

# Kit Instructions

## Remote Customer Scanner

7879-K351  
Issue C



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## Revision Record

Issue	Date	Remarks
A	Apr 2016	First Issue
B	Oct 2016	Added Diagnostics section
C	Jul 2017	Added NCR 7877

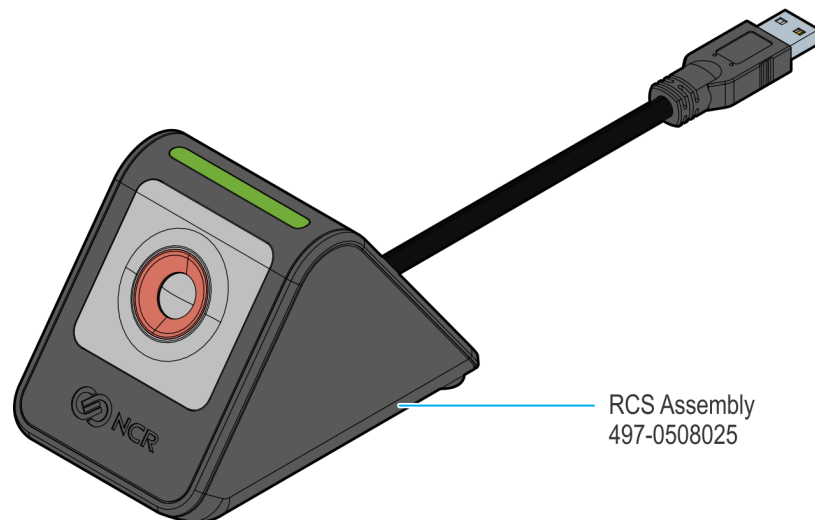
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# Remote Customer Scanner

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The Remote Customer Scanner (RCS) is a customer facing scanner designed to be used with the NCR 7879 and NCR 7877. It can be used by the customer to scan items such as coupons or loyalty cards from paper or an electronic device such as a Smart Phone. The RCS is a flexible solution that allows more installation flexibility to accommodate a wide variety of environments and checkstands.

## Kit Contents



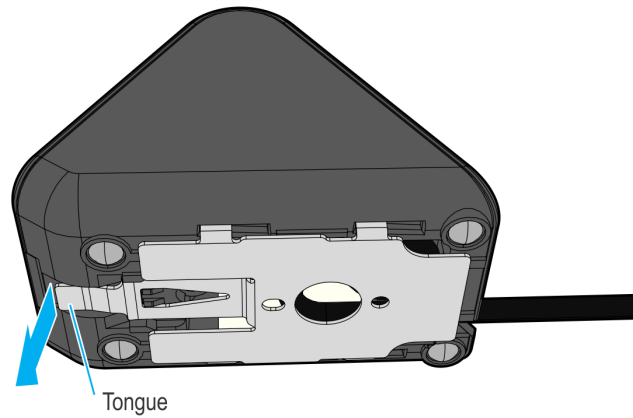
CCP-60723



**Note:** Cable length shown is just a representation. Actual cable length is 1.8 m.

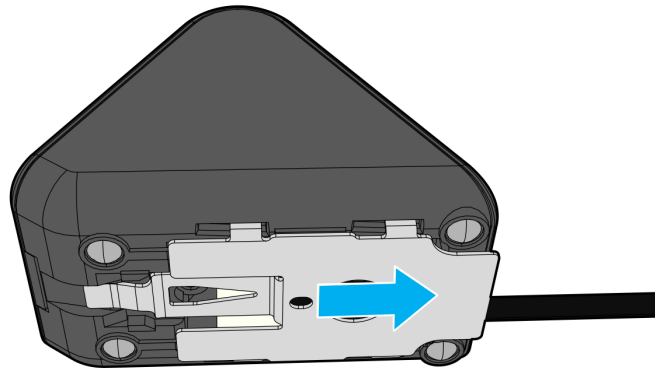
# Installation Procedure

1. Remove the RCS Mounting Bracket from the RCS Assembly.
  - a. Pull the tongue of the RCS Mounting Bracket downwards to disengage it from the snap.



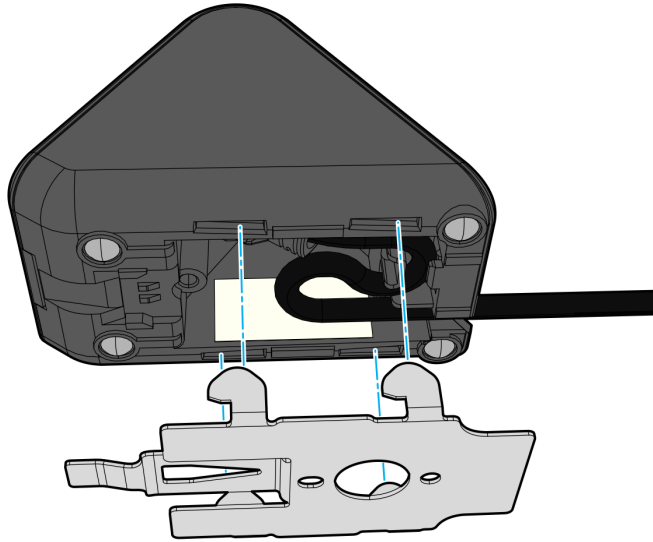
CCP-60724

- b. Push the RCS Mounting Bracket backwards.



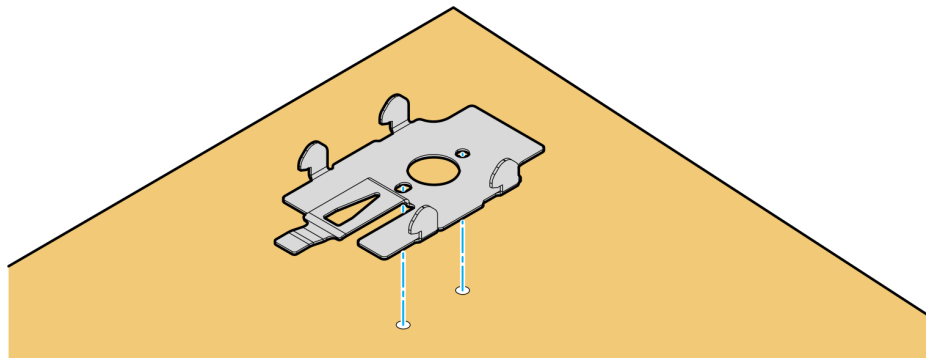
CCP-60725

- c. Remove the RCS Mounting Bracket.



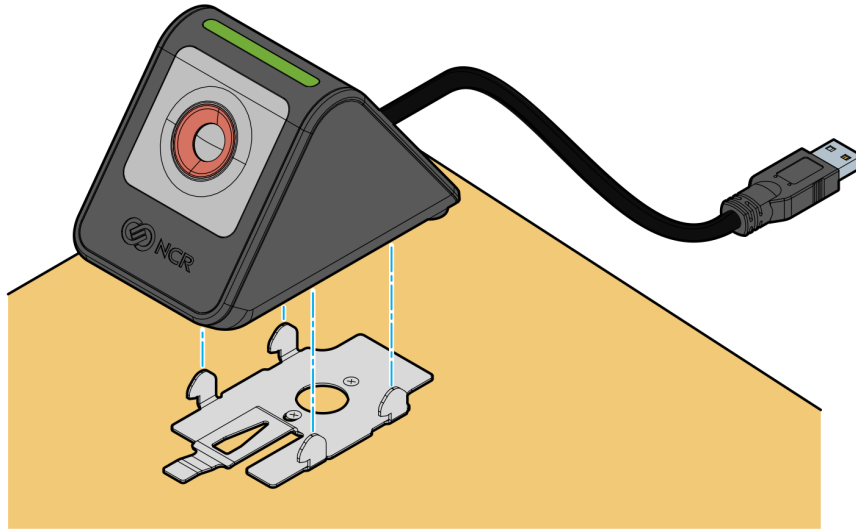
CCP-60989

2. Install the RCS Mounting Bracket, with the tongue of the Bracket facing the user, onto the desired location by securing it with (2) M4 or #8 wood or sheet metal screws (as appropriate).



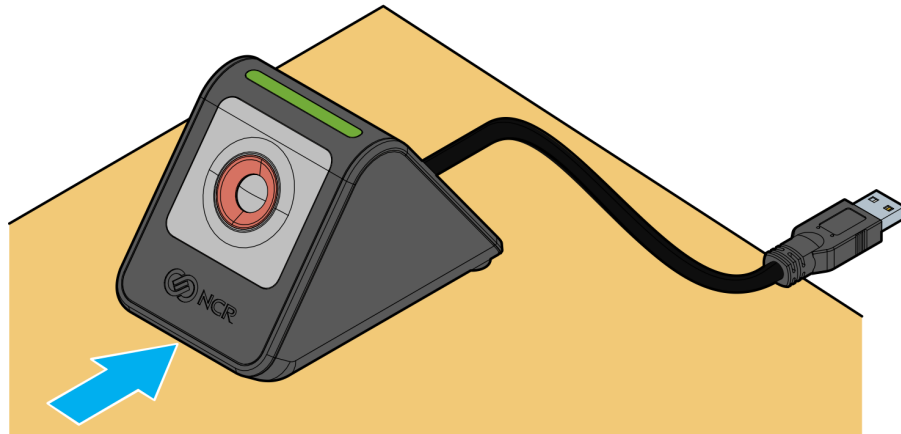
CCP-60997

3. Place the RCS Assembly on the RCS Mounting Bracket.



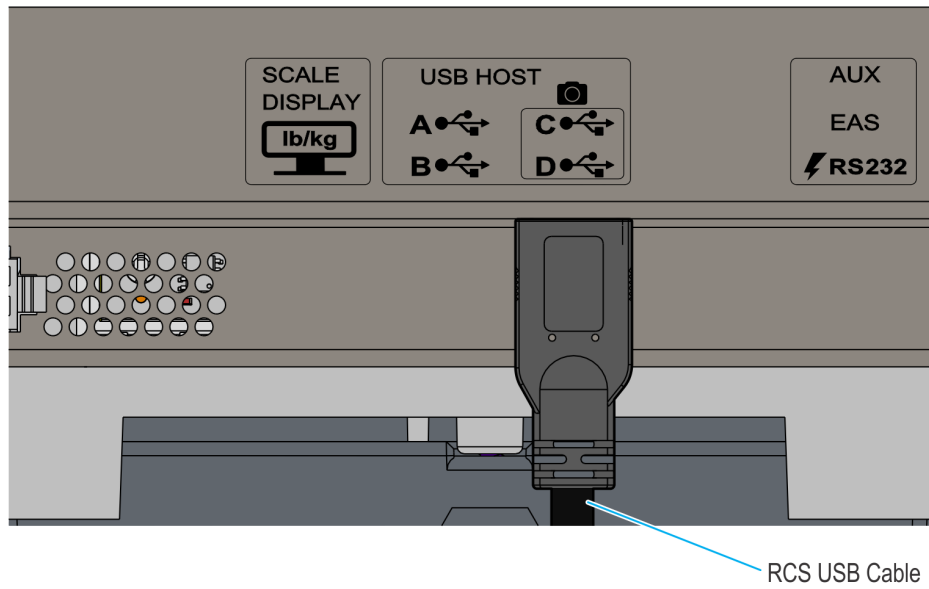
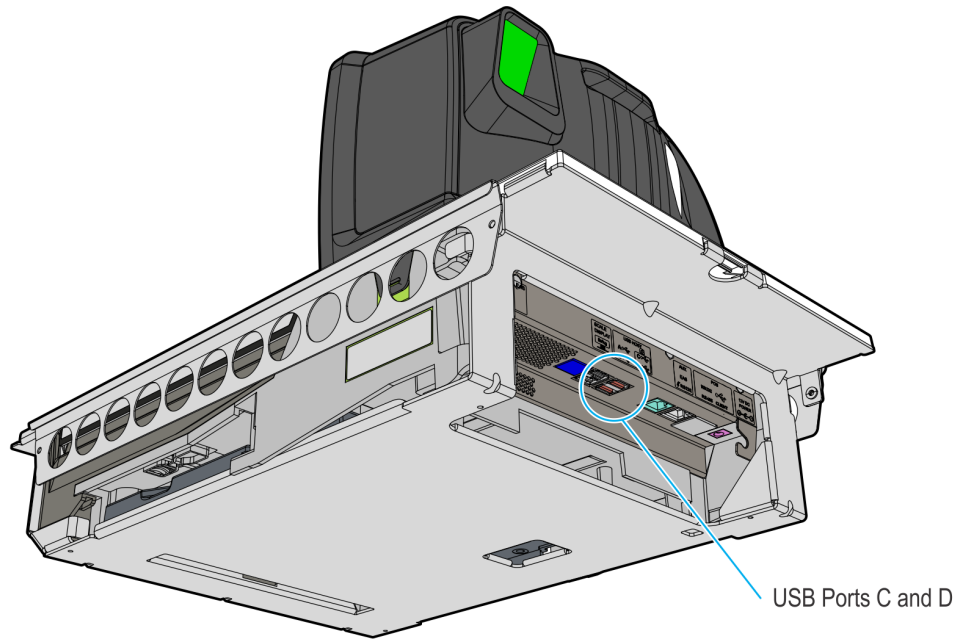
CCP-60998

4. Slide the RCS Assembly in the direction shown until it clicks and locks into place.

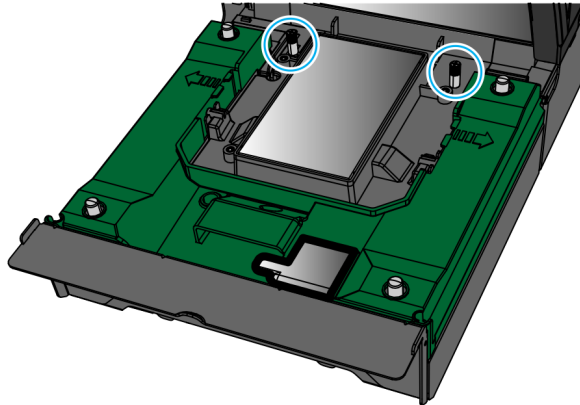


CCP-60999

5. Connect the RCS USB Cable to the scanner.
  - For NCR 7879, connect to Port C or Port D



- For NCR 7877, connect to one of the two ports in the USB dual-stacked connector
- a. Loosen, but do not remove, the two thumb screws indicated in the image below.

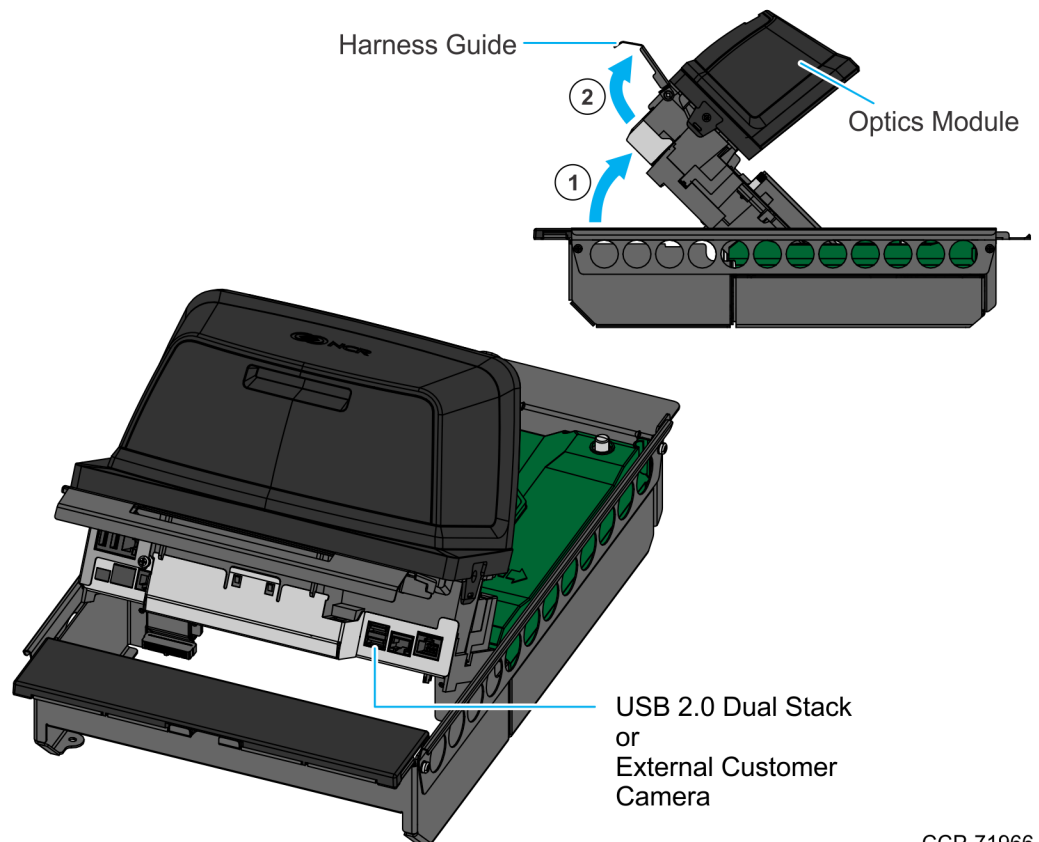


CCP-71269

- b. Tilt the Optics Module (1), and then open the Harness Guide (2).



**Note:** For NCR 7877, the RCS cannot be used along with a USB 3.0 device in the same stacked connector.



CCP-71966



# Programming Instructions



**Note:** The customer-side and cashier-side images are programmed independently; however, the Remote Customer Scanner (RCS) will NOT independently enumerate with OPOS.

The RCS comes with three LEDs, which have no independent behavior from each other (they work together). This camera is defaulted to Autodetect mode but can be turned off (deactivated) with programming.

When the camera is detected by the scanner, the RCS LEDs turn blue, indicating that the camera is active but, by default, no RCS symbologies are enabled. When one or more RCS symbologies are enabled, the RCS LEDs turn from blue to green.

Also, when the camera is detected, the default beep frequency of the RCS is three positions higher in the frequency list from the default scanner beep frequency.

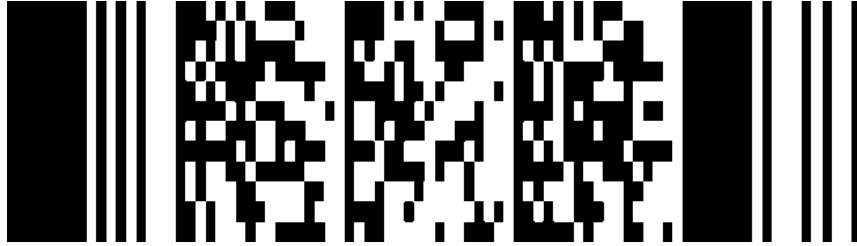
## Programming the Scanner for RCS

To program the scanner for the RCS, perform these steps:

1. Power up the scanner. The RCS is automatically detected by the scanner, and the RCS LEDs turn blue.
2. Allow the pass-through of 1D and 2D data to the POS.
  - a. Enable any of the 1D or 2D tags. For the programming sequences, refer to the "Programming Worksheets" section.
  - b. Enable 1D and 2D pass-through function of the enabled bar code types by scanning the **Save and Reset** tag. For the programming tags, refer to the "Programming Tags" section.
  - c. Test the RCS to validate its functionality. Refer to the "Testing the Remote Customer Scanner" section.

## Testing the Remote Customer Scanner

To confirm if the RCS is properly set up, apply a program sequence to enable one of the RCS symbologies (for example, PDF417) and scan a corresponding barcode at the RCS rear-facing scanner. If the barcode is successfully read, a beep should then be heard.



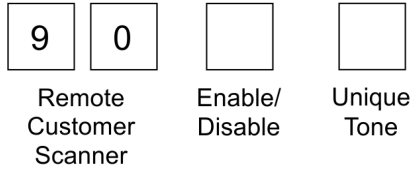
1234

Sample PDF417 Barcode

# Programming Worksheets

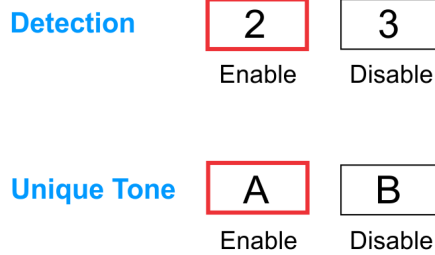
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## Your Program



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## Program Parameters



**Note:** Direct Entry Only.  
When RCS is enabled,  
you must use Worksheet  
95 or 96 to activate  
symbology.

CCP-61004

### ***Detection***

By default, the Autodetect mode is turned on. To disable, scan the **Hex 3** tag.

### ***Unique Tone***

By default, the Unique Tone is enabled and thus, a unique beep is heard when items are scanned with the RCS. To disable, scan the **Hex B** tag.

# Remote Customer Scanner Symbology Enable 1

## Your Program

<input type="checkbox"/> 9	<input type="checkbox"/> 5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RCS Enable 1	UPC-A, UPC-E, EAN-8, EAN-13	P2 Periodical	P5 Periodical	Code 128	Interleaved 2 of 5	Code 39	GSI Databar-14 (RSS-14)	
<input type="checkbox"/>								
GSI Databar Expanded (RSS-E)								

## Program Parameters

UPC-A, UPC-E, EAN-8, EAN-13	<input checked="" type="checkbox"/> 0	<input type="checkbox"/> 1
	Disable	Enable
P2 Periodical	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3
	Disable	Enable
P5 Periodical	<input checked="" type="checkbox"/> 4	<input type="checkbox"/> 5
	Disable	Enable
Code 128	<input checked="" type="checkbox"/> 6	<input type="checkbox"/> 7
	Disable	Enable
Interleaved 2 of 5	<input checked="" type="checkbox"/> 8	<input type="checkbox"/> 9
	Disable	Enable
Code 39	<input checked="" type="checkbox"/> A	<input type="checkbox"/> B
	Disable	Enable
GSI Databar-14 (RSS-14)	<input checked="" type="checkbox"/> C	<input type="checkbox"/> D
	Disable	Enable
GSI Databar Expanded (RSS-E)	<input checked="" type="checkbox"/> E	<input type="checkbox"/> F
	Disable	Enable

**Note:** Direct Entry Only. All symbologies are OFF by default.

### ***UPC-A, UPC-E, EAN-8, EAN-13***

The UPC/EAN parameter controls reading of UPC/EAN bar codes by the RCS. Disable reading UPC/EAN bar codes by scanning the **Hex 0** tag and enable reading by scanning the **Hex 1** tag.

UPC-A and UPC-E are the most common bar code types in the US, while EAN-8 and EAN-13 are the most common types in Europe.

### ***P2 Periodical***

The P2 Periodical parameter controls reading of 2-digit periodical bar codes by the RCS. Disable reading 2-digit periodical bar codes by scanning the **Hex 2** tag and enable reading by scanning the **Hex 3** tag.

This type of bar code is commonly seen next to a UPC or EAN bar code on newspapers and magazines.

### ***P5 Periodical***

The P5 Periodical parameter controls reading of 5-digit periodical bar codes by the RCS. Disable reading 5-digit periodical bar codes by scanning the **Hex 4** tag and enable reading by scanning the **Hex 5** tag.

This type of bar code is commonly seen next to a UPC or EAN bar code on greeting cards and some magazines.

### ***Code 128***

The Code 128 parameter controls reading of Code 128 bar codes by the RCS. Disable reading Code 128 bar codes by scanning the **Hex 6** tag and enable reading by scanning the **Hex 7** tag.

### ***Interleaved 2 of 5***

The Interleaved 2 of 5 parameter controls reading Interleaved 2 of 5 bar codes by the RCS. Disable reading Interleaved 2 of 5 bar codes by scanning the **Hex 8** tag and enable reading by scanning the **Hex 9** tag.

### ***Code 39***

The Code 39 parameter controls reading of Code 39 bar codes by the RCS. Disable reading Code 39 bar codes by scanning the **Hex A** tag and enable reading by scanning the **Hex B** tag. If reading Code 39 bar codes is disabled, there are no other entries permitted for this parameter.

**GS1 Databar-14 (RSS-14)**

GS1 DataBar-14 is a linear symbology that encodes 14 UCC/EAN digits. This structure provides four segments that can be scanned and decoded separately, then reconstructed. The total symbol contains 96 modules combined into 46 elements (bars and spaces).

This symbology is commonly seen on produce items.



0100012345678905

33105

**GS1 Databar Expanded (RSS-E)**

GS1 DataBar-Expanded is a variable length linear symbology. It can encode 74 numeric or 41 alpha characters. GS1 DataBar-Expanded can be scanned and decoded in up to 22 segments and then reconstructed.

This symbology is commonly seen on coupons and some deli items.



9987 6543 2101 2345 6789 8888

33107

## Remote Customer Scanner Symbology Enable 2

### Your Program

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RCS Enable 2	Codabar	Italian Pharmacode	PDF417 (also enables MicroPDF)	Aztec	Data Matrix	QR Code (also enables MicroQR)	OCR	MaxiCode

### Program Parameters

<b>Codabar</b>	<input checked="" type="checkbox"/> 0 Disable	<input type="checkbox"/> 1 Enable
<b>Italian Pharmacode</b>	<input checked="" type="checkbox"/> 2 Disable	<input type="checkbox"/> 3 Enable
<b>PDF417</b>	<input checked="" type="checkbox"/> 4 Disable	<input type="checkbox"/> 5 Enable
<b>Aztec</b>	<input checked="" type="checkbox"/> 6 Disable	<input type="checkbox"/> 7 Enable
<b>Data Matrix</b>	<input checked="" type="checkbox"/> 8 Disable	<input type="checkbox"/> 9 Enable
<b>QR Code</b>	<input checked="" type="checkbox"/> A Disable	<input type="checkbox"/> B Enable
<b>OCR</b>	<input checked="" type="checkbox"/> C Disable	<input type="checkbox"/> D Enable
<b>MaxiCode</b>	<input checked="" type="checkbox"/> E Disable	<input type="checkbox"/> F Enable

**Note:** Direct Entry Only. All symbologies are OFF by default.

**Note:** Also enables MicroPDF.

**Note:** Also enables MicroQR.

CCP-61006

### Codabar

The Codabar Decoding parameter controls reading Codabar bar codes by the RCS. Disable reading Codabar bar codes by scanning the **Hex 0** tag, enable reading by scanning the **Hex 1** tag.

### ***Italian Pharmacode***

The Italian Pharmacode Decoding parameter controls reading Italian Pharmacode bar codes by the RCS. Disable reading Italian Pharmacode bar codes by scanning the **Hex 2** tag, enable reading by scanning the **Hex 3** tag.

### ***PDF417***

The PDF417 Decoding parameter controls reading PDF417 bar codes by the RCS. Disable reading PDF417 bar codes by scanning the **Hex 4** tag, enable reading by scanning the **Hex 5** tag.

### ***Aztec***

The Aztec Decoding parameter controls reading Aztec bar codes by the RCS. Disable reading Aztec bar codes by scanning the **Hex 6** tag, enable reading by scanning the **Hex 7** tag.

### ***Data Matrix***

The Data Matrix Decoding parameter controls reading Data Matrix bar codes by the RCS. Disable reading Data Matrix bar codes by scanning the **Hex 8** tag, enable reading by scanning the **Hex 9** tag.

### ***QR Code***

The QR Code Decoding parameter controls reading QR Code bar codes by the RCS. Disable reading QR Code bar codes by scanning the **Hex A** tag, enable reading by scanning the **Hex B** tag.

### ***OCR***

The OCR Decoding parameter controls reading OCR bar codes by the RCS. Disable reading OCR bar codes by scanning the **Hex C** tag, enable reading by scanning the **Hex D** tag.

### ***MaxiCode***

The MaxiCode Decoding parameter controls reading MaxiCode bar codes by the RCS. Disable reading MaxiCode bar codes by scanning the **Hex E** tag, enable reading by scanning the **Hex F** tag.



# Remote Customer Scanner Tone Frequency

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## Your Program

<input type="text" value="9"/>	<input type="text" value="9"/>	<input type="text"/>
RCS Tone Frequency		Frequency

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## Program Parameters

Frequency	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>	<input type="text" value="4"/>	<input type="text" value="5"/>	<input type="text" value="6"/>	<input type="text" value="7"/>
	702 Hz	781 Hz	868 Hz	961 Hz	1071 Hz	1187 Hz	570 Hz	633 Hz

**Note:** Direct Entry Only.

CCP-61007

### ***Tone Frequency (Hertz)***

The Tone Frequency parameter sets the frequency (tone) for the RCS. By default, the tone frequency is set to 961 Hz.

## Remote Customer Scanner Tone Length

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### Your Program

<input type="text" value="9"/>	<input type="text" value="9"/>	<input type="text"/>
RCS Tone Length		Length

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### Program Parameters

<b>Length</b>	<input type="text" value="8"/>	<input type="text" value="9"/>	<input type="text" value="A"/>	<input type="text" value="B"/>	<input type="text" value="C"/>	<input type="text" value="D"/>	<input type="text" value="E"/>	<input type="text" value="F"/>
	45 ms	65 ms	90 ms	120 ms	150 ms	190 ms	230 ms	25 ms

**Note:** Direct Entry Only.

CCP-61008

### ***Tone Length (Milliseconds)***

The Tone Length parameter sets the length of the tone for the RCS. By default, the tone length is set to 45 ms.

# Programming Tags

## Programming Mode



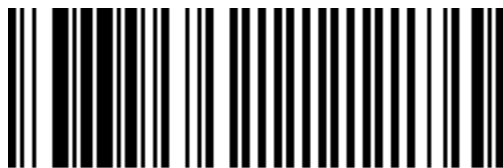
33122

## Save and Reset



33124

## Hex 0



33133

## Hex 1



33134

## Hex 2



33135

## Hex 3



33136

## Hex 4



33137

## Hex 5



33138

### Hex 6



33139

### Hex 7



33140

### Hex 8



33141

### Hex 9



33142

### Hex A



33143

### Hex B



33144

### Hex C



33145

### Hex D



33146

## Hex E



33147

## Hex F



33148

## Diagnostics

LED	Description	Action Item
Blue	RCS is active, no RCS symbologies enabled	
Green	RCS is active, one or more RCS symbologies enabled	
Yellow	Ongoing USB enumeration	
	RCS connected to powered hub without USB host present	<ul style="list-style-type: none"> <li>• NCR 7879 — connect the RCS to USB Port C or D</li> <li>• NCR 7877 — connect the RCS to one of the two ports in the USB dual-stacked connector</li> </ul> <p><b>Note:</b> For NCR 7877, the RCS cannot be used along with a USB 3.0 device in the same stacked connector.</p>
	Wrong Scanner port	<ul style="list-style-type: none"> <li>• NCR 7879 — connect the RCS to USB Port C or D</li> <li>• NCR 7877 — connect the RCS to one of the two ports in the USB dual-stacked connector</li> </ul> <p><b>Note:</b> For NCR 7877, the RCS cannot be used along with a USB 3.0 device in the same stacked connector.</p>
Flashing Blue and Red	RCS sync failed	<ol style="list-style-type: none"> <li>1. Reset the RCS by disconnecting then reconnecting the RCS.</li> <li>2. If Sync still fails, restart the scanner.</li> </ol>