# NCR V::YIX

## NCR 7895 Scanner/Scale

# Hardware Installation Guide



BCC5-0000-5507

Issue M

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Atlanta, Georgia, USA

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### Preface

### Audience

This publication is written for hardware installer/service personnel, system integrators, and field engineers.

#### P Note

This document is NCR proprietary information and is not to be disclosed or reproduced without consent.

### References

- NCR 7895 Scanner/Scale Site Preparation Guide (BCC5-0000-5506)
- NCR 7895 Scanner/Scale Installation Guide (BCC5-0000-5507)
- NCR 7895 Scanner/Scale User Guide (BCC5-0000-5508)
- NCR 7895 Scanner/Scale Bar Code Programming Guide (BCC5-0000-5516)
- NCR 7895 Scanner/Scale Service Guide (BCC5-0000-5509)
- NCR 7895 Scanner/Scale Parts Identification Manual (BCC5-0000-5510)
- NCR 7895 Scanner/Scale Safety and Regulatory Information (BCC5-0000-5505)

## **Safety Requirements**

The NCR 7895 Scanner/Scale conforms to all applicable legal requirements. To view the compliance statements see the NCR 7895 Scanner/Scale Safety and Regulatory Information (BCC5-0000-5505).

#### **A** Caution

This product does not contain user serviceable parts. Servicing should only be performed by a qualified service technician.

### **AC Disconnect**

To power down the NCR 7895, disconnect the AC power cord.



#### 🛕 Warning

A readily accessible and easily identifiable means of disconnecting power from the NCR 7895 Scanner/Scale must be provided, such as a plug on the power cord, isolating switch, or circuit breaker incorporated in the building wiring.

#### 🛕 Warning

Il est impératif d'avoir un moyen pour débrancher l'électricité. Ce moyen d'accès doit être visible et facile a identifier, du genre la prise de courant, le switch d'isolation, ou le disjoncteur incorporé dans l'installation électrique du bâtiment ou de l'immeuble.

### **Grounding Instructions**

The Power Supply used with this product is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances. Do not modify the plug provided – if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the product's plug. **Repair or replace damaged or worn cords immediately.** 

### Warranty

Warranty terms vary by region and country.

All parts of this product that are subject to normal wear and tear are not included in the warranty. In general, damages due to the following are not covered by the warranty.

- Improper or insufficient maintenance
- Improper use or unauthorized modifications of the product.
- Inadequate location or surroundings. Site installation must conform to guidelines listed in the NCR 7895 Scanner/Scale Site Preparation Guide (BCC5-0000-5506) and the NCR Workstation and Peripheral AC Wiring Guide (BST0-2115-53).

For detailed warranty arrangements please consult your contract documents.

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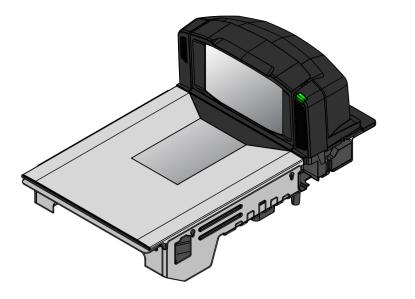
### **Revision Record**

Issue	Date	Remarks
А	Jul 2021	Initial release.
В	Oct 2021	<ul> <li>Added the 7895-3111-5000 PID</li> <li>Added a note stating that the Color Camera USB Cable is shipped separately</li> <li>Added procedures in connecting and installing the Color Camera Assembly</li> <li>Corrected the note on scanner and Scale Display behavior in the <i>Calibration at Load</i> section</li> <li>Updated software download links</li> <li>Added a note on camera behavior in the <i>Camera Activation Button Presses</i> section</li> <li>Removed the previously specified required weight sets to perform <i>Calibration at Load</i></li> <li>In <i>Scale Calibration</i>, added a list of weight sets that can be used to calibrate the scale</li> </ul>
С	Jan 2022	Added a note on routing Sensormatic Cables and Color Camera USB Cable
D	Feb 2022	Added a note stating that the Sensormatic AC Power Cable must not be connected to the same power strip with the POS or SCO terminal
E	Jun 2022	<ul> <li>Added procedures for using 123Scan</li> <li>Added procedures for configuring the scanner with RS-232 interface</li> <li>Added procedures for using SMS Package</li> <li>Updated procedures for using USB Staging Flash Drive</li> </ul>
F	Jul 2022	Updated with the correct location of the Calibration Switch

Issue	Date	Remarks
G	Oct 2022	Updated procedures for Configuring RS-232 Using 123Scan Utility
		Added procedures for opening and modifying configuration files
		Updated procedures for installing the Trim Bracket
		Added procedures for Importing a Configuration File from a Staging Flash Drive
		Updated calibration procedures
		Corrected the calibration weight from 11 kg to 10 kg
н	Jan 2023	Added procedures for NCR CDC Host Interface Configuration
I	Apr 2023	Added the following PIDs:
		• 7895-1020-0000
		• 7895-2020-0000
		• 7895-2110-4000
		• 7895-2120-1000
		• 7895-2120-2000
		• 7895-2310-5000
		• 7895-3010-0010
		• 7895-3020-0000
		• 7895-3310-5000
		• 7895-2111-1000
		• 7895-2111-4000
		• 7895-2111-5000
		• 7895-3011-0010
J	Dec 2023	Updated calibration procedures
К	Oct 2024	Updated links
L	Nov 2024	Converted to Voyix template
		Removed OBF section
м	Mar 2025	Updated step of "Installing the Color Camera USB Cable" on page 51.

### NCR 7895 Scanner/Scale Overview

The NCR 7895 Scanner/Scale is a data capture solution that reads 1D, 2D, Digimarc, and mobile bar codes in all orientations. Bar code data is transmitted to a Point-of-Sale (POS) host through USB, RS-232, or RS-485 connection.

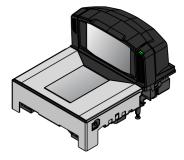


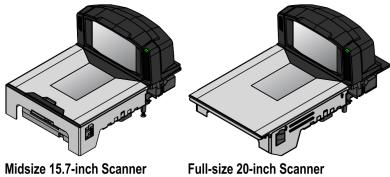
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The NCR 7895 is designed to be installed in a retail checkstand cutout, and it supports the following auxiliary devices:

- USB Handheld Scanners
- Checkpoint® Electronic Article Surveillance (EAS)
- Sensormatic® Electronic Article Surveillance (EAS)
- Scale
  - OEM Standard Scale
  - ° Mettler-Toledo price computing scale for parts of Europe
- Scale Display
  - ° Single Head Scale Display
  - <sup>o</sup> Dual Head Scale Display
- USB staging flash drive with Type A connector

### **Product IDs**





Compact 13.9-inch Scanner

Midsize 15.7-inch Scanner

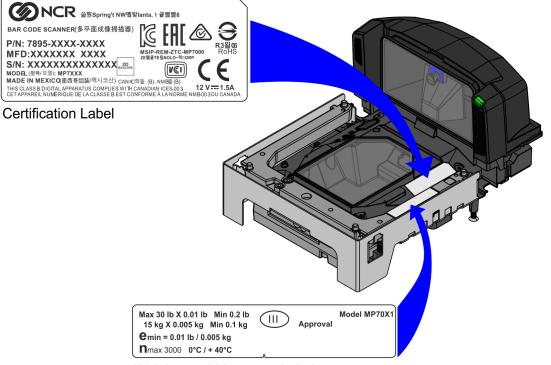
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Product ID	Description	
Compact, Monochrome Camera		
7895-1010-0000	Bi-Optic Imager - Scanner Only with Non-Sapphire Top Plate (Compact)	
7895-1020-0000	Bi-Optic Imager - Scanner Only with Sapphire Top Plate (Compact)	
Midsize, Monochrome	e Camera	
7895-2010-0000	Bi-Optic Imager - Scanner Only with Non-Sapphire Top Plate (Midsize)	
7895-2010-2010	Bi-Optic Imager - Scanner Only with Non-Sapphire Top Plate (Midsize) for use with TPP scales (primarily Europe)	
7895-2020-0000	Bi-Optic Imager - Scanner Only with Sapphire Top Plate (Midsize)	
7895-2110-1000	Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, US Scale Certification (Midsize)	
7895-2110-2000	Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, EU Scale Certification (Midsize)	
7895-2110-4000	Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, Canada/Mexico Certification (Midsize)	
7895-2110-5000	Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, International Scale Certification (Midsize)	
7895-2120-1000	Bi-Optic Imager - Scanner/Scale with Sapphire Top Plate, US Scale Certification (Midsize)	
7895-2120-2000	Bi-Optic Imager - Scanner/Scale with Sapphire Top Plate, EU Scale Certification (Midsize)	

Product ID	Description	
7895-2310-5000	Bi-Optic Imager - Scanner/Scale with Switch, Non-Sapphire Top Plate, OIML Scale Certification (Midsize)	
Full-size, Monochron	ne Camera	
7895-3010-0000	Bi-Optic Imager - Scanner Only with Non-Sapphire Top Plate (Full-size)	
7895-3010-0010	Bi-Optic Imager - Scanner Only with Non-Sapphire Top Plate, Mid Platter (Full Size)	
7895-3020-0000	Bi-Optic Imager - Scanner Only with Sapphire Top Plate (Full Size)	
7895-3110-1000	Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, US Scale Certification (Full-size)	
7895-3110-2000	Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, EU Scale Certification (Full-size)	
7895-3110-4000	Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, Canada Scale Certification (Full-size)	
7895-3110-5000	Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, International (OIML) Scale Certification (Full-size)	
7895-3310-5000	Bi-Optic Imager - Scanner/Scale with Switch, Non-Sapphire Top Plate, OIML Scale Certification (Full Size)	
Midsize, Monochrome and Color Cameras		
7895-2011-0000	Color Bi-Optic Imager - Scanner Only with Non-Sapphire Top Plate (Midsize)	
7895-2011-2010	Color Bi-Optic Imager - Scanner Only with Non-Sapphire Top Plate (Midsize) for use with TPP scales (primarily Europe)	
7895-2111-1000	Color Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, US Scale Certification (Midsize)	
7895-2111-1002	Color Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, US Scale Certification (Midsize) for Walmart	
7895-2111-2000	Color Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, EU Scale Certification (Midsize)	
7895-2111-3000	Color Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, AUS/NZ Scale Certification (Midsize)	

Product ID	Description
7895-2111-4000	Color Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, Canada/Mexico Scale Certification (Midsize)
7895-2111-5000	Color Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, OIML Scale Certification (Midsize)
Full-size, Monochrom	e and Color Cameras
7895-3011-0000	Color Bi-Optic Imager - Scanner Only with Non-Sapphire Top Plate (Full-size)
7895-3011-0010	Color Bi-Optic Imager - Scanner Only with Non-Sapphire Top Plate, Mid Platter (Full Size)
7895-3021-0000	Color Bi-Optic Imager - Scanner Only with Sapphire Top Plate (Full-size)
7895-3111-1000	Color Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, US Scale Certification (Full-size)
7895-3111-1002	Color Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, US Scale Certification (Full-size) for Walmart
7895-3111-2000	Color Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, EU Scale Certification (Full-size)
7895-3111-3000	Color Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, AUS/NZ Scale Certification (Full-size)
7895-3111-4000	Color Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, Canada/Mexico Scale Certification (Full-size)
7895-3111-5000	Color Bi-Optic Imager - Scanner/Scale with Non-Sapphire Top Plate, International (OIML) Scale Certification (Full-size)
7895-3121-1000	Color Bi-Optic Imager - Scanner/Scale with Sapphire Top Plate, US Scale Certification (Full-size)
7895-3121-2000	Color Bi-Optic Imager - Scanner/Scale with Sapphire Top Plate, EU Scale Certification (Full-size)

### **Product Labels**

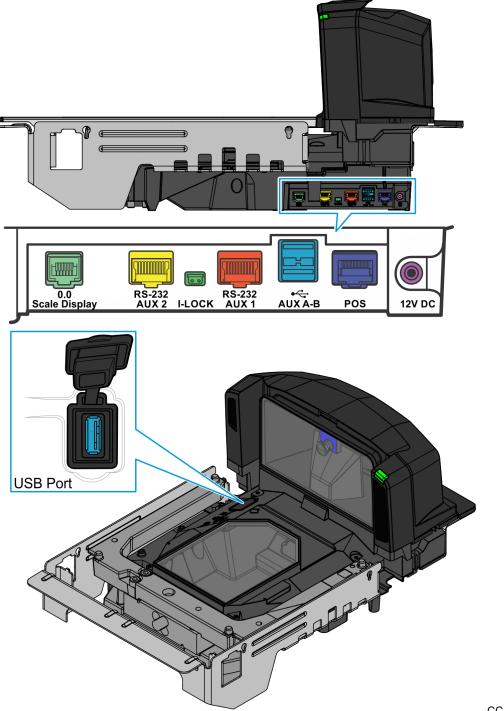


Weights and Measures Label

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### **Cable Connections**

The NCR 7895 Scanner/Scale has external connectors located at the right side of the unit and an additional USB port under the Top Plate.



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Connector	Description			
Scale Display	For connecting a Scale Display			
RS-232 Aux 1, RS-232 Aux 2	For connecting peripheral devices			
	<b>Caution</b> Do not connect a POS cable to any of the RS-232 Aux ports.			
I-Lock	For connecting to a Checkpoint system			
(Checkpoint Interlock)				
Aux A-B	For connecting auxiliary USB scanners and mass storage device			
(USB 2.0 Ports)	<b>Note</b> An additional USB port is available in the front, under the platter. All USB ports can be used for the USB staging flash drive.			
POS Port	For connecting a POS terminal. Supported interfaces include USB 2.0, RS-232, and RS-485 with approved NCR supplied cables.			
12V DC	For connecting an external +12V, 3.33A Power Supply			

### **Auxiliary Connections**

The following table provides a connection guide for auxiliary devices.

Configuration	RS-232 Device Port Configuration Value	Port Assignment			
Configuration		Aux 1	Aux 2	USB A	USB B
Sensormatic Controller and Auxiliary Scanner/s	5	Sensormatic Controller	For future use	USB auxiliary scanner	USB auxiliary scanner
Third-Party Scale and Auxiliary Scanner/s	7	Third-Party Scale		USB auxiliary scanner	USB auxiliary scanner

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In all configurations, up to one or two additional USB auxiliary scanners can be connected. An auxiliary scanner is not counted until it is attached.

### **Accessing Scanner Components**

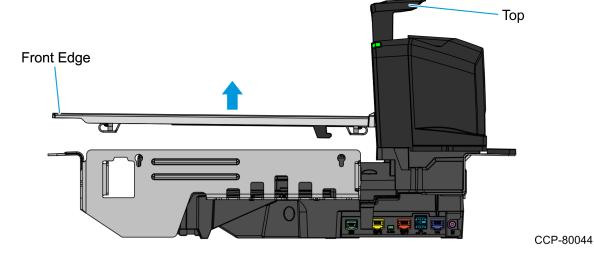
In some cases, the Top Plate or the Tower Cover need to be removed to access NCR 7895 internal components or to access the USB A port below the Top Plate.

To remove or install the Top Plate, refer to the following procedures:

- For Full-size scanner-only models
  - "Removing the Top Plate for Full-size Scanner-only Models" on the next page
  - "Installing the Top Plate for Full-size Scanner-only Models" on page 25
- For Full-size scanner/scale models
  - "Removing the Top Plate for Full-size Scanner/Scale Models" on page 26
  - ° "Installing the Top Plate for Full-size Scanner/Scale Models" on page 28
- For Midsize and Compact models, scanner-only and scanner/scale
  - "Removing the Top Plate for Midsize and Compact Models" on page 30
  - "Installing the Top Plate for Midsize and Compact Models" on page 31
- To remove or install the Tower Cover, refer to the following procedures:
  - "Removing the Tower Cover" on page 32
  - "Installing the Tower Cover" on page 33

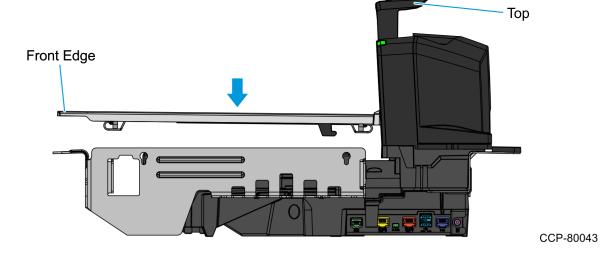
### Removing the Top Plate for Full-size Scanneronly Models

• Hold the front edge and the top of the Top Plate, and then lift the Top Plate off the scanner.



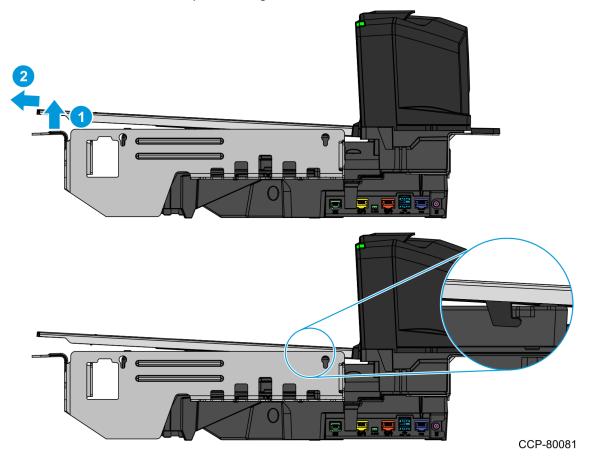
### Installing the Top Plate for Full-size Scanneronly Models

• Hold the front edge and the top of the Top Plate, and then lower the Top Plate onto the scanner until it sits on the tabs of the metal frame.

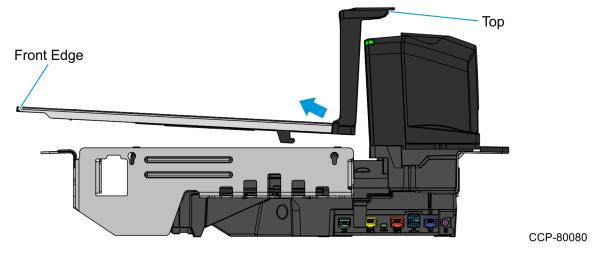


### Removing the Top Plate for Full-size Scanner/Scale Models

1. Slightly lift up the front edge of the Top Plate and slide the Top Plate forward until its hooks are released from the positioning tabs on the scale.

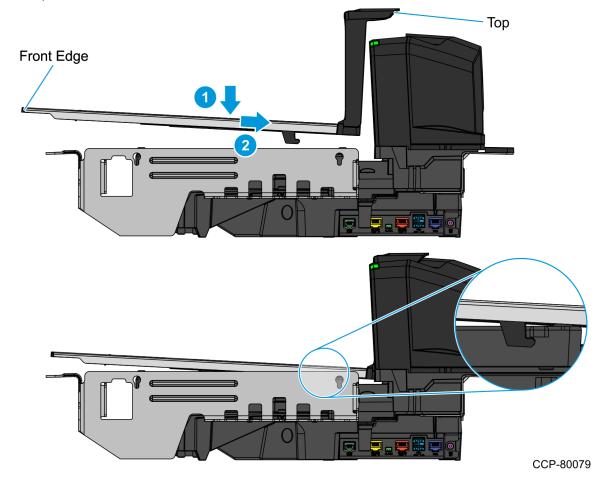


2. Holding the front edge and the top of the Top Plate, pull the Top Plate out and lift it off the scanner.

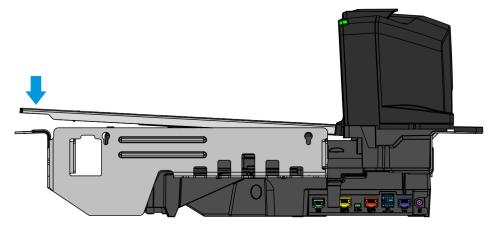


### Installing the Top Plate for Full-size Scanner/Scale Models

- 1. Holding the front edge and the top of the Top Plate, and with the Top Plate slightly tilted, position the Top Plate on top of the scanner base.
- 2. Slide the Top Plate onto the scanner base until the hooks on the bottom of the Top Plate are positioned under the tabs on the scale.



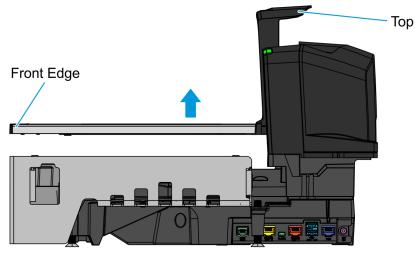
3. Lower the front edge of the Top Plate until the Top Plate sits securely on the scanner base.



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# Removing the Top Plate for Midsize and Compact Models

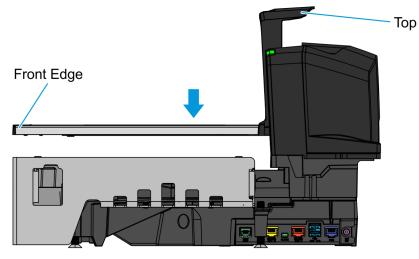
• Hold the front edge and the top of the Top Plate, and then lift the Top Plate off the scanner.



CCP-80077

# Installing the Top Plate for Midsize and Compact Models

• Hold the front edge and the top of the Top Plate, and then lower the Top Plate onto the scanner until it is secure.



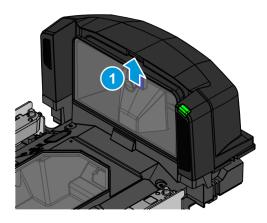
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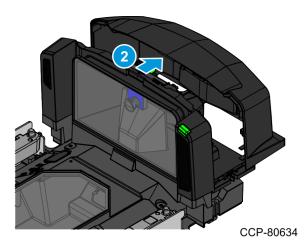
### **Removing the Tower Cover**

#### P Note

The image in this section shows the Tower Cover for units with color camera. However, procedures for both monochrome and color tower covers are the same.

- Remove the Top Plate. For more information, refer to "<u>Accessing Scanner</u> <u>Components</u>" on page 23.
- 2. Using your thumb, lift the center of the Tower Cover to disengage and remove it from the tower housing.



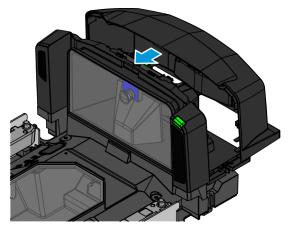


### Installing the Tower Cover

#### P Note

The image in this section shows the Tower Cover for units with color camera. However, procedures for both monochrome and color tower covers are the same.

1. Slide the Tower Cover onto the back of the tower housing until it snaps into place.



CCP-80635

 Re-install the Top Plate and ensure that there is no weighted load on the Top Plate. For more information, refer to "<u>Accessing Scanner Components</u>" on page 23.

### **Hardware Installation**

The NCR 7895 Scanner/Scale can be installed in many existing checkstand cutouts. For more information about the required cutouts, refer to NCR 7895 Scanner/Scale Site Preparation *Guide* (BCC5-0000-5424).

Installation information in this section covers all available models including both scanner only and scanner/scale devices. The installation procedures extend from inspecting a received NCR 7895 through verifying that the installed unit is operational.

For NCR 7895 Monochrome models, the scanner unit ships completely assembled from the factory; no installation assembly is required. For NCR 7895 Color models, the Color Camera USB Cable ships separately, and therefore needs to be installed during the initial setup of the scanner unit.

#### P Note

Only certified personnel can perform the scale calibration procedure and place the scale into service for trade to comply with governmental weights and measures regulations.

Installing the NCR 7895 Scanner/Scale involves the following procedures:

- Inspect the product. For more information, refer to "<u>Inspecting the Product</u>" on page 36.
- If required, install the Scale Display. For more information, refer to "<u>Installing the</u> <u>Scale Display</u>" on page 37.
- If required, install the Trim Bracket. For more information, refer to "Installing the Trim Bracket" on page 40.
- If required, install the Electronic Article Surveillance System (optional). For more information, refer to "<u>Installing the Electronic Article Surveillance System</u>" on page 42.
- For NCR 7895 Color models, install and connect the Color Camera USB Cable. For more information, refer to "<u>Installing the Color Camera USB Cable</u>" on page 51.

- Route and connect the cables to the NCR 7895. For more information, refer to "Routing and Connecting Cables" on page 54.
- Install the NCR 7895 in a checkstand cutout. For more information, refer to "Installing the Scanner in Checkstand Cutout" on page 59.
- Install the Top Plate and verify its alignment. For more information, refer to "<u>Preparing</u> the Top Plate for Service" on page 62.
- Power up the NCR 7895. For more information, refer to "<u>Powering Up the Scanner</u>" on page 63.
- Calibrate the scale. For more information, refer to "<u>Calibrating the Scale</u>" on page 64.

### **Inspecting the Product**

### **Reporting a Damaged Unit**

After receiving the NCR 7895 Scanner/Scale, inspect the shipping carton for damage. If the NCR 7895 is damaged due to shipping, notify the carrier, the NCR representative, or the supplier if the unit is not purchased directly from NCR.

### **Package Contents**

After unpacking the NCR 7895, take inventory to ensure that all components are received. The following list identifies the package contents.

- NCR 7895 Scanner/Scale
- Power Supply (separate package if ordered)
- Power Cord (separate package if ordered)
- Top Plate
- Interface Cable (separate package if ordered)
- Scale Display (separate package if ordered)
- Power Cord Documents (for International Units)
- The label which identifies the model number (for example, 7895-3010-0000)
- Customer Satisfaction Hotline Details

#### P Note

Before attempting to install the NCR 7895, the site must be prepared in accordance with the requirements described in *NCR 7895 Scanner/Scale Site Preparation Guide* (BCC5-0000-5424).

# Installing the Scale Display

When installing the optional Scale Display, consider both the cashier and customer's viewing angle. Both must see the weight value displayed. Identify the location to place the Scale Display based on counter design and viewing angle. Place the unit where it cannot impede access to scanned items being swept over the NCR 7895, payment terminals, printers, and other peripherals.

### **Required Tools**

The following tools are required to mount the Scale Display:

- Ruler (or a similar measuring device)
- Pencil (or a similar measuring device)
- Drill
- 2.4 mm (3/32 in.) diameter drill bit-for scale display mounting holes
- 19 mm (3/4 in.) diameter drill bit—for scale display cable access hole
- #2 Phillips screwdriver

### **Installation Procedure**

When installing the optional Scale Display, consider both the cashier and customer's viewing angle. Both must see the weight value displayed. Identify the location to place the Scale Display based on counter design and viewing angle. Place the unit where it cannot impede access to scanned items being swept over the NCR 7895, payment terminals, printers, and other peripherals.

To install the Scale Display, follow these steps:

- 1. Drill the required mounting holes on the countertop for the Scale Display.
  - Two screw holes with a diameter of 2.4 mm (0.094 in.) and a depth of 25 mm (0.984 in.)
  - One cable access hole with a diameter of 19 mm (0.750 in.), Optional
- To attach the proper faceplate to the Scale Display window, remove the adhesive liner from the back of the faceplate and carefully secure the faceplate on the front of the Scale Display window.

#### 🗗 Note

Ensure that the weight units (kg or lb) and parameters on the faceplate exactly match the scale parameters printed on the scale Weights and Measures label. Labels vary depending on the unit and country location.

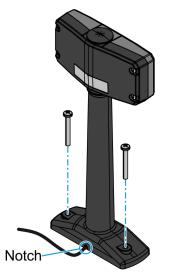
- kg single interval
- Ib single interval
- 3. Position the Scale Display on the countertop and initially route its cable through either of the following options:
  - Route the cable out through the notch on the base of the Scale Display.

#### Note

The notch is usually located towards the rear, where it is less visible.

• Route the cable through the cable access hole on the countertop.

4. Secure the Scale Display to the countertop using two screws.



CCP-80048

5. Route the Scale Display cable and connect it to the **Scale Display** port of the NCR 7895.

# Installing the Trim Bracket

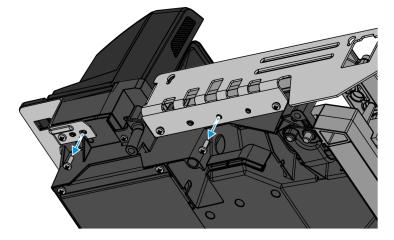
The trim bracket kit (7895-K733 0.5 inch Bracket) can be used to modify the full-size NCR 7895 to fit into a counter cutout previously occupied by a 12-inch wide NCR scanner/scale. The bracket can be mounted on either side of the NCR 7895, but it is recommended to install it on the downstream side of conveying goods. The bracket adds **0.5 in.** (1.2 cm) to the width of the NCR 7895.

The kit includes the following:

- One metal trim bracket
- One Torx screw with a colored thread lock patch, 0.28 in. (7 mm) in length

To install the Trim Bracket, follow these steps:

- Remove the Top Plate. For more information, refer to "<u>Accessing Scanner</u> <u>Components</u>" on page 23.
- 2. Turn the NCR 7895 flat on one side and remove the two screws that secure the frame to the housing. Set the two screws aside.



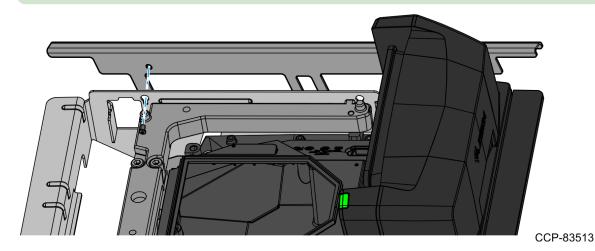
CCP-83511

3. Turn the NCR 7895 back on it upright position.

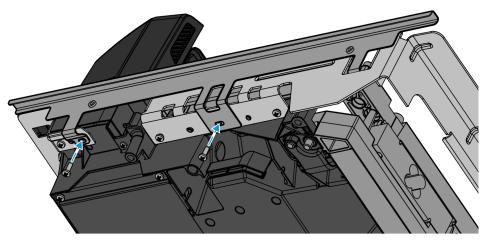
4. Mount the bracket onto the scanner, aligning the bracket mounting hole with the scanner frame mounting hole closest to the front of the scanner, and then secure the bracket to the scanner using the colored Torx screw included in the package.

#### Tip

For easier installation, attach but do not fully tighten the colored Torx screw to the bracket, hook the screw into the scanner frame mounting hole, fit the bracket into place, and then tighten the colored Torx screw using a T20 Torx screwdriver.



5. Turn the NCR 7895 flat on one side and re-install the two screws that were previously removed.



CCP-83512

 Turn the NCR 7895 back on it upright position and re-install the Top Plate. For more information, refer to "<u>Accessing Scanner Components</u>" on page 23.

# Installing the Electronic Article Surveillance System

Either of the following Electronic Article Surveillance (EAS) systems can be installed in the NCR 7895:

- "Sensormatic Deactivation System" on the next page
- "Checkpoint Deactivation System" on page 47

#### P Note

Checkpoint and Sensormatic EAS systems require proper installation by representatives from those companies to install, verify, and tune the system for proper EAS operation. These processes are typically done on-site.

### **Sensormatic Deactivation System**

The Sensormatic Antenna is installed behind the Vertical Scan Window and below the Top Plate. The antenna pigtail cable is routed through the side of the scanner to allow connection to the Sensormatic Controller.

#### 🛕 Warning

Make sure that the Sensormatic Controller is powered OFF. Do NOT connect or disconnect the Sensormatic Cables or Antenna from the Sensormatic Controller when power is ON as this could damage the controller.

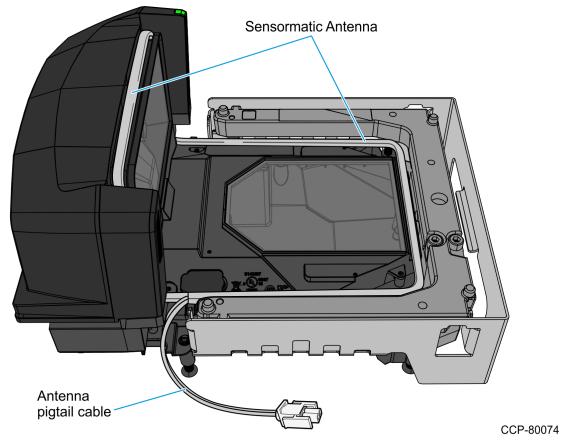


The Sensormatic Antenna and Cables are installed by a Sensormatic Service Technician. Contact Sensormatic for installation and setup.

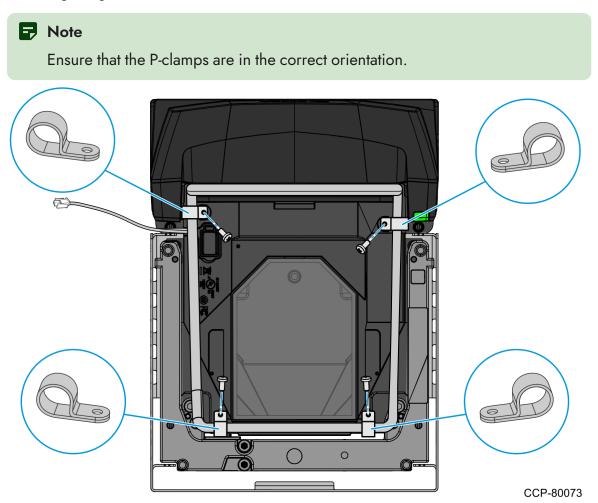
To install the Sensormatic Antenna and Cables, follow these steps:

 Remove the Top Plate. For more information, refer to "<u>Accessing Scanner</u> <u>Components</u>" on page 23.

2. Place the Sensormatic Antenna around the Vertical Scan Window and into the scanner housing, with the antenna pigtail cable routed through the side of the scanner. Ensure that the top of the Sensormatic Antenna does not extend above the top surface of the scanner.



3. Attach four P-clamps to the Sensormatic Antenna on the locations indicated in the following image.



4. Align the P-clamps with the screw holes on the scanner housing, and then secure with screws.

#### P Note

Ensure that the Sensormatic Antenna is centered in the scanner housing and away from the scale arm.

- 5. Connect the EEPROM cable to the antenna pigtail cable connector and route the other end of the EEPROM cable to the Sensormatic Controller.
- Connect the 10-pin side of the interlock cable to the RS-232 Aux 1 port of the scanner. Route the other end of the cable to the Sensormatic Controller.

7. Re-install the Top Plate. For more information, refer to "<u>Accessing Scanner</u> <u>Components</u>" on page 23.

### **Checkpoint Deactivation System**

The Checkpoint Antenna is installed below the Top Plate. The antenna leads are routed through the side of the scanner to allow connection to the Checkpoint Controller leads.

The Checkpoint Horizontal Antenna Only Kit (7895-K942) is sold separately. It includes the following components:

- Horizontal Checkpoint antenna
- Three #4-24 HI-LO .375" long screws with a T8 torx head



#### 🛕 Warning

If the Checkpoint Antennas are not installed correctly, they can cause issues with scale functionality.

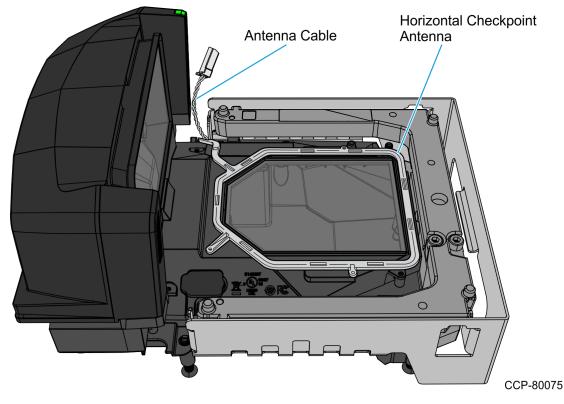
#### **D** Note

The Checkpoint Antennas and Cables are installed by a Checkpoint Service Technician. Contact Checkpoint for installation and setup.

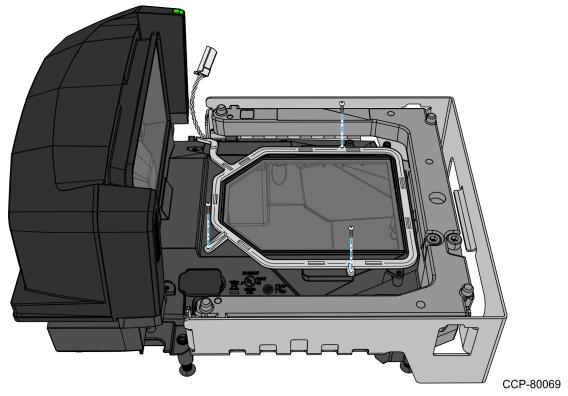
To install the Checkpoint Antennas, follow these steps:

1. Remove the Top Plate. For more information, refer to "Accessing Scanner" Components" on page 23.

2. Place the Horizontal Checkpoint Antenna into the scanner housing, with the antenna cable routed through the side of the scanner.



3. Align the mounting holes on the Horizontal Checkpoint Antenna with the screw holes on the scanner housing, and then secure using three #4-24 HI-LO screws and a T8 Torx screwdriver.



 Re-install the Top Plate. For more information, refer to "<u>Accessing Scanner</u> <u>Components</u>" on page 23.

 Contact your local Checkpoint representative to install the EAS cable to the Checkpoint System. Refer to the Checkpoint device documentation for details about its functionality.

#### P Note

The following cables are also required to complete the Checkpoint EAS installation:

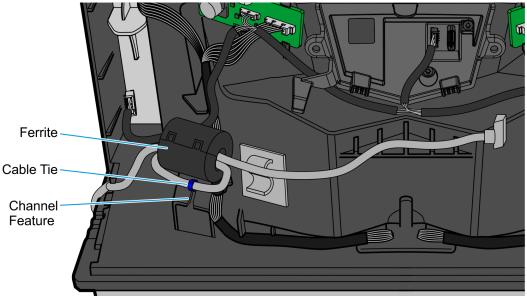
- Checkpoint Interlock Cable (1432-C895-0004)—connects the Checkpoint Controller to the Checkpoint Interlock port of the NCR 7895.
- Checkpoint Antenna Extender (1432-C893-0030)—connects the Antenna Cable to the Checkpoint Controller.

# Installing the Color Camera USB Cable

For NCR 7895 Color models, the Color Camera USB Cable ships separately, and therefore needs to be installed during the initial setup of the scanner unit.

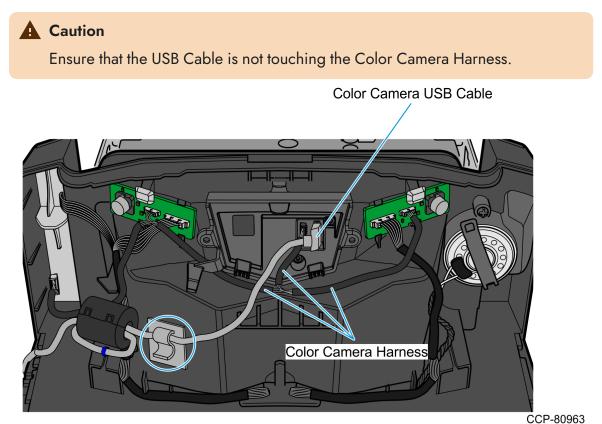
To install the Color Camera USB Cable, follow these steps:

- Remove the Top Plate, and then the Tower Cover. For more information, refer to "Accessing Scanner Components" on page 23.
- 2. Secure the ferrite of the Color Camera USB Cable to the tower housing.
  - a. Insert the locking head of the cable tie into the slot of the channel feature in the scanner tower.
  - b. Push the ferrite all the way in by sliding the head of the cable tie through the slot.

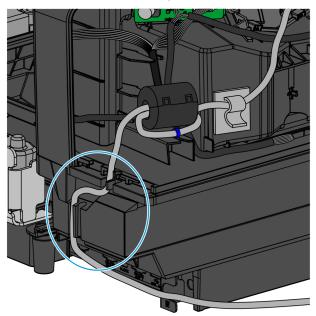


CCP-80962

3. Route the camera cables under the cable retainer tabs and connect them to the Color Camera Assembly.



4. Route the USB Cable through the cable exit slot on the side of the tower.



CCP-80961

 Install the Tower Cover, and then the Top Plate. For more information, refer to <u>"Accessing Scanner Components</u>" on page 23.

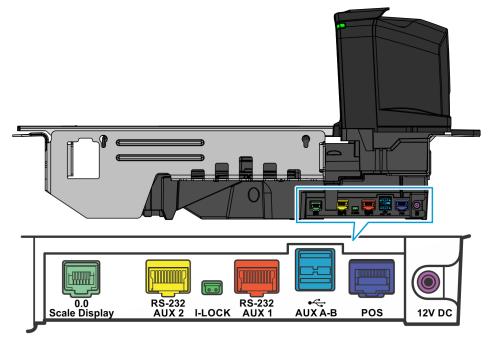
## **Routing and Connecting Cables**

#### 🛕 Warning

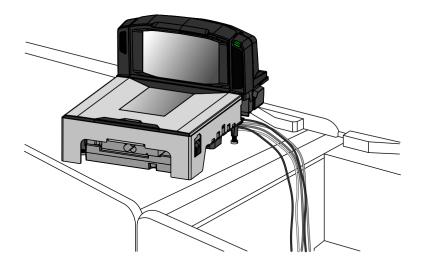
Before connecting or disconnecting any cable, ensure that the NCR 7895 power is off.

The NCR 7895 Scanner/Scale has external connectors located at the right side of the unit. When routing the power and interface cables for the NCR 7895, take note of the following:

- Do not route interface cables in close proximity to electrical motors or other sources of electromagnetic interference.
- When routing the Sensormatic Cables to the checkstand cutout, make sure that the Color Camera USB Cable is as far as possible from the Sensormatic Cables. This is to avoid signal interference between the Sensormatic device and the Color Camera Assembly.
- Drop the cables directly from their connectors on the scanner or route them along the side of the scanner to the back.
- If the NCR 7895 is powered by an external Power Supply, connect the Power Supply DC Cable to the NCR 7895 before connecting the Power Supply to the AC power source.



CCP-80058



CCP-80054

To route and connect cables to the NCR 7895, follow these steps:

- 1. Position the unit so that the right side of the scanner is directly over the hole in the checkstand.
- 2. Verify that all components have the correct interface cable.
- 3. Connect the NCR 7895 to the POS terminal or to the external Power Supply, depending on the configuration.
  - If the NCR 7895 is powered by an external Power Supply, connect the Power Supply DC Cable to the **12V DC** port on the NCR 7895. Do not connect the Power Supply to the AC power source yet.
  - If the NCR 7895 is powered by a host terminal, turn off the host terminal and connect the interface cable from the host terminal to the **POS** port of the NCR 7895.
- 4. For NCR 7895 Color models, connect the Color Camera USB Cable to the **USB 3.0** port of the POS terminal.
- 5. f the configuration includes a Handheld Scanner with a USB interface cable, connect the Handheld Scanner to any of the two **Aux A-B USB 2.0** ports of the NCR 7895.



 If the configuration includes a Scale Display, connect the display cable to the Scale Display port of the NCR 7895.

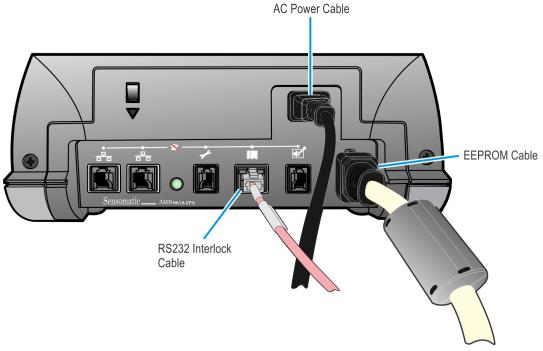
- 7. If the configuration includes an Electronic Article Surveillance (EAS) system, do either of the following:
  - For Sensormatic Deactivation system, connect NCR 7895 to the Sensormatic Controller. For more information, refer to "<u>Connecting the Scanner to the</u> <u>Sensormatic Controller</u>" on the next page.
  - For Checkpoint Deactivation system, connect the Checkpoint Controller cable to the **I-Lock** port of the NCR 7895.

## Connecting the Scanner to the Sensormatic Controller

#### A Caution

To avoid damage to the controller, DO NOT reverse the order of connecting the Sensormatic cables, and DO NOT connect or disconnect the cables from the controller when the power is ON.

- 1. Connect the Sensormatic Antenna EEPROM Cable to the EEPROM cable port on the Sensormatic Controller.
- 2. Connect the Sensormatic RS-232 Interlock Cable to the scanner port on the Sensormatic Controller.
- 3. Connect the Sensormatic AC Power Cable to the Sensormatic Controller.



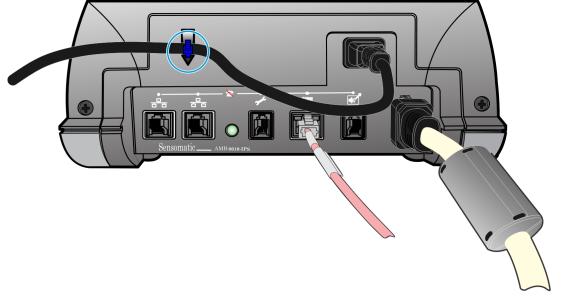
CCP-80071

4. Connect the other end of the Sensormatic AC Power Cable to the unswitched AC outlet that has less than 0.5Vac between neutral and ground.

#### A Caution

The Sensormatic AC Power Cable must not be connected to the same power strip with the POS or SCO terminal.

5. Use a cable tie to secure the Sensormatic AC Power Cable to the back of the controller.



CCP-80070

#### Note

The Status LED blinks green. While the controller auto-synchronizes, this LED can briefly flash amber. Auto-sync can take up to 10 seconds.

#### **A** Caution

If the Status LED is solid red, stop the installation and return the controller to an authorized repair center.

#### **A** Caution

When removing the controller for service, leave the coil EEPROM cable in place. The EEPROM maintains the system settings for the coil location and automatically updates the new controller.

# Installing the Scanner in Checkstand Cutout

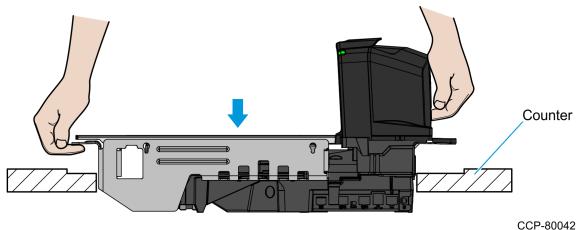
To install the NCR 7895 in the checkstand cutout, follow these steps:

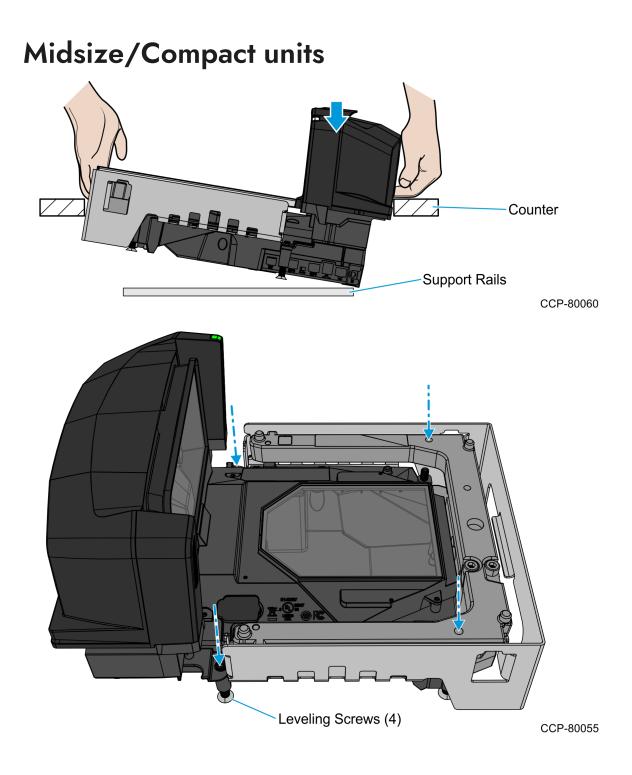
- Verify the dimensions of the Checkstand Cutout. Verify that the top of the NCR 7895 supports are set to the initial distance from the top of the checkstand. For more information, refer to NCR 7895 Scanner/Scale Site Preparation Guide (BCC5-0000-5506).
- Holding the support handles on the back of the tower cabinet and the front of the unit (under the Top Plate), slowly lower the NCR 7895 into the checkstand cutout. It should sit on the designated supports.

#### **A** Caution

Ensure that no cables are pinched.

# Full-size units





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#### P Note

- It is important that the NCR 7895 does not rock on its supports. Make sure that all adjustable supports are securely fastened, the NCR 7895 is sitting on all supports, and the Top Plate is flush with the surrounding checkstand. When the Top Plate is flush, its *leading edge should be slightly below the checkstand* and the *trailing edge should be slightly above the checkstand*.
- For NCR 7895 Full-size models—if the scanner rocks, remove it and adjust the checkstand supports (screws). If the scanner still rocks, continue to remove the scanner and adjust the supports until the scanner sits solidly in the checkstand.
- For NCR 7895 Midsize and Compact models—if the Top Plate is not flush or the scanner rocks, adjust the leveling screws to place the scanner at the correct height. To adjust the scanner, remove the Top Plate and adjust the leveling screws until the scanner sits solidly in the checkstand and the Top Plate is flush with the surrounding checkstand.
- To ensure smooth scanning, ensure the Top Plate is in place, take a steel can (for example, a soup can), turn it over so the harsher seam is facing down, and slide the can over the Top Plate in the standard scanning direction. The can must not catch on the checkstand or the Top Plate when swept across all sections of the Top Plate, in the correct direction.

# **Preparing the Top Plate for Service**

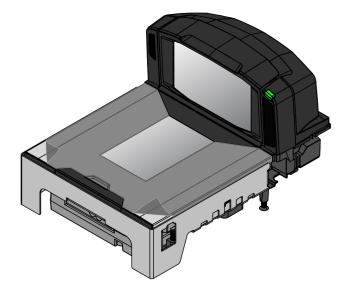
For added protection during shipment, the NCR 7895 Top Plate is covered with a tight fitting layer of plastic as shown in the image below. Remove this plastic layer before placing the NCR 7895 into service.



Do not use a sharp object to remove the protector. Doing so can damage the Top Plate.

#### Note

For scanner/scale models, ensure to remove the plastic layer before scale calibration.



CCP-80059

## **Powering Up the Scanner**

To power up the NCR 7895, do either of the following:

- If the NCR 7895 is powered by an external Power Supply, connect one end of the AC Power Cable to the Power Supply and then connect the other end of the AC Power Cable to an AC power source.
- If the NCR 7895 is powered by a host terminal, turn on the host terminal.

Upon power up, the NCR 7895 verifies that all sub-systems and auxiliary devices are operational. If a fault condition exists, an error condition displays on the 7-segment display, and the start-up sequence halts. Power cycling is required after rectifying the problem. For more information on error conditions, refer to "<u>General Error and Warning Codes</u>" on page 251.

Upon power up, the Scale Display presents the following test sequence:

- Displays 00.000 for 1.5 seconds, and then displays 99.999 for 1.5 seconds
- Displays xx.xx0 lb or xx.xxx kg (based on the units selected) in normal operating mode

#### Note

If a scale is installed, warm-up time for the scale is 30 minutes, assuming the room temperature is **20°C** (68°F).

# **Calibrating the Scale**

This section provides procedures in calibrating the scale and programming its parameters. These procedures are applicable to NCR 7895 scanner/scale units only.

#### P Note

Only certified personnel can perform the scale calibration procedure and place the scale into service for trade to comply with governmental weights and measures regulations.

The NCR 7895 must meet the following accuracy requirements.

- The NCR 7895 is considered a new unit each time the scale is calibrated. This status lasts for thirty (30) days.
- The NCR 7895 is considered an in-service unit thirty (30) days after the scale is calibrated.

Weight	New Unit	In Service Unit
Up to 2.500 kg	± 0.000 kg	± 0.005 kg
Above 2.500 kg	± 0.005 kg	± 0.010 kg
Up to 5.000 lb	± 0.000 lb	± 0.010 lb
Above 5.000 lb	± 0.010 lb	± 0.020 lb

During factory testing, the scale is calibrated one or more times to test the scale calibrating function. This calibration test is not sufficient to make the scale ready for weighing in trade. The scale MUST be calibrated following installation in their working environment to offset effects of local gravitation, imperfect leveling, and working environmental conditions. The scale MUST be calibrated when any of the following occur (this is a government requirement).

- Initial installation of an NCR 7895
- When the scale cannot be zeroed
- When the diagnostics indicate a calibration error
- When the Scale Assembly is replaced or serviced

Scale capacity is  $15 \pm 0.005$  kg or  $30 \pm 0.01$  lb. Also, the scale weighs in increments of  $\pm 0.005$  kg or  $\pm 0.01$  lb.

One or more certified weight sets are required to calibrate and certify the scale. The following are examples:

- Whole Pound Weight Set: NCR Part Number 998-0633009
- Fractional Pound Weight Set: NCR Part Number 998-0633012
- Kilogram Weight Set: Obtain locally

Refer to the following required weights depending on the unit of weight configured for the scanner.

Unit of weight	Required calibration weight	
Pound	30 lb (25 lb for calibration and 30 lb for testing)	
Kilogram	15 kg (10 kg for calibration and 15 kg for testing)	

#### P Note

It is recommended to exercise the scale from zero up to its full capacity (30 lb for US scales and 15 kg for metric scales) at least three times before entering calibration. This is done by placing and removing the scale weights box on the Top Plate three times.

#### A Caution

Complete each calibration step within 30 seconds. Otherwise, the calibration process automatically ends. At any time during the calibration process, if the units of measure are modified (for example, from lb to kg) and a 30-second time is completed, the Scale Display flashes *CAL* and the 7-segment display shows the *U14* warning code. Both codes indicate that the scale is out of calibration.

### **Preparing for Calibration**

Before calibrating the scale, ensure that the following requirements are completed and performed:

- The ambient temperature must be set correctly and the scanner unit must remain powered on for a specific number of hours.
  - If the room temperature is maintained at 20°C (68°F) or above for at least 24 hours, leave the unit powered on for at least 30 minutes before calibrating the scale.
  - If the room temperature is below 20°C (68°F), leave the unit powered on for at least 6 hours before calibrating the scale.
- There must be no rocking motion when pressing on opposite corners of the scale.
- The unit must be installed with proper height in the checkstand cutout.

Platter is below the counter edge 🛛 🐼 Incorrect!
Platter is above the counter edge 🛛 🐼 Incorrect!
Platter is even with the counter edge 🤡 Correct!

### **Calibration Procedures**

#### **A** Caution

- During calibration, ensure not to bump into the scale and that no .vibration occurs.
- Pause for a few seconds at each step for the weights to settle. However, complete each step within 30 seconds. Otherwise, the calibration process automatically ends.
- Wait for a prompt on the 7-segment diagnostic display to know when to proceed to the next step

#### P Note

- If a Scale Display is used, connect the Scale Display to the Scale Display port on the NCR 7895, and then scan the Enable Scale Display Configuration bar code to enable the display and the display port. The default Scale Display configuration is *Disabled*.
- If a Scale Display is unavailable, the internal 7-segment one character display can be used to prompt users through the steps of the scale calibration procedure.

Calibrating the NCR 7895 scale involves the following procedures:

- Placing the scale in Calibration Mode. For more information, refer to "<u>Entering</u> <u>Calibration Mode</u>" on the next page.
- Programming the legal scale unit and dampening filter. For more information, refer to "Programming Legal Scale Parameters" on page 72.
- Calibrating the scale with no weighted load. For more information, refer to "<u>Calibrating at No Load</u>" on page 74.
- Calibrating the scale with weighed load. For more information, refer to "<u>Calibrating at</u> <u>Load</u>" on page 76.
- Verifying scale accuracy. For more information, refer to "Verifying Scale Accuracy" on page 78.

 Securing the calibration switch. For more information, refer to "<u>Securing the Scale</u> Calibration Switch" on page 85.

### **Entering Calibration Mode**

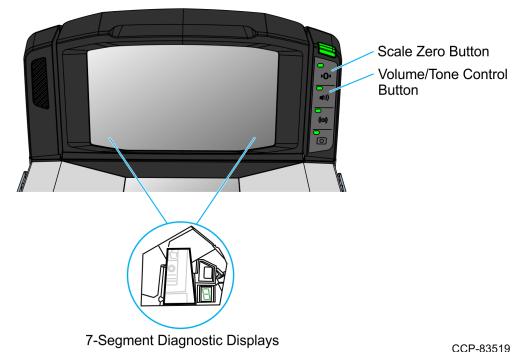
Depending on scale configuration, select one of the options in this section to place the scale into Calibration Mode.

### **Electronic Entry**

The Electronic Entry method is used if the integrated scale does not have a mechanical calibration switch.

To perform an Electronic Calibration Mode entry, follow these steps:

1. Press and hold the **Scale Zero** and **Volume** buttons continuously for at least five seconds until a short beep sounds.



- 2. When a short beep sounds, release the **Scale Zero** and **Volume** buttons.
- Within two seconds after releasing the buttons, quickly press and release the Scale Zero and Volume buttons to confirm entering calibration mode. The scanner emits five long beeps and the 7-segment display scrolls COOLb or COOg. If a Scale Display is used, it blinks CALOO and CAL\_\_.

If Calibration Mode is entered successfully, the scanner emits five long beeps and the 7-segment display scrolls *COOLb* or *COOg*. If a Scale Display is used, it blinks *CALOO* and *CAL\_\_*.

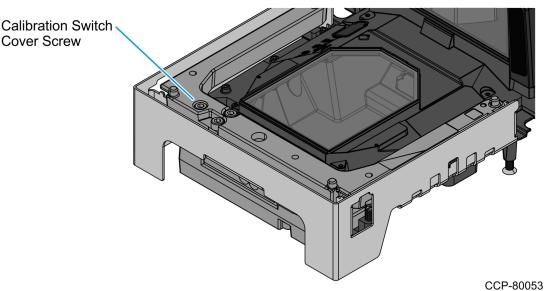
If Calibration Mode was not entered successfully, the scale remains in its current state, the Scale Display blinks *CAL F*, or the 7-segment display scrolls the error code *u*##. The scale returns to its prior state only if there are no failures during calibration. The issue must be fixed before re-entering calibration to enable an operational scale.

### **Manual Entry**

The Manual Entry method is used if the integrated scale has a mechanical calibration switch. Some Weights and Measure regulatory jurisdictions require a mechanical calibration switch.

To perform a Manual Calibration Mode entry, follow these steps:

- Remove the Top Plate. For more information, refer to "<u>Accessing Scanner</u> <u>Components</u>" on page 23.
- 2. If applicable, remove the security seal (wired, or tamper evident film seal) over the Calibration switch cover screw.
- 3. Remove the calibration switch cover screw with an Allen wrench.



4. Press and release the calibration switch twice.

 Re-install the Top Plate and ensure that there is no weighted load on the Top Plate. For more information, refer to "Accessing Scanner Components" on page 23.

#### P Note

If the Top Plate is not installed properly, the Scale Display blinks the letters *PLA* and the scanner persistently beeps until the Top Plate is installed correctly.

If Calibration Mode is entered successfully, the scanner emits five long beeps and the 7-segment display scrolls *COOLb* or *COOg*. If a Scale Display is used, it blinks *CALOO* and *CAL\_\_*.

If Calibration Mode was not entered successfully, the scale remains in its current state, the Scale Display blinks *CAL F*, or the 7-segment display scrolls the error code *u##*. The scale returns to its prior state only if there are no failures during calibration. The issue must be fixed before re-entering calibration to enable an operational scale.

### **Programming Legal Scale Parameters**

Sealable and legal parameters, such as the Unit Selection and the Dampening Filter Setting, can only be programmed or changed when the NCR 7895 is in Calibration Mode. It is not required to change these values. However, if there is a need to change their values, they must be programmed when the scale is in Calibration Mode.

The Dampening Filter Setting can be changed multiple times during Calibration Mode without affecting the calibration outcome. However, if the Unit Selection value is changed before successfully completing the calibration process, the scanner exits Calibration Mode and the scale is not operational until it is successfully calibrated.

For procedures in programming legal scale parameters, refer to the following topics:

- "Selecting the Scale Unit of Weight" below
- "Setting the Scale Dampening Filter" on the next page

### Selecting the Scale Unit of Weight

The Scale Unit of Weight can either be in Kilograms (metric) or Pounds (US).

To change the scale unit of weight while in Calibration Mode, follow these steps:

- 1. Verify the unit of weight measurement by doing any of the following:
  - Check if the Scale Display icon shows *lb* or *kg*
  - Check if the 7-segment display scrolls Lb or g (indicates kg unit)
- To change the unit of weight, scan the appropriate Legal Scale Units bar code in "Legal Scale Units (Parameter #995)" on page 90. If you do not change the default, or current weight unit, the scale calibrates with the default (depending on the country or region) or previously programmed weight unit.

#### 🗗 Note

The scale unit of weight parameter can be changed at any time after entering the Calibration Mode. After a successful scan, the Calibration Mode restarts at **"Calibrating at No Load"** on page 74.

## **Important Notes**

- Automatic zero setting is enabled for metric scales (kg) and disabled for US scales (lb).
- Automatic zero setting, if enabled, is performed if weight has remained below zero and is stable (that is, no motion on the Top Plate) for at least 5 seconds. The scale is automatically set to zero after 5 seconds.
- If the unit of weight is changed from lb to kg, this setting is enabled after a cold power start of the NCR 7895. A scale reset through the Scale Reset STISCLRST bar code will not enable this setting. Likewise, if weight units change from kg to lb, this setting is disabled. This setting is illegal for US (lb) scales.

## Setting the Scale Dampening Filter

The scale sensitivity to vibration can be set while in Calibration Mode. The following are options for the Scale Dampening Filter parameter:

- 0—Higher (most sensitive to vibration)
- 1—Low (factory default)
- 2—Very Low
- 3—Ultra Low

The lower the number, the more sensitive the scale is to vibration. The higher the number, the slower the scale may operate.

 To set the scale dampening filter level, scan the appropriate bar code in "Legal Scale Dampening Filter (Parameter #996)" on page 92.

# **Calibrating at No Load**

#### **A** Caution

Complete this step within 30 seconds. Otherwise, the calibration process automatically ends.

To calibrate the scale with no weighted load, follow these steps:

- 1. Verify that the Top Plate is properly installed, has no weighted load, and has nothing touching it.
- Press the Scale Zero button on the front panel of the NCR 7895.
   The scanner beeps once, and the 7-segment diagnostic display scrolls either C25Lb or C10g. If a Scale Display is used, it blinks either CAL25 or CAL10. The scanner then

proceeds to the next calibration step, "Calibrating at Load" on page 76.

## P Note

If the Scale Display blinks *CAL F* and the 7-segment display scrolls the error code *u##*, the Calibration at No Load is not successful. Check the error code and its corresponding recommended action. For more information, refer to "<u>Scale Warning Codes</u>" on page 253.

#### Important Notes

If the Scale Display blinks HOLD for the entire 30-second time period and then times out, the process is unable to find a zero weight threshold. This may occur due to the following conditions:

- The Top Plate is incorrectly installed.
- The weight on the scale is outside a +/- 2% maximum capacity range (+/- 0.6 lb or +/- 0.3 kg).
- The scale is incorrectly installed.

In this case, the scale cannot accept the calibration and returns to its prior state. There is no impact on the sealed calibration counter or the scale legal parameter counter. However, if calibration fails, the scale is non-operational until the problem is fixed and the scale is

successfully calibrated. To fix this issue, go back to "<u>Entering Calibration Mode</u>" on page 69. The scale does not have to be reset and can be left on before re-entering Calibration Mode.

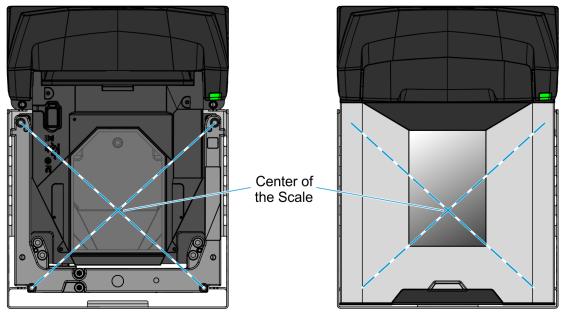
# **Calibrating at Load**

**Caution** 

Complete this step within 30 seconds. Otherwise, the calibration process automatically ends.

To calibrate the scale with weighted load, follow these steps:

 Depending on the programmed unit of weight, place 25 lb or 10 kg on the scale. Ideally, these weights should be grouped at the center of the scale.



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2. Allow the weights to settle for a few seconds, and then press the **Scale Zero** button on the front panel of the NCR 7895. The scanner emits a single beep, and the 7-segment diagnostic display scrolls between *CAL P and CAL S*. If a Scale Display is used, it blinks between *CAL P* and *CAL S*.

#### P Note

CAL P indicates "pass," while CAL S indicates "save and reset the scale."

- 3. Remove the weights from the Top Plate, and then press the **Scale Zero** button on the front panel of the NCR 7895. The scanner emits three short beeps to indicate that the calibration is successful and all parameters are saved. The scanner then reboots
- 4. Proceed to the next step, "Verifying Scale Accuracy" on page 78.

## Important Notes

If the scale is unable to detect a load of 25 lb or 10 kg, Calibration at Load is not successful and the scale returns to Calibration at No Load. This may occur due to the following conditions:

- The correct weights are not placed on the Top Plate before pressing the **Scale Zero** button.
- The scale is incorrectly installed.

There is no impact on the sealed calibration counter or the scale legal parameter counter. However, if calibration fails, the scale is non-operational until the problem is fixed and the scale is successfully calibrated. To fix this issue, go back to "<u>Entering Calibration Mode</u>" on page 69. The scale does not have to be reset and can be left on before re-entering Calibration Mode.

# Verifying Scale Accuracy

Scale accuracy must be verified immediately following calibration, and annual scale inspections are recommended to ensure that weighing error due to harsh environmental conditions and mechanical stresses do not go unnoticed. Inspection periods greater than one year increase risk of weighing error and regulatory non-compliance. Scales must be calibrated when the measured weighing error exceeds the regulated tolerance requirements. For jurisdictions where a government authority does not perform regular inspections, NCR's inspection service helps maintain customer trust in the brand by ensuring all scales comply with local regulations. Contact your local NCR Service Representative for program details.

Perform the following scale accuracy verification tests in order, immediately after calibration and during an annual inspection.

Step	Scale Accuracy Test	Description
1	" <u>Increasing Load Test</u> " on the next page	Verifies scale accuracy when incrementally adding weight to the Top Plate, without returning the weight to zero.
2	" <u>Over-Capacity Test</u> " on page 80	Verifies that proper indication appears on the Scale Display when too much weight is placed on the Top Plate.
3	" <u>Decreasing Load Test</u> " on page 81	Verifies scale accuracy when incrementally removing weight from the Top Plate, without returning the weight to zero.
5	" <u>Return to Zero Test</u> " on page 82	Verifies that the scale returns to zero when all weights are removed.
4	" <u>Shift Test</u> " on page 83	Verifies accurate weight measurement in all quadrants of the Top Plate.

#### P Note

After verification, record or report audit trail information to the local Weights and Measure authority where required by law.

## **Increasing Load Test**

The Increasing Load Test checks the scale accuracy when incrementally adding weight to the center of the scale. Use weights that correspond to the NCR 7895 programmed unit of weight.

# For Metric Scales, kg

Step	Applied Load	Scale Display Result	Tolerance
1	0.000 kg	0.000	± 0.000 kg
2	0.100 kg	0.100	± 0.0025 kg
3	2.500 kg	2.500	± 0.0025 kg
4	5.000 kg	5.000	± 0.005 kg
5	10.000 kg	10.000	± 0.005 kg
6	15.000 kg	15.000	± 0.0075 kg

## For US Scales, lb

Step	Applied Load	Scale Display Result	Tolerance
1	0.00 lb	0.00	± 0.0 lb
2	0.10 lb	0.10	± 0.005 lb
3	5.00 lb	5.00	± 0.005 lb
4	10.00 lb	10.00	± 0.01 lb
5	20.00 lb	20.00	± 0.01 lb
6	30.00 lb	30.00	± 0.015 lb

#### Rote

Do NOT remove any weight from the Top Plate between test steps unless directed to do so.

## **Over-Capacity Test**

The Over-Capacity Test checks for proper indication from the scale when too much weight is placed on the Top Plate.

#### P Note

This test must immediately follow the Increasing Load Test. Do not remove any of the weights from the previous test prior to running this test.

Place additional weight on the center of the Top Plate as shown in the following table. Use the weight that corresponds to the NCR 7895 programmed unit of weight.

#### P Note

Scale capacity is 15  $\pm$ 0.005 kg or 30  $\pm$ 0.01 lb. Also, the scale weighs in increments of  $\pm$ 0.005 kg or  $\pm$ 0.01 lb.

## For Metric Scales, kg

Applied Load	Scale Display Result
15.100 kg	EEEE

## For US Scales, lb

Applied Load	Scale Display Result
30.20 lb	EEEE

#### P Note

Do NOT remove any weight from the Top Plate after completing this test.

## **Decreasing Load Test**

The Decreasing Load Test checks the scale accuracy when incrementally removing weight from the Top Plate. Use weights that correspond to the NCR 7895 programmed unit of weight.

#### Rote

This test must immediately follow the Over-Capacity Test. Do NOT remove any of the weights from the previous test prior to running this test.

Step	Applied Load	Scale Display Result	Tolerance
1	15.000 kg	15.000	± 0.0075 kg
2	10.000 kg	10.000	± 0.005 kg
3	5.000 kg	5.000	± 0.005 kg
4	2.500 kg	2.500	± 0.0025 kg
5	0.100 kg	0.100	± 0.0025 kg

# For Metric Scales, kg

## For US Scales, lb

Step	Applied Load	Scale Display Result	Tolerance
1	30.00 lb	30.00	± 0.015 lb
2	20.00 lb	20.00	± 0.01 lb
3	10.00 lb	10.00	± 0.01 lb
4	5.00 lb	5.00	± 0.005 lb
5	0.10 lb	0.10	± 0.005 lb

## **Return to Zero Test**

The checks if the scale returns to zero when all weights are removed.

# For Metric Scales, kg

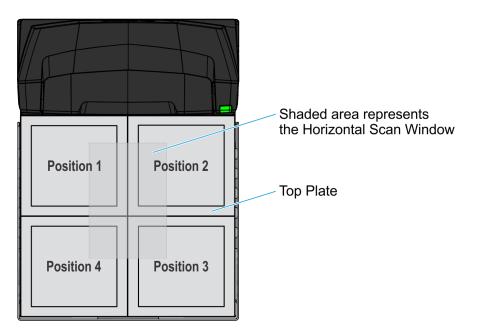
Applied Load	Scale Display Result	Tolerance
0.000 kg	0.000	0.0 kg

## For US Scales, lb

Applied Load	Scale Display Result	Tolerance
0.00 lb	0.00	0.0 lb

## Shift Test

This test checks for accurate weight measurement while moving the weight across all quadrants of the Top Plate. The weight checked at each position on the scale, shown in image below, represents halfway between the center of the Top Plate and the corners. Use a stack configuration of weights if needed (that is, two 5.00 lb weights or two 2.500 kg weights).



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For Metric Scales, kg

Step	Applied Load	Scale Display Result	Tolerance
1	5.000 kg at Position 1	5.000	± 0.005 kg
2	5.000 kg move to Position 2	5.000	± 0.005 kg
3	5.000 kg move to Position 3	5.000	± 0.005 kg
4	5.000 kg move to Position 4	5.000	± 0.005 kg

## For US Scales, lb

Step	Applied Load	Scale Display Result	Tolerance
1	10.00 lb at Position 1	10.00	± 0.01 lb
2	10.00 lb move to Position 2	10.00	± 0.01 lb
3	10.00 lb move to Position 3	10.00	± 0.01 lb
4	10.00 lb move to Position 4	10.00	± 0.01 lb

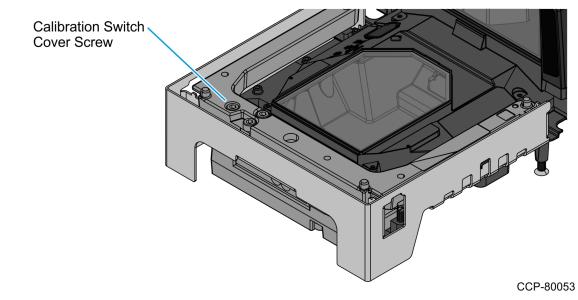
While performing a shift test, the result of each position should be within the applicable tolerance, and the range of results obtained should not exceed twice the applicable tolerance.

# Securing the Scale Calibration Switch

If the manual calibration entry method was used, and a successful calibration and verification was performed, a new security seal must be installed.

To secure the Scale Calibration Switch, follow these steps:

- Remove the Top Plate. For more information, refer to "<u>Accessing Scanner</u> Components" on page 23.
- 2. Reinsert the calibration switch cover screw, aligning the hole in the screw with the hole in the scale.



 Seal the calibration switch using an approved sealing method that meets the requirements of the local government. Examples of sealing methods are wire seal/crimp, approved plastic seal, or a tamper evident paper seal (where approved) may be used over the screw.

#### 🗗 Note

Depending on local laws, Weights and Measures officials may be required to attach the seal. Also, in the United States and Canada, the audit trail serves as an acceptable security seal when the Remote Compact Display is present.

4. Re-install the Top Plate and ensure that there is no weighted load on the Top Plate. For more information, refer to "Accessing Scanner Components" on page 23.

#### Note

If the Top Plate is not installed properly, the Scale Display blinks the letters *PLA* and the scanner persistently beeps until the Top Plate is installed correctly.

# **Audit Tallies**

The NCR 7895 maintains an audit trail or tally of scale calibration, parameter changes, and firmware updates. The audit trail consists of three event counters that can be shown on the Scale Display or on the 7-segment Display.

- Cxxx—calibration counter. The C value is the number of times the scale has been successfully calibrated.
- Pxxx—legal parameter counter. The P value is the number of times a sealed scale parameter or legal parameter has been changed.
- x.xxF—Legally Relevant firmware version number. The F value is the number of times the firmware has been updated.

To view audit tallies on the Scale Display or the 7-segment diagnostic display, do the following:

• Press and hold the **Scale Zero** button for three seconds. The display alternates between Cxxx, Pxxx, and x.xxF. When the **Scale Zero** button is released, the scale returns to normal operation and the tallies are removed from the display.

#### P Note

Take note of the following:

- This function does not work when the scanner is in Calibration Mode.
- If the unit of weight is modified, the parameter counter is incremented by two in the audit tally. This is because the **Automatic Zero Setting** legal parameter is enabled when going from lb to kg, and disabled when going from kg to lb.
- After verification, seal the scale by recording or reporting the Audit Trail or by applying a physical seal to models that contain a physical calibration switch. Report information as required by local Weight & Measures Regulations, or where required by law.

# **Calibration Mode Exit Conditions**

Calibration Mode exits under the following conditions:

- No response is received from an external operator for 30 seconds.
- The operator turns the NCR 7895 off.
- The Calibration at Load is completed, whether successfully or unsuccessfully.
- A user scans the Scale Reset bar code. When Scale Reset is scanned, a test runs showing a series of characters on the optional Scale Display. When the test is completed, the scale returns to its prior state before entering a scale Calibration Mode.

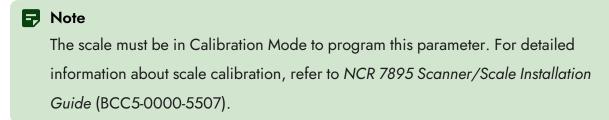
# **Scale Configuration Parameters**

This section provides information on parameters and bar codes needed to configure and calibrate the scale.

Parameter	Parameter Number	Parameter Name
"Legal Scale Units (Parameter #995)" on the next page	995	Kilograms (International or metric)
		Pounds (US)
" <u>Scale Display Configuration (Parameter #986)</u> " on	986	Disable Scale Display (default)
page 91		Enable Scale Display
"Legal Scale Dampening Filter (Parameter #996)" on page 92	996	Normal Vibration Sensitivity
page 92		Low Vibration Sensitivity (default)
		Very Low Vibration Sensitivity
		Ultra Low Vibration Sensitivity
" <u>Scale Pole Display Type (Parameter #1692)</u> " on page 94	1692	Standard Pole Display Type (default)
		Alternate Pole Display Type

# Legal Scale Units (Parameter #995)

The scale unit of measure is pre-configured to your country or region by model. If reconfiguring is necessary, scan a weight unit bar code below to set the legal weight units for the NCR 7895.



For international or metric unit, scan Kilograms.



For US unit, scan **Pounds**.



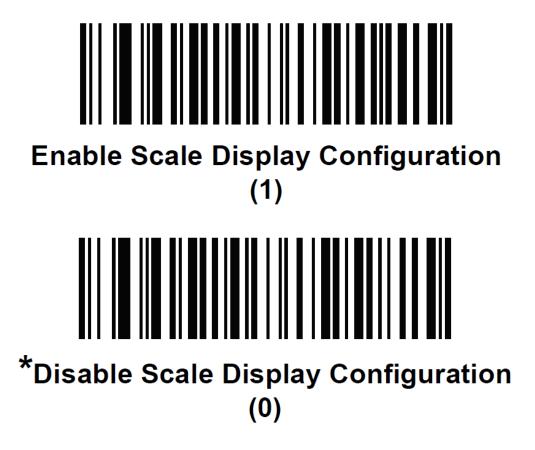
Pounds (1)

# Scale Display Configuration (Parameter #986)

This parameter enables the pole display to show the product weight and other information related to the scale.

- Enable Scale Display Configuration—when a pole display is installed and connected to the NCR 7895, the pole display shows weight and additional alphanumeric information associated with the state of the scale. If a pole display is not connected, and Enable Scale Display Configuration is scanned, the 7-segment display scrolls the code *U23* to indicate that there is a remote Scale Display communication error.
- Disable Scale Display Configuration—scan this parameter when no Scale Display is installed. When a Scale Display is installed and connected to the NCR 7895, the Scale Display remains blank. The Scale Display can be installed and programmed in any mode of operation.

Scan one of the following bar codes to enable or disable the Scale Display configuration. By default, this parameter is set to **Disable**.

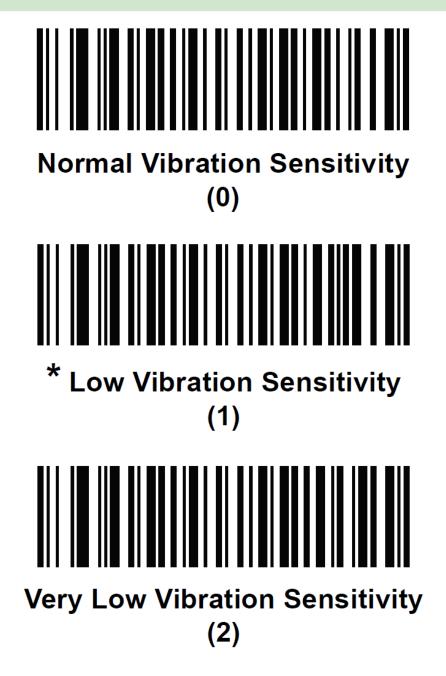


# Legal Scale Dampening Filter (Parameter #996)

Scan one of the following bar codes to set the vibration sensitivity of the scale. The lower the number value, the more sensitive the scale is to vibration. By default, this parameter is set to **Low Vibration Sensitivity**.

## 🛃 Note

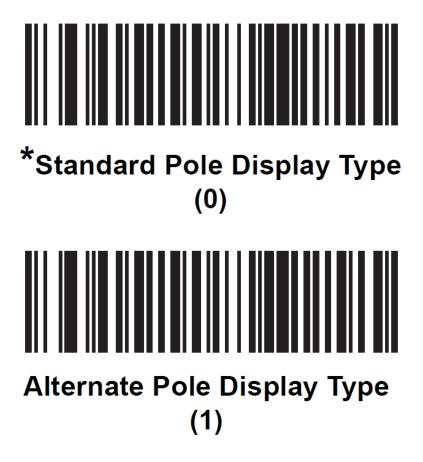
The scale must be in Calibration Mode to program this parameter. For detailed information about scale calibration, refer to *NCR* 7895 Scanner/Scale Installation *Guide* (BCC5-0000-5507).



# Ultra Low Vibration Sensitivity (3)

# Scale Pole Display Type (Parameter #1692)

Scan one of the following bar codes to set the pole display type. By default, this parameter is set to **Standard**.



# Programming

The NCR 7895 Scanner/Scale can be programmed using any of the following options:

- Programming management tools
  - 123Scan software tool—programs scanner parameters, upgrades firmware, displays scanned bar code data, scanning statistics, battery health, asset data and prints reports. For more information, refer to "<u>123Scan Software Tool</u>" on the next page.

#### Note

If an NCR 7895 scans a programming 2D bar code generated by 123Scan, it only programs the NCR 7895. If an auxiliary scanner is used with the NCR 7895, the auxiliary scanner must be programmed separately to be configured.

- Scanner Management Service (SMS) Package—a file used together with the SMS agent to manage a scanner remotely by programming parameters and updating firmware. For more information, refer to "Scanner Management Service Package" on page 144.
- USB staging flash drive—sets up the scanner, performs scanner cloning, collects scanner data. For more information, refer to "<u>USB Staging Flash Drive</u>" on page 169.
- Application programming interfaces
  - Scanner SDK APIs (CoreScanner APIs)
  - Scanner OPOS/JPOS APIs
  - WMI Interfaces
- Programming bar codes

#### Rote

For parameter bar codes necessary to configure the NCR 7895, refer to NCR 7895 Scanner/Scale Bar Code Programming Guide (BCC5-0000-5516).

# 123Scan Software Tool

123Scan is a software tool for customizing scanner operation. Intuitive enough for first time users, the 123Scan wizard guides users through a streamlined setup process. Settings are saved in a configuration file that can be printed as a single programming bar code for scanning, emailed to a smart phone for scanning from its screen, or downloaded to the scanner using a USB cable.

Through 123Scan, users can perform the following:

- Configure a scanner using a wizard
  - Program the following scanner settings:
    - Beeper tone / volume settings
    - Enable / disable symbologies
    - Communication settings
  - Modify data before transmission to a host using Advanced Data Formatting (ADF) by scanning one bar code per trigger pull
- Load parameter settings to a scanner through the following options:
  - Bar code scanning
    - Scan a paper bar code
    - Scan a bar code from a PC screen
    - Scan a bar code from a smart phone screen
  - ° Download over a USB cable
    - Load settings to one scanner
    - Stage up to 10 scanners simultaneously
- Validate scanner setup
  - ° View scanned data within the utility's Data View screen
  - ° Capture an image and save to a PC within the utility's Data View screen
  - ° Review settings using the Parameter Report
  - ° Clone settings from an already deployed scanner

- Upgrade scanner firmware
  - ° Load settings to one scanner
  - ° Stage up to 10 scanners simultaneously with a power USB hub
- View statistics such as the following:
  - ° Asset tracking information
  - ° Time and usage information
  - ° Bar codes scanned by symbology
  - ° Communication diagnostics
- Generate the following reports:
  - Bar code Report—programming bar code, included parameter settings, and supported scanner models
  - ° Parameter Report—list of parameters programmed within a configuration file
  - ° Activity Report—list of activities performed on a scanner or scanners
  - ° Inventory Report—list of scanner asset tracking information
  - ° Validation Report—printout of scanned data
  - ° Statistics Report—list of all statistics retrieved from the scanner

# Requirements

The following are required to use the 123Scan utility:

- Host computer running Windows OS
- Scanner
- USB cable to connect the scanner to a Windows host computer
- Zebra CoreScanner Driver
  - ° Included in the 123Scan installation package
  - ° Supported operating systems:
    - Windows 7 (32-bit and 64-bit)
    - Windows 10 (32-bit and 64-bit)
- Zebra Bioptic Color Camera SDK for Windows
  - ° Supported operating systems:
    - Windows 7 (32-bit and 64-bit)
    - Windows 10 (32-bit and 64-bit)
  - Download link: <u>http://www.zebra.com/us/en/support-</u> downloads/software/developer-tools/bioptic-color-camera-sdk-for-windows.html

# Installing NCR 123Scan

## P Note

It is recommended to install the latest version of the NCR 123Scan utility.

Installation procedures for the 123Scan utility depend on the NCR 7895 model. For more information, refer to the following:

- "Installing on NCR 7895 Monochrome Models" on the next page
- "Installing on NCR 7895 Color Models" on page 102

# Installing on NCR 7895 Monochrome Models

To install the NCR 123Scan utility for NCR 7895 Monochrome models, follow these steps:

- Download the 123Scan Configuration Utility from https://www5.ncr.com/support/text/Peripherals/7895Utility.htm.
- 2. Double-click the 123Scan\_for\_NCR\_(64bit)\_vx.xx.exe file to run the installer. The application displays the Welcome screen.

123Scan for NCR Installation	Nizard	×
	Welcome to the InstallShield Wizard for 123Scan for NCR (64bit) The InstallShield Wizard will install 123Scan for NCR (64bit) on your computer. To continue, click Next.	
Install Shield	< Back Next > Cancel	

#### P Note

If no Zebra CoreScanner driver is installed in the system or the pre-installed CoreScanner driver version is not the latest version included in 123Scan installation package, the setup wizard prompts to install the latest Zebra CoreScanner Driver.

123Scan for NCR (64bit) - InstallShield Wizard
123Scan for NCR (64bit) requires the following items to be installed on your computer. Click Install to begin installing these requirements.
Status Requirement
Pending Zebra CoreScanner Driver (64bit) v3.07.0017
Install Cancel
Linstail

- Select **Install** to start installing the CoreScanner driver. After installing the driver, the application displays the Welcome screen.
- 3. On the Welcome screen, select **Next**. The application displays the End User License Agreement.
- 4. Select Yes to accept the agreement, and then follow the onscreen instructions.
- 5. When the installation is complete, select **Finish**. The application closes the installation window.
- 6. Reboot the computer or POS terminal.

# Installing on NCR 7895 Color Models

To install the NCR 123Scan utility for NCR 7895 Color models, follow these steps:

- 1. Download and install the 123Scan Configuration Utility.
  - a. Download the 123Scan Configuration Utility from https://www5.ncr.com/support/text/Peripherals/7895Utility.htm.
  - b. Double-click the 123Scan\_for\_NCR\_(64bit)\_vx.xx.exe
     file to run the installer. The application displays the Welcome screen.
     123Scan for NCR Installation Wizard

	Welcome to the InstallShield Wizard for 123Scan for NCR (64bit) The InstallShield Wizard will install 123Scan for NCR (64bit) on your computer. To continue, click Next.
Install Shield	< Back Cancel

#### P Note

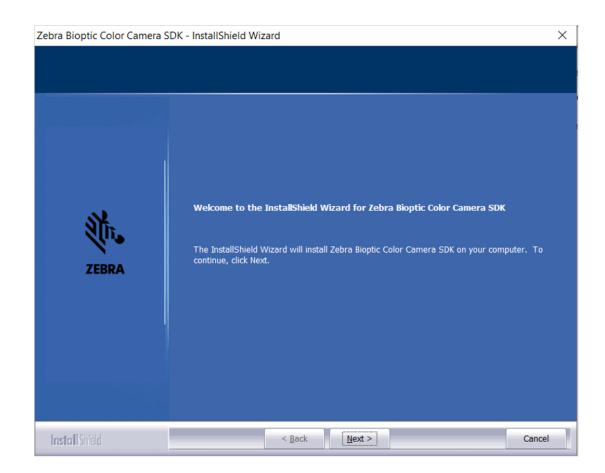
If no Zebra CoreScanner driver is installed in the system or the pre-installed CoreScanner driver version is not the latest version included in 123Scan installation package, the setup wizard prompts to install the latest Zebra CoreScanner Driver.

123Scan for NCR (64bit) - InstallShield Wizard
123Scan for NCR (64bit) requires the following items to be installed on your computer. Click Install to begin installing these requirements.
Status Requirement
Pending Zebra CoreScanner Driver (64bit) v3.07.0017
Install Cancel

- Select **Install** to start installing the CoreScanner driver. After installing the driver, the application displays the Welcome screen.
- c. Select Next. The application displays the End User License Agreement.
- d. Select Yes to accept the agreement, and then follow the onscreen instructions.
- e. Select **Finish**. The installation is complete and the application closes the installation window.

#### 2. Download and install the Bioptic Color Camera SDK.

- a. Download the Bioptic Color Camera SDK from <u>https://www.zebra.com/us/en/support-downloads/software/developer-</u> <u>tools/bioptic-color-camera-sdk-for-windows.html</u>.
- b. Double-click the Zebra\_Bioptic\_Color\_Camera\_SDK\_
   vx.xx.xxx.exe file to run the installer. The application displays the Welcome screen.



- c. Select Next. The application displays the End User License Agreement.
- d. Select **Yes** to accept the agreement, and then follow the onscreen instructions.
- e. When the installation is complete, select **Finish**. The application closes the installation window.
- 3. Reboot the computer or POS terminal.

# Launching NCR 123Scan

To launch the NCR 123Scan utility, follow these steps:

- 1. Launch the 123Scan utility by doing any of the following:
  - From the Windows taskbar of the computer or POS terminal, select
     Start→Zebra Scanner→ 123Scan for NCR Configuration Utility.
  - From the Desktop, double-click the **123Scan for NCR** shortcut icon.

The application displays the Start tab of the main window and automatically checks for the latest firmware plug-ins updates online.

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## Note

If updates are available, the application downloads and installs the updates to the scanner. The application displays the 123Scan Updater status at the bottom of the main window.

Start       Data view		123	Scan									
<ul> <li>Actions ▼</li> <li>What do you want to do?</li> <li>Create new configuration file</li> <li>Load existing configuration file</li> <li>Clone/modify my connected scanner settings</li> <li>Update scanner firmware</li> <li>Neent files</li> </ul>		Start	Data vie	w					Barcodes *	Preferences	Hel	p (
Years and the dots         Create new configuration file         Load existing configuration file         Choe/modify my connected scanner settings         Update scanner firmware         Image: Construction file	;											0
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Clone/modify my connected scanner settings         Update scanner firmware		Crea	ate new o	configurat	tion file			$\bigcirc$				
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		1233	scan opdate	n. r-iug-iii(s)	upualeu successiully as of 3/29/2022	9.35 AN	r. view update histo	ry   Supported scatthers   Rele	ase notes   Che	eck for updates		

- 2. If additional plug-ins are required, do the following:
  - a. From the upper-right section of the main window, select Tools→ Import plug-in into 123Scan. The application displays the Import plug-in window.

🔚 Import plug-in				×
$\leftarrow$ $\rightarrow$ $\checkmark$ $\uparrow$ $\blacksquare$ « Public > Public Docum	nents > 123ScanNCR	ٽ ~	, Search 123ScanNCR	
Organize   New folder				?
Name	Date modified	Туре	Size	
📒 Activity Report Database	3/22/2022 9:34 AM	File folder		
📜 App Developer Report	3/22/2022 5:07 PM	File folder		
📕 Barcode Printouts and Parameter Reports	3/22/2022 9:34 AM	File folder		
Configuration Files	3/22/2022 9:34 AM	File folder		
📒 Data View Reports	3/22/2022 9:34 AM	File folder		
📙 Images	3/22/2022 9:34 AM	File folder		
📒 SMS Packages	3/22/2022 9:34 AM	File folder		
📙 Staging Flash Drive Files	3/22/2022 9:34 AM	File folder		
Statistics Files	3/22/2022 9:34 AM	File folder		
Supported Scanners and Plug-ins	4/18/2022 6:41 PM	File folder		
File name:		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Scanner Plugin File (.scnplg)	$\sim$
			Open Cance	el

b. Browse for the scanner plugin file (.scnplg), and then select **Open**. The application installs the updates to the scanner and displays a notification after it successfully imports the plug-in.

Start Data	view							
Actions 🔻								
		2						
Vhat do you	want to do	2						
0					✓ 123Scan Overview			
Create new	v configura		CLICCECC					
		Import plug-in file -	- SUCCESS			×		
Load existi	ing configu	Iration file	Vour plug	-in imported suc	constully			
			rour plug	-in imported suc	ccessiony.			
Clone/mod		incoted and	Plug-in na	me : 7895-NCR	R STANDARD MODELS-S-003			
	iitv mv cor	nected scal						
Cionemiou	iny my cor		Firmware		03 - 2021.07.28 (CAAFMS00-0	03-R07)		
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Apdate sca     Accent files     Type     Config File     Config File     Config File     Config File     SMS Package     SMS Package     Config File	Model 7895 7895 7895 7895 7895 7895 7895 7895	Name           NcR7895_DEF_CFG           NCR7895_ALL_CFG           NCR7895_ALL_CFG           NCR7895_ALL_CFG           NCR7895_ALL_CFG_PAAFM           NCR7895_ALL_CFG_NOFW           NCR7895_ALL_CFG	Firmware You are no scanners su CLOSE 001 001 001 001 001 001 001 001 001	: Release 00 wable to create of upported by the COPY TO C 06-Apr-2022 06-Apr-2022 06-Apr-2022 06-Apr-2022 06-Apr-2022 06-Apr-2022	03 - 2021.07.28 (CAAFMS00-0) configurations and update firmv plug-in above. LIPBOARD NCR7895_DEF_CFG_2022 NCR7895_ML_CFG.scncft NCR7895_ALL_CFG.scncft SMS_Package_NCR7895_ SMS_Package_NCR7895_ NCR7895_ALL_CFG.scncft	ware for 2.02.10.scncfg g g ALL_CFG_PAAI ALL_CFG_NoFi g	W.smspkg	
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Apdate sca     Accent files     Type     Config File     Config File     Config File     Config File     SMS Package     SMS Package     Config File	Anner firmv Model 7895 7895 7895 7895 7895 7895 7895 7895	Name           NcR7895_DEF_CFG           NCR7895_ALL_CFG           NCR7895_ALL_CFG           NCR7895_ALL_CFG           NCR7895_ALL_CFG_PAAFM           NCR7895_ALL_CFG_NOFW           NCR7895_ALL_CFG	Firmware You are no scanners su CLOSE 001 001 001 001 001 001 001 001 001 00	: Release 00 wable to create of upported by the COPY TO C 06-Apr-2022 06-Apr-2022 06-Apr-2022 06-Apr-2022 06-Apr-2022 06-Apr-2022	03 - 2021.07.28 (CAAFMS00-0) configurations and update firmv plug-in above. LIPBOARD NCR7895_DEF_CFG_2022 NCR7895_ML_CFG.scncft NCR7895_ALL_CFG.scncft SMS_Package_NCR7895_ SMS_Package_NCR7895_ NCR7895_ALL_CFG.scncft	aver for 2.02.10.scncfg g g ALL_CFG_PAAI ALL_CFG_PAAI ALL_CFG_PAAI WM_CFG_PAAI	W.smspkg FMS00_003_R07	

## Note

Select **Close** to close the notification.

# Setting Up the Scanner

To set up the scanner with 123Scan utility, follow these steps:

1. Using a USB communication cable, connect the NCR 7895 scanner to a computer or POS terminal. The scanner produces three incrementing beeps.

#### Note

If the computer or POS terminal supports audio, it also produces a detection sound indicating that the scanner is detected.

 Launch the 123Scan utility. For more information, refer to "Launching NCR 123Scan" on page 105.  Verify that the application detects the NCR 7895 scanner by selecting Action→ View USB Scaners on the upper-right section of the Start tab. The application displays the list of detected scanners.

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	overed Scanners 🛞						•
🖏 Actions 🔹 🌋 Load configura	tion  🎄 Update firmware	🛚 🖹 Print / Export	💌 🔁 Refresh 🔛 H	low to video			
1 Scanners found on local USB ho Select all similar   Deselect all	st.	Mass U	Upgrade Mode What i	in thin?		My scanner	is not show
Model	Serial Number	Config. name	Firmware	Mfg. Date	Status	wy scamer	IS NOT SHOW
	ScharNumber	Coning. Hame	Timware				
▼ 📌 7895-3111-2000	20262010557968	Modified	CAAFMS00-003-R07	19-Sep-2020	Available		
🚮 20-МР7-М30-01	2007217785	Modified	PAABTS00-001-R04	01-Jul-2020	Available		
Hide offline scanner list   0scanne							
Hide offline scanner list   0scanne Model	r(s) offline Clear offline sc Serial Number	canner list Config. name	Firmware	Mfg. Date	Last online		
			Firmware	Mfg. Date	Last online		
			Firmware	Mfg. Date	Last online		
			Firmware	Mfg. Date	Last online		
			Firmware	Mfg. Date	Last online	 	
			Firmware	Mfg. Date	Last online	 	

#### Note

If the scanner is not detected, do the following:

- Ensure that the NCR 7895 scanner uses a USB communication cable to connect to a computer or POS terminal.
- Ensure that the USB communication cable is not defective. If defective, replace the cable.
- Ensure that the scanner is not defective by checking its ports and hardware components.

# **Programming the Scanner Using 123Scan**

Through 123Scan utility, parameter settings can be programmed or configured into the scanner using any of the following options:

- "Programming Using a USB Communication Cable" below
- "Programming Using 123Scan Configuration Bar Codes" on page 114

## **Programming Using a USB Communication Cable**

To configure parameter settings of the scanner using 123Scan and a USB communication cable, follow these steps:

1. Using a USB communication cable, connect the NCR 7895 scanner to a computer or POS terminal. The scanner produces three incrementing beeps.

#### P Note

If the computer or POS terminal supports audio, it also produces a detection sound indicating that the scanner is detected.

- Launch the 123Scan utility. For more information, refer to "Launching NCR 123Scan" on page 105.
- 3. From the Start tab of the 123Scan main window, select one of the following options.

Option	Description	Referene
Create new configuration file	Creates a new configuration file for the connected scanner.	For more information, refer to " <u>Creating a</u> <u>Configuration File</u> " on page 118.
	Note For the connection option, select My scanner is connected via USB cable.	
Load existing configuration file	Configures the connected scanner based on an existing configuration file.	For more information, refer to " <u>Loading an</u> <u>Existing Configuration File to a Scanner</u> " on page 133.

Option	Description	Referene
Clone/modify my connected scanner settings	Modifies the current configuration of the connected scanner.	For more information, refer to " <u>Cloning/Modifying Settings of Connected</u> <u>Scanner</u> " on page 139.

4. On the left pane of the 123Scan Configuration Wizard, select **Load and print**. The application displays the Load and print options.

👁 🖛 123Scan		_ 0
12000411		Barcodes * Preferences Tools * Help *
Start   Data view   Untitled1 🛞	NCR7895_WM_CFG (NCR7895_DEF_CFG ()	۹ ۵ ک
🖏 Actions 🔻 🚊 Save file to PC 🛛 🚇	Print bar code 🛛 🗮 Load to scanner 🛛 💐 Email Bar Code to Phone	Print/Save parameters III How to video
Model List Plug-in Name Release Notes App Developer Report	Load and print Choose from the options below to program your scanner	
7895-NCR STANDARD MODELS-002	Save to PC	
1. Name and notes Name:NCR7895_DEF_CFG Notes:	Print bar code	
2. Cable connection USB (default)	Load to scanner	
3. Symbologies (bar code types) Factory default settings	Email bar code to phone	
4. Modify Data No rules	Email electronic config file	
5. Imaging Factory default settings	Print/export parameter report	
6. Scale Parameters Factory default settings		
7. General Factory default settings		
8. Printing Options		
9. Load and print		
< Back Next >	Done Cancel	Search for a parameter

5. From the Load and print options, select **Load to scanner**. The application starts loading the configuration to the selected scanner and the scanner LED starts flashing red.

Load configuration	×
7895-NCR STANDARD MODELS Firmware version: Release 002 - 2021.02.03 (CAAFMS00-003-R05) 7895 model list	
1 compatible scanner(s) found for your configuration.	
Uploading NCR7895_DEF_CFG 1 of 1 scanner(s)	
25 %	
DISCOVERED SCANNER LIST	CLOSE

When the application has completed loading the configuration to the scanner, the scanner LED returns to solid green.

#### 🗗 Note

Some parameter updates, such as EAS and Scale parameters, require a scanner reboot to apply the changes to the scanner. To reboot the scanner, do any of the following:

- Disconnect and then reconnect power to the scanner.
- Simultaneously press the Scale and EAS buttons for 5 to 10 seconds until the scanner produces a long beep. After the scanner reboots, it produces three incrementing beeps.

## Programming Using 123Scan Configuration Bar Codes

NCR 123Scan provides an option to generate a configuration bar code that contains multiple scanner parameter settings. This bar code can be scanned to load new or updated parameter settings to the scanner.

#### P Note

Depending on the number and type of parameters updated or modified, the NCR 123Scan utility may generate one or more configuration bar codes.

To configure parameter settings of the scanner using 123Scan configuration bar codes, follow these steps:

 Create the configuration file using the NCR 123Scan utility. For more information, refer to "Creating a Configuration File" on page 118.

- 2. Print the 123Scan configuration bar code.
  - a. On the left pane of the 123Scan Configuration Wizard, select Load and print.
     The application displays the Load and print options.

a 123Scan		_ E >
Start Data view Untitled1 6	NCR7895_WM_CFG 🛞 NCR7895_DEF_CFG 🛞	
	Print bar code 🛛 🛣 Load to scanner 🛛 🖓 Email Bar Code to Phone	
Model List Plug-in Name Release Notes App Developer Report	Load and print Choose from the options below to program your scanner	
7895-NCR STANDARD MODELS-002	Save to PC	
Amme and notes	Print bar code	
Name:NCR7895_DEF_CFG Notes: 2. Cable connection	Load to scanner	
USB (default)  3. Symbologies (bar code types) Factory default settings	Email bar code to phone	
A. Modify Data     No rules	Email electronic config file	
5. Imaging Factory default settings	Print/export parameter report	
6. Scale Parameters Factory default settings		
7. General Factory default settings		
8. Printing Options		
9. Load and print		
< Back Next >	Done	Search for a parameter

b. From the Load and print options, select **Print bar code**. The application displays the Bar code formatting tab of the Print window.

Print			
Bar code forma	tting 🔻 🛛 P	age Setup▼	
Bar code type:	2D (ALL setting	gs in one barcode	e) PDF417 × ×
Control unautho	(Default) × prized paramete enables the read	ding	Bar code layout         ✓         ✓         Include caption         ✓         ✓         ✓         ✓         ✓         Start programming barcode with         ●         ✓         Set factory defaults         ○         Set defaults         Bar codes per page:         6         ✓         Erase all rules
Param	neters can be pe	rmanently chang	ed from the "Printing Options" screen.

- c. On the Bar code formatting tab, set the following options:
  - For the Bar code type, select 2D (ALL settings in one barcode) PDF417.
  - For the Bar code format, select Small (Default).
- d. Close the Bar code formatting tab. The application displays the configuration file containing the configuration bar codes, parameter settings, and other scanner details.

(O) HCR	123Scan			□ ×
		Barcodes - Preferences	Tools 👻	Help 👻
Print				×
Ba	code formatting ▼ Page Setup ▼			
*	7895: Programming Barcodes for 7895         Configuration name in Utility:       7895         Last Modified :       22-Mar-22         Windows Filename :       Config File, 7895_7895_2022.03.22 scnctg         Plug-in Name :       7895-NCR STANDARD MODELS-003         Report Type :       Only parameters changed from defaults shown	*		•
CAT	CEL	SAVE AS MS WO	RD PI	▼ RINT

e. Select the **Print** button to print the configuration bar code.

Note The configuration bar codes may also be printed out on a piece of paper.

- Scan the Enable PDF417 and Enable MicroPDF417 bar codes on "<u>PDF417 and</u> <u>MicroPDF417 Bar Codes</u>" on the next page. These bar codes enable the scanner to recognize the configuration bar codes generated through 123Scan.
- 4. Scan the 123Scan configuration bar code.
  - a. Position the bar code vertically and angled slightly to the side.
  - b. Present the bar code to the middle of the Vertical Scan Window.

#### P Note

If scanning multiple configuration bar codes, take note of the following:

- Scan the configuration bar codes in order.
- If "Start programming bar code with Set factory defaults" is selected under the Bar code layout options, rescan the Enable PDF417 and Enable MicroPDF417 bar codes before scanning the next configuration bar code.

#### PDF417 and MicroPDF417 Bar Codes

#### P Note

The bar codes may also be printed out on a piece of paper.



Enable MicroPDF417 (01h)

# **Creating a Configuration File**

A 123Scan configuration file contains all parameters and data formatting rules required to program the NCR 7895 scanner. It can be in any of the following formats:

- 123Scan Scanner Configuration (.scncfg) file programmed into the scanner using a USB communication cable.
- Configuration bar code scanned to apply the parameter settings to the scanner.

To create a configuration file, follow these steps:

- Launch the 123Scan utility. For more information, refer to "Launching NCR 123Scan" on page 105.
- From the Start tab of the 123Scan main window, select Create new configuration file.
   The application opens a new untitled tab and displays scanner connection options in creating a configuration file.

0	∗ 123Scan	_ 🗆 ×
		Barcodes 👻 Preferences Tools 👻 Help 👻
	Start   Data view Untitled1 🛞	• •
	- Back	
	Select an option to start creating a configuration	in file
	My scanner is connected via USB cable	Why is using a connected scanner better?
	Ny scame is connected via USD cable	If you use a scanner connected to this local
	My scanner is NOT connected	host, the application chooses the correct default configuration file with which to start.

- 3. Select one of the following scanner connection options:
  - "Scanner is Connected Through a USB cable" on page 121
  - "Scanner is Not Connected" on page 123

#### R Note

After selecting the scanner connection option, scanner model, and firmware plug-in, the application starts the Configuration Wizard.

123Scan				Barcodes -		🗖 🗄
Start   Data view Untitled1	0				<b>(</b> )	
🗞 Actions 🔻 道 Save file to PC 🖉	Print bar code	Load to scanner	💐 Email Bar Code to Phone	Print/Save parameters	🔛 How to video	
Model List Plug-in Name Release Notes App Developer Report 7895-NCR STANDARD MODEL S-003			What is this?	so add		
Name and notes     Name:Untiled1     Notes:     Cable connection	Notes:			*		
USB (default) 3. Symbologies (bar code types) Factory default settings		<b>500</b> of 500 chara	cters remaining	×		
4. Modify Data No rules 5. Imaging						
Factory default settings  6. Scale Parameters Factory default settings						
7. General Factory default settings						
8. Printing Options						
9. Load and print						
< Back Next >	Done	Cancel		Search for a parameter		j

4. Enter the configuration name.

#### P Note

The configuration name must start with "NCR7895" and end with "CFG". For example, set the configuration name to "NCR7895\_DEF\_CFG".

- 5. Add notes to briefly describe the configuration file (optional).
- 6. Select **Next** to proceed and configure other settings. The application displays the next window and displays the new configuration name as the tab title.

7. After adjusting all settings for the configuration file, select **Load and print** from the left pane and do any of the following options:

Action	Description
Save to PC	Saves the configuration file, in (.scncfg) format, to a predesignated location on the computer.
	Note 123Scan configuration files are saved in C:\Users\Public\Documents\123ScanNCR\Configuration Files.
Print bar code	Creates a configuration bar code that contains multiple scanner parameter settings.
	<b>Note</b> Depending on the number and type of parameters updated or modified, the NCR 123Scan utility may generate one or more configuration bar codes. For more information, refer to " <u>Programming Using 123Scan Configuration Bar Codes</u> " on page 114.
Load to scanner	Loads the configuration to the connected scanner through a USB communication cable. For more information, refer to " <u>Programming Using a USB Communication Cable</u> " on page 111.
Email bar code to phone	Emails both the configuration bar code and parameter report.
Email electronic config file	Emails the configuration file. The message also includes the configuration file overview and instructions in using the configuration file.
Print/export parameter report	<ul> <li>Prints a parameter report containing all parameters that were enabled or disabled within the configuration file. The report may be printed out or saved as a Word file.</li> <li>A parameter report shows either of the following: <ul> <li>Only the parameters that were changed from factory defaults</li> <li>All parameters</li> </ul> </li> </ul>

## Scanner is Connected Through a USB cable

If the NCR 7895 scanner is connected to the computer or POS terminal through a USB communication cable, the 123Scan application automatically detects the firmware plug-in of the scanner.

To create a configuration file based on the firmware plug-in of the connected scanner, follow these steps:

 Using a USB communication cable, connect the NCR 7895 scanner to a computer or POS terminal. The scanner produces three incrementing beeps.



From the scanner connection option, select My scanner is connected via USB cable.
 The application displays all detected scanners and their firmware plug-in options.

<b>∞⊷</b> 123S		- ×
Start	Data view Untitled1 (2)	
Select you If you do no above to se	Refresh list ur scanner model from the options below: I see your scanner's image / plug-in information below, click the "Refresh list" button arch your PC for scanners connected by a cable. If after this your scanner is still not w, see the "I don't see my scanner" box on the right for additional assistance.	
	7895-NCR STANDARD MODELS         Select form 1 plug-in option(s)         Select a Plug-in         Release notes       Supported models         Release 003 - 2021 07.28 (CAAFMS00-003-R07)	

3. Select the latest firmware plug-in. The application starts the Configuration Wizard.

or ang						_ 🗆 >
				Barcodes 👻	Preferences Tools	➡ Help ➡
Start   Data view Untitled1 (	8					
🖏 Actions 🔻 🚊 Save file to PC 🛔	🖹 Print bar code 🛛 🌋 Lo	oad to scanner 🛛 😽 Email	Bar Code to Phone	Print/Save parameters	🔛 How to video	
Model List Plug-in Name Release Notes App Developer Report 7585-NCR STANDARD MODELS-003	Please be sure to give notes and give the cor Configuration name:	es your settings a configurati figuration name a version n Untitled1 16 character limit		so add		
1. Name and notes Name:Unitiled1 Notes: 2. Cable connection USB (default)	Notes:			<u>^</u>		
3. Symbologies (bar code types) Factory default settings 4. Modify Data No rules	5	<b>500</b> of 500 characters remain	ing	Ψ.		
5. Imaging Factory default settings 6. Scale Parameters	-					
Factory default settings 7. General Factory default settings	-					
8. Printing Options						
9. Load and print	-					
< Back Next >	Done	Cancel		Search for a parameter		

## **Scanner is Not Connected**

If the NCR 7895 scanner is not connected to the computer or POS terminal through a USB communication cable, the user must manually select the scanner model and firmware plug-in.

To create a configuration file without a scanner connected, follow these steps:

1. From the scanner connection option, select **My scanner is not connected**. The application displays the available scanner family options.

() NCR	123Scan							Barco	des 🔻 Preferences	∃ ×
	Start Da	ta view Untit	led1 🛞							
	EBack Select your	scanner fam	ily from the	options belo	w:				I don't see m Check online	
	Search – For e	example type 9908		(	2					
	Recently Used	d								
	7895									=
-										 •
			J	?	5	7	Ð	-	3	
	7895	CS4070	CS6080	DS2208	DS2278	DS3508	DS3578	DS3608	DS3678	
	T	ŢŢ		٦		1	1			
	DS4208	DS4308	DS457	DS4608	DS4801	DS6707	DS6708	DS6878	DS7708	
	-	L	E	9	1	II	-		<i>«</i>	

2. From the scanner family options, select **7895**. The application displays the available scanner models under 7895.

or an	_ 🗆 ×
	Barcodes * Preferences Tools * Help *
Start Data view Untitled1	
E Back	
Select your scanner model from the options below:	Is my scanner supported?
7895-NCR STANDARD MODELS Select from 1 plug-in option(s)	Help me find my scanner. List of Currently Available Plug-ins
Select a Plug-in Release notes Supported models	
Release 003 - 2021.07.28 (CAAFMS00-003-R07)	

3. Select the latest firmware plug-in. The application starts the Configuration Wizard.

or 123Scan						_ 🗆 >
				Barcodes 👻	Preferences Tools	➡ Help ➡
Start   Data view Untitled1 (	8					
🖏 Actions 🔻 🚊 Save file to PC 🛔	🖹 Print bar code 🛛 🌋 Lo	oad to scanner 🛛 😽 Email	Bar Code to Phone	Print/Save parameters	🔛 How to video	
Model List Plug-in Name Release Notes App Developer Report 7895-NCR STANDARD MODELS-003	Please be sure to give notes and give the cor Configuration name:	es your settings a configurati figuration name a version n Untitled1 16 character limit		so add		
1. Name and notes Name:Unitiled1 Notes: 2. Cable connection USB (default)	Notes:			<u>^</u>		
3. Symbologies (bar code types) Factory default settings 4. Modify Data No rules	5	<b>500</b> of 500 characters remain	ing	Ψ.		
5. Imaging Factory default settings 6. Scale Parameters	-					
Factory default settings 7. General Factory default settings	-					
8. Printing Options						
9. Load and print	-					
< Back Next >	Done	Cancel		Search for a parameter		

# **Opening an Existing Configuration File**

An existing Configuration File can be opened using any of the following options:

- "Opening a Configuration File from the Configuration Files Folder" below
- "Opening a Configuration File within 123Scan" on page 128

## Opening a Configuration File from the Configuration Files Folder

To open an existing Configuration File from the Configuration Files folder on the computer or POS terminal, follow these steps:

1. Locate the Configuration File (.scncfg) on the computer or POS terminal.

P	Note
	By default, 123Scan configuration files are saved in
	C:\Users\Public\Documents\123ScanNCR\Configuration
	Files.

2. Double-click the Configuration File. The system launches the NCR 123Scan utility

launches and displays the Configuration File summary.

🚥 123Scan		_ = ×
12050all		Barcodes * Preferences Tools * Help *
Start   Data view NCR7895_D	F_CFG 🛞	
🖏 Actions 👻 🚊 Save file to PC 🗕	Print bar code 🛛 🧮 Load to scanner 🛛 🦉 Email Bar Code to Phor	ne 🖹 Print/Save parameters 🚯 How to video
Model List Plug-in Name	Configuration file summary	
Release Notes App Developer Report	Configuration name: NCR7895_DEF_CFG Notes: Default 7895 Configuration settings	View / Edit
7895-NCR STANDARD MODELS-004	Cable connection USB (default)	Mew / Edit
Start configuration wizard >>	Symbologies (bar code types) Factory default settings	Wew/Edit
	Modify Data No rules	Wew/Edt
	Imaging Factory default settings	View / Edit
	Scale Parameters Factory delault settings	View / Edit
	General Factory default settings	View / Edit
	Printing Options	View / Edit

## **Opening a Configuration File within 123Scan**

To open an existing Configuration File within 123Scan, follow these steps:

- Launch the 123Scan utility. For more information, refer to "Launching NCR 123Scan" on page 105.
- From the upper-left section of the Start tab, select Action→ Open Configuration File.
   The application displays the Open configuration window.

Open configuration					×
$\leftarrow$ $\rightarrow$ $\checkmark$ $\uparrow$ $\blacksquare$ « 123ScanNCR > Config	uration Files	~	Ü	,	h Configuration Files
Organize   New folder					:= • 🔟 ?
Name	Date modified	Туре		Size	
🐻 Config File_NCR7895_DEF_CFG_2022.04.21	4/21/2022 12:41 PM	123Scan Scanr	ner C	37 KB	
File name:			~		nfiguration File (.scn $  imes $
				Open	Cancel

3. Browse for the Configuration File (.scncfg) on the computer or POS terminal.



4. Select **Open**. The application displays the Configuration File summary.

<b>()</b> -ca	123Scan					□ ×
	12000011			Barcodes *	Preferences Tools *	Help 👻
	Start   Data view NCR7895_DE	F_CFG 🛞			@ @	
4	🕏 Actions 👻 🚊 Save file to PC 🗕	Print bar code 🛛 🦹 Load to scanner	💐 Email Bar Code to Phone	R Print/Save parameters	How to video	
	Model List Plug-in Name	Configuration file summary				
	App Developer Report	Configuration name: NCR7895_DEF_CFG Notes: Default 7895 Configuration settings			View / Edit	
71	895-NCR STANDARD MODELS-004	Cable connection USB (default)			View / Edit	
	Start configuration wizard >>	Symbologies (bar code types) Factory default settings			View / Edit	
		Modify Data No rules			View / Edit	
		Imaging Factory default settings			View / Edit	
		Scale Parameters Factory default settings			View / Edit	
		General Factory default settings			View / Edit	
		Printing Options			View / Edit	
						-

# Modifying an Existing Configuration File

A Configuration File can be modified using the NCR 123Scan utility. To modify an existing Configuration File, follow these steps:

 Open an existing Configuration File. For more information, refer to "Opening an Existing Configuration File" on page 126.

Start Data view NCR7895_DE	F_CFG 🛞	6
🗞 Actions 🔹 🛅 Save file to PC 🔒	Print bar code 🛛 🧮 Load to scanner 🛛 💐 Email Bar Code to Ph	tone 🔹 Print/Save parameters 🔛 How to video
Model List Plug-in Name Release Notes	Configuration file summary	
App Developer Report	Notes: Default 7895 Configuration settings	View / Edit
7895-NCR STANDARD MODELS-004	Cable connection USB (default)	View / Edit
Start configuration wizard >>	Symbologies (bar code types) Factory default settings	View/Edit
	Modify Data No rules	Wew/Edit
	Imaging Factory default settings	Wew/Edit
	Scale Parameters Factory default settings	View / Edit
	General Factory default settings	View / Edit
	Printing Options	View / Edit

2. Select **Start configuration wizard**. The application starts the Configuration Wizard.

ner 123Scan			_ □ Barcodes ▼ Preferences Tools ▼ Help
Start Data view NCR7895_E	DEF_CFG 🛞		
🖏 Actions 🔻 🚊 Save file to PC 🖉	Print bar code 🛛 🌋	Load to scanner 🛛 💐 Email Bar Code to P	hone 🔋 Print/Save parameters 🛛 🔛 How to video
Model List Plug-in Name Release Notes App Developer Report MODEL S-003		otes ive your settings a configuration name. You configuration name a version number. NCR7895_DEF_CFG What is this? 16 character limit	
Name:NCR7895_DEF_CF6 Notes:     Cable connection ^ USB (default)     Symbologies (bar code types) Factory default settings     4. Modify Data No rules	Notes:	500 of 500 characters remaining	
5. Imaging Factory default settings 6. Scale Parameters Factory default settings 7. General Factory default settings			
Cool (Contact County)     Reprinting Options     Solution			
< Back Next >	Done	Cancel	Search for a parameter

- 3. Select **Next** and modify the settings as necessary.
- 4. After adjusting all settings for the configuration file, select **Load and print** from the left pane and do any of the following options:

Action	Description
Save to PC	Saves the configuration file, in (.scncfg) format, to a predesignated location on the computer.
	Note 123Scan configuration files are saved in C:\Users\Public\Documents\123ScanNCR\Configuration Files.

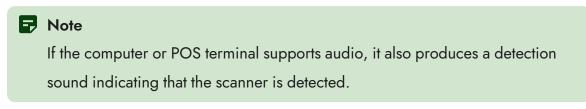
Action	Description
Print bar code	Creates a configuration bar code that contains multiple scanner parameter settings.
	Note Depending on the number and type of parameters updated or modified, the NCR 123Scan utility may generate one or more configuration bar codes. For more information, refer to " <u>Programming Using 123Scan Configuration Bar Codes</u> " on page 114.
Load to scanner	Loads the configuration to the connected scanner through a USB communication cable. For more information, refer to " <u>Programming Using a USB Communication Cable</u> " on page 111.
Email bar code to phone	Emails both the configuration bar code and parameter report.
Email electronic config file	Emails the configuration file. The message also includes the configuration file overview and instructions in using the configuration file.
Print/export parameter report	<ul> <li>Prints a parameter report containing all parameters that were enabled or disabled within the configuration file. The report may be printed out or saved as a Word file.</li> <li>A parameter report shows either of the following: <ul> <li>Only the parameters that were changed from factory defaults</li> <li>All parameters</li> </ul> </li> </ul>

# Loading an Existing Configuration File to a Scanner

Using 123Scan, an existing configuration file can be loaded to a connected scanner.

To load an existing file to a connected scanner, follow these steps:

1. Using a USB communication cable, connect the NCR 7895 scanner to a computer or POS terminal. The scanner produces three incrementing beeps.



- Launch the 123Scan utility. For more information, refer to "Launching NCR 123Scan" on page 1.
- From the Start tab of the 123Scan main window, select Load existing configuration file. The application displays the Open configuration window.

💮 Open configuration					×
$\leftarrow$ $\rightarrow$ $\checkmark$ $\uparrow$ $\blacksquare$ « 123ScanNCR > Config	uration Files	ٽ ~	,	Configuration	Files
Organize 🔻 New folder					•
Name	Date modified	Туре	Size		
Config File_NCR7895_DEF_CFG_2022.04.21	4/21/2022 12:41 PM	123Scan Scanner C	37 KB		
File name:		~	Scanner Cor	nfiguration File	(.scn ∨
			Open	Car	ncel

4. Browse for the configuration file (.scncfg) on the computer or POS terminal.



5. Select **Open**. The application displays the Load configuration window.

Load configuration	×
7895-NCR ENGINEERING TESTING-C Firmware version: Release 002 - 2022.04.13 (CAAFMS00-004-N03) 7895 model list	
<ul> <li>1 compatible scanner(s) found for your configuration.</li> <li>Refresh scanner list</li> <li>20174010554600 - CAAFMS00-004-N03</li> <li>If you do not see your scanner listed print the bar code and scan it to confirm the scanner is properly communicating over US8.</li> <li>Clicking on a scanner above will begin the loading for that scanner. You can click the FLASH/BEEP icon within a row to</li> </ul>	
find that particular scanner. Or to initiate the loading of all scanners, click the LOAD TO ALL SCANNERS button above. DISCOVERED SCANNER LIST CLC	

6. From the scanner list, select the scanner to configure. The application starts loading the configuration to the selected scanner and the scanner LED starts flashing red.

Load configuration	×
7895-NCR STANDARD MODELS Firmware version: Release 002 - 2021.02.03 (CAAFMS00-003-R05) 7895 model list	
1 compatible scanner(s) found for your configuration.       LOAD TO ALL SCANNERS         Uploading NCR7895_DEF_CFG       1 of 1 scanner(s)	
26 %	
DISCOVERED SCANNER LIST	CLOSE

When the application has completed loading the configuration to the scanner, the scanner LED returns to solid green.

#### P Note

Some parameter updates, such as EAS and Scale parameters, require a scanner reboot to apply the changes to the scanner. To reboot the scanner, do any of the following:

- Disconnect and then reconnect power to the scanner.
- Simultaneously press the Scale and EAS buttons for 5 to 10 seconds until the scanner produces a long beep. After the scanner reboots, it produces three incrementing beeps.

# Importing a Configuration File from a Staging Flash Drive

Scanner parameters can be extracted or imported from the staging files package stored in a USB flash drive and then saved in configuration file format (.scncfg). The USB Flash drive to be used should contain scanner staging files generated from the NCR 123Scan utility or from an NCR 7895 scanner.

To import a configuration file from a USB staging flash drive, follow these steps:

- 1. Connect the USB staging flash drive to the computer or POS terminal.
- Launch the 123Scan utility. For more information, refer to "Launching NCR 123Scan" on page 105.
- From the upper-right section of the main window, select Tools→ Staging flash drive for Multi-Plane Scanners→Import Configuration File from Staging Flash Drive. The application displays the Browse For Folder window.

DHCR	123Scan				
	Start Data view		Barcodes   Preferences		Help
	Actions 💌				
١	What do you want to do?				
	Create new configuration file	Browse For Folder			
1	Load existing configuration file	Select a folder containing staging config files to import			
	Clone/modify my connected scanner	> This PC  > 3 D Objects			
	Update scanner firmware	> Desktop > B Documents			
(		<ul> <li>&gt; ➡ Downloads</li> <li>&gt; Music</li> <li>&gt; ➡ Pictures</li> <li>&gt; ➡ Videos</li> <li>&gt; ➡ Windows (C:)</li> </ul>			
		OK Cancel			
	123Scan Updater: Your utility and plug-ins are up-to-	tate as of 9/14/2022, 2:08 PM. View update history   Supported scanners	Release notes Check for u	updates	

4. Select the USB flash drive containing the scanner staging files, and then select **OK**.

123	Scan	
120		Barcodes - Preferences Tools - H
Start	Data view	
🖏 Acti	Import Staging Files	×
What	Select a device from below	Select a file from below, then click the open button.
Cre	7895-NCR STANDARD MODELS-004	Model: 7895-1010-0000 File name: MAAFMS00.STGCFG Configuration Name: Defaults
Loa		Plug-in: NCR STANDARD MODELS Firmware: Release 004 - 2022.07.06 (CAAFMS00-004-R00)
Clo Upc		
Rec     Type		
SMS F Stagin		pkg
Config Config		
SMS F		15
SMS F		
SMS F Config		
Coning		
	BACK	OPEN CONFIG. FILE

5. Select a device and a configuration file to import.



Some flash drives may contain more than one configuration staging files.

6. Select **OPEN CONFIG FILE**. The application displays the Configuration File summary.

🗪 123Scan					□ ×
1200cari			Barcodes 👻	Preferences Tools *	Help 👻
Start   Data view Defaults 🛞				•	
🖏 Actions 👻 🛅 Save file to PC 🖉	Print bar code 🛛 🚒 Load to scanner 🛛 💐	Email Bar Code to Phone	R Print/Save parameters	How to video	
Model List Plug-in Name Release Notes	Configuration file summary				
App Developer Report	Configuration name: Defaults Notes:			View / Edit	
7895-NCR STANDARD MODELS-004	Cable connection USB (default)			View / Edit	
Start configuration wizard >>	Symbologies (bar code types) Factory default settings			View / Edit	
	Modify Data No rules			View / Edit	
	Imaging Factory default settings				
	Scale Parameters Factory default settings			View / Edit	
	General Factory default settings			View / Edit	
	Printing Options			View / Edit	

7. Select **Save files to PC**. The application saves the configuration file, in (.scncfg) format, to a predesignated location on the computer.

٦	Note
	By default, 123Scan configuration files are saved in
	C:\Users\Public\Documents\123ScanNCR\Configuration
	Files.

# Cloning/Modifying Settings of Connected Scanner

When a scanner is connected to computer or POS terminal, its settings can be retrieved for review, modification, or cloning.

To review, modify, or clone the settings of the connected scanner, follow these steps:

1. Using a USB communication cable, connect the NCR 7895 scanner to a computer or POS terminal. The scanner produces three incrementing beeps.



 Launch the 123Scan utility. For more information, refer to "Launching NCR 123Scan" on page 105. 3. From the Start tab of the 123Scan main window, select **Clone/modify my connected scanner settings**. The application displays the current scanner configuration file summary.

Start Data view NCR7895_DE	F_CFG 🛞	•
🖏 Actions 👻 🚊 Save file to PC 🛛 🚇	Print bar code 🛛 🧝 Load to scanner 🛛 🦉 Email Bar Code to Phone 🛛 🖹 Print/Save parameters	🔛 How to video
Model List Plug-in Name Release Notes App Developer Report	Configuration file summary Configuration name: NCR7895_DEF_CFG Notes:	View / Edit
7895-NCR STANDARD MODELS-003	Cable connection ^ USB (default)	View / Edit
Start configuration wizard >>	Symbologies (bar code types) Factory default settings	View / Edit
	Modify Data No rules	View / Edit
	Imaging Factory default settings	View / Edit
	Scale Parameters Factory default settings	View / Edit
	General Factory default settings	View / Edit
	Printing Options	View / Edit

4. Select **Start configuration wizard**. The application displays the Configuration Wizard options.

			Barcodes <b>*</b> Preferences	Tools *
Start   Data view NCR7895_0	DEF_CFG 🛞			
🖏 Actions 👻 🛄 Save file to PC 📲	Print bar code	🛃 Load to scanner 🛛 😽 Email Bar Code to Phone	Print/Save parameters III How to vide	eo
Model List Plug-in Name	Name and	notes		
Release Notes App Developer Report		give your settings a configuration name. You can a e configuration name a version number.	also add	
7895-NCR STANDARD MODELS-003	Configuration name:	NCR7895_DEF_CFG What is this?		
-		16 character limit		
1. Name and notes Name:NCR7895_DEF_CFG Notes:	Notes:		<u></u>	
2. Cable connection ^ USB (default)				
3. Symbologies (bar code types) Factory default settings		500 of 500 characters remaining	<b>v</b>	
4. Modify Data No rules				
5. Imaging Factory default settings				
6. Scale Parameters Factory default settings				
7. General Factory default settings				
8. Printing Options				
9. Load and print				
-				

- 5. On the left pane of the 123Scan Configuration Wizard, select a group of settings to configure.
- 6. After adjusting all settings for the configuration file, select **Load and print** from the left pane and do any of the following options:

Action	Description
Save to PC	Saves the configuration file, in (.scncfg) format, to a predesignated location on the computer.
	Note 123Scan configuration files are saved in C:\Users\Public\Documents\123ScanNCR\Configuration Files.

Action	Description
Print bar code	Creates a configuration bar code that contains multiple scanner parameter settings.
	Note Depending on the number and type of parameters updated or modified, the NCR 123Scan utility may generate one or more configuration bar codes. For more information, refer to " <u>Programming Using 123Scan Configuration Bar Codes</u> " on page 114.
Load to scanner	Loads the configuration to the connected scanner through a USB communication cable. For more information, refer to " <u>Programming Using a USB Communication Cable</u> " on page 111.
Email bar code to phone	Emails both the configuration bar code and parameter report.
Email electronic config file	Emails the configuration file. The message also includes the configuration file overview and instructions in using the configuration file.
Print/export parameter report	<ul> <li>Prints a parameter report containing all parameters that were enabled or disabled within the configuration file. The report may be printed out or saved as a Word file.</li> <li>A parameter report shows either of the following: <ul> <li>Only the parameters that were changed from factory defaults</li> <li>All parameters</li> </ul> </li> </ul>

# **Advanced Data Formatting**

Advanced Data Formatting (ADF) is a means of customizing data from before transmission to the host device. Use ADF to edit scan data to suit your host's requirements. With ADF, you scan one bar code per trigger pull. ADF is programmed using 123Scan.

For an ADF tutorial, go to Creating an Advanced Data Formatting (ADF) Rule.

# Scanner Management Service Package

The Scanner Management Service (SMS) Solution enables a business to remotely manage its scanners and provides the following benefits:

- Access asset tracking information.
- Remotely set scanner parameters and update scanner firmware.
- Establish automatic communication between the scanner and host application.
- Automate the process of loading a 123Scan generated SMS Package to a scanner.

### **Requirements**

The following are required to use the Scanner Management Service (SMS) Solution:

• 123Scan Configuration Utility

#### Note

It is recommended to install the latest version (v5.04.0006 or higher, 64-bit) of the 123Scan utility. For more information on 123Scan, refer to "Installing NCR 123Scan" on page 99.

- Supported operating systems:
  - ° Windows 7 SP1 (32-bit and 64-bit)
  - ° Windows 10 (32-bit and 64-bit)
  - ° Windows POS Ready 2009
- SMS Solution Size
  - ° Approximately 20 MB for 32-bit
  - ° Approximately 30 MB for 64-bit

#### P Note

Once installed in a production environment, the SMS solution size decreases.

## **Installing Scanner Management Service**

To install Scanner Management Service (SMS) on the computer or POS terminal, follow these steps:

- 1. Download the SMS Solution from <a href="https://www.zebra.com/cn/zh/support-downloads/software/utilities/scanner-management-service-for-windows.html">https://www.zebra.com/cn/zh/support-downloads/software/utilities/scanner-management-service-for-windows.html</a>.
- 2. Double-click the Zebra\_Scanner\_Management\_Service\_(xxbit)\_ vx.xx.xxx.exe file to run the installer. The application displays the Welcome screen.

Zebra Scanner Management Service (64bit) - InstallShield Wizard



Zebra Scanner Management Service (64bit) requires the following items to be installed on your computer. Click Install to begin installing these requirements.

Status	Requirement
Pending	Zebra CoreScanner Driver (64bit) v3.07.0023
	Install Cancel

• Select **Install** to start installing the CoreScanner driver. After installing the driver, the application displays the Welcome screen.

#### Note

If no Zebra CoreScanner driver is installed in the system or the pre-installed CoreScanner driver version is not the latest version, the setup wizard prompts to install the latest Zebra CoreScanner Driver.

- 3. On the Welcome screen, select **Next**. The application displays the End User License Agreement.
- 4. Select **Yes** to accept the agreement, and then follow the onscreen instructions.
- 5. When the installation is complete, select **Finish**. The application closes the installation window.
- 6. Reboot the computer or POS terminal.

### Creating an SMS Package Using 123Scan

An SMS Package includes the following three components:

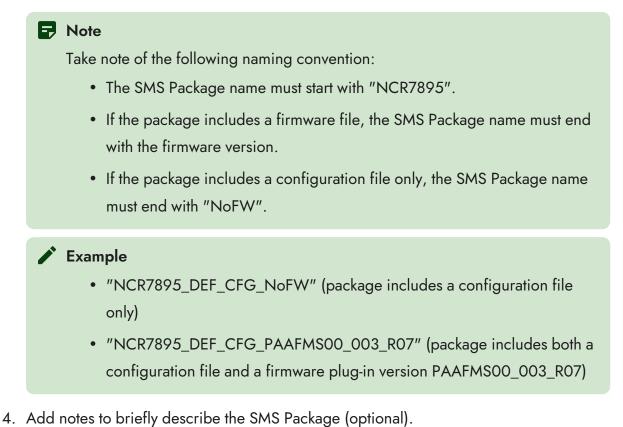
- 123Scan configuration file containing parameters
- 123Scan plug-in containing scanner firmware
- Load *Directive* file with loading details such as date and time

To create an SMS Package, follow these steps:

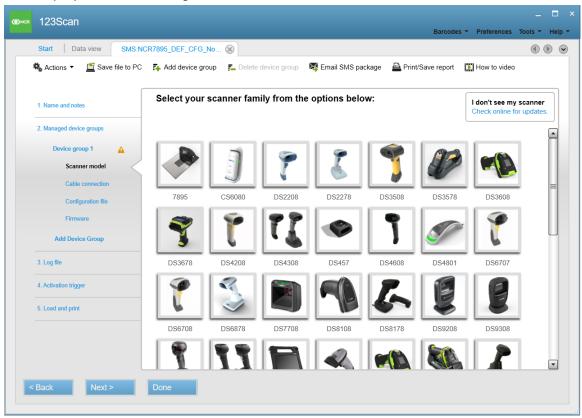
- Launch the 123Scan utility. For more information, refer to "Launching NCR 123Scan" on page 105.
- From the upper-left section of the Start tab, select Action→ Create SMS Package. The application opens a new untitled tab and starts the SMS Package Wizard.

⊶∝ 123Scan				Barcodes 🔻 Preferences	_ =	
	Intitled1 🛞	🚰 Delete device group	K Email SMS package	Arint/Save report	0.0	0
1. Name and notes  2. Managed device groups  Device group 1  Scanner model  Cable connection  Configuration file  Firmware  Add Device Group  3. Log file  4. Activation trigger  5. Load and print	SMS package na Please specify a name SMS package name Package notes		What is this?	<ul> <li>SMS overview</li> <li>What is an SMS Package</li> <li>Deploying an SMS Package</li> <li>How to videos</li> </ul>		
< Back Next >	Done					

3. Enter the SMS Package name.



5. Select **Next** to proceed. The application displays the available scanner family options and displays the new configuration name as the tab title.



6. From the scanner family options, select **7895**. The application displays the available scanner models under 7895.

(C) HCF	123Scan		_ 🗆 ×
			es • Preferences Tools • Help •
_		R7895_DEF_CFG_No 🛞	
	K Actions ▼ L Save file to PC	🗛 Add device group 🛛 📮 Delete device group 🛛 🖉 Email SMS package 🛛 🚔 Print/Save report	🔛 How to video
	<ul> <li>1. Name and notes</li> <li>2. Managed device groups</li> <li>Device group 1</li> <li>Scanner model</li> <li>Cable connection</li> <li>Configuration file</li> <li>Firmware</li> <li>Add Device Group</li> <li>3. Log file</li> <li>4. Activation trigger</li> <li>5. Load and print</li> </ul>	Elect your scanner model from the options below:	I don't see my scanner Check online for updates
	< Back Next >	Done	

7. From the scanner model options, select **7895-NCR STANDARD MODELS**. The application displays the list of supported scanners models.

<b>O</b> NCR	123Scan	Barcodes ▼ Preferences Tr	_ 🗆 ×
	Start Data view SMS:N	Barcodes * Preferences To	eools • Help •
		🗛 Add device group 🛛 ฐ Email SMS package 🛛 🚔 Print/Save report 🛛 🛄 How to video	
	1. Name and notes         2. Managed device groups         Device group 1         Scanner model         Cable connection         Configuration file         Firmware         Add Device Group         3. Log file         4. Activation trigger         5. Load and print	Supported scanner models Scanner plug-in name: 7895-NCR STANDARD MODELS Click "Next" if your scanner model is listed below. • 7895-1010-0000 • 7895-2010-0000 • 7895-2010-0000 • 7895-2010-0000 • 7895-2110-1000 • 7895-2110-1000 • 7895-2110-1000 • 7895-2110-1000	
	< Back Next >	Done	

8. Select Next. The application displays the cable connection options.

123Scan			_ 🗆 ×
120000	Barcod	es 👻 Preferences	Tools 👻 Help 👻
 Start   Data view	IS:NCR7895_DEF_CFG_No		
🍓 Actions ▾ 🛛 🖆 Save file	) PC 🛛 🗛 Add device group 🛛 🚰 Delete device group 🛛 🦉 Email SMS package 🛛 🚔 Print/Save report	🔛 How to video	
1. Name and notes	Cable connection Specify the communication protocol to be used while managing your scanner		
2. Managed device groups			
Device group 1	Management Communication Protocol USB - SNAPI	<ul> <li>What is this?</li> </ul>	
Scanner model			
Cable connection			
Configuration file			
Firmware			
Add Device Group			
3. Log file			
4. Activation trigger			
5. Load and print			
	-		
Back Next >	Done		

#### P Note

This protocol is the communication mode used by SMS to manage the scanner. The fastest supported management communication protocol (programming mode) is shown at the top of the list by default. This management protocol can be different from the communication protocol used by the device during normal operations such as scanning and transmitting data to the host application.

9. Select a Management Communication Protocol option, and then select **Next**. The application displays the parameter loading options.

Start   Data view SMS:N	CR7895_DEF_CFG_No 🛞
🖏 Actions 🔹 🖆 Save file to PC	🖡 Add device group 🛛 Elete device group 🛛 🖓 Email SMS package 🛛 Arint/Save report 🔛 How to video
1. Name and notes 2. Managed device groups	Load parameters to your scanner To remotely load parameters to your scanner, a 123Scan Configuration file is required. Select a configuration file that is compatible with the scanner's full model number. The model number is visible on the scanner model screen.
Device group 1	Load parameters to scanner What is this? Configuration file name Browse for file
Cable connection	Disable parameter barcode scanning
Firmware	
Add Device Group	
3. Log file	
4. Activation trigger	
5. Load and print	

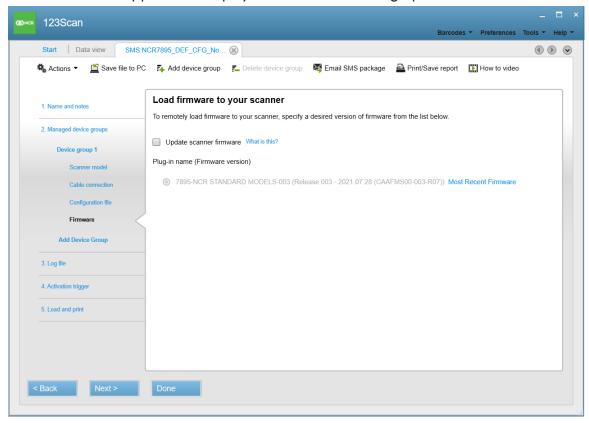
10. Enable **Load parameters to scanner** to include a configuration file containing parameter settings to be loaded to the scanner.



11. Browse for the configuration file (.scncfg), and then select **Open**. The application returns to the Load parameters to your scanner window and displays the configuration file name.

or 123Scan	_ 🗆 ×								
	Barcodes * Preferences Tools * Help *								
Start   Data view SMS:N	ICR7895_DEF_CFG_No 🛞 🕚 🕥								
🔩 Actions 👻 道 Save file to PC	🖡 Add device group 🛛 Elete device group 🛛 💐 Email SMS package 🛛 Arint/Save report 🛛 🔛 How to video								
1. Name and notes	Load parameters to your scanner To remotely load parameters to your scanner, a 123Scan Configuration file is required. Select a configuration file that is								
2. Managed device groups	compatible with the scanner's full model number. The model number is visible on the scanner model screen.								
Device group 1	Load parameters to scanner     What is this?								
Scanner model	Configuration file name C:\Users\Public\Documents\123ScanNCR\Configuration Files\Config File_I Browse for file								
Cable connection	Disable parameter barcode scanning								
Configuration file									
Firmware									
Add Device Group									
3. Log file									
4. Activation trigger									
5. Load and print									
< Back Next >	Done								

12. Select Next. The application displays the firmware loading options.



- 13. If a firmware file should be included in the SMS Package, do the following:
  - a. Enable **Update scanner firmware**. The application displays the available firmware versions.

3 NCR	123Scan		_ 0
	Start Data view	Barcodes * Preferences	Tools - Help
4		to PC 🖡 Add device group 🐔 Delete device group 🐺 Email SMS package 🚔 Print/Save report 🔛 How to video	000
1	I. Name and notes	Load firmware to your scanner To remotely load firmware to your scanner, specify a desired version of firmware from the list below.	
2	2. Managed device groups	Vibra scanner firmware What is this?	
	Device group 1 Scanner model	Plug-in name (Firmware version)	
	Cable connection	7895-NCR STANDARD MODELS-003 (Release 003 - 2021.07.28 (CAAFMS00-003-R07)) Most Recent Firmware     7895-NCR STANDARD MODELS-002 (Release 002 - 2021.02.03 (CAAFMS00-003-R05))	
	Firmware		
	Add Device Group		
	3. Log file 4. Activation trigger		
	5. Load and print		
< B	Back Next >	Done	

b. Select the firmware version to load to the scanner.



14. Select **Next** until the application displays the Track events options.

Start Data view SMS:	CR7895_DEF_CFG_No 🛞		(	
Actions	🗛 Add device group 🛛 🐔 Delete device group 🛛 🔯 Email SMS package	A Print/Save report	🔛 How to video	
1. Name and notes	Track events with a log file			
2. Managed device groups	Generate a log file What is this?			
Device group 1	Logging for all device groups     Enable / disable logging by device group			
Add Device Group	Target location %ProgramFiles%\Zebra Technologies\Barcode Scanners	SMS\D What is this?		
3. Log file	Log method Circular Log File v What is this?			
4. Activation trigger	Log file size 50 🗘 KB			
5. Load and print				

15. Enable **Generate a log file**.

#### P Note

It is not required to change the other settings.

16. Select **Next**. The application displays the activation trigger options.

Start Data view SMS:	:NCR7895_DEF_CFG_No 🛞 🕚 🛞
🖏 Actions 🔹 🔛 Save file to Pi	PC 👎 Add device group 🐔 Delete device group 🦉 Email SMS package 斗 Print/Save report []] How to video
1. Name and notes	Activation trigger Select the operating mode of the Scanner Management Service (SMS)
2. Managed device groups	SMS Operation Mode Run as Application   What is this?
Device group 1	Select which event(s) will trigger the loading of your SMS Package
Add Device Group	Apply settings to all device groups
3. Log file	Each device group has its own settings
4. Activation trigger	Event triggering load: 🔣 Start of Scanner Management Service (SMS)
5. Load and print	<ul> <li>Power up and / or cable connection of scanner and /or cordless scanner pairing</li> <li>Run immediately (At download of package to SMS) What is this?</li> </ul>
	Date and time
	Date 5/24/2022 15
	Time 0 v : 0 v
	Reoccurrence Vhat is this?

17. For SMS Operation Mode, select **Run as Application**. to set the SMS to run only when it is manually launched.



It is not required to change the other settings.

18. Select **Next**. The application displays the load and print options.

Start   Data view SMS:N	CR7895_DEF_CFG_No 🛞			
Actions	🖡 Add device group 🛛 🐔 Delete device group 🛛 💐 Email SMS packag	e 🗕 Print/Save report	🔛 How to video	
1. Name and notes	Load and print Choose from the options below to output a SMS Package			
2. Managed device groups				
Device group 1	Save SMS package to PC			
Add Device Group	Print SMS report			
3. Log file	Email SMS package			
4. Activation trigger				
5. Load and print	Deploying an SMS Package			

19. Select **Save SMS package to PC**. The application displays the Save SMS package

window.										
🔚 Save SMS package	9									×
$\leftarrow \rightarrow \checkmark \uparrow$	« 1	23ScanNCR >	SMS Packages		~	Ü	Q	Search SM	S Packages	
Organize 👻 Nev	w fold	er							• <b>•</b>	?
🧢 This PC	^	Name	^		Date modi	fied		Туре		Size
🧊 3D Objects				No items	match your	search.				
E. Desktop										
Documents										
🖊 Downloads										
👌 Music										
Pictures										
🔡 Videos										
📢 Windows (C:)										
🔫 TEST-April (\\	15: 🧹	<								>
File name:	SMS	Package_NCF	7895_DEF_CFG_I	NoFW_2022.05.24						~
Save as type:			ent Service Pack							~
		2								
∧ Hide Folders								Save	Can	icel

- 20. Select Save. The application saves the SMS Package (.smspkg) in C:\Users\Public\Documents\123ScanNCR\SMS Packages, and then returns to the Load and print window.
- 21. Select **Done**. The application closes the SMS Package Wizard and displays the SMS package summary.

(Ork	a 123Scan						-	□ ×
_					Barcodes 👻	Preferences	Tools 🔻	Help 👻
	Start Data v	view SMS:NO	CR7895_DEF_CFG_No 🛞					
	🎝 Actions 👻 📋	Save file to PC	😽 Email SMS package	Print/Save report III How to video				
	Start SMS package	e wizard >>	SMS package summa	ry				
			Package name: NCR7895_DEF_( Notes: SMS package with NCR 78				View / Edit	
			Managed device groups					
			Device Group 1 Management connection Parameters: Firmware	7895-NCR STANDARD MODELS-003 USB - SNAPI Config File_NCR7895_DEF_CFG_2022.04.21.scncfg Update Enabled			View / Edit	
			Log file Enabled				View / Edit	•
			Activation trigger Execution mode: Run as Applicatio	n			View / Edit	

## **Opening an Existing SMS Package**

An existing SMS Package can be opened using any of the following options:

- "Opening an SMS Package from the SMS Packages Folder" on the next page
- "Opening an SMS Package within 123Scan" on page 164

### **Opening an SMS Package from the SMS Packages Folder**

To open an existing SMS Package from the SMS Packages folder on the computer or POS terminal, follow these steps:

1. Locate the SMS Package (.smspkg) on the computer or POS terminal.

P	Note	
	By default, SMS packages are saved in	
	C:\Users\Public\Documents\123ScanNCR\SMS	Packages.

2. Double-click the SMS Package. The system launches the NCR 123Scan utility launches and displays the SMS Package summary.

or 123Scan				_ 🗆 ×
12000011			Barcodes 👻 Prefe	erences Tools - Help -
Start Data view SMS:N	CR7895_DEF_CFG_No 🛞			
🖏 Actions 🔹 📓 Save file to PC	Email SMS package	Print/Save report 🛛 🔛 How to video		
Start SMS package wizard >>	SMS package summa	ry		
	Package name: NCR7895_DEF_0 Notes: SMS package with NCR 78			View / Edit
	Managed device groups			
	Device Group 1 Management connection			View / Edit
	Parameters: Firmware	Config File_NCR7895_DEF_CFG_2022.04.21.scncfg Update Enabled		
	Log file Enabled			View / Edit
	Activation trigger Execution mode: Run as Applicatio	yn		View / Edit

### **Opening an SMS Package within 123Scan**

To open an existing SMS Package within 123Scan, follow these steps:

- Launch the 123Scan utility. For more information, refer to "Launching NCR 123Scan" on page 105.
- From the upper-left section of the Start tab, select Action → Open SMS Package. The application displays the Open SMS Package window.

Open SMS package						
$\rightarrow$ $\checkmark$ $\uparrow$ $\blacksquare$ « 123ScanNCR $>$ SMS Pa	ackages	~	Ū	,	h SMS Pac	kages
Drganize 🔻 New folder					• •	
Name	Date modified	Туре		Size		
🐻 SMS Package_NCR7895_DEF_CFG_NoFW	5/24/2022 5:05 PM	Scanner Mana	gem	3,166 KB		
File name:			~	Scanner Ma	nagemeni	t Service P. V

3. Browse for the SMS Package (. smspkg) on the computer or POS terminal.



4. Select **Open**. The application displays the SMS package summary.

(C) NCR	123Scan								
CINCK	12000all				Barcodes 🔻	Preferences	Tools 👻	Hel	ip 👻
	Start   Data view	SMS:NO	CR7895_DEF_CFG_No 🛞						•
	🖏 Actions 🔹 🖆 Sa	ve file to PC	💐 Email SMS package	Print/Save report III How to video					
Sta	art SMS package wiz	ard >>	SMS package summa	ry					
			Package name: NCR7895_DEF_C Notes: SMS package with NCR 78				View / Edit		
			Managed device groups						
			Device Group 1 Management connection	7895-NCR STANDARD MODELS-003 USB - SNAPI			View / Edit		
			Parameters: Firmware	Config File_NCR7895_DEF_CFG_2022.04.21.scncfg Update Enabled					
			Log file Enabled				View / Edit		
			Activation trigger Execution mode: Run as Applicatio	'n			View / Edit		

## Modifying an Existing SMS Package

An SMS Package can be modified using the NCR 123Scan utility. To modify an existing SMS Package, follow these steps:

 Open an existing SMS Package. For more information, refer to "<u>Opening an Existing</u> <u>SMS Package</u>" on page 162.

(C) HCR	123Scan								
	12000011				Barcodes 👻	Preferences	Tools 👻	Hel	p 👻
	Start   Data	view SMS:N	CR7895_DEF_CFG_No 🛞						•
:	🔩 Actions 🔻	🖺 Save file to PC	💐 Email SMS package	Print/Save report III How to video					
St	art SMS packa	ge wizard >>	SMS package summa	ry					
			Package name: NCR7895_DEF_C Notes: SMS package with NCR 78				View / Edit		
			Managed device groups						
			Device Group 1 Management connection	7895-NCR STANDARD MODELS-003 USB - SNAPI			View / Edit		
			Parameters: Firmware	Config File_NCR7895_DEF_CFG_2022.04.21.scncfg Update Enabled					
			Log file Enabled				View / Edit		
			Activation trigger Execution mode: Run as Applicatio	n			View / Edit		
								-	

2. Select Start SMS package wizard. The application starts the SMS Package Wizard.

Start Data view SMS:NO	CR7895_DEF_CFG_No 🛞			۱
Actions	🗛 Add device group 🛛 🐔 De	ete device group 🛛 😽 Email SMS packa	ge 斗 Print/Save report 🔛 How to video	
1. Name and notes 2. Managed device groups Device group 1 Scanner model Cable connection Configuration file Firmware Add Device Group 3. Log file 4. Activation trigger 5. Load and print	40 chara Package notes SMS pa configu		<ul> <li>SMS overview</li> <li>What is an SMS Package</li> <li>Deploying an SMS Package</li> <li>Or How to videos</li> </ul>	

3. Select **Next** and modify the settings as necessary.

4. After adjusting all settings for the SMS Package, select **Load and print** from the left pane and do any of the following options:

Action	Description
Save SMS package to PC	Saves the SMS Package (.smspkg) format, to a predesignated location on the computer.
	Note SMS packages are saved in C:\Users\Public\Documents\123ScanNCR\SMS Packages.
Print SMS report	Prints an SMS report containing all settings that were enabled or disabled within the SMS Package. The report may be printed out or saved as a Word file.
Email SMS package	Emails the SMS Package. The message also includes the SMS Package overview and instructions in using the SMS Package.
Deploy an SMS Package	Provides instructions on deploying an SMS Package on a production host PC. The instructions may also be printed out.

# **USB Staging Flash Drive**

A staging USB flash drive can be used to perform the following:

- Set up an NCR 7895 system from a 123Scan generated set of files
- Perform NCR 7895 system cloning
- Collect NCR 7895 statistics, usage, and diagnostics data

A staging flash drive can be created by 123Scan, from an NCR 7895, or both.

- A 123Scan generated staging flash drive can perform device setups from 123Scan to multiple NCR 7895.
- An NCR 7895 generated staging flash drive can perform the following functions:
  - ° Device cloning from one NCR 7895 to multiple NCR 7895
  - ° Back up system settings from an NCR 7895

#### P Note

The NCR 7895 parameter settings can be imported into 123Scan.

° Collect statistics, usage, and diagnostics data

#### P Note

The data can be viewed in 123Scan.

## **Recommended USB Flash Drive Dimensions**

When using the NCR 7895 flash drive well that is located under the Top Plate, the USB flash drive must meet the following specifications to be easily inserted into and removed from the well:

- Maximum thickness: 1.1 cm (0.43 in.)
- Maximum width: **2.1 cm** (0.83 in.)
- Minimum length: 6.35 cm (2.5 in.)

## Loading Staging Files to a USB Flash Drive

Use any of the following options to load staging files to a USB staging flash drive:

- Insert the staging flash drive into one of the NCR 7895 USB ports and select Option 1 from the USB Staging Flash Drive menu options. For more information, refer to "Loading Files Using USB Staging Flash Drive Menu Options" on the next page.
- Use 123Scan to create and export files to the staging flash drive. For more information, refer to "Loading Files Using 123Scan Utility" on page 176.

#### P Note

It is recommended to start with a clean USB flash drive. The USB flash drive must have a length of at least **6.35 cm** (2.5 in.) to be accessible for removal after insertion into the internal NCR 7895 flash drive well. Alternatively, some USB flash drives include an opening in their rear covers into which a paper clip can be looped to help achieve the minimal length dimension. For the recommended flash drive dimensions for use in the internal USB port, refer to "<u>Recommended USB Flash Drive Dimensions</u>" on the previous page.

### Loading Files Using USB Staging Flash Drive Menu Options

To clone data and load cloning files to the USB flash drive through menu options on the 7segment display, follow these steps:

 Connect the USB flash drive to any of the three NCR 7895 USB ports. The EAS Deactivation button on the front panel turns on and the speaker emits two beeps.

#### **A** Caution

While the staging flash drive is inserted, do not remove power, do not remove nor connect any cables, and do not press the **Volume/Tone Control** button nor the **Scale** button. These actions may interfere with the staging flash drive process.

#### P Note

If the Sensormatic device is installed and operational, the EAS Deactivation button remains On. If the Sensormatic device is not installed or not operational, the EAS Deactivation button turns on when the NCR 7895 detects the USB flash drive.

 Wait for the 7-segment display to show 1 (Option 1: Copy an NCR 7895 configuration to the USB flash drive), and then press the EAS Deactivation button. The speaker emits one beep.

#### 🗗 Note

The flash drive menu displays three number options for approximately five seconds each. When the option you want is displayed in the menu, select the option within five seconds.

3. Confirm the selection within 15 seconds by pressing the EAS Deactivation button again. The 7-segment display then shows a scrolling bar (–), indicating that the device is working. When the process is complete, the speaker emits three success beeps (high-low-high) and the 7-segment display stops showing the scrolling bar.

#### P Note

Take note of the following:

- If the selection is not confirmed, the speaker emits four fail beeps and the 7-segment display re-scrolls the menu.
- The scrolling bar stops whether the cloning process succeeded or failed. If the process failed, try again or contact the System Administrator.

#### **A** Caution

If the staging flash drive is removed prior to completion, a fail occurs (four beeps). Premature removal of the staging flash drive may result in a partial change in the system.

#### **USB Staging Flash Drive Menu Options**

#### P Note

Auxiliary device settings are copied or loaded if applicable. Auxiliary cordless scanners are not supported.

#### Option 1: Copy an NCR 7895 configuration to the USB flash drive.

• Copy parameter settings and firmware from the NCR 7895 to the USB flash drive for cloning to another device or viewing in 123Scan.

#### P Note

When Option 1 is available, the 7-segment display shows 1 and the speaker beeps once.

#### Option 2: Load a USB flash drive configuration to the NCR 7895.

• Load the parameter settings and firmware (if present) from the staging USB flash drive to this NCR 7895.

#### **A** Caution

The NCR 7895 system configuration settings and firmware are overwritten.

#### P Note

When Option 2 is available, the 7-segment display shows 2 and the speaker emits two beeps.

#### Option 3: Copy statistics, usage, and diagnostics data to the USB flash drive.

• Copy data from the NCR 7895 into the USB flash drive. The data can be viewed in 123Scan.

#### Note

When Option 3 is available, the 7-segment display shows 3 and the speaker emits three beeps.

#### P Note

To exit without doing anything, remove the USB flash drive from the NCR 7895.

### Loading Files Using 123Scan Utility

The Flash Drive Wizard option within the 123Scan utility guides users in generating a USB staging flash drive with cloning files.

To clone data and load cloning files to the USB flash drive using the 123Scan utility, follow these steps:

- 1. Connect the USB staging flash drive to the computer or POS terminal.
- Launch the 123Scan utility. For more information, refer to "Launching NCR 123Scan" on page 105.
- From the upper-right section of the main window, select Tools→ Staging flash drive for Multi-Plane Scanners→ Create Staging Flash Drive Files. The application starts the Flash Drive Wizard by opening a new untitled tab.

or 123Scan		_ 🗆 ×
		Barcodes 👻 Preferences Tools 👻 Help 👻
Start Data view Flash I	Drive:Untitled1 🛞	
🔩 Actions 👻 道 Save file to PC	Add device group 🚰 Delete device group 🚔 Print/Save report	⊷ter Save files to flash drive
1. Name and notes	Staging flash drive name and notes Please specify a name for this staging flash drive.	<ul> <li>Staging Flash Drive overview</li> <li>Instructions for deploying staging files</li> </ul>
Device Group 1	Staging flash drive Untitled1 What is this?	
Scanner model	40 character limit Package notes	
Configuration file		
Firmware		
Add Device Group		
3 Load and print	500 of 500 characters remaining	
< Back Next >	Done	

- 4. Enter the staging flash drive name.
- 5. Add notes to briefly describe the package (optional).

6. Select **Next**. The application displays the available scanner family options.

	123Scan		_ 🗆 ×
			Preferences Tools      Help
		ve:Untitled1 🛞	
3	Actions • 🖆 Save file to PC	🗛 Add device group 🛛 📮 Delete device group 🖉 Print/Save report 🛛 🔸 Save files to flash drive	
	1. Name and notes	Select your scanner family from the options below: * Cordless Scanners cannot be configured through the staging flash drive	I don't see my scanner Check online for updates.
	2. Managed device groups		
	Device Group 1		
	Scanner model		
	Configuration file	7895	
	Firmware	1092	
	Add Device Group		
	3. Load and print		
<	Back Next >	Done	

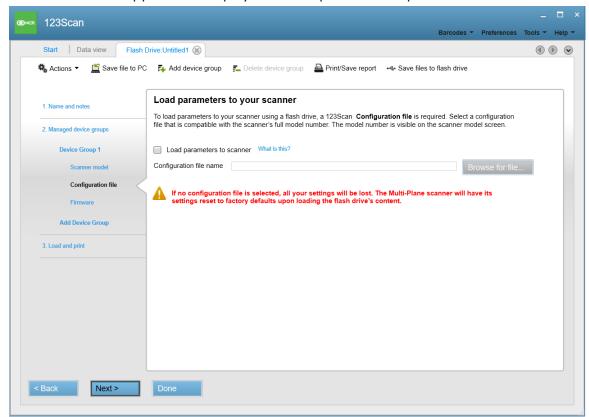
7. From the scanner family options, select **7895**. The application displays the available scanner models under 7895.

(C) HCR	123Scan		_ 🗆 ×
	Start Data view Flash Dr	Ve:Untitled1	Preferences Tools      Help
		Add device group 👔 Delete device group 🚔 Print/Save report 🔸 Save files to flash drive	
	1. Name and notes	EBack Select your scanner model from the options below:	I don't see my scanner Check online for updates
	2. Managed device groups		
	Device Group 1 Scanner model	7895-NCR STANDARD MODELS	
	Configuration file		
	Firmware		
	Add Device Group		
	3. Load and print		
	< Back Next >	Done	

8. Select **7895-NCR STANDARD MODELS**. The application display the list of supported scanner models.

(O) HCR	123Scan		_ 🗆 ×
	12000011	Barcodes * Preferences	Tools 👻 Help 👻
	Start   Data view Flas	h Drive:Untitled1 🛞	
	Actions 🔹 🖆 Save file to	PC 👎 Add device group 🐔 Delete device group 🚔 Print/Save report 🔸 Save files to flash drive	
	1. Name and notes	Supported scanner models Scanner plug-in name: 7895-NCR STANDARD MODELS	
	2. Managed device groups	Click "Next" if your scanner model is listed below.	
	Device Group 1		
	Scanner model	• 7895-1011-0000 • 7895-2010-0000	
	Configuration file	• 7895-2011-0000 • 7895-2021-0000 • 7895-2110-1000	
	Add Device Group	• 7895-2110-1002	
	3. Load and print	Change scanner model	
	< Back Next >	Done	

9. Select Next. The application displays the load parameters options.



10. Enable Load parameters to scanner.

#### P Note

This option enables the USB staging flash drive to load parameters from a 123Scan configuration file to the scanner. If no configuration file is selected, the scanner resets to factory default during staging.

11. Select **Browse for file**. The application displays the Open configuration window.

B Open configuration			×		
$\leftarrow$ $\rightarrow$ $\vee$ $\uparrow$ $\blacksquare$ « 123ScanNCR > Config	uration Files	ٽ ~	,⊖ Sear	ch Configuratio	on Files
Organize ▼ New folder				• ▼	
Name	Date modified	Туре	Size		
🐻 Config File_NCR7895_DEF_CFG_2022.04.21	4/21/2022 12:41 PM	123Scan Scanner C	37 KB		
File name:		~	Scanner Co	onfiguration Fi	le (.scn \vee
			Open	C	ancel

12. Browse for the configuration file (.scncfg), and then select **Open**. The application returns to the load parameters options.

13. Select **Next**. The application displays the load firmware options.

Start   Data view Flash	n Drive:USB_Staging_Test 🛞	
Actions 🔹 🖆 Save file to F	PC 👎 Add device group 🖉 Delete device group 🖉 Print/Save report 🛶 Save files to flash drive	
1. Name and notes	Load firmware to your scanner To load firmware to your scanner using a flash drive, specify a desired version of firmware from the list below.	
2. Managed device groups		
Device Group 1	Plug-in name (Firmware version)	
Scanner model	7895-NCR STANDARD MODELS-003 (CAAFMS00-003-R07) Most Recent Firmware	
Configuration file		
Firmware		
Add Device Group		
3. Load and print		

- 14. Select the plug-in name or firmware version.
- 15. On the left pane of the Flash Drive Wizard, select **Load and print**. The application displays the load and print options.
- 16. Select **Save files to flash drive**. The application displays the Browse For Folder window.
- Select the USB staging flash drive and select OK. The application closes the Browse For Folder window.

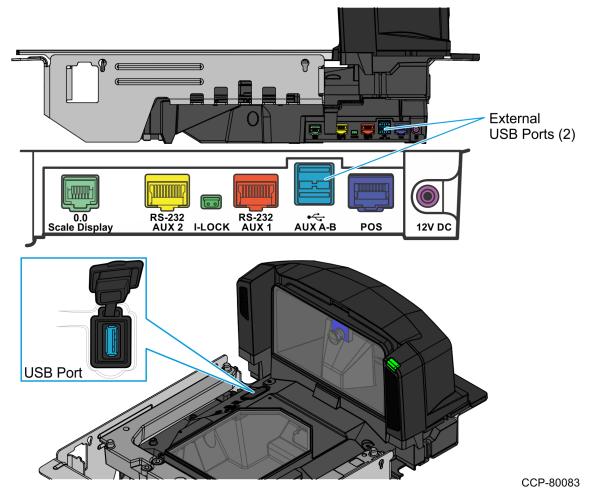
#### P Note

The staging files can be found in the Zebra\_Flash\_Drive folder in the flash drive.

# Configuring the Scanner Using a USB Flash Drive

To configure or flash firmware to the NCR 7895 scanner using a USB flash drive, follow these steps:

- 1. Generate the staging files and load them to the USB staging flash drive. For more information, refer to "Loading Staging Files to a USB Flash Drive" on page 171.
- 2. Connect the USB flash drive to any of the three NCR 7895 USB ports. The EAS Deactivation button on the front panel turns on and the speaker beeps twice.



Confidential and proprietary information of NCR Voyix. Use and disclose solely pursuant to company instructions.

#### **A** Caution

While the staging flash drive is inserted, do not remove power, do not remove nor connect any cables, and do not press the **Volume/Tone Control** button nor the **Scale** button. These actions may interfere with the staging process.

#### Important

The cap cover must be replaced when the USB port is not in use. A missing or incorrect placement of the cap does not allow the Top Plate to sit properly when replaced.

#### Note

If the Sensormatic device is installed and operational, the EAS Deactivation button remains On. If the Sensormatic device is not installed or not operational, the EAS Deactivation button turns on when the NCR 7895 detects the USB flash drive.

 Wait for the 7-segment display to show 2 (Option 2: Load a USB flash drive configuration to the NCR 7895), and then press the EAS Deactivation button. The speaker emits two beeps.

#### Note

The flash drive menu displays three number options for approximately five seconds each. When the option you want is displayed in the menu, select the option within five seconds.

4. Confirm the selection within 15 seconds by pressing the EAS Deactivation button again. The 7-segment display then shows a scrolling bar (–), indicating that the device is working. When the process is complete, the speaker emits three success beeps (high-low-high) and the 7-segment display stops showing the scrolling bar.

#### P Note

Take note of the following:

- If the selection is not confirmed, the speaker emits four fail beeps and the 7-segment display re-scrolls the menu.
- The scrolling bar stops whether the cloning process succeeded or failed. If the process failed, try again or contact the System Administrator.

#### **A** Caution

If the staging flash drive is removed prior to completion, a fail occurs (four beeps). Premature removal of the staging flash drive may result in a partial change in the system.

- 5. Remove the flash drive from the scanner. The scanner emits three success beeps.
- Verify the firmware version. For more information, refer to "Identifying Firmware Version" on page 187.

# **Firmware Flashing**

Scanner firmware is updated by flashing firmware to the scanner, thus installing updates without replacing the actual chip on the Main PCB Board. NCR 7895 firmware can be updated through the NCR 123Scan utility, a USB staging flash drive, or Scanner Management Service (SMS).

# **Identifying Firmware Version**

## Using the EAS Deactivation Button

Press and hold the **EAS Deactivation** button for five seconds. The scanner firmware version number is displayed on the internal 7-segment display.

## Using the 123Scan Utility

 Using a USB communication cable, connect the NCR 7895 scanner to a computer or POS terminal. The scanner produces three incrementing beeps.

#### P Note

If the computer or POS terminal supports audio, it also produces a detection sound indicating that the scanner is detected.

 Launch the 123Scan utility. For more information, refer to "Launching NCR 123Scan" on page 105.  From the upper-left section of the Start tab, select Action→ View USB Scanners. The application displays the list of detected scanners and their firmware version.

🖏 Actions 👻 🌋 Load configura	ation 🔺 Undate firmware	Print / Export	🗙 🌄 Refresh 🕅 F	low to video			
1 Scanners found on local USB ho				ion to video			
Select all similar   Deselect all	iot.	📃 Mass U	Jpgrade Mode What i	s this?		My scan	er is not shov
Model	Serial Number	Config. name	Firmware	Mfg. Date	Status		
▼	20262010557968	Modified	CAAFMS00-003-R07	19-Sep-2020	Available		
	2007217785	Modified	PAABTS00-001-R04	01-Jul-2020	Available		
			-		to a contract to a contract		
Hide offline scanner list   0 scanne Model	er(s) offline Clear offline so Serial Number	canner list Config. name	Firmware	Mfg. Date	Last online		
			Firmware	Mfg. Date	Last online		
Hide offline scanner list   0 scanne Model			Firmware	Mfg. Date	Last online		
			Firmware	Mfg. Date	Last online		

# **Updating Scanner Firmware**

The following are two options to update the NCR 7895 scanner firmware:

- "Updating Firmware Using USB Staging Flash Drive" on the next page
- "Updating Firmware Using NCR 123Scan" on page 191

#### P Note

This option requires the latest version of the 123Scan utility.

• "Updating Firmware Using SMS" on page 194

## Updating Firmware Using USB Staging Flash Drive

To update the scanner firmware using a USB staging flash drive, refer to "<u>Configuring the</u> <u>Scanner Using a USB Flash Drive</u>" on page 183.

## Updating Firmware Using NCR 123Scan

To update the scanner firmware using the NCR 123Scan utility, follow these steps:

1. Using a USB communication cable, connect the NCR 7895 scanner to a computer or POS terminal. The scanner produces three incrementing beeps.

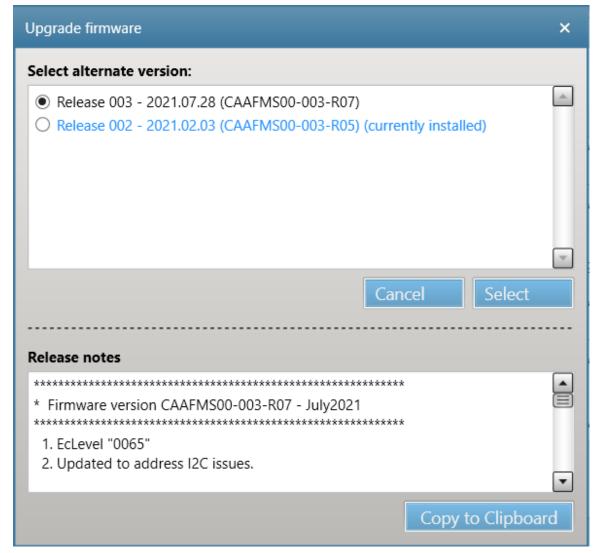
#### Note

If the computer or POS terminal supports audio, it also produces a detection sound indicating that the scanner is detected.

- Launch the 123Scan utility. For more information, refer to "Launching NCR 123Scan" on page 105.
- From the Start tab of the 123Scan main window, select Update Scanner Firmware. The application displays the Update firmware window, which shows the scanner device model, serial number, existing firmware version, and the latest firmware plug-in downloaded.

Update firmware	×
Update firmware         Confirm that you want to update the following scanner         Image: Confirm that you want to update the following scanner         Image: Confirm that you want to update the following scanner         Serial number: 20174010554600         Existing:       Release 003 - 2021.07.28 (CAAFMS00-003-R07)         Update to:       Release 003 - 2021.07.28 (CAAFMS00-003-R07)         Update to:       Release 003 - 2021.07.28 (CAAFMS00-003-R07)         Select alternate firmware       During firmware update, your scanner settings can be changed.         Choose from the options below:       Image: Option 1 - Load firmware BUT Keep current settings (Recommended)         Option 2 - Load firmware THEN Load other settings       Option 3 - Load firmware THEN Load other settings	Release Notes:          *       *         *       *         1. EcLevel "0065"       2. Updated to address I2C issues.         *       *         *       *         1. EcLevel "0065"       2. Updated to address I2C issues.         *       *         *       1. EcLevel "0065"         2. Updated to address FAT issues.       *
Update firmware DISCOVERED SCANNER LIST	CLOSE

4. If the target firmware version is different from the version indicated in the *Update to* field, select **Select alternative firmware**. The application displays the Upgrade firmware window with the list of alternative versions.



- 5. Select the target firmware from the list, and then select **Select**. The application closes the Upgrade firmware window.
- 6. On the bottom-right section of the Update firmware window, select one the options and then select **Update firmware** to proceed with firmware update. The application starts updating the scanner firmware and automatically reboots the scanner.

#### **A** Caution

Do not disconnect the scanner while firmware update is ongoing.

- Verify the firmware version. For more information, refer to "Identifying Firmware Version" on page 187.
- 8. Close the 123Scan utility. The scanner automatically reboots.

## **Updating Firmware Using SMS**

Scanner firmware update can also be done by deploying an SMS Package. It requires placing the package into the SMS download folder on the computer or POS terminal. The SMS agent checks the download folder for an SMS Package, and then executes the actions specified in the package.

To update the scanner firmware using SMS, follow these steps:

1. Using a USB communication cable, connect the NCR 7895 scanner to a computer or POS terminal. The scanner produces three incrementing beeps.

#### P Note

If the computer or POS terminal supports audio, it also produces a detection sound indicating that the scanner is detected.

Save the NCR 7895 SMS Package in the following directory:

C:\ProgramFiles\Zebra Technologies\Barcode Scanners\SMS \Download.

#### **A** Caution

Save one SMS Package at a time for the SMS agent to process. Having multiple packages in the download folder can cause deployment issues.

- 2. Run the SMS agent by doing the following:
  - From the Windows taskbar of the computer or POS terminal, select

#### Start $\rightarrow$ Zebra Scanner $\rightarrow$ Remote Mgmt - SMS - Launch as an Application.

The SMS agent starts updating the scanner firmware, configuration, or both.

#### Caution

Do not disconnect the scanner while update is ongoing.

#### P Note

Take note of the following:

- During programming, the Status LED blinks red and the scanner may restart at least once, depending on the components included in the SMS Package. When programming is complete, the scanner reboots and then returns to its normal mode.
- When updating both the scanner firmware and configuration, the SMS agent first updates the firmware, and then the configuration.
- If the current scanner firmware version is the same as the firmware version in the SMS Package, the SMS agent skips the firmware update.
- When the SMS Package is placed in the Download folder, the SMS agent automatically processes the SMS Package by moving it from the Download folder to the Work sub-folder. The new SMS Package replaces the previous content of the Work sub-folder.

# **RS-232 Interface Configuration**

This section provides procedures for configuring the NCR 7895 unit to the host terminal through the **RS-232 NCR Variant** interface. By default, the NCR 7895 is configured to connect to the host terminal through the **IBM Table-top USB** interface.

# Requirements

The following are required to configure the NCR 7895 with RS-232 interface:

• 123Scan Configuration Utility

#### P Note

It is recommended to install the latest version (v5.04.0006 or higher, 64-bit) of the 123Scan utility. For more information on 123Scan, refer to "<u>Installing NCR</u> <u>123Scan</u>" on page 99.

- Programming bar codes
  - NCR 7895 Scanner/Scale Bar Code Programming Guide (BCC5-0000-5516) at https://onlinehelp.ncrvoyix.com/Retail/Scanners/7895/HTML/Default.htm
- USB communication cable to connect the scanner to a Windows host computer (if using 123Scan utility)
- RS-232 communication cable to connect the scanner to a Windows host computer (if using programming bar codes)

# Configuring the Scanner with RS-232 Interface

The following are two options to configure the NCR 7895 scanner with RS-232 interface:

• "Configuring Using 123Scan Utility" on the next page

#### P Note

This option requires the latest version of the 123Scan utility.

• "Configuring Using Programming Bar Codes" on page 210

## **Configuring Using 123Scan Utility**

To configure the NCR 7895 scanner using 123Scan utility, follow these steps:

 Using a USB communication cable, connect the NCR 7895 scanner to a computer or POS terminal. The scanner produces three incrementing beeps.

#### P Note

If the computer or POS terminal supports audio, it also produces a detection sound indicating that the scanner is detected.

- Launch the 123Scan utility. For more information, refer to "Launching NCR 123Scan" on page 105.
- 3. Create a configuration file using the following options:
  - "Based on Default Settings" on page 225
  - "Based on Current Scanner Settings" on page 228
- 4. On the left pane of the 123Scan Configuration Wizard, select **Cable connection.** The application displays the USB interface settings.

123Scan						
			Barcodes 👻	Preferences To	ols 👻	Hel
Start   Data view NCR78	95_DEF_CFG 🛞					
🖏 Actions 👻 🚊 Save file to PC	🖴 Print bar code 🛛 龎 Load to	scanner 🛛 😽 Email Bar Code to Phone	Print/Save parameters	🔛 How to video		
Model Plug-in N. Release N App Developer Re	Your scanner is already set u You can use the tab(s) below	using to connect your scanned up to communicate to your host using the v to setup / modify up to 4 cable types (co	most common communication			
7895-NCR STANDARD MODELS-003	USB		+ add cable -			
<b></b>	Basic Settings USB Device Type	Default (IBM Table Top USB) ~				
1. Name and notes Name:NCR7895_DEF_CFG Notes:	Ignore Unknown Characters	<ul> <li>Send Barcodes with Unknown 0</li> </ul>				
2. Cable connection USB (default)	Characters	<ul> <li>Do Not Send Barcodes with Unit</li> </ul>	known Characters			
3. Symbologies (bar code types)	IBM Handheld / Tab	oletop / OPOS Options				
Factory default settings	HID Keyboard Option	ons				
4. Modify Data No rules	CDC Options					
5. Imaging Factory default settings						
6. Scale Parameters Factory default settings						
7. General Factory default settings						
8. Printing Options						
9. Load and print						
-						
< Back Next >	Done Cano	el	Search for a parameter			٦

5. Select **add cable**, and then select **Single RS232C**. The application displays the Single RS232C interface settings.

123Scan			Barcodes 👻	Preferences Tools - H
Start   Data view NCR7895_DE	EF_CFG 🛞			۹ ()
🖏 Actions 🔻 🚊 Save file to PC 🛛 🚇	Print bar code 🛛 🌋 Load to	scanner Kernail Bar Code to Phone	Print/Save parameters	🔛 How to video
Model List Plug-in Name Release Notes App Developer Report	Your scanner is already set	using to connect your scanne up to communicate to your host using the n v to setup / modify up to 4 cable types (cor	nost common communication	
7895-NCR STANDARD MODELS-003	USB Single RS232C	$\otimes$	+ add cable -	1
<b>_</b>	Set as reboot default	Enabled	<u> </u>	
1. Name and notes Name:NCR7895_DEF_CFG Notes:	Basic Settings RS-232 Host Type	Standard Host v	=	
2. Cable connection USB (default)	Baud Rate	9600 ¥		
3. Symbologies (bar code types) Factory default settings 4. Modify Data	Parity	None v		
No rules 5. Imaging Factory default settings	Check Receive Errors	Check For Received Errors     Do Not Check For Received Error	rs	
6. Scale Parameters Factory default settings	Stop Bits	One Stop Bit     Two Stop Bits		
7. General Factory default settings 8. Printing Options	Data Bits	Eight Bits     Seven Bits		
9. Load and print	Hardware Handshaking	None *	T	1
-				1
< Back Next >	Done	zel	Search for a parameter	

- 6. Enable the **Set as reboot default** option. This setting enables the scanner to set the cable connection to RS-232 upon reboot.
- 7. Set the RS-232 Host Type to **NCR Host**. The application displays the parameter default settings for NCR Host.
- 8. Set the following NCR Host settings.

Parameter	Description
NCR Use Prefix	<ul> <li>Uses prefix for all communications. By default, this parameter is enabled.</li> <li>Enable—for customers using prefix.</li> <li>Disable—for customers not using prefix.</li> </ul>

Parameter	Description
NCR Use BCC	Uses of the Block Check Character (after the Terminator byte) for all communications. Set this parameter based on the NCR Interface used. By default, this parameter is enabled. • Enable—for Scanner/Scale interface. • Disable—for Scanner Only interface.
NCR Interface	<ul> <li>Sets the NCR specific interface to be used for all communications. By default, this parameter is set to Follow System.</li> <li>Follow System—auto-detects the system interface used.</li> <li>Scanner Only—for NCR 7895 scanner-only units.</li> <li>Scanner/Scale—for NCR 7895 scanner/scale units.</li> </ul>
NCR Prefix	Determines the Prefix Character used for all communications. By default, this parameter is set to 1002 (prefix 02, STX). <b>Note</b> If the NCR Use Prefix parameter is disabled, leave this parameter blank.

- 9. Load the new configurations to the scanner.
  - a. On the left pane of the 123Scan Configuration Wizard, select Load and print.
     The application displays the load and print options.

(O) NCR	123Scan								⊐ ×
Check	12000a11					Barcodes 👻	Preferences	Tools 👻	Help 👻
	Start   Data view	NCR7895_D	EF_CFG 🛞						
	🖏 Actions 🔹 🚊 Save	e file to PC	Print bar code	🗶 Load to scanner	😽 Email Bar Code to Phone	Print/Save parameters	🔝 How to vid	eo	
		Model List Plug-in Name Release Notes veloper Report	Load and   Choose from th	<b>print</b> ne options below to prog	gram your scanner				
	7895-NCR STANDARD MODELS-003		Save to	PC					
	1. Name and notes Name:NCR7895_DEF_CFG Notes:		Print ba						
	2. Cable connection ^ USB (default) Single RS232C			scanner ar code to phon					
	3. Symbologies (bar code types Factory default settings	5)							
	<ol> <li>Modify Data No rules</li> </ol>		Email e	lectronic config	file				
	5. Imaging Factory default settings		Print/ex	port parameter	report				
	6. Scale Parameters Factory default settings								
	7. General Factory default settings								
	8. Printing Options								
	9. Load and print								
	< Back Ne	ext >	Done	Cancel		Search for a parameter			

b. From the Load and print options, select **Load to scanner**. The application displays the Load configuration window.

Load configuration	×
7895-NCR STANDARD MODELS Firmware version: Release 002 - 2021.02.03 (CAAFMS00-003-R05) 7895 model list	
1 compatible scanner(s) found for your configuration.	
Refresh scanner list         20262010557968 - CAAFMS00-003-R07         If you do not see your scanner listed print the bar code and scan it to confirm the scanner is properly communicating over USB.	
Clicking on a scapper above will begin the leading for that	
Clicking on a scanner above will begin the loading for that scanner. You can click the <b>FLASH/BEEP</b> icon within a row to find that particular scanner. Or to initiate the loading of all scanners, click the <b>LOAD TO ALL SCANNERS</b> button above.	
DISCOVERED SCANNER LIST	SE

c. From the scanner list, select the scanner to configure. The application starts loading the configuration to the selected scanner.

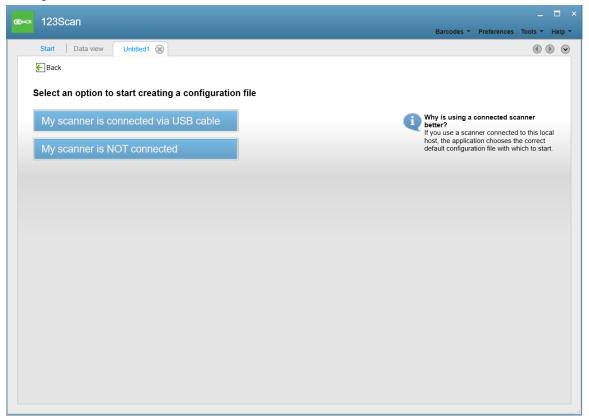
Load configuratio	n		×
	7895-NCR STANDARD MODELS Firmware version: Release 002 - 2021.02.03 ( 7895 model list	(CAAFMS00-003-R05)	
1 compatible	scanner(s) found for your configuration.	LOAD TO ALL SCANNERS	
	Uploading NCR7895_DEF_CFG	1 of 1 scanner(s)	
	26 %		
	CALIFIC LICE		CLOSE
DISCOVERED	SCANNER LIST		CLOSE

- d. When the application has completed loading the configuration to the scanner, select **Close**.
- 10. Close the 123Scan utility. The scanner automatically reboots.
- 11. Turn off the scanner and disconnect the USB cable.
  - If the scanner is powered by a host terminal, disconnect the USB cable from the scanner and from the computer or POS terminal.
  - If the scanner is powered by an external Power Supply, disconnect the AC Power Cable from the AC power source, and then disconnect the USB cable from the scanner.
- 12. Connect one end of an RS-232 communication cable to the scanner and the other end to the host terminal.

- 13. Turn on the scanner by connecting the AC Power Cable to the AC power source. When the scanner starts up, it produces three incrementing beeps.
- 14. Launch any serial application and test scanner functions such as scanning bar codes, sending commands, and others.

#### **Based on Default Settings**

From the Start tab of the 123Scan main window, select Create new configuration file.
 The application opens a new untitled tab and displays options in creating a configuration file.



2. Select **My scanner is connected via USB cable**. The application displays the list of detected scanners and their firmware plug-in options.

() HCR	123Scan	_ 🗆 ×
		Barcodes - Preferences Tools - Help -
	Start Data view Untitled1 🛞	(4) (9)
	Back 📅 Refresh list	
9	elect your scanner model from the options below:	I don't see my scanner
2	you do not see your scanner's image / plug-in information below, click the "Refresh list" button bove to search your PC for scanners connected by a cable. If after this your scanner is still not nown below, see the "I don't see my scanner" box on the right for additional assistance.	Help me find my scanner. List of Currently Available Plug-ins
	7895-NCR STANDARD MODELS	
	Select from 1 plug-in option(s)	
	Select a Plug-in Release notes Supported models	
	Release 003 - 2021.07.28 (CAAFMS00-003-R07)	

3. Select the latest firmware plug-in. The application starts the Configuration Wizard.

123Scan					_ C
Start Data view Untitled1 (X)				Barcodes -	Preferences Tools - He
	Print bar code 🛛 🔭	Load to scanner	😽 Email Bar Code to Phone	Print/Save parameters	How to video
Model List Plug-in Name Release Notes App Developer Report	Name and n Please be sure to g notes and give the	ive your settings a	configuration name. You can als a version number.	so add	
7895-NCR STANDARD MODELS-003	Configuration name:	Untitled1 16 character limit	What is this?		
Name and notes     Name:Untitled1     Notes:     Cable connection	Notes:			<u>^</u>	
USB (default) 3. Symbologies (bar code types) Factory default settings 4. Modify Data		<b>500</b> of 500 chara	cters remaining	¥	
No rules 5. Imaging Factory default settings					
6. Scale Parameters Factory default settings					
7. General Factory default settings					
8. Printing Options					
9. Load and print					
< Back Next >	Done	Cancel	ſ	Search for a parameter	

4. Set the configuration name.

#### P Note

The configuration name must start with "NCR7895" and end with "CFG". For example, set the configuration name to "NCR7895\_DEF\_CFG". The maximum limit is 16 characters.

5. Add notes to briefly describe the configuration file (optional).

#### **Based on Current Scanner Settings**

 From the Start tab of the 123Scan main window, select Clone/modify my connected scanner settings. The application displays the current scanner configuration file summary.

Start   Data view NCR7895_DE	F_CFG 🛞	•
🗞 Actions 👻 🚊 Save file to PC 🗕	Print bar code 🛛 🏹 Load to scanner 🛛 💐 Email Bar Code to Phone	Print/Save parameters III How to video
Model List Plug-in Name	Configuration file summary	
Release Notes App Developer Report	Configuration name: NCR7895_DEF_CFG Notes:	View / Edit
Start configuration wizard >>	Cable connection ^ USB (default)	View / Edit
	Symbologies (bar code types) Factory default settings	View / Edit
	Modify Data No rules	View / Edit
	Imaging Factory default settings	View / Edit
	Scale Parameters Factory default settings	View / Edit
	General Factory default settings	View / Edit
	Printing Options	View / Edit

2. Select **Start configuration wizard**. The application displays the Configuration Wizard options.

123Scan		
Start Data view NCR7895_Df	F_CFG 🛞	Barcodes - Preferences Tools - Help
	Print bar code 🛛 🗮 Load to scanner 🛛 💐 Email Bar Code to Phone	ne 🖹 Print/Save parameters 🔛 How to video
Model List Plug-in Name Release Notes App Developer Report 7895-NCR STANDARD MODEL S-003	Name and notes           Please be sure to give your settings a configuration name. You can notes and give the configuration name a version number.           Configuration name:         NCR7895_DEF_CFG         What is this?           16 character limit         Normal Statement         Normal Statement	ı also add
Name and notes     Name:NCR7895_DEF_CFG     Notes:     Cable connection ^ USB (default)	Notes:	*
Symbologies (bar code types)     Factory default settings     Modify Data     No rules	500 of 500 characters remaining	
5. Imaging Factory default settings 6. Scale Parameters Factory default settings		
7. General Factory default settings 8. Printing Options		
9. Load and print		
< Back Next >	Done	Search for a parameter

## **Configuring Using Programming Bar Codes**

To configure the NCR 7895 scanner using programming bar codes, follow these steps:

- 1. Using an RS-232 communication cable, connect the NCR 7895 scanner to a computer or POS terminal. The scanner produces three incrementing beeps.
- 2. Scan the following bar code to set RS-232 Host Type to **NCR Variant** interface and activate the RS-232 driver.



3. Set the following NCR Variant settings by scanning their corresponding bar codes.

Parameter	Description
NCR Use Prefix	<ul> <li>Uses prefix for all communications. By default, this parameter is enabled.</li> <li>Enable—for customers using prefix.</li> <li>Disable—for customers not using prefix.</li> </ul>
NCR Prefix	Determines the Prefix Character used for all communications. By default, this parameter is set to 1002 (prefix 02, STX).
	<b>Note</b> If the NCR Use Prefix parameter is disabled, the NCR Prefix parameter is not required.
NCR Use BCC	Uses of the Block Check Character (after the Terminator byte) for all communications. Set this parameter based on the NCR Interface used. By default, this parameter is enabled.
	<ul><li>Enable—for Scanner/Scale interface.</li><li>Disable—for Scanner Only interface.</li></ul>

Parameter	Description
NCR Interface	<ul> <li>Sets the NCR specific interface to be used for all communications. By default, this parameter is set to Follow System.</li> <li>Follow System—auto-detects the system interface used.</li> <li>Scanner Only—for NCR 7895 scanner-only units.</li> <li>Scanner/Scale—for NCR 7895 scanner/scale units.</li> </ul>

Refer to the following sections for the RS-232 bar codes:

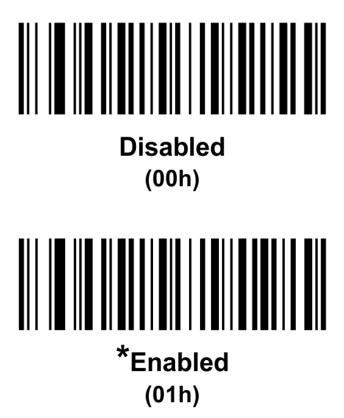
- "NCR Use Prefix (Parameter #1238)" on the next page
- "NCR Use Block Check Character (BCC) (Parameter #1239)" on page 213
- "NCR Interface (Parameter #1240)" on page 214
- 4. Reboot the NCR 7895 scanner to re-enumerate the device.
- 5. Launch any serial application and test scanner functions such as scanning bar codes, sending commands, and others.

## Programming Bar Codes for RS-232 Configuration

## NCR Use Prefix (Parameter #1238)

When **NCR Variant** is selected, this parameter determines whether or not the prefix is used for all communications.

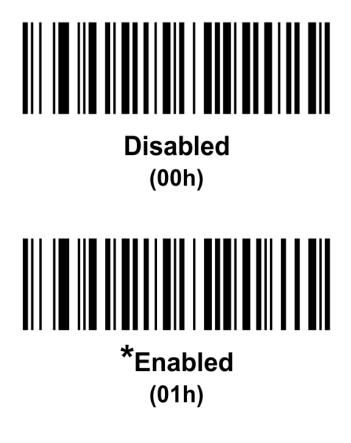
Scan one of the following bar codes to enable or disable the use of prefix. By default, this parameter is set to **Enabled**.



## NCR Use Block Check Character (BCC) (Parameter #1239)

When **NCR Variant** is selected, this parameter determines whether or not to enable the use of the Block Check Character (after the Terminator byte) for all communications.

Scan one the following bar codes to enable or disable the use of the block check character. By default, this parameter is set to **Enabled**.

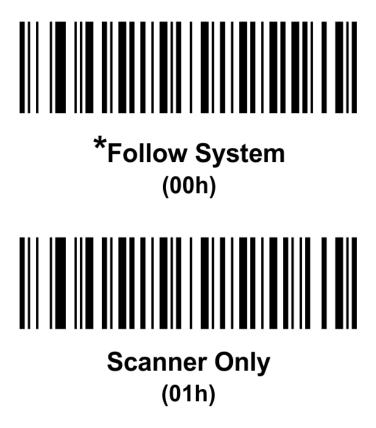


#### NCR Interface (Parameter #1240)

When **NCR Variant** is selected, this parameter determines the NCR specific interface to be used for all communications. NCR supports two interfaces: scanner only and scanner/scale.

- Follow System—auto-detects the system interface. If the system has a scale installed, the scanner/scale interface is used. If the system has no scale installed, scanner only is used.
- Scanner Only—forces the system to use the scanner only interface whether or not a scale is installed.
- Scanner/Scale—forces the system to use the scanner/scale interface whether or not a scale is installed.

Scan one the following bar codes to select the NCR interface setting. By default, this parameter is set to **Follow System**.



# Scanner/Scale (02h)

# NCR CDC Host Interface Configuration

This section provides procedures for configuring the NCR 7895 unit with **NCR CDC Host** interface. The NCR 7895 uses the CDC interface to connect to POS devices, host computers, or other devices with the assigned Virtual COM Port.

# Requirements

The following are required to configure the NCR 7895 with NCR CDC interface:

- NCR 7895 Scanner Firmware Plug-in (CAAFMS00-004-R00 or newer)
- 123Scan Configuration Utility

#### Note

It is recommended to install the latest version (v5.04.0006 or higher, 64-bit) of the 123Scan utility. For more information on 123Scan, refer to "<u>Installing NCR</u> <u>123Scan</u>" on page 99.

- Programming bar codes
  - NCR 7895 Scanner/Scale Bar Code Programming Guide (BCC5-0000-5516) at https://onlinehelp.ncrvoyix.com/Retail/Scanners/7895/HTML/Default.htm
- Zebra USB CDC Driver
  - ° Supported operating systems:
    - Windows 7 (32-bit and 64-bit)
    - Windows 8.1 (64-bit)

#### P Note

The Windows 10 native CDC driver included in the Windows 10 operating system supports Zebra scanners and should be used to provide CDC functionality in the Windows 10 environment. For version other than Windows 10, the latest USB CDC Driver (v2.15.6000) needs to be installed from <u>https://www.zebra.com/us/en/support-</u>downloads/software/drivers/usb-cdc-driver.html.

• USB communication cable to connect the scanner to a Windows host computer

# Configuring the Scanner with CDC Host Interface

The following are two options to configure the NCR 7895 scanner with CDC Host interface:

• "Configuring Using 123Scan Utility" on the next page

#### Note

This option requires the latest version of the 123Scan utility.

• "Configuring Using Programming Bar Codes" on page 230

### **Configuring Using 123Scan Utility**

To configure the NCR 7895 scanner using 123Scan utility, follow these steps:

 Using a USB communication cable, connect the NCR 7895 scanner to a computer or POS terminal. The scanner produces three incrementing beeps.

#### P Note

If the computer or POS terminal supports audio, it also produces a detection sound indicating that the scanner is detected.

- Launch the 123Scan utility. For more information, refer to "Launching NCR 123Scan" on page 105.
- 3. Create a configuration file using the following options:
  - "Based on Default Settings" on page 225
  - "Based on Current Scanner Settings" on page 228

4. On the left pane of the 123Scan Configuration Wizard, select **Cable connection.** The application displays the USB interface settings.

a 123Scan			Barcodes -	Preferences Tools - He
Start Data view NCR7895_D	EF_CFG 🛞		Duroduco	() () () () () () () () () () () () () (
Actions - 🖾 Save file to PC 🖉	Print bar code 🛛 🔭 Load to sca	anner 🛛 💐 Email Bar Code to Phone	Print/Save parameters	🔛 How to video
Model List Plug-in Name Release Notes App Developer Report 7895-NCR STANDARD	Your scanner is already set up t	ing to connect your scanne o communicate to your host using the n setup / modify up to 4 cable types (con	ost common communication munication protocols) on yo	
MODELS-003	USB Basic Settings USB Device Type *	CDC COM Port Emulation ~	+ add cable ▼	
Name:NCR7895_DEF_CFG Notes: 2. Cable connection USB (default)	lgnore Unknown Characters	Send Barcodes with Unknown Cl     Do Not Send Barcodes with Unkn		
Symbologies (bar code types)     Factory default settings     Modify Data     No rules	Use NCR Barcode Typ IBM Handheld / Tablete HID Keyboard Options	op / OPOS Options		
5. Imaging Factory default settings	CDC Options ^     Static CDC ^			
6. Scale Parameters     Factory default settings      7. General     Factory default settings	CDC Host Variant ^	NCR v		
8. Printing Options				
9. Load and print				
< Back Next >	Done Cancel		Search for a parameter	

- 5. Set the USB Device Type to CDC COM Port Emulation.
- 6. Configure the following CDC options:
  - Clear the **Static CDC** checkbox.
  - Set the CDC Host Variant to NCR.
- 7. If needed, adjust other settings by selecting the menu options on the left pane.

- 8. Load the new configurations to the scanner.
  - a. On the left pane of the 123Scan Configuration Wizard, select Load and print. The application displays the load and print options.

ONCR	123Scan		_ 🗆 ×
			Barcodes 👻 Preferences Tools 👻 Help 👻
	Start Data view NCR7895_D	₽F_CFG ⊗	
	🖏 Actions 🔻 🚊 Save file to PC 🛛 🚇	Print bar code 🛛 🧮 Load to scanner 🛛 😽 Email Bar Code to Phone	Rint/Save parameters III How to video
	Model List Plug-in Name Release Notes App Developer Report	Load and print Choose from the options below to program your scanner	
	7895-NCR STANDARD MODELS-003	Save to PC	
	Name and notes     Name:NCR7895 DEF CFG	Print bar code	
	Notes: 2. Cable connection ^ USB (default)	Load to scanner	
	Single RS232C 3. Symbologies (bar code types)	Email bar code to phone	
	Factory default settings 4. Modify Data No rules	Email electronic config file	
	5. Imaging Factory default settings	Print/export parameter report	
	6. Scale Parameters Factory default settings		
	7. General Factory default settings		
	8. Printing Options		
	9. Load and print		
	< Back Next >	Done Cancel	Search for a parameter

#### P Note

To save the configuration file, select Save to PC. The application saves the configuration file, in (.scncfg) format, to

C:\Users\Public\Documents\123ScanNCR\Configura tion Files.

b. From the Load and print options, select Load to scanner. The application displays the Load configuration window.

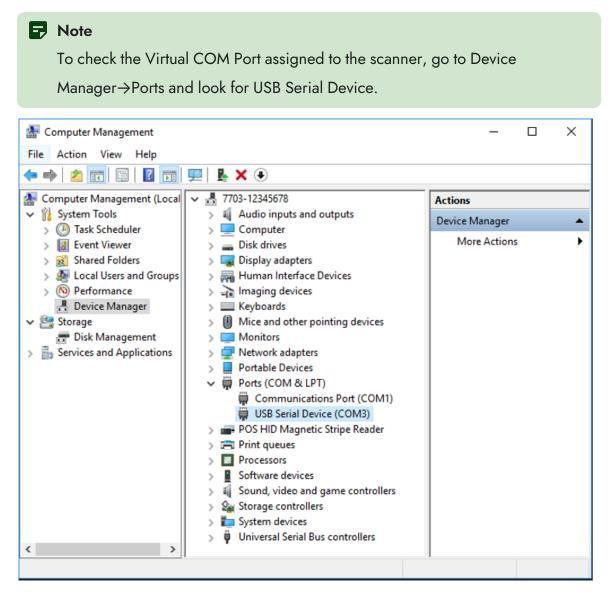
Load configuration	×
7895-NCR STANDARD MODELS Firmware version: Release 002 - 2021.02.03 (CAAFMS00-003-R05) 7895 model list	
1 compatible scanner(s) found for your configuration.	
Refresh scanner list 20262010557968 - CAAFMS00-003-R07	
×	
Clicking on a scanner above will begin the loading for that scanner. You can click the <b>FLASH/BEEP</b> icon within a row to find that particular scanner. Or to initiate the loading of all scanners, click the <b>LOAD TO ALL SCANNERS</b> button above.	
DISCOVERED SCANNER LIST	SE

c. From the scanner list, select the scanner to configure. The application starts loading the configuration to the selected scanner.

Load configuratio	n		×
	7895-NCR STANDARD MODELS Firmware version: Release 002 - 2021.02.03 ( 7895 model list	CAAFMS00-003-R05)	
1 compatible	scanner(s) found for your configuration.	LOAD TO ALL SCANNERS	
	Uploading NCR7895_DEF_CFG	1 of 1 scanner(s)	
	26 %_		
DISCOVERED	SCANNER LIST		CLOSE

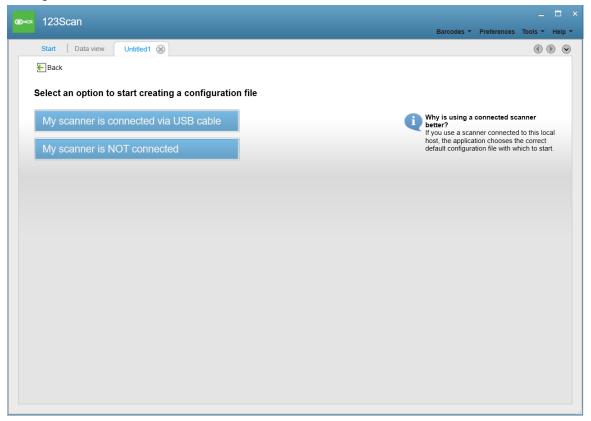
- d. When the application has completed loading the configuration to the scanner, select **Close**.
- 9. Close the 123Scan utility. The scanner automatically reboots.

10. Launch any serial application with correct Virtual COM Port settings and test scanner functions such as scanning bar codes, sending commands, and others.



#### **Based on Default Settings**

From the Start tab of the 123Scan main window, select Create new configuration file.
 The application opens a new untitled tab and displays options in creating a configuration file.



2. Select **My scanner is connected via USB cable**. The application displays the list of detected scanners and their firmware plug-in options.

(C) NCR	123Scan	_ 🗆 ×
		Barcodes 👻 Preferences Tools 👻 Help 👻
	Start   Data view Untitled1 🛞	
	Back 🗗 Refresh list	
3	Select your scanner model from the options below:	I don't see my scanner
	f you do not see your scanner's image / plug-in information below, click the "Refresh list" button bove to search your PC for scanners connected by a cable. If after this your scanner is still not hown below, see the "I don't see my scanner" box on the right for additional assistance.	Help me find my scanner. List of Currently Available Plug-ins
	7895-NCR STANDARD MODELS	
	Select from 1 plug-in option(s)	
	Select a Plug-in Release notes Supported models	
	Release 003 - 2021.07.28 (CAAFMS00-003-R07)	

3. Select the latest firmware plug-in. The application starts the Configuration Wizard.

123Scan					_
				Barcodes 👻	Preferences Tools - H
Start Data view Untitled1 (					
🖏 Actions 🔻 道 Save file to PC 🛔	Print bar code	Load to scanner	Email Bar Code to Phone	Print/Save parameters	🔛 How to video
Model Lis	Name and	noton			
Plug-in Name					
Release Notes	notes and give the	give your settings a configuration name	configuration name. You can al a version number.	so add	
App Developer Repor 7895-NCR STANDARD					
MODELS-003	Configuration name:	Untitled1	What is this?		
-		16 character limit	t		
1. Name and notes	Notes:			<b>A</b>	
Name:Untitled1					
2. Cable connection					
USB (default)					
3. Symbologies (bar code types)				Ŧ	
Factory default settings		<b>500</b> of 500 chara	cters remaining		
4. Modify Data No rules					
5. Imaging					
Factory default settings 6. Scale Parameters	-				
Factory default settings					
7. General	1				
Factory default settings	-				
8. Printing Options					
9. Load and print	1				
-	1				
			[		
< Back Next >	Done	Cancel		Search for a parameter	

4. Set the configuration name.

#### P Note

The configuration name must start with "NCR7895" and end with "CFG". For example, set the configuration name to "NCR7895\_DEF\_CFG". The maximum limit is 16 characters.

5. Add notes to briefly describe the configuration file (optional).

#### **Based on Current Scanner Settings**

 From the Start tab of the 123Scan main window, select Clone/modify my connected scanner settings. The application displays the current scanner configuration file summary.

Start Data view NCR7895_DE	F_CFG 🛞	۲
🖏 Actions 👻 🚊 Save file to PC 🛛 🚔	Print bar code 🛛 🗮 Load to scanner 🛛 💐 Email Bar Code to Phone 📑 F	Print/Save parameters III How to video
Model List Plug-in Name Release Notes	Configuration file summary	
App Developer Report	Configuration name: NCR7895_DEF_CFG Notes:	View / Edit
7895-NCR STANDARD MODELS-003	Cable connection ^ USB (default)	View / Edit
Start configuration wizard >>	Symbologies (bar code types) Factory default settings	View / Edit
	Modify Data No rules	View / Edit
	Imaging Factory default settings	View / Edit
	Scale Parameters Factory default settings	View / Edit
	General Factory default settings	View / Edit
	Printing Options	View / Edit

2. Select **Start configuration wizard**. The application displays the Configuration Wizard options.

123Scan		
Start Data view NCR7895_Df	F_CFG 🛞	Barcodes - Preferences Tools - Help
	Print bar code 🛛 🗮 Load to scanner 🛛 💐 Email Bar Code to Phone	e 🖹 Print/Save parameters 🔛 How to video
Model List Plug-in Name Release Notes App Developer Report 7895-NCR STANDARD MODEL S-003	Name and notes         Please be sure to give your settings a configuration name. You can notes and give the configuration name a version number.         Configuration name:         NCR7895_DEF_CFG         What is this?         16 character limit	also add
Name and notes     Name:NCR7895_DEF_CFG     Notes:     Cable connection ^     US8 (default)     Symbologies (bar code types)	Notes:	*
Factory default settings 4. Modify Data No rules	500 of 500 characters remaining	
5. Imaging Factory default settings 6. Scale Parameters		
Factory default settings 7. General Factory default settings		
8. Printing Options     9. Load and print		
< Back Next >	Done Cancel	Search for a parameter

### **Configuring Using Programming Bar Codes**

Before scanning the **USB CDC Host** bar code, ensure that the appropriate USB CDC Driver is installed on the host. This is to ensure that the scanner does not stall during power-up due to a failure in enumerating USB).

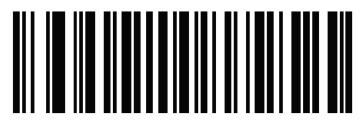
To configure the NCR 7895 scanner using programming bar codes, follow these steps:

- 1. Using a USB communication cable, connect the NCR 7895 scanner to a computer or POS terminal. The scanner produces three incrementing beeps.
- Scan the following bar code to set the scanner USB interface to CDC Com Port Emulation.



### **CDC COM Port Emulation**

3. Scan the following bar code to disable **Static CDC**.



### **Disable USB Static CDC**

4. Scan the following bar code to set CDC Host Variant to NCR.

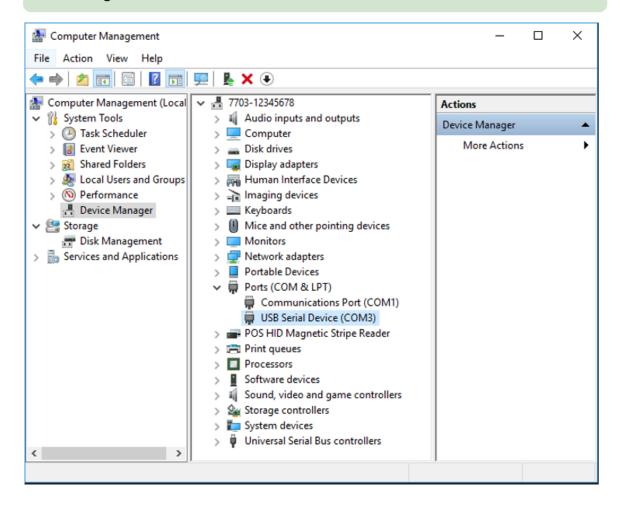


5. Launch any serial application with correct Virtual COM Port settings and test scanner functions such as scanning bar codes, sending commands, and others.



To check the Virtual COM Port assigned to the scanner, go to Device

Manager→ Ports and look for USB Serial Device.



# **Downloading Scanner Software**

#### Important

For deployment and configuration of the NCR 7895 scanner, use the NCR Platform Software and the NCR 123Scan tool available on the NCR web site. Do not download 123Scan from the Zebra web site.

### **Drivers**

Use NCR Platform Software to get the necessary drivers for the NCR 7895. Applications can interface to the NCR 7895 scanner/scale through either OPOS on Windows or JavaPOS (on supported versions of Linux or Windows). To download these drivers, go to

https://www5.ncr.com/support/support\_drivers\_

patches.asp?Class=External/RPSWWindows\Released\display and select the RPSW release that supports the NCR 7895 scanner.

- RPSW 5.3.6.0 (for 64bit)
- RPSW 4.3.6.0 (for 32bit)

#### Note

For customers who prefer not to use the NCR Platform Software, consult the Zebra support web site for drivers. However, NCR 123Scan from NCR web site must still be used.

### NCR 123Scan Utility

NCR 123Scan is a software tool for customizing scanner operation. To download the NCR 123Scan utility, go to https://www5.ncr.com/support/text/Peripherals/7895Utility.htm.

# Scanner SDK, Other Software Tools, and Videos

The following table lists the tools that can assist in configuring the NCR 7895 scanner.

Tool	Where to download
123Scan configuration utility	https://www5.ncr.com/support/text/Peripherals/7895Utility.htm
SDKs • Scanner SDK for Windows • Scanner SDK for Linux • Scanner SDK for Android	https://www5.ncr.com/support/support_drivers_ patches.asp?Class=retail_RealScan#7895utils
OPOS/JavaPOS Driver	https://www5.ncr.com/support/support_drivers_ patches.asp?Class=External/RPSWWindows\Released\display
Other Drivers <ul> <li>TWAIN driver</li> <li>USB CDC driver</li> <li>Virtual COM port driver</li> </ul>	https://www5.ncr.com/support/support_drivers_ patches.asp?Class=retail_RealScan#7895utils
Scanner Management Service (SMS) for Remote Management • Windows • Linux • IBM 4690	https://www5.ncr.com/support/support_drivers_ patches.asp?Class=retail_RealScan#7895utils
Mobile Apps • Scanner Control App • Android	http://www.zebra.com/scannersoftware
How-To-Videos	http://www.zebra.com/ScannerHowToVideos

# Troubleshooting

This chapter provides information about troubleshooting problems that might occur while operating the NCR 7895. Many problems can be corrected locally, restoring the NCR 7895 back to service quickly. Other problems require the aid of a factory trained technician.

# **Basic Troubleshooting**

If NCR 7895 displays any of the LED display codes preceded by an **E**, the unit will not operate correctly unless the error is resolved. For LED display codes preceded by a **U**, the unit will continue to operate, although with possible performance degradation. Under any circumstance, it is recommended to review basic hardware installation, and software configuration prior to contacting your service provider.

Before contacting your service provider, check the following items:

- Verify that the NCR 7895 has power. The system LED should be On.
- If the NCR 7895 includes a Scale, verify that there is no dirt or debris restricting the movement of the Top Plate. Clean and remove debris if necessary.
- If the NCR 7895 includes a Scale, touch the **Scale Zero** button.
- If the system includes a Scale Display, verify that it is properly connected to the NCR 7895.
- If the problem is with a remote device, such as a handheld scanner, verify that it is properly connected to the NCR 7895.
- Power cycle the NCR 7895. Remove and then supply power.
- 1. Remove power from the NCR 7895, POS equipment, and any auxiliary devices, such as handheld scanners/cradles.
- 2. Inspect external cables including POS, auxiliary handheld devices, and optional pole display (scale units only) for proper seating in their respective connectors.
- 3. Remove any objects from the Top Plate or near the unit, and then re-apply power to the NCR 7895 and attached equipment (POS, handheld scanner, and others).
- 4. Wait for the unit to boot, and listen for start-up audio indicators.

#### 🗗 Note

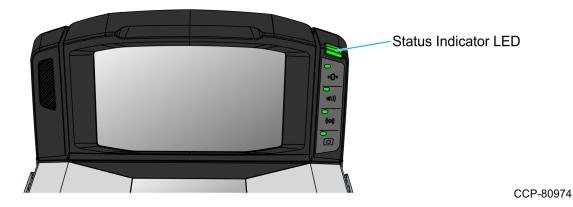
If the LED display codes persist, contact your service provider.

# **LED Display Guidelines**

- A dash (-) indicates normal operating mode.
- Scale calibration information (see the *Scale Warning Codes* table) has precedence over general warning messages but not over errors.
- Scrolling **CAL** (number of calibrations performed) and **PAR** (legal parameter) values display for scale verification (electronic seal).
- Cxxx and Pxxx scroll when the Scale Zero button is held for three or more seconds.
- An error message displays when a fault condition exists. A power cycle is required. Verify that the subsystems and auxiliary devices are operational.
- A warning message displays when a warning condition exists. The power sequence pauses until the issue is resolved.
- For scale firmware version #1.04F (for applicable countries):
  - Scrolling CAL (number of calibrations performed) and PAR (legal parameter) values display for scale verification (electronic seal), and where required by country legislation, scale approved firmware version number.
  - Cxxx and Pxxx scroll when the Scale Zero button is held for three or more seconds, followed by x.xx F (determined by country legislation).

# **Status Indicator LED**

The Status Indicator LED is located on the right side of the NCR 7895 and provides visual feedback for system status and alerts.



The LED provides the following feedback:

- Green—the unit is operating normally.
- Blinking Red or Blinking Green—indicates a warning. The unit continues to operate with possible performance degradation.
- **Solid Red**—indicates a fault. The unit does not operate correctly unless the error is resolved.

# **Beeper and LED Indicators**

The following are different topics that indicate beeper and LED conditions and their descriptions:

- "Advanced Data Formatting (ADF) Programming" on the next page
- "Button Presses" on page 240
- "Camera Activation Button Presses" on page 241
- "Code 39 Buffering" on page 241
- "EAS/Security Tags" on page 242
- "Firmware Download" on page 243
- "Macro PDF" on page 243
- "Parameter Programming" on page 244
- "<u>Scale</u>" on page 244
- "Standard Use" on page 249
- "<u>Volume</u>" on page 250

# Advanced Data Formatting (ADF) Programming

Condition	Beeper Indication	System LED Indication	Button LED Indication	Description
Number expected	High, Low Beeps	Green	No change	Enter another digit. Add leading zeros to the front if necessary.
Alpha character expected	Low, Low Beeps	Green	No change	Enter another alphabetic character or scan the End of Message bar code.
Criteria or action expected	High, High Beeps	Green Blinking	No change	ADF criteria or action is expected. Enter another criterion or action, or scan the Save Rule bar code.
ADF rule saved	High, Low, High, Low Beeps	Green (turns off blinking)	No change	Rule saved. Rule entry mode exited.
Criteria or action cleared	High, Low, Low Beeps	Green	No change	All criteria or actions cleared for current rule, continue entering rule.
Last rule deleted	Low Beep	Green	No change	Delete last saved rule. The current rule is left intact.
All rules deleted	Low, High, High Beeps	Green	No change	All rules are deleted.
ADF out of memory	Low, High, Low, High Beeps	Red	No change	Out of rule memory. Erase some existing rules, then try to save rule again
Cancel rule entry	Low, High, Low Beeps	Green (turns off blinking)	No change	Cancel rule entry. Rule entry mode exited because of an error or the user asked to exit rule entry.
Rule error	Low, High Beeps	Red	No change	Entry error, wrong bar code scanned, or criteria/action list is too long for a rule. Re-enter criterion or action.

### **Button Presses**

Condition	Beeper Indication	System LED Indication	Button LED Indication	Description
Press and release <b>Scale</b> <b>Zero</b> button	Click	No change	Scale Zero button LED blinks green (momentary)	LED illuminates only if <b>Scale Zero</b> button is enabled. Causes the scale to zero.
Press and hold <b>Scale</b> <b>Zero</b> button	Click	No change	None	If <b>Scale Zero</b> button is enabled, causes the scale calibration audit trail to display until button is released.
Press and hold/release <b>Scale Zero</b> and <b>EAS</b> buttons	Click	Red after 10 seconds upon reboot	No change	After buttons are held for 10 seconds, a system reboot initiates.
Press and hold <b>Scale</b> <b>Zero</b> and <b>Volume/Tone</b> buttons for 5 seconds, then release	Short beep after 5 seconds; within 2 seconds of release, press the <b>Scale Zero</b> and <b>Volume/Tone</b> again and release; 5 long beeps sound	No change	No change	After the final 5 long beeps sound, scale calibration is entered.
Press and release <b>EAS</b> button	Click	No change	EAS is enabled, LED is amber	If EAS is enabled, button press activates tag manual deactivation.

# **Camera Activation Button Presses**

Condition	Beeper Indication	System LED Indication	Button LED Indication	Description
Press and release the <b>Camera Activation</b> button	Periodic clicks until shutter sounds indicating a picture was taken	No Change	No Change	Takes a picture. <b>Note</b> The ability to use the data from the camera may depend on the POS or system using the device.
Press-hold-release (hold longer than 0.5 seconds) the <b>Camera Activation</b> button to scan a bank check	Periodic clicks until check scan completes. • Successful completion - one beep sounds. • Unsuccessful completion - four beep sequence sounds.	No Change	No Change	Scans a bank check.

# Code 39 Buffering

Condition	Beeper Indication	System LED Indication	Button LED Indication	Description
Code 39 character added into buffer	High, Low Beeps	No change	No change	New Code 39 data was entered into the buffer.
Code 39 buffer full	3 Long High Beeps	No change	No change	Code 39 buffer is full.

Condition	Beeper Indication	System LED Indication	Button LED Indication	Description
Code 39 buffer cleared	High, Low, High Beeps	No change	No change	The Code 39 buffer was erased.
Code 39 buffer empty	Low, High, Low Beeps	No change	No change	The Code 39 buffer was erased or there was an attempt to clear or transmit an empty buffer.
Code 39 buffer transmitted	Low, High Beeps	No change	No change	A successful transmission of buffered data.

# EAS/Security Tags

Condition	Beeper Indication	System LED Indication	Button LED Indication	Description
EAS system disabled	None	No change	EAS LED is off	EAS parameter disabled.
EAS system functional (idle)	None	No change	EAS LED is on	EAS is operating normally.
EAS tag detected anytime	Configurable: None, Geiger Counter clicks	No change	EAS LED blinks yellow at 4 Hz	An EAS tag is in the EAS tag detected area and was detected.
EAS manual deactivation activated	None	No change	EAS LED on	Deactivation is active on the system.
EAS Soft Tag Deactivation	None, Beep 1, Beep 2	No change	No change	Beep indicates that a soft tag was deactivated.
EAS Hard Tag Detected	None, Beep 1, Beep 2	No change	No change	Beep indicates that a hard tag was detected.

# **Firmware Download**

Condition	Beeper Indication	System LED Indication	Button LED Indication	Description
Firmware Download	Low, Medium, High beep after complete	Red alternating between on and fast blink	No change	<ul> <li>Firmware download in progress.</li> <li>Firmware Download has multiple states.</li> <li>The LEDs during these states are: <ul> <li>During firmware data</li> <li>download/transfer – no LED</li> <li>control.</li> </ul> </li> <li>After reboot firmware is installed <ul> <li>LED blinks red, fast.</li> </ul> </li> <li>When the process is complete, the scanner emits a normal power-up beep.</li> </ul>

### Macro PDF

Condition	Beeper Indication	System LED Indication	Button LED Indication	Description
Macro PDF buffered	2 Low Beeps	No change	No change	MDPF sequence buffered
Macro PDF file ID error	2 Long Low Beeps	No change	No change	File ID error. A bar code not in the current MPDF sequence was scanned.
Macro PDF buffer out of memory	3 Long Low Beeps	No change	No change	Out of memory. There is not enough buffer space to store the current MPDF symbol.
Macro PDF bad symbology encountered	4 Long Low Beeps	No change	No change	Bad symbology. Scanned a 1D or 2D bar code in a MPDF sequence, a duplicate MPDF label, a label in an incorrect order, or trying to transmit an empty or illegal MPDF field.
Macro PDF buffer flushed	5 Long Low Beeps	No change	No change	Flushing MPDF buffer.

Condition	Beeper Indication	System LED Indication	Button LED Indication	Description
Macro PDF aborted	Fast Warble Beep	No change	No change	Aborting MPDF sequence.
Macro PDF buffer flushed with no data	Low, High Beeps	Red	No change	Flushing an already empty MPDF buffer.

# **Parameter Programming**

Condition	Beeper Indication	System LED Indication	Button LED Indication	Description
Parameter entry error	Low, High Beeps	Red	No change	Input error: incorrect bar code, programming sequence, or <b>Cancel</b> scanned.
Parameter number entry expected	High, Low Beeps	Green	No change	Number expected. Enter value using numeric bar codes.
Parameter entry accepted	High, Low, High, Low Beeps	Green	No change	Successful program exit with change in parameter setting.

# Scale

Scale State	7-segment Diagnostic Display	LED (System)	Beeper Sequence	Scale Zero Button (LED)	Optional Scale Displ ay
Scale disabled	No change	No change	None	Off	Blank

Scale State	7-segment Diagnostic Display	LED (System)	Beeper Sequence	Scale Zero Button (LED)	Optional Scale Displ ay
Scale normal - stable with weig ht	No change	No change	None; single short beep after weight request from POS, if this feature is enabled.	Solid Green On	Weight reading
Under zero	No change	No change	None	Flashing	All "" (dashes)
Over range condition (weight is greater than 30.09 lb or 15.045 kg)	No change	No change	None	Off	EEEE
Weight unstable	No change	No change	None	Off	Numerical values blank but measurement unit icons (lb or kg) remain on.
Scale Zero button press	If zero operation fails, it scrolls <i>U12</i>	Red (Warning) if zero operation fails on a <b>Scale Zero</b> button press; otherwise, no change	Click sound	No change	If successful, weight reads 0 (zero) and <0> indicator icon illuminates.
Scale out of calibration	Scrolls fault code U14	Red (Warning)	None	Off	Blinks CAL

Scale State	7-segment Diagnostic Display	LED (System)	Beeper Sequence	Scale Zero Button (LED)	Optional Scale Displ ay
Successfully entering scale legal Calibration Mode	<ul> <li>At "Programmin g Legal Parameter s" step or "Calibration at No Load" step, shows COOLb or COOg, depending on the programmed unit of weight.</li> <li>At "Calibration at Load" step, shows C25Lb or C10g, depending on the programmed unit of weight.</li> <li>After "Calibration at No Load" and "Calibration at Load," repeatedly shows CAL P and CAL S.</li> <li>If calibration fails at any step, shows error code u##.</li> </ul>	No change	Five long beeps	Off	<ul> <li>At         <ul> <li>"Calibration at No Load"</li> <li>step, blinks</li> <li>between</li> <li>CAL00 and</li> <li>CAL with</li> <li>the correct</li> <li>unit icon</li> <li>illuminated (lb</li> <li>or kg).</li> </ul> </li> <li>At         <ul> <li>"Calibration</li> <li>at Load" step,</li> <li>blinks CAL25</li> <li>with the lb</li> <li>icon</li> <li>illuminated,</li> <li>or blinks</li> <li>CAL10 with</li> <li>the kg icon</li> <li>illuminated.</li> </ul> </li> <li>After         <ul> <li>"Calibration</li> <li>at No Load"</li> <li>and</li> <li>"Calibration</li> <li>at Load,"</li> <li>blinks</li> <li>between</li> <li>CAL P (PASS)</li> <li>and CAL S</li> <li>(save legal</li> <li>parameter</li> <li>settings).</li> </ul> </li> </ul>

Scale State	7-segment Diagnostic Display	LED (System)	Beeper Sequence	Scale Zero Button (LED)	Optional Scale Displ ay
					<ul> <li>If calibration fails at any step, blinks CAL F.</li> </ul>
Between calibration steps	No change	No change	No change	Off	Blinks <i>HOLD</i> while taking a measurement.
Stepping through a calibration step	No change	No change	Single long beep tone after pressing the <b>Scale Zero</b> button	Off	No change
Failure to place the correct load on the scale at "Calibration at Load" step	<i>C25Lb</i> or <i>C10g</i> , depending on the programmed unit of weight	No change	Two long beep tones	No change	No change
Successfully executing and exiting a scale legal calibration	Calibration procedure semantics removed from display.	No change	Three short beeps	Solid Green On if weight is stable after resetting the scale	Scale is reset either by pressing the <b>Scale Zero</b> button, scanning the <b>Scale Reset</b> parameter bar code, of powering the unit Off then On again. The seven segment test will run.

Scale State	7-segment Diagnostic Display	LED (System)	Beeper Sequence	Scale Zero Button (LED)	Optional Scale Displ ay
Cold reset of scale	No change	No change	No change except after "Calibration at No Load" and "Calibration at Load,". When the <b>Scale Zero</b> button is pressed during this step, three short beep tones is emitted.	No change	Seven segment test runs and displays the following: • 00.000 all icons illuminated for three seconds • Blank for one second • 99.999 all icons illuminated for three seconds • Blank for one seconds • Blank for one second • Normal display
Audit Tally - Press and hold <b>Scale Zero</b> button for greater than three seconds not in Calibration Mode	Repeatedly scrolls <i>C###</i> then <i>P###</i>	No change	None	No change	Blinks between <i>C###</i> and <i>P###</i>
In Bootloader Mode	No change	Off	None	Off	None

Scale State	7-segment Diagnostic Display	LED (System)	Beeper Sequence	Scale Zero Button (LED)	Optional Scale Displ ay
Scale Error	Scrolls fault code <i>u##</i>	Red (Warning)	None	Off	<ul> <li>Blinks FAIL or blanks display with unit icon showing lb or kg illuminated</li> <li>Blinks CAL F if the system is in scale legal Calibration Mode.</li> </ul>

# Standard Use

Condition	Beeper Indication	System LED Indication	Button LED Indication	Description
System power- up	Low, Medium, High Beeps	None	No change	Power up.
System reboot	Loud beep for two seconds.	No change for 10 seconds. Red for two seconds.	No change	After holding the <b>Scale</b> <b>Zero</b> and <b>EAS</b> buttons for 10 seconds, the scanner reboots.
Bar code decoded	Off, Low, Medium, High, two-tone beep, or TBD tone (programmable)	Bright green	No change	One bright green LED flash.
System is idle	None	Dim green	No change	LED constant on; ready for decode.
System is disabled	None	Off	No change	Host application has sent SCAN-DISABLE command.
Bar code data transmission error	4 Low Beeps	Red	No change	Transmission error.

Condition	Beeper Indication	System LED Indication	Button LED Indication	Description
Bar code data conversion error	5 Low Beeps	Red	No change	Conversion or Format error.
RS-232 host parity error	Low, Low, Low, Extra Low Beeps	Red	No change	RS-232 Receive error.
BELL (RS-232)	High Beep	None	No change	A <bel> character is received over RS-232.</bel>

### Volume

Condition	Beeper Indication	System LED Indication	Button LED Indication	Description
Pressed and release <b>Volume/Tone</b> button	Emits volume level	No change	Button LED blinks for two seconds (at 2 Hz)	Speaker volume changes. The speaker emits a sound using the current speaker volume. The Speaker emits a sound with the volume increasing each time the <b>Volume/Tone</b> button is pressed within two seconds of the previous (or while the volume LED is blinking). When the maximum volume level is reached, it wraps and begins at the lowest volume level.
Press and hold Volume/Tone button for two seconds	Emits decode tone	No change	Button LED blinks for two seconds	Decode tone changes. The Speaker emits a sound and cycles through all different tones every second while touching the <b>Volume/Tone</b> button.
Decode tone change (Describes action above)	Button click; decode beep at next tone (wrap)	No change	No change	After holding the <b>Volume/Tone</b> button for two seconds, the next decode tone sounds. For each additional second the decode tone changes again.

# **General Error and Warning Codes**

General error and warning codes are displayed on the 7-segment diagnostic displays, which are visible inside the Vertical Scan Window. When an error is detected, the 7-segment displays show letter and number messages one character at a time.

#### P Note

The information in the following table is for reference only. For more information, contact your service provider.

LED Display Code	Error/Warning Indication
Errors (E)	
E21	Illumination failed
E26	Image Capture Hardware (HW assist) failure
E28	Digital Audio Playback failure
Warnings (U)	
U1	Diagnostic Test Flag (internal only)
U2	Illumination Current Limit warning
U3	Horizontal Left Current Limit warning
U5	Horizontal Right Current Limit warning
U6	Vertical Left Current Limit warning
U8	Vertical Right Current Limit warning
U9	Image Sensor Warning (either)
U10	Vertical Image Sensor warning
U11	Horizontal Image Sensor warning
U16	Sensormatic EAS Offline warning
U17	Host Protocol warning

LED Display Code	Error/Warning Indication
U18	Left Channel IR (object detection) failure
U25	Right Channel IR (object detection) failure
U27	User Interface (button interface) failure
U29	EAS Communication Error
U30	Center Channel IR (object detection) failure
U31	Indicates that the Sensormatic control box has an internal high voltage fault. The user should turn off the Sensormatic control box (EAS tags will not be detected or deactivated).

# Scale Warning Codes

Scale Warning Codes are displayed on the 7-segment diagnostic displays, which are visible inside the Vertical Scan Window. When an error is detected, the 7-segment displays show letter and number messages one character at a time.

#### 🗗 Note

The information in the following table is for reference only. For more information, contact your service provider.

Warning Code	Warning Type	Description	Recommended Action
U12	Scale Failed to Zero on <b>Scale Zero</b> Button Press	The scale failed to find a zero weight reference when the <b>Scale Zero</b> button was pressed. The scale will zero if the weight on the Top Plate is within +/- 2% of maximum weight measurement capacity, and stable (that is, no motion on the Top Plate). This is +/- 0.6 lb (+/- 0.3 kg) depending on the	Press the <b>Scale Zero</b> button.
		programmed unit of weight. The allowable zeroing weight limit of 0.6 lb and 0.3 kg is configurable. Refer to the NCR 7895 Scanner/Scale Bar Code Programming Guide (BCC5-0000-5516) for the Maximum Scale Zeroing Weight Limit parameter.	

Warning Code	Warning Type	Description	Recommended Action
U13	Scale Outside of Zero Drift Threshold	The zero reference drifted beyond 80% of the initial zero setting range of -5% to +15% (-0.9 lb to +3.9 lb, or -0.4 kg to +1.9 kg) maximum weight measurement capacity, relative to the zero weight reference found at a no load legal scale calibration. This is an advisory indicating that the scale alibration. It can sometimes be cleared by scanning the <b>Scale Reset</b> parameter bar code, repowering the scale, or leaving the scale on from a cold power start for more than 10 minutes. If this persists, recalibrate the scale.	<ul> <li>The error is triggered if a weight greater than 4.5 lb (2.25 kg) is left on the weighing surface while the scale comes up from a reset or cold power start. To clear the error, remove the weight from the weighing surface.</li> <li>The error is triggered if the scale resets, or upon a cold reset of the NCR 7895 system, and the Top Plate is not installed. To clear the error, re-install the Top Plate.</li> </ul>

Warning Code	Warning Type	Description	Recommended Action
U14	Scale is Out of Calibration	The scale must be legally calibrated before it becomes operational. There are three reasons:	Calibrate the scale.
		<ul> <li>The scale can no longer find a zero weight reference at power up, after a weight is removed from the Top Plate during normal operation, or when pressing the</li> </ul>	
		Scale Zero button.NoteThe scale softwaredoes not removethe scale fromcalibration underthese conditions ifit was alreadylegally calibrated.This is a very visiblecondition for usersto troubleshoot. TheScale Display doesnot show 0 (zero)reading from	
		<ul> <li>power-up, or after</li> <li>pressing the Scale</li> <li>Zero button with no</li> <li>load on the Top</li> <li>Plate.</li> <li>A new scale was</li> <li>installed in the</li> </ul>	

Warning Code	Warning Type	Description	Recommended Action
		NCR 7895. • A new NCR 7895 shipped from a factory to an installation that requires calibration at place of scale use.	
U15	Scale Offline	This is an internal error in the NCR 7895 scanner/scale unit, and in most cases, a <i>Scale</i> <i>Communication Error U22</i> is reported before this error.	<ol> <li>Verify the connection of the Scale Cable to the scale and Main PCB Board.</li> <li>Replace the Scale Cable.</li> <li>Replace the Main PCB Board.</li> <li>Replace the Scale Assembly.</li> </ol> Note For details, contact NCR Support at https://www.ncr.com/support.
U22	Scale Communication Error	<ul> <li>This is a failed communication between the NCR 7895 scanner PCB and the scale device. There are three issues that can cause this fault condition:</li> <li>Circuitry on the NCR 7895 scanner PCB failed.</li> <li>Internal cable between scanner PCB and the scale device is faulty.</li> <li>Internal circuitry on the scale device is faulty.</li> </ul>	<ol> <li>Verify the connection of the Scale Cable to the scale and Main PCB Board.</li> <li>Replace the Scale Cable.</li> <li>Replace the Main PCB Board.</li> <li>Replace the Scale Assembly.</li> </ol> Note For details, contact NCR Support at <a href="https://www.ncr.com/support">https://www.ncr.com/support</a> .

Warning Code	Warning Type	Description	Recommended Action
U23	Scale Display Communication Error	This is a failed communication between the NCR 7895 PCB and the Scale Display. There are three issues that can cause this fault condition: • The Scale Display configuration parameter is enabled and no Scale Display is connected to the NCR 7895 scanner/scale. For scale parameters, refer to the NCR 7895 Scanner/Scale Bar Code Programming Guide (BCC5-0000-5516). • Display circuitry on the NCR 7895 PCB failed. • The Scale Display cable between the NCR 7895 PCB failed. • The Scale Display is faulty, or the internal circuitry of the Scale Display is faulty. The Scale Display and cable are a single Field Replaceable Unit (FRU).	Replace the Scale Display. Note For details, contact NCR Support at https://www.ncr.com/support.

Warning Code	Warning Type	Description	Recommended Action
U24	Scale Motion Fault	<ul> <li>This condition occurs when the scale detects constant motion on the weighing surface for an extended duration of time.</li> <li>This is a <i>latched fault</i>, meaning the NCR 7895 needs to be powered off, the problem fixed, and the NCR 7895 powered back on. There are three possible reasons for this fault condition: <ul> <li>The scale was improperly installed, or is mechanically bent or damaged where it cannot achieve a stable weight condition.</li> <li>The scale or the Top Plate is pressed up against a fixed object and its free motion is inhibited.</li> <li>Debris is lodged under one or more of the over travel stop screws.</li> </ul> </li> </ul>	Remove and re-seat the scale. If the error persists, replace the scale. Note For details, contact NCR Support at https://www.ncr.com/support.

# **Standard Parameter Defaults**

The following table shows the NCR 7895 parameter default settings.

#### P Note

This table includes limited parameters. For all NCR 7895 programming parameters and bar codes, refer to NCR 7895 Scanner/Scale Bar Code Programming Guide (BCC5-0000-5516).

Parameter		Default Setting	
USB Device Type		IBM Table-top USB	
RS-232 Host Type	•	Standard RS-232	
RS-232 Device Po	ort Configuration	AUX 1 Sensormatic and AUX 2 RS-232 Scanner	
Third Party Scale	Third Party Scale	Disable Third Party Scale	
	Third Party Scale LED Pin	Active High	
	Third Party Scale Zero Pin	Active High	
IBM Port Addres	ses	None	
IBM Scale Port A	ddresses	None	
Legal Scale Units	5	Kilograms (International or metric)	
		Pounds (US)	
Scale Display Configuration		Disable	
Legal Scale Dampening Filter		Low Vibration Sensitivity	
Scale Pole Displa	ау Туре	Standard Pole Display Type	

# **Character Sets**

This section provides the character sets available for NCR 7895.

- "ASCII Character Set" on the next page
- "ALT Key Character Set" on page 269
- "GUI Key Character Set" on page 271
- "PF Key Character Set" on page 273
- "F Key Character Set" on page 274
- "Numeric Key Character Set" on page 276
- "Extended Key Character Set" on page 277

### **ASCII Character Set**

For the Keyboard Wedge Interface, Code 39 Full ASCII interprets the bar code special character (\$ + % /) preceding a Code 39 character and assigns an ASCII character value to the pair. For example, if you enable Code 39 Full ASCII and scan **+B**, it transmits as **b**, **%J** as **?**, and **%V** as **@**. Scanning **ABC%I** outputs the keystroke equivalent of **ABC** >.

#### P Note

The keystroke in **bold** transmits only if the Function Key Mapping is enabled. Otherwise, the regular keystroke transmits. For more information on Function Key Mapping, refer to *NCR 7895 Scanner/Scale Bar Code Programming Guide* (BCC5-0000-5516).

ASCII Value (Prefix/Suffix Value)	Full ASCII Code 39 Encode Char	Keystroke	ASCII Character (Applies to RS-232 Only)
1000	%U	CTRL 2	NUL
1001	\$A	CTRL A	SOH
1002	\$B	CTRL B	STX
1003	\$C	CTRL C	ETX
1004	\$D	CTRL D	EOT
1005	\$E	CTRL E	ENQ
1006	\$F	CTRL F	ACK
1007	\$G	CTRL G	BELL
1008	\$H	CTRL H	BCKSPC
		or	
		BACKSPACE	

ASCII Value (Prefix/Suffix Value)	Full ASCII Code 39 Encode Char	Keystroke	ASCII Character (Applies to RS-232 Only)
1009	\$1	CTRL I	HORIZ TAB
		or	
		HORIZONTAL TAB	
1010	\$J	CTRL J	LF
			or
			NW LN
1011	\$К	CTRL K	VT
1012	\$L	CTRL L	FF
1013	\$M	CTRL M	CR
		or	or
		ENTER	ENTER
1014	\$N	CTRL N	SO
1015	\$O	CTRL O	SI
1016	\$P	CTRL P	DLE
1017	\$Q	CTRL Q	DC1
			or
			XON
1018	\$R	CTRL R	DC2
1019	\$S	CTRL S	DC3
			or
			XOFF
1020	\$T	CTRL T	DC4
1021	\$U	CTRL U	NAK

ASCII Value (Prefix/Suffix Value)	Full ASCII Code 39 Encode Char	Keystroke	ASCII Character (Applies to RS-232 Only)
1022	\$∨	CTRL V	SYN
1023	\$W	CTRL W	ЕТВ
1024	\$X	CTRL X	CAN
1025	\$Y	CTRL Y	ЕМ
1026	\$Z	CTRL Z	SUB
1027	%A	CTRL [	ESC
1028	%В		FS
1029	%C	CTRL ]	GS
1030	%D	CTRL 6	RS
1031	%Е	CTRL -	US
1032	Space	Space	Space
1033	/A	!	!
1034	/В	u	"
1035	/C	#	#
1036	/D	\$	\$
1037	/E	%	%
1038	/F	&	&
1039	/G	,	,
1040	/Н	(	(
1041	/I	)	)
1042	/J	*	*

ASCII Value (Prefix/Suffix Value)	Full ASCII Code 39 Encode Char	Keystroke	ASCII Character (Applies to RS-232 Only)
1043	/К	+	+
1044	/L	,	,
1045	-	-	-
1046			
1047	/o	/	/
1048	0	0	0
1049	1	1	1
1050	2	2	2
1051	3	3	3
1052	4	4	4
1053	5	5	5
1054	6	6	6
1055	7	7	7
1056	8	8	8
1057	9	9	9
1058	/Z	:	:
1059	%F	;	;
1060	%G	<	<
1061	%Н	=	=
1062	%I	>	>
1063	%]	?	?

ASCII Value (Prefix/Suffix Value)	Full ASCII Code 39 Encode Char	Keystroke	ASCII Character (Applies to RS-232 Only)
1064	%V	@	@
1065	A	A	A
1066	В	В	В
1067	С	с	с
1068	D	D	D
1069	E	E	E
1070	F	F	F
1071	G	G	G
1072	н	н	н
1073	I	I	I
1074	J	J	J
1075	к	к	к
1076	L	L	L
1077	м	м	м
1078	Ν	Ν	N
1079	0	0	0
1080	Р	Ρ	Ρ
1081	Q	Q	Q
1082	R	R	R
1083	S	S	S
1084	т	т	Т

ASCII Value (Prefix/Suffix Value)	Full ASCII Code 39 Encode Char	Keystroke	ASCII Character (Applies to RS-232 Only)
1085	U	U	U
1086	V	V	V
1087	W	w	w
1088	Х	х	х
1089	Y	Y	Y
1090	Z	Z	Z
1091	%К	[	[
1092	%L	λ	X
1093	%М	]	]
1094	%N	^	^
1095	%0	-	_
1096	%W	,	、
1097	+A	а	a
1098	+В	b	b
1099	+C	с	с
1100	+D	d	d
1101	+E	е	е
1102	+F	f	f
1103	+G	g	g
1104	+H	h	h
1105	+I	i	i

ASCII Value (Prefix/Suffix Value)	Full ASCII Code 39 Encode Char	Keystroke	ASCII Character (Applies to RS-232 Only)
1106	+J	j	j
1107	+К	k	k
1108	+L	I	I
1109	+M	m	m
1110	+N	n	n
1111	+0	0	0
1112	+P	p	р
1113	+Q	q	q
1114	+R	r	r
1115	+\$	S	5
1116	+T	t	t
1117	+U	u	u
1118	+V	v	v
1119	+W	w	w
1120	+X	x	x
1121	+Y	У	у
1122	+Z	z	z
1123	%P	{	{
1124	%Q	1	1
1125	%R	}	}
1126	%S	~	~

ASCII Value (Prefix/Suffix Value)	Full ASCII Code 39 Encode Char	Keystroke	ASCII Character (Applies to RS-232 Only)
1127			Undefined
7013			ENTER

### **ALT Key Character Set**

ALT Keys	Keystroke
2064	ALT 2
2065	ALT A
2066	ALT B
2067	ALT C
2068	ALT D
2069	ALT E
2070	ALT F
2071	ALT G
2072	ALT H
2073	ALT I
2074	ALT J
2075	ALT K
2076	ALT L
2077	ALT M
2078	ALT N
2079	ALT O
2080	ALT P
2081	ALT Q
2082	ALT R
2083	ALT S
2084	ALT T

ALT Keys	Keystroke
2085	ALT U
2086	ALT V
2087	ALT W
2088	ALT X
2089	ALT Y
2090	ALT Z

# **GUI Key Character Set**

For GUI Shift Keys, the Apple<sup>™</sup> iMac keyboard has an apple key on either side of the space bar. Windows-based systems have a GUI key to the left of the left ALT key and to the right of the right ALT key.

GUI Key	Keystroke
3000	Right Control Key
3048	GUI 0
3049	GUI 1
3050	GUI 2
3051	GUI 3
3052	GUI 4
3053	GUI 5
3054	GUI 6
3055	GUI 7
3056	GUI 8
3057	GUI 9
3065	GUI A
3066	GUI B
3067	GUI C
3068	GUI D
3069	GUI E
3070	GUI F
3071	GUI G

GUI Key	Keystroke
3072	GUI H
3073	GULI
3074	GUIJ
3075	GUI K
3076	GUI L
3077	GUI M
3078	GUI N
3079	GUI O
3080	GUI P
3081	GUI Q
3082	GUI R
3083	GUI S
3084	GUI T
3085	GUI U
3086	GUI V
3087	GUI W
3088	GUI X
3089	GUI Y
3090	GUI Z

### **PF Key Character Set**

PF Keys	Keystroke
4001	PF 1
4002	PF 2
4003	PF 3
4004	PF 4
4005	PF 5
4006	PF 6
4007	PF 7
4008	PF 8
4009	PF 9
4010	PF 10
4011	PF 11
4012	PF 12
4013	PF 13
4014	PF 14
4015	PF 15
4016	PF 16

## F Key Character Set

F Keys	Keystroke
5001	F 1
5002	F 2
5003	F 3
5004	F 4
5005	F 5
5006	F 6
5007	F 7
5008	F 8
5009	F 9
5010	F 10
5011	F 11
5012	F 12
5013	F 13
5014	F 14
5015	F 15
5016	F 16
5017	F 17
5018	F 18
5019	F 19
5020	F 20
5021	F 21

F Keys	Keystroke
5022	F 22
5023	F 23
5024	F 24

### **Numeric Key Character Set**

Numeric Keypad	Keystroke
6042	*
6043	+
6044	Undefined
6045	-
6046	
6047	/
6048	0
6049	1
6050	2
6051	3
6052	4
6053	5
6054	6
6055	7
6056	8
6057	9
6058	Enter
6059	Num Lock

#### **Extended Key Character Set**

Extended Keypad	Keystroke
7001	Break
7002	Delete
7003	Pg Up
7004	End
7005	Pg Dn
7006	Pause
7007	Scroll Lock
7008	Backspace
7009	Tab
7010	Print Screen
7011	Insert
7012	Home
7013	Enter
7014	Escape
7015	Up Arrow
7016	Dn Arrow
7017	Left Arrow
7018	Right Arrow

# **Communication Protocol Functionality**

The following table provides the list of supported scanner functionality by communication protocol.

Communication Interfaces	Functionality				
	Data Transmission	Remote Management	Image and Video Transmission		
USB					
HID Keyboard Emulation	Supported	Not Available	Not Available		
Simple COM Port Emulation	Not Available	Not Available	Not Available		
CDC COM Port Emulation	Supported	Not Available	Not Available		
SSI over CDC COM Port Emulation	Not Available	Not Available	Not Available		
IBM Table-top USB	Supported	Supported	Not Available		
IBM Hand-held USB	Supported	Supported	Not Available		
USB OPOS Hand-held	Supported	Supported	Not Available		
Symbol Native API (SNAPI) without Imaging Interface	Available	Supported	Imaging Available; Video Not Available		
Symbol Native API (SNAPI) with Imaging Interface	Available	Supported	Imaging Available; Video Not Available		
RS-232					
Standard RS-232	Supported	Not Available	Not Available		
ICL RS-232	Supported	Not Available	Not Available		
Fujitsu RS-232	Supported	Not Available	Not Available		
Wincor-Nixdorf RS-232 Mode A	Supported	Not Available	Not Available		
Wincor-Nixdorf RS-232 Mode B	Supported	Not Available	Not Available		

Communication Interfaces	Functionality				
	Data Transmission	Remote Management	Image and Video Transmission		
Olivetti ORS4500	Supported	Not Available	Not Available		
Omron	Supported	Not Available	Not Available		
CUTE	Supported	Not Available	Not Available		
OPOS/JPOS	Supported	Not Available	Not Available		
NCR	Supported	Not Available	Not Available		
Datalogic	Supported	Not Available	Not Available		
SSI	Not Available	Supported	Not Available		
IBM 4690					
Hand-held Scanner Emulation (Port 9B)	Supported	Not Available	Not Available		
Table-top Scanner Emulation (Port 17)	Supported	Supported	Not Available		
Non-IBM Scanner Emulation (Port 5B)	Supported	Supported	Not Available		