NCR VOYIX

NCR 7895 Scanner/Scale

Site Preparation Guide

BCC5-0000-5506

Issue C

Copyright and Trademark Information

Preface

This is a contractual document. It contains important information about properly preparing a site for the NCR 7895 Scanner/Scale. You are advised to read it carefully.

It is the responsibility of the customer to assure that all installation preparations are complete and in compliance with NCR specifications and requirements and all applicable national, state, or local codes, regulations, and laws.

Audience

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

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).

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.

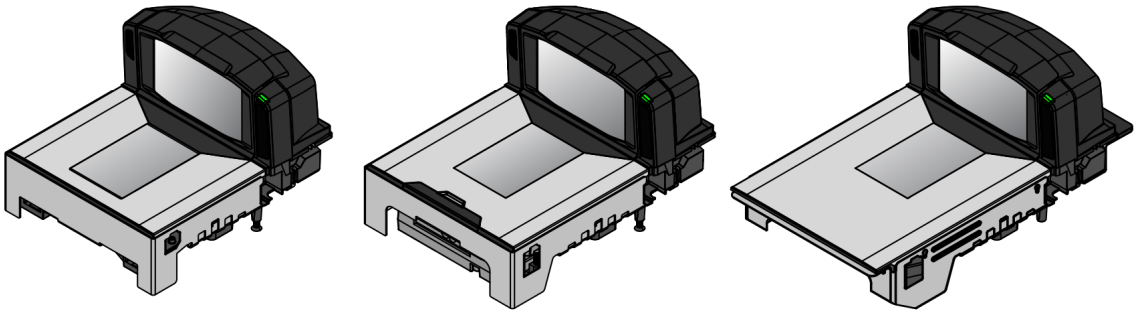
Table of Contents

Revision Record

Publication issue	Date	Description of change
A	Jul 2021	Initial release
B	Oct 2024	Updated links
C	Nov 2024	• Converted to Voyix template • Removed OBF section

NCR 7895 Scanner/Scale Site Preparation

This document provides the information necessary to prepare a site to NCR specifications prior to installing the NCR 7895 Scanner/Scale. The site must be properly prepared before the scanner is installed because site preparation deficiencies may be difficult to detect and correct after installation.



Compact 13.9-inch Scanner | Midsize 15.7-inch Scanner | Full-size 20-inch Scanner

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Customer Responsibilities

Before the Scanner/Scale system can be installed, the customer must do or provide the following:

- When required by NCR, provide the NCR Customer Services Representative with appropriate drawings that indicate the following.
    - Location of equipment
    - Site wiring (power and signal, paths, and lengths)
    - Location of other equipment capable of generating large amounts of electrical noise, electromagnetic interference, heat, and so forth
- Provide floor coverings and environmental systems that prevent static electricity build-up and discharge.
- Provide and install necessary power distribution boxes, conduits, grounds, lightning arrestors, and associated hardware.
- Ensure clear space and environmental requirements of the unit are met.
- Make all building alterations necessary to meet wiring and other site requirements.
- Ensure all applicable codes, regulations, and laws (including, but not limited to, electrical, building, safety, and health) are met.
- Provide and install all communication cables, wall jacks, special connectors, and associated hardware.
- Provide and install auxiliary power or other equipment as required.

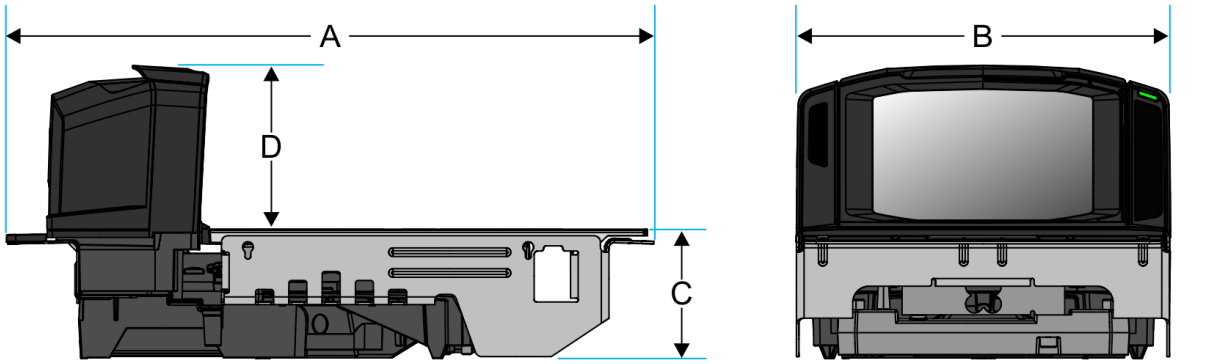
Weight

The weight of the NCR 7895 Scanner/Scale depends on the model and installed features. The table below shows the maximum installed weights of five basic models. These values are for reference only.

The weight of the power supply and power cord are not included.

Model	Weight
Full-Size Bi-Optic Imager, Scanner Only	**6.6 kg** (14.6 lb)
Full-Size Bi-Optic Imager, Scanner/Scale	**8.0 kg** (17.6 lb)
Mid-Size Bi-Optic Imager, Scanner Only	**5.7 kg** (12.6 lb)
Mid-Size Bi-Optic Imager, Scanner/Scale	**7.1 kg** (15.7 lb)
Compact Bi-Optic, Scanner Only	**5.5 kg** (12.1 lb)

Dimensions



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Model	Length (A)	Width (B)	Depth (C)	Tower Height (D)
Full-Size Bi-Optic Imager, Scanner Only	**50.6 cm** (20.0 in.)	**29.2 cm** (11.5 in.)	**10.2 cm** (4.0 in.)	**12.8 cm** (5.0 in.)
Full-Size Bi-Optic Imager, Scanner/Scale				
Mid-Size Bi-Optic Imager, Scanner Only	**39.8 cm** (15.7 in.)	**29.2 cm** (11.5 in.)	**10.2 cm** (4.0 in.)	**12.8 cm** (5.0 in.)
Mid-Size Bi-Optic Imager, Scanner/Scale				
Compact Bi-Optic, Scanner Only	**35.1 cm** (13.9 in.)	**29.2 cm** (11.5 in.)	**10.2 cm** (4.0 in.)	**12.8 cm** (5.0 in.)

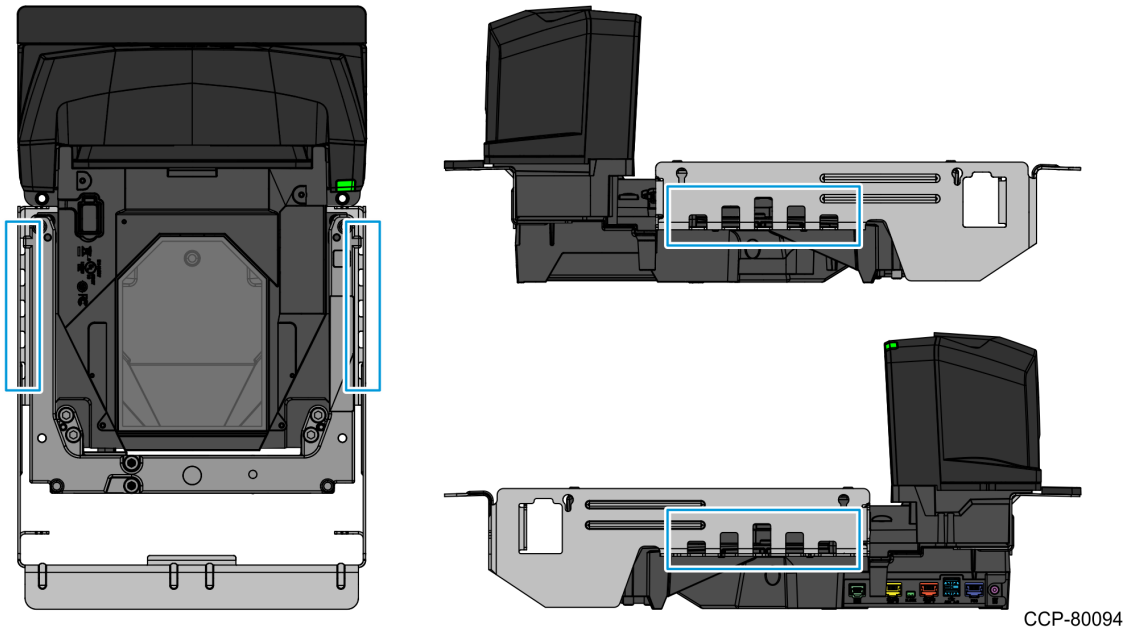
Service Clearance

The NCR 7895 Scanner/Scale is designed to allow performance of all routine service and maintenance, including scale zeroing and scale calibration, without removing the scanner from the counter.

Service must be performed by a qualified service provider who is trained to repair the scanner or to calibrate the scale. Depending on the region of installation, a certified Weights & Measures technician is required to ensure that the scanner/scale follows all regulatory requirements before using and after certain repairs.

Ventilation Requirements

The scanner/scale housing is designed to provide adequate space for ventilation and drainage for spills. The following image shows the drainage or ventilation holes, on both sides of the NCR 7895, for possible spills that may occur when scanning or weighing items.



Checkstand ventilation may be required to ensure the NCR 7895 Scanner/Scale temperature limits are not exceeded. If forced air ventilation is used, it must not pass through the NCR 7895 Scanner/Scale as this can produce an unstable weighing environment. The ambient air temperature inside the checkstand, adjacent to the device, must not exceed **40°C** (104°F).

Checkstand Cutout

The NCR 7895 Scanner/Scale mounts in checkstands that are prepared for a specific scanner/scale configuration or for a variety of existing NCR and competitive scanner/scales, which may require using special flanges and spacers available as Features/Kits.

When cutting the checkstand hole, ensure that the specified dimensions are maintained. The checkstand must be designed to drain large spills of liquids away from the base of the scanner. Also, scanner/scale must be installed in a "near level" position.

When installing NCR 7895 Scanner/Scale in a checkstand with an item feed belt next to the NCR 7895, NCR recommends placing an adjustable plate between the leading edge of the NCR 7895 and the checkstand belt.

Scanner mounting surfaces (especially for a scale installation) must be structurally sound and rigid, such that excessive vibrations are avoided when a weight is applied to the scale. Further, any lead-in or take-away belt motors, or any other external sources of mechanical vibration must be mechanically isolated from the scanner/scale mounting surfaces of the checkstand.

Checkstand cutout dimensions are to be considered nominal. The Customer or the Installer is responsible for preventing excessive movement (greater than 0.03 in. or 0.76 mm) in either lateral direction. Further, the cutout should not place stress on the scanner and no portion of the checkstand should contact the top-plate (weigh-plate). Use of an adjustable side plate next to the scanner is recommended.

Note

Take note of the following:

- The NCR 7895 unit has a width of 11.5 inches. If replacing a pre-existing scanner in a checkstand that has a width of 12 inches, NCR recommends a Trim Filler Kit (*7895-K733 0.5-inch (1.2 cm) Bracket to extend width of scanner*) to fill in the gap in the checkstand. The trim can be mounted on either side of the NCR 7895. However, it should be mounted on the downstream side or the trailing edge of the NCR 7895.
- The NCR 7895 unit has a depth of 4.0 inches. If replacing a pre-existing short or medium scanner that has a depth of 5 inches, use the 1-inch longer leveling screw kit (*7895-K741 Leveling Screw - Extended length, pack of 4*). Using the leveling screw brings the platter up to the countertop level.

Checkstand Preparation

Verify that the area allows for proper cabling and for an AC/DC power supply. Mounting may require installation of supports, leveling screws, and peripheral devices.

Note

Take note of the following:

- Leveling screws are not available with NCR 7895 full-size models.
- For the midsize and compact models, the checkstand should provide for leveling screws under the NCR 7895 (two screws on the front and two screws on the rear).
- Leveling screws accessory kit (*7895-K740 Leveling Screw - Standard length, pack of 4*) is shipped with every midsize and compact scanner model. If required, longer leveling screws kit with an extra length of 1 inch is available for purchase (*7895-K741 Leveling Screw - Extended length, pack of 4*).

Liquid Spills and Moisture

Select a checkstand design that allows fluids to flow through and directs liquids and moisture build up away from any electronic equipment or storage areas. Should a liquid spill occur, ensure that moisture can flow through the checkstand without pooling. The power supply should be away from any area where spills may occur.

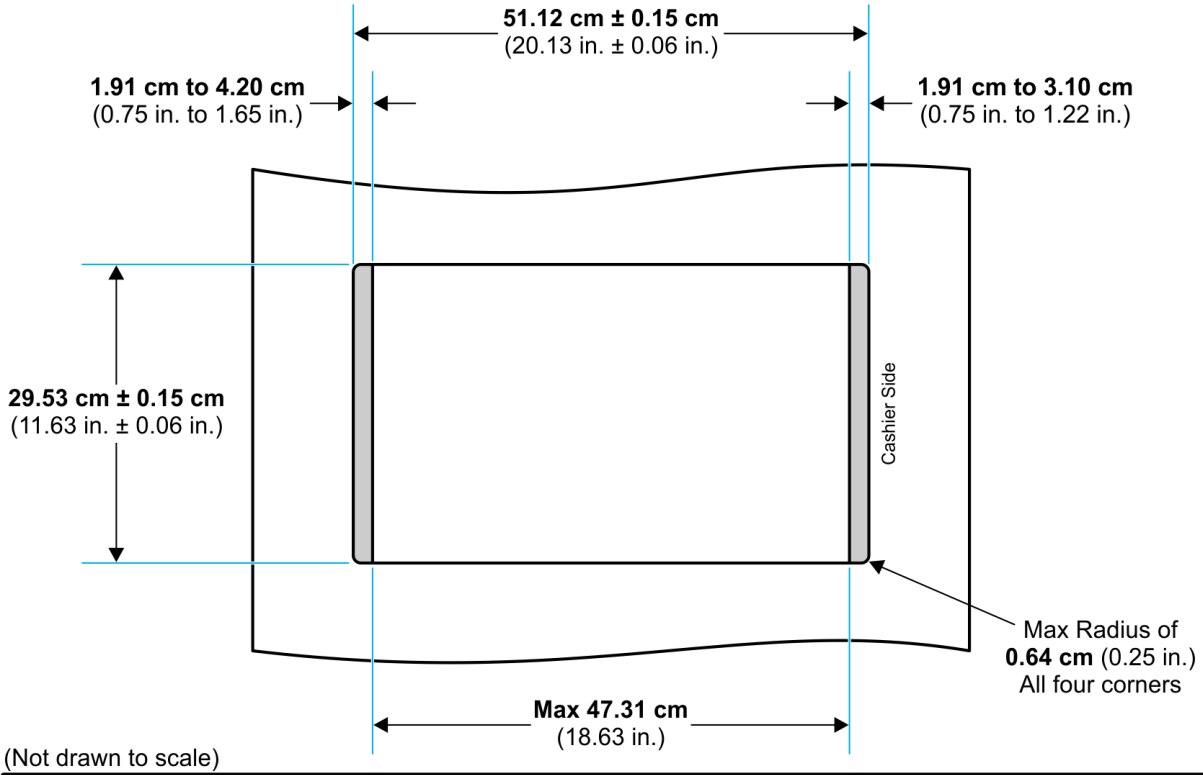
Vertical Clearance

For all configurations of the NCR 7895, the maximum height above the top plate is **13.0 cm** (5.1 in.). The maximum depth below the top plate is **10.2 cm** (4.0 in.).

Ergonomics

Ensure the installation is designed for maximum comfort, efficiency, safety, and ease of use. Allow items to be directed within easy reach and allow a scanning area that does not require lifting or special orientation of items.

Full-size Bi-Optic Scanner/Scale



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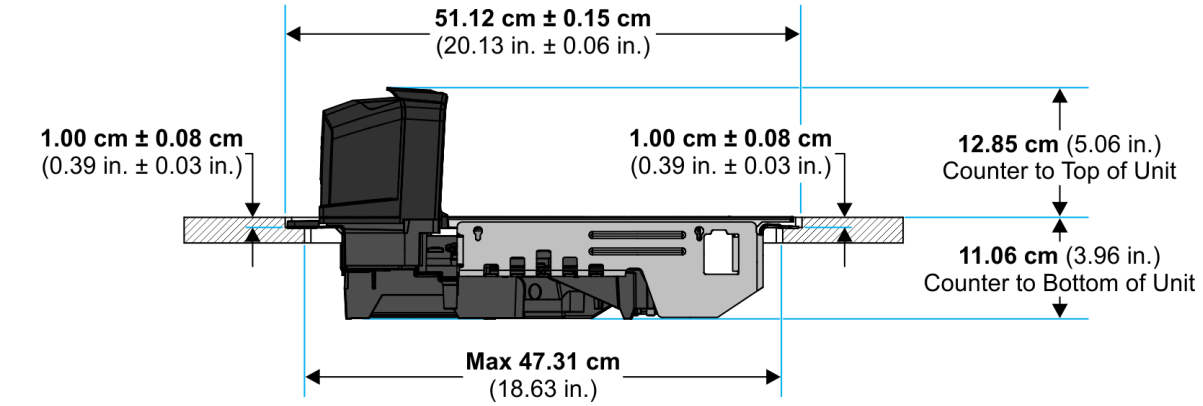

Note: Always treat the scanner's profile under the checkstand as a rectangular prism (a flat-sided box) when measuring the checkstand for a fit. Do not take advantage of voids or angles in the design of the scanner base as NCR reserves the right to change the profile without notice as long as the change does not impact overall outside dimensions.

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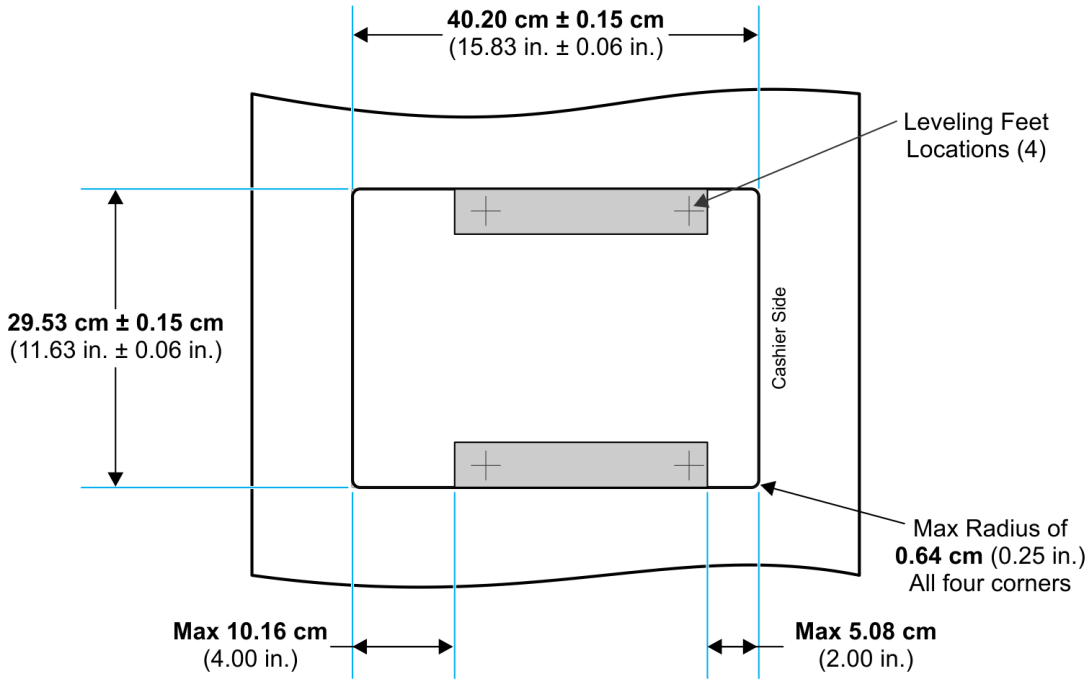
Midsize Bi-Optic Scanner/Scale



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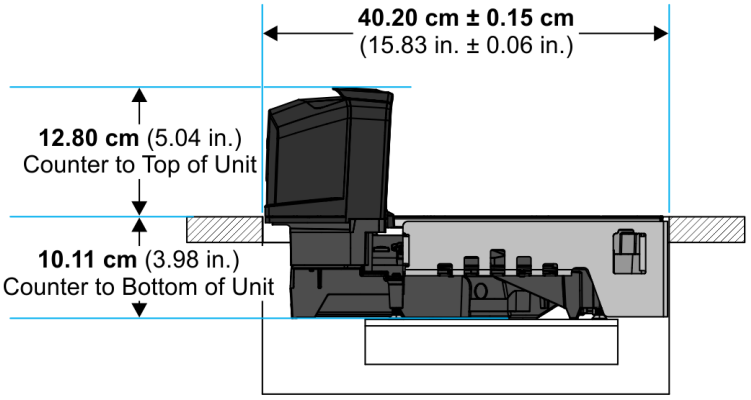
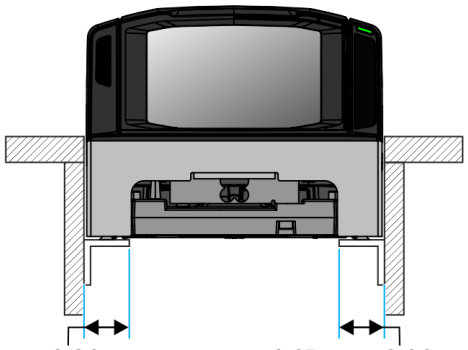


Important: Use the support rails as shown, and not a shelf. If liquid spills, it pools on a shelf.



Note: Always treat the scanner's profile under the checkstand as a rectangular prism (a flat-sided box) when measuring the checkstand for a fit. Do not take advantage of voids or angles in the design of the scanner base as NCR reserves the right to change the profile without notice as long as the change does not impact overall outside dimensions.

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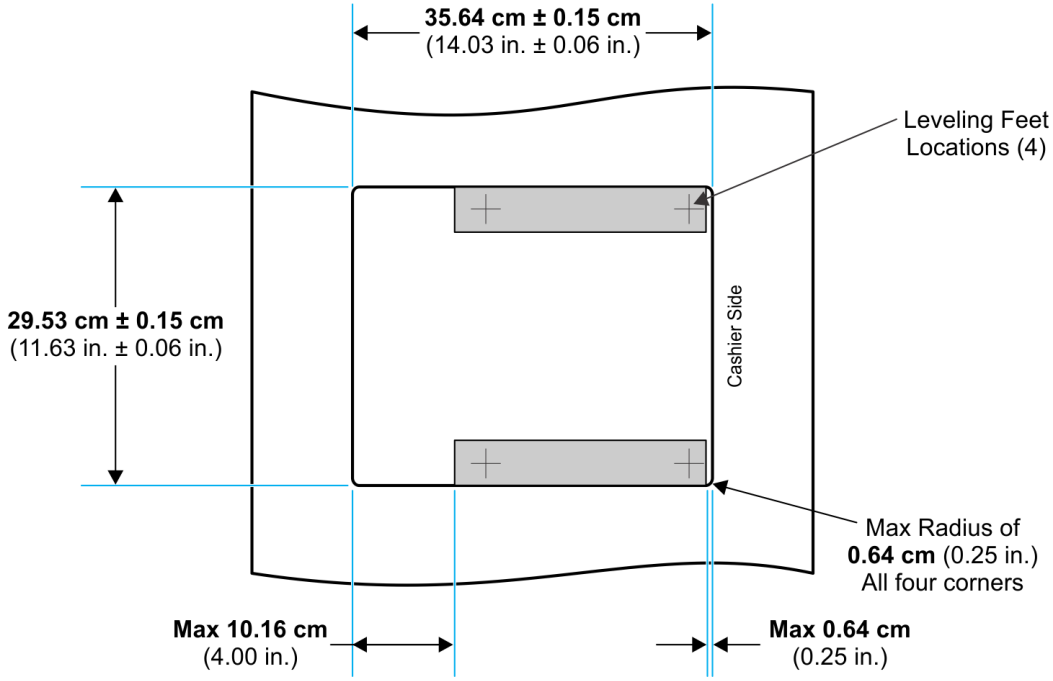
Compact Bi-Optic Scanner



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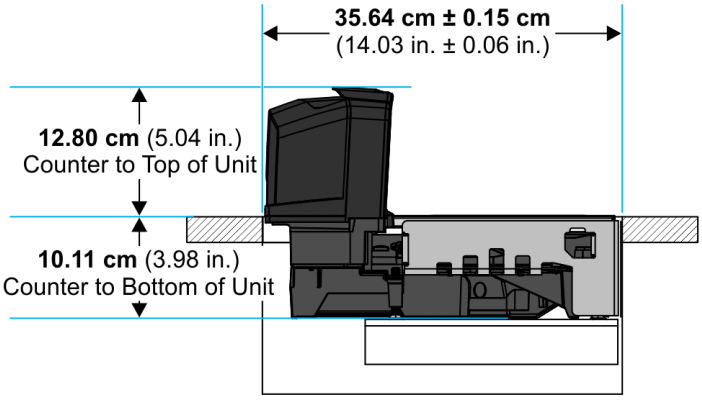
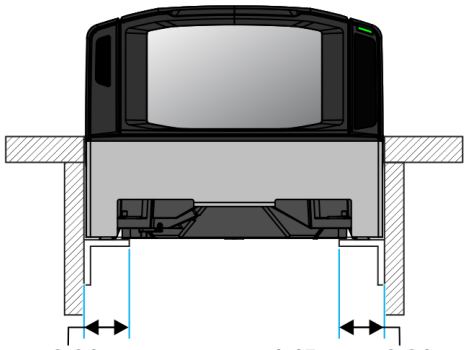


Important: Use the support rails as shown, and not a shelf. If liquid spills, it pools on a shelf.



Note: Always treat the scanner's profile under the checkstand as a rectangular prism (a flat-sided box) when measuring the checkstand for a fit. Do not take advantage of voids or angles in the design of the scanner base as NCR reserves the right to change the profile without notice as long as the change does not impact overall outside dimensions.

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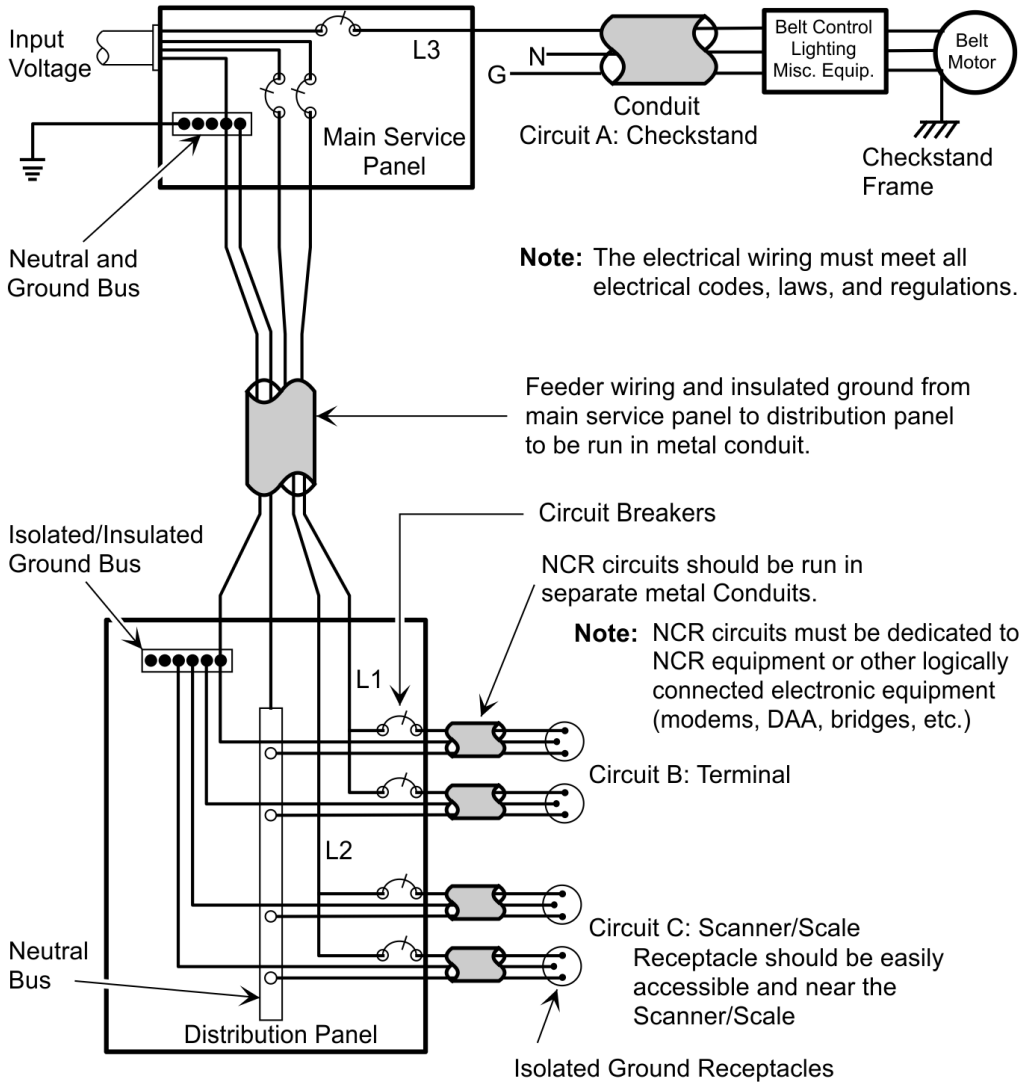
Checkstand Wiring



Installation Type	Input Voltage	L1, L2	Circuit Breakers
U.S., Canada, & Japan	100Vac to 120Vac	100Vac to 120Vac	Standard single-pole; value determined by type of device branch and by electrical code.
International	220Vac to 240Vac	220Vac to 240Vac	
European	220Vac	220Vac	European double-pole.

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Power Considerations

The NCR 7895 receives +12 Vdc power from a POS terminal or from an external Power Supply.

- **POS terminal**—connect the Powered USB cable from the POS terminal to the **POS** port of the NCR 7895.
- **External Power Supply**—connect the 50W Power Supply (7895-K220) to the NCR 7895 12V DC port. The Power Supply has the following inputs:
  - Voltage: 100 Vac to 240 Vac
  - Frequency: 50/60 Hz
  - Current: 4.16 A

> **Note**
> If using an external power supply, a 115V/230V outlet must be available in the checkstand near the scanner.

The following table shows power dissipation for different duty cycles with the scale installed.

State	Average Power Consumption at 12 Vdc
Active	5.5 W (typical), 6.0 W (maximum)
Idle	3.0 W (typical)
Typical Usage Power (assuming 18% Active and 82% Idle)	3.5 W

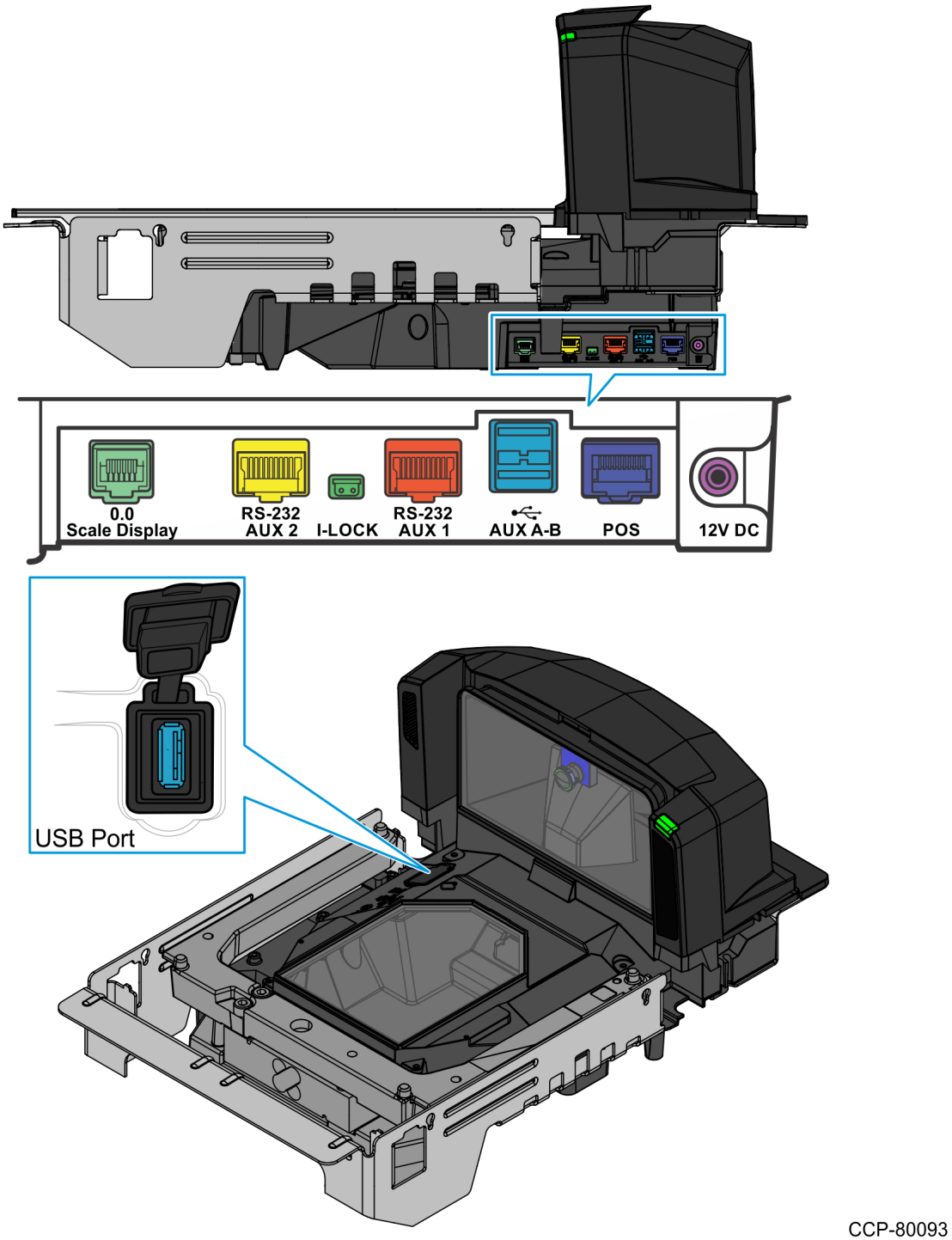
> **Note**
> NCR 7895 configurations that include color camera enhancements will see an additional 170 mW in power consumption due to the white LEDs, resulting to the Typical Usage Power of 3.7 W. This increase is based on a color camera exposure time of 1 millisecond.

Power Transient Protection

Voltage transients, surges, sags, impulses, and spikes may be experienced routinely or sporadically. When such phenomena occur, the equipment requires the use of protective devices to ensure proper operation.

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 **Caution** Do not connect a POS cable to any of the RS-232 Aux ports.
I-Lock (Checkpoint Interlock)	For connecting to a Checkpoint system
Aux A-B (USB 2.0 Ports)	For connecting auxiliary USB scanners and mass storage device **Note** 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

Environmental Considerations

The NCR 7895 Scanner/Scale operates in most standard working environments. Temperature ranges permitted are greater when the NCR 7895 is in storage or transit. The NCR 7895 can operate up to one hour at extreme temperatures without suffering from damage.

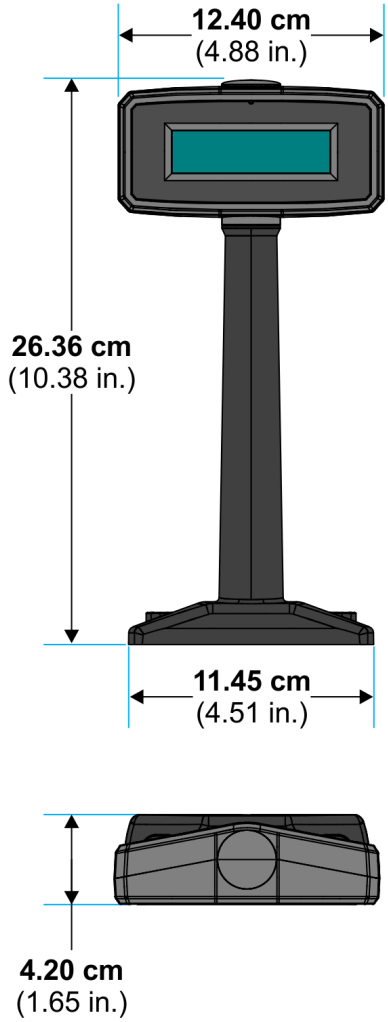
Physical Variable	Normal Operating	Storage
Temperature	0°C to 40°C (32°F to 104°F)	-40°C to 70°C (-40°F to 158°F)
Relative Humidity	20% to 95% Non-condensing	
Ambient Light (for scanning)	• Artificial Light: 0 Foot-candles to 450 Foot-candles (4,842 Lux) • Sunlight: 0 Foot-candles to 8000 Foot-candles (86,080 Lux)	
Environmental Sealing	IP5X	

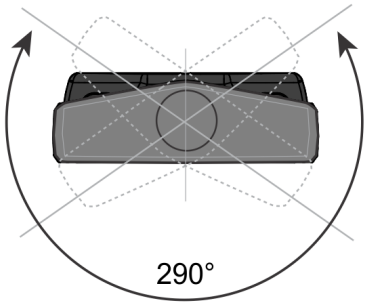
Note

Condensation may occur when the equipment is transferred from cold to warm areas during shipment. The equipment design shall permit operation after flash condensation has occurred, provided a drying out process has been accomplished, and the equipment stabilized to the operating environment.

Scale Display Dimensions

Single Head Scale Display





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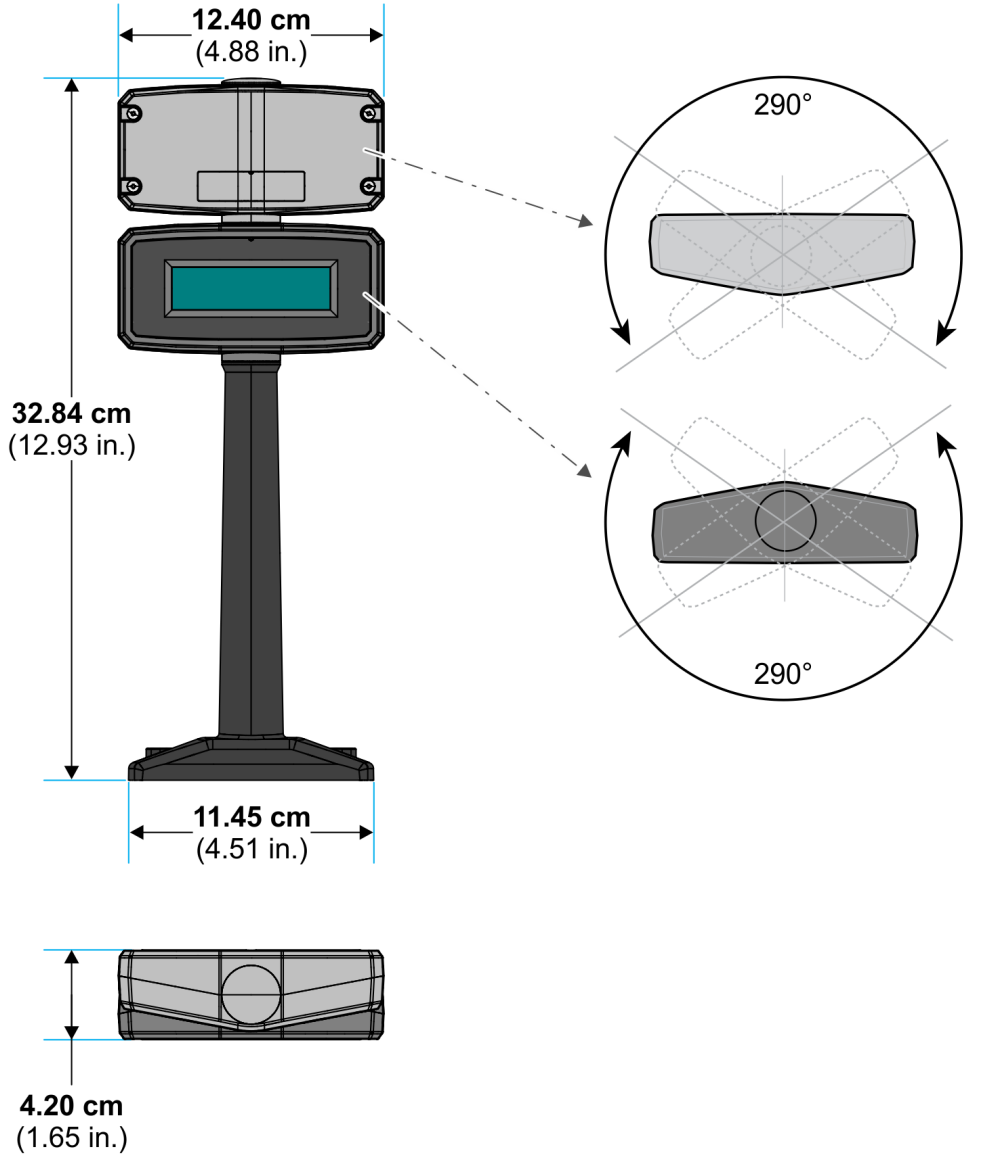
Dual Head Scale Display



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