

# PRODUCT

## NCR X-Series Displays Class 5968 / 5985 Configuration and Pricing

MB-POS-1257  
February 27, 2018

Note: This is the first issue of an X-Series Stand-Alone reference for these classes. This bulletin replaces information previously released in Product Reference Bulletin 1038.

The following pages provide product, configuration and pricing information about the NCR Class 5968 (Touch) and 5985 (Non-Touch) displays.

- These displays have been certified with ENCOR ISS45 and ScanMaster.
- Prices provided are provisional MRPs as of the publication date. Final prices paid by Channel Partners are determined by your distributor (ScanSource or BlueStar).
- A selection sequence is provided to enable PID-level ground-up configurations with all units, options, cables etc. available and selectable.
- Distributors may also stock "M-BOM" packages that include multiple PIDs in the most common pre-packaged configurations.



# RealPOS X-Series Displays

(Class 5968 and 5985)

## Ordering & Configuration Information

**NCR COMPANY CONFIDENTIAL**

**Last Updated:** February 16, 2018



The NCR RealPOS X-Series displays are designed to support the NCR next generation of retail terminals. Designed in conjunction with the XR7 retail terminal, the X-Series displays combine good looks, the latest technology and NCR experience in the retail market to build a display that will last well into the future.

## Table of Contents

PRODUCT OVERVIEW .....	3
KEY FEATURES .....	4
EXPLANATION OF NEW FEATURES .....	6
NCR REALPOS TOUCH DISPLAY FAMILY PRODUCT COMPARISON .....	7
ORDER CONFIGURATION PROCESS FLOW .....	10
FEATURES VS. KITS .....	10
5968/5985 BASE MODEL .....	11
5968/5985 COMMUNICATIONS CABLE LAYOUT .....	12
5968/5985 VIDEO INTERFACE CABLE .....	12
5968/5985 USB POWER CABLE AND USB COMMUNICATION CABLES .....	14
5968/5985 AUDIO CABLE .....	15
5968/5985 EXTERNAL POWER SUPPLY .....	16
5968/5985 PERIPHERAL FEATURE OPTIONS .....	18
5968/5985 DISPLAY MOUNTS .....	20
NOTES: .....	23
PLATFORM SOFTWARE, FIRMWARE & DRIVERS .....	24
VIDEO FIRMWARE AND ROMFLASHER .....	24
TOUCH DRIVER SOFTWARE .....	24
NCR SOFTWARE OSD (ON SCREEN DISPLAY) UTILITY .....	24
SUPPORTED TERMINALS AND PLATFORM SOFTWARE .....	24
INFORMATION PRODUCTS .....	25
PRODUCT TECHNICAL REFERENCE .....	26
PRODUCT DIMENSIONS .....	26
APPENDIX A – UPP CONFIGURATIONS .....	27
CHANGE CONTROL .....	28

## Product Overview

The X-Series displays offer the flexibility and ruggedness you need in an ultra-thin design that will look great in any retail environment.

- **Connect with shoppers where it counts**

Engage shoppers by providing them useful information on pricing, promotions, or upcoming events with the X-Series display family. The X-Series displays feature high brightness and high contrast to make it easy to read and to create an enjoyable experience for both your customers and store associates. These stylish displays are available in a variety of sizes and include both touch and non-touchscreen displays – the choice is yours.

- **Tap, zoom, swipe, or scroll**

The ultra-thin X-Series displays are available in both projected capacitive and resistive touchscreen options to let you select the right option for your stores. Projected capacitive supports gesture based (multi-touch) interactions making it familiar and easy for your associates to use. Another advantage is projected capacitive never requires calibration to help you avoid unnecessary service calls. For environments requiring glove or stylus input, the resistive touchscreen option may best meet your needs.

- **Play it safe**

Let's face it; your store environment can be harsh on point-of-sale equipment. The X-Series displays are sleek and elegant, but don't let that fool you. The X-Series displays are engineered to withstand the rigors of retail without compromising appearance or ease of use. They are also resistant to dust and liquid infiltration because those accidental mishaps do occur. The stylish bezel design makes it easy to clean and the 15" models have a rugged die-cast aluminum chassis for added durability. Software controlled on screen display (OSD) prevents tampering or accidental shutdown.

- **One size does not fit all**

Your stores are unique and your needs are always changing. The X-Series displays are available in 10.4" and 15" sizes and can be used as an associate display or they can be rear mounted to a terminal or free standing to display pricing and promotional messages. And they are available with an encrypted magnetic stripe reader (MSR) for enhanced security. You can also configure an optional integrated fingerprint biometric reader and a camera on select models. Whichever options you prefer, these displays are sure to enhance the appearance of your wrap stand or checkout and save you valuable counter space.

## Key Features



### 15" Resistive (XT15)

- Single touch interface
- Standard 4:3 aspect ratio
- 1028x768 XGA Native resolution
- High bright LED-backlit LCD
- Ultra-thin zero-bezel design
- HDMI, DisplayPort, VGA, DVI (via HDMI)



### 15" Projected Capacitive (XT15)

- 10-point multi-touch interface
- Standard 4:3 aspect ratio
- 1028x768 XGA Native resolution
- High bright LED-backlit LCD
- Ultra-thin zero-bezel design
- HDMI, DisplayPort, VGA, DVI (via HDMI)



### 15" Display (XD15)

- High-bright LED LCD
- Standard 4:3 aspect ratio
- 1028x768 XGA Native resolution
- Ultra-thin zero-bezel design
- HDMI, DisplayPort, VGA, DVI (via HDMI)
- Software OSD support



### 10.4" Projected Capacitive (XT10)

- 10-point multi-touch interface
- Standard 4:3 aspect ratio
- 800 x 600 SVGA Native resolution
- High bright LED-backlit LCD
- Thin zero-bezel design
- HDMI, DisplayPort, VGA, DVI (via HDMI)



### 10.4" Display (XD10)

- High-bright LED LCD
- Standard 4:3 aspect ratio
- 800 x 600 SVGA Native resolution
- Thin zero-bezel design
- HDMI, DisplayPort, VGA, DVI (via HDMI)
- Software OSD support



### 10.4" Resistive (XT10)

- Single touch interface
- Standard 4:3 aspect ratio
- 800 x 600 SVGA Native resolution
- High bright LED-backlit LCD
- Thin zero-bezel design
- HDMI, DisplayPort, VGA, DVI (via HDMI)



**MSR**



**Biometrics**



Side View with MSR



Rear / Side View with MSR - Angled



Rear View with MSR



Front View with MSR  
– Table Top Stand



Front View with MSR  
– XR7 Stand



Rear View with MSR  
– Table Top Stand



Rear View with MSR  
– XR7 Stand

## Explanation of new features

- Zero-Bezel – No frame around the front of the display screen which provides a smooth, glass surface that is attractive and easily cleaned. This feature does not apply to Resistive model.
- 10 Point Multi-Touch – the ability to leverage up to 10 touch points on the LCD at once – versus the current single touch screens. Provides future capability to leverage multi-touch gestures, such as zooming (pinch in and out), and app switching (multiple finger swipe left-right).
- Projected Capacitive - Projected Capacitive Touch (PCT or PCAP) technology is a variant of capacitive touch technology. All PCT touch screens are made up of a matrix of rows and columns of conductive material, layered on sheets of glass. When a conductive object, such as a finger, touches a PCT panel, it distorts the local electrostatic field at that point. This is measurable as a change in capacitance. If a finger bridges the gap between two of the "tracks", the charge field is further interrupted and detected by the controller. The capacitance can be changed and measured at every individual point on the grid (intersection). Therefore, this system accurately track touches. Unlike traditional capacitive touch technology, it is possible for a PCT system to sense a passive stylus or lightly gloved fingers. This is similar technology as used on smart phones.
- Anti-glare – Smooth glass screen requires Anti-glare treatment to reduce reflected light from that could interfere with the store staff ability to read the screens.
- Encrypted MSR – Card data is coded at time of swipe and passes from the MSR via USB in a coded format
- Imager – Integrated 2D imaging scanner for barcodes, PDF, QBR and license applications

## NCR RealPOS Touch Display Family Product Comparison

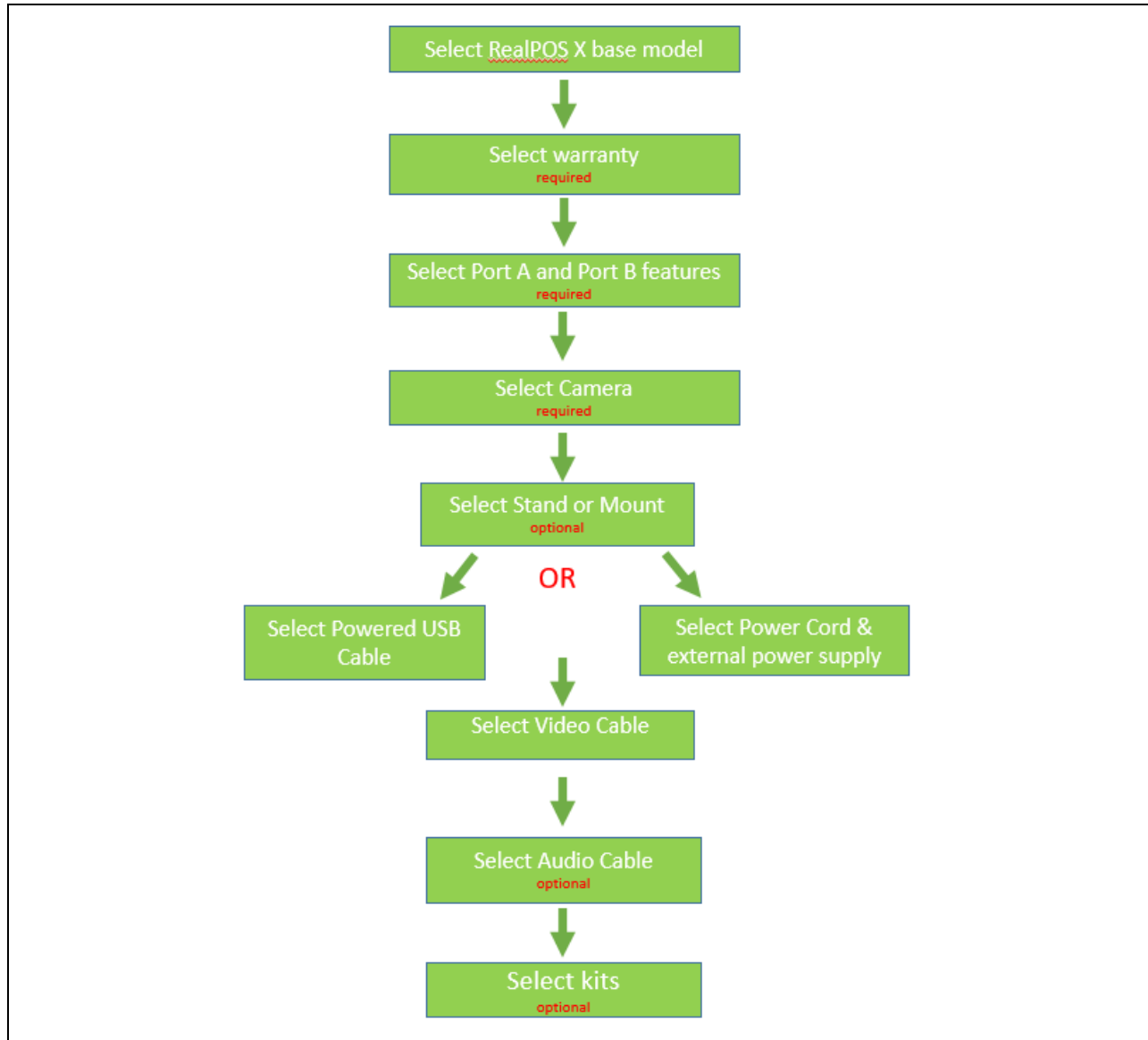


Features	5968 (10.4")	5968/5985(10.4")	5968 (15")	5985 (15")	5943/5967 12"
Non-Touch version	N/A	5985	N/A	5985	5943
Bezel	Zero bezel, flat screen	Stylish bezel, flat screen	Zero bezel, flat screen	Stylish bezel, flat screen	Traditional bezel
Touch Technology	Projected Capacitive (10 point multi-touch)	5 Wire Resistive	Projected Capacitive (10 point multi-touch)	5 Wire Resistive	Surface Capacitive
Touchscreen operation	Human touch input	Gloved Hand; Stylus	Human touch input	Gloved Hand; Stylus	Human touch input
Touchscreen Life expectancy*	No known wear out point	50 million touches at one point	No known wear out point	50 million touches at one point	225 million touches at one point
Touch Driver	Microsoft	Touch Base	TPK	Touch Base	Microchip
Touch Interface	USB	USB	USB	USB	USB
Periodic Touchscreen Calibration	No	Yes	No	Yes	Yes
Surface hardness	No known wear out point	4H	No known wear out point	4H	MOHS 7
Touch Response Time	10ms	50ms	10ms	50ms	≤25ms
Video Interface	DisplayPort, HDMI, VGA, DVI through HDMI	DisplayPort, HDMI, VGA, DVI through HDMI	DisplayPort, HDMI, VGA, DVI through HDMI	DisplayPort, HDMI, VGA, DVI through HDMI	DVI and VGA
Backlight	LED	LED	LED	LED	LED
Open USB ports	1	1	1	1	1
Net Luminance (cd/m <sup>2</sup> )	340 (typ) P-Cap	400 (typ) non-touch 320 (typ) resistive	425 (typ) P-Cap	500 (typ) non-touch 400 (typ) resistive	500 (typ) non-touch 450 (typ) S-Cap
Contrast Ratio	700:1	700:1	800:1	800:1	500:1
Native Resolution	SVGA (800x600)/16.2m colors	SVGA (800x600)/16.2m colors	XGA (1024x768)/16.2m colors	XGA (1024x768)/16.2m colors	XGA (1024x768)
Additional Resolutions Supported	VGA (640x480), SVGA (800x600) SXGA(1024x768)	VGA (640x480), SVGA (800x600)	VGA (640x480), SVGA (800x600), SXGA(1280x1024)	VGA (640x480), SVGA (800x600)	VGA (640x480), SVGA (800x600) XGA (1024 x 768) SXGA (1280x1024)
User adjustable OSD controls	Allows for adjustments through software OSD. Several controls can be adjusted including brightness, contrast, volume and horizontal/vertical position	Allows for adjustments through software OSD. Several controls can be adjusted including brightness, contrast, volume and horizontal/vertical position	Allows for adjustments through software OSD. Several controls can be adjusted including brightness, contrast, volume and horizontal/vertical position	Allows for adjustments through software OSD. Several controls can be adjusted including brightness, contrast, volume and horizontal/vertical position	Allows for adjustments through software OSD. Several controls can be adjusted including brightness, contrast, volume and horizontal/vertical position

Features	5968 (10.4")	5968/5985(10.4")	5968 (15")	5985 (15")	5943/5967 12"
Viewing Direction	12 O'clock	12 O'clock	12 O'clock	12 O'clock	12 O'clock
Display Response Time	10ms (typ)	10ms (typ)	≤8ms (typ)	<8ms (typ)	10ms (typ)
Touch Response Time	10ms for 10 simultaneous touch points	50ms	10ms for 10 simultaneous touch points	50ms	25ms
Audio	Integrated stereo speakers - amplified through the display (2w per channel)	Integrated stereo speakers - amplified through the display (2w per channel)	Integrated stereo speakers - amplified through the display (2w per channel)	Integrated stereo speakers - amplified through the display (2w per channel)	Integrated audio speakers (non-amplified) mounted underneath the display
Power	1x8 latching 12V USB from POS	1x8 latching 12V USB from POS	1x8 latching 12V USB from POS	1x8 latching 12V USB from POS	2x4 latching 12V USB from POS
Power consumption (touch)	6.8w (typ) 2.0w (standby)	6.8w (typ) 1.9w (standby)	11.7 w (typ) 2.1w (standby)	11.6w (typ) 1.7w (standby)	16.3w (typ) 1.1w (standby)
Power consumption (non-touch)	N/A	6.6w (typ) 1.6 (standby)	N/A	11.4 w (typ) 1.4w (standby)	16.3w (typ) 1.1w (standby)
Peripheral Connectivity	One additional external port	One additional external port	One additional external port	One additional external port	One additional external port
MSR Option	Encrypted 3-track or JIS	Encrypted 3-track or JIS	Encrypted 3-track or JIS	Encrypted 3-track or JIS	3-track or JIS
Biometrics	No	No	Yes, Integrated	Yes, Integrated	No
Camera	No	No	Yes, Integrated	No	No
Physical Mounting interface	NCR custom & VESA 75mm	NCR custom & VESA 75mm	NCR custom & VESA 75mm	NCR custom & VESA 75mm	VESA 75mm
Color	Black	Black	Black	Black	Beige or Charcoal
Life (hours to ½ brightness of backlight)	50,000 hours	50,000 hours	50,000 hours	50,000 hours	50,000 hours
NCR Terminal Compatibility	7446, 7402, 7457, 7458, 7606, 7459, 7403, 7600, 7601, 7616, 7702	7446, 7402, 7457, 7458, 7606, 7459, 7403, 7600, 7601, 7616, 7702	7446, 7402, 7457, 7458, 7606, 7459, 7403, 7600, 7601, 7616, 7702	7446, 7402, 7457, 7458, 7606, 7459, 7403, 7600, 7601, 7616, 7702	7446, 7402, 7457, 7458, 7606, 7459, 7403, 7600, 7601, 7616
Retail Hardened	Yes – integrated enclosure, mounting, sealed front glass, software OSD, latching cables	Yes – integrated enclosure, mounting, sealed front glass, software OSD, latching cables	Yes – integrated die cast enclosure, mounting, moisture/dust sealed display, software OSD, latching cables	Yes – integrated die cast enclosure, mounting, moisture/dust sealed display, software OSD, latching cables	Yes – integrated enclosure, mounting, sealed, software OSD, latching cables
Sealed against dust	Yes (front)	Yes (front)	Yes (front)	Yes (front)	Yes
Sealed against liquid	Yes (front)	Yes (front)	Yes (front)	Yes (front)	Yes (IPX3)
Excess shock & vibe	Yes	Yes	Yes	Yes	Yes
EDID/DCC standards	VESA	VESA	VESA	VESA	VESA
Power Management	VESA	VESA	VESA	VESA	VESA
Certifications	TUV/UL/NOM/GOST/KCC/CCC	TUV/UL/NOM/GOST/KCC/CCC	TUV/UL/NOM/GOST/KCC/CCC	TUV/UL/NOM/GOST/KCC/CCC	TUV/UL/NOM/GOST/KCC/CCC
Service Philosophy	Whole Unit	Whole Unit	Whole Unit	Whole Unit	Piece parts
Display Area	211.2mm(H) x 158.4mm(V)	211.2mm(H) x 158.4mm(V)	304.128(H) x 228.096(V)	304.128(H) x 228.096(V)	245.76 (H) x 184.32 (V)

Features	5968 (10.4")	5968/5985(10.4")	5968 (15")	5985 (15")	5943/5967 12"
Operating temperature	5° to 45°C	5° to 45°C	5° to 45°C	5° to 45°C	5° to 45°C
Operating Humidity	10% to 90% (Non-condensing)	10% to 90% (Non-condensing)	10% to 90% (Non-condensing)	10% to 90% (Non-condensing)	10% to 90% (Non-condensing)
Dimensions (no mount/no MSR) (w x d x h) Weight	282mm (11.10") x 49mm (1.93") x 224mm (8.82") 2.06kg (4.55 lbs)	282mm (11.10") x 49mm (1.93") x 224mm (8.82") 2.06kg (4.55 lbs)	380mm (14.96") x 48mm (1.89") x 305mm (12") 3.6kg (7.9 lbs)	380mm (14.96") x 48mm (1.89") x 305mm (12") 3.6kg (7.9 lbs)	292mm (11.5") x 58mm (2.3") x 248mm (9.8") 2.15kg (4.8 lbs)
Dimensions (w/ mount/ no MSR) (w x d x h) Weight	282mm (11.10") x 271mm (10.67) x 268mm (10.55) 3.86kg (8.5 lbs)	282mm (11.10") x 271mm (10.67) x 268mm (10.55) 3.86kg (8.5 lbs)	380mm (14.96") x 260mm (10.24") x 328mm (12.9") 5.35 kg (11.8 lbs)	380mm (14.96") x 260mm (10.24") x 328mm (12.9") 5.35 kg (11.8 lbs)	292mm (11.5") x 280mm (11") x 292mm (11.5") 2.97kg (5.23 lbs)
Miscellaneous weights	MSR: .06 kg (.15 lbs)	MSR: .06 kg (.15 lbs)	MSR: .06 kg (.15 lb) Biometric .13 kg (.3 lbs)	MSR: .06 kg (.15 lb) Biometric .13 kg (.3 lbs)	
	<p><b>Note: Non-touch displays of the 5985 family share the same characteristics as the 5968 without the touch. These displays would include the 5985-2010-9090 (10.4" non-touch) and 5985-1015-9090 (15" non-touch) displays. Information above (excluding touch items) would apply to the display of the same sizes (10.4" and 15"). The 5985 15" non-touch display is based on the resistive model of the 5968 15" touch display.</b></p>				

## Order Configuration Process Flow



### Features vs. Kits

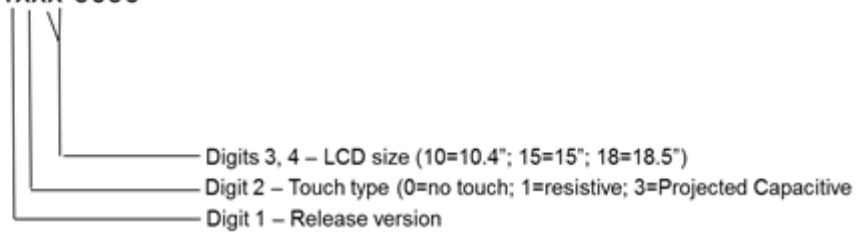
X-Series displays and supported peripherals follow NCR's standard nomenclature of "features" (identified with an "F") and "kits" (identified with a "K").

"Features" must be ordered with the base unit and will be installed at the factory using standard installation instructions. This installation takes place without a specific staging agreement being in place.

To address unique customer requirements or to upgrade previously deployed terminals, various kits and cables are available. "Kits" are packaged separately and require field installation. If required, kits can be integrated at the NCR factory prior to shipment by submitting a staging request. NCR's Worldwide Customer Services organization can also be utilized for integration and installation services at the customer site.

**5968/5985 Base Model**

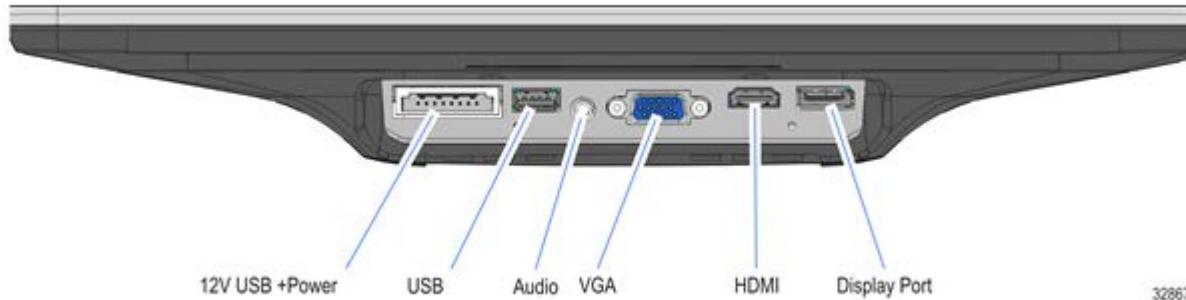
PID Legend: 5968-1xxx-9090



Product ID	Description	Configuration Notes	MRP
<b>Touch Displays</b>			
5968-2110-9090	RealPOS 5968 10.4" Resistive Touch Display – XT10	Display head only. Includes amplified stereo speakers, 75mm VESA mount patterns, and one external USB port for peripheral connections. Requires cable features for power and data, peripheral features and mount kits which are not included and must be configured. May also be ordered as a POS feature, see 770X OCIs.	\$1200
5968-1310-9090	RealPOS 5968 10.4" PCAP Touch Display – XT10		\$1200
5968-1115-9090	RealPOS 5968 15" Resistive – XT15	Display head only. Includes amplified stereo speakers, 75mm VESA mount patterns, and one external USB port for peripheral connections. Requires cable features for power and data, peripheral features and mount kits which are not included and must be configured.	\$1400
5968-1315-9090	RealPOS 5968 15" PCAP Touch Display – XT15		\$1700
<b>Non-Touch Displays</b>			
5985-1015-9090	RealPOS 5985 15" LED Backlight Display – XD15	Display head only. Includes amplified stereo speakers, 75mm and 100mm VESA mount patterns, and one external USB port for peripheral connections. Requires cable features for power and data, peripheral features and mount kits which are not included and must be configured.	\$750
5985-2010-9090	RealPOS 5985 10.4" LED Backlight Display with Port B – XD10	Display head only. Includes amplified stereo speakers, 75mm VESA mount patterns, and one external USB port for peripheral connections. Requires cable features for power and data, peripheral features and mount kits which are not included and must be configured. May also be ordered as a POS feature, see 770X OCIs.	\$925

## **5968/5985 Communications Cable Layout**

The 5968 and 5985 display family share a common cable interface layout. All displays in the X-Series family will utilize the layout below:



## **5968/5985 Video Interface Cable**

For the 5968/5985 class models select a VGA, display port, HDMI or DVI (through HDMI) cable based on model and terminal port availability. In dual display configurations, note any limitations on video interface options on the second display. If you are configuring a new display, please use the appropriate feature ID (5968 for touch; 5985 for non-touch displays). 1416 and 1432 PIDs are used for individual cable orders only. When configuring an X-Series display it is imperative that only NCR cables are used. We will not support “off the shelf third party” cabling solutions.

When connecting an X-Series display to the XR5, XR7 or XR7Plus, or to a terminal which has a display port connector, please select a display port cable as first choice due to its latching connector. For integration to a 7701, 7702 or 7703 please refer to the 770X Order and Configuration Guide.

Product ID	Description	Configuration Notes
<b>VGA Cables</b>		
1432-C526-0013 5968/5985-F116	VGA cable, 1.3m	1.3 meter (51.18”) VGA cable (usage of VGA requires an audio cable if sound is desired)
1432-C526-0040 5968/5985-F117	VGA cable, 4m	4 meter (157.48”) VGA cable (usage of VGA requires an audio cable if sound is desired)
<b>Display Port Cables**</b>		
1432-C614-0005	Cable, DisplayPort integrated video, 0.5m	0.5 meter (19.68”) display port cable for integration to 770X XR terminals. To be used only on displays attached directly to theXR7 POS table top stand; included in 770X-F452/K452 10.4” integrated display feature or kit.
1432-C483-0008 5968/5985-F110 1432-C614-0008	Cable, Display Port integrated video, 0.8m	0.8 meter (31.496”) display port cable for integration to 770X XR terminals using the rear display arm of the POS table top stand included in 770X-F453/K453 XR7 LCD extension stand and cables feature or kit. See 770X Order and Configuration guides.

1432-C483-0013 5968/5985-F111 1432-C614-0013	Cable, Display Port video, 1.3m	1.3 meter (51.18") Display Port cable
5968/5985-F112 1432-C614-0040	Cable, Display Port video, 4m	4.0 meter (157.48") Display Port cable
<b>HDMI to HDMI Cables (when connecting to the XR7, use Display Port cabling)</b>		
1432-C527-0013 5968/5985-F114	Cable, HDMI to HDMI video, 1.3m	1.3 meter (51.18") HDMI cable
1432-C527-0040 5968/5985-F115	Cable, HDMI to HDMI video, 4m	4.0 meter (157.48") HDMI cable
<b>DVI through HDMI Cables</b>		
1432-C529-0013 5968/5985-F118	Cable, DVI to HDMI video, 1.3m	DVI (terminal) to HDMI (Display) conversion cable. Please note HDMI ended cables are not locking/latching cables, strain relief is necessary to keep cable from unplugging.
1432-C529-0040 5968/5985-F119	Cable, DVI to HDMI video, 4m	

\*\*Display port cable transition in process, order feature to avoid confusion.

## **5968/5985 USB Power Cable and USB Communication Cables**


For class 5968/5985 models, select the appropriate USB cable. For integration to a 7701, 7702 or 7703, please refer to the 770X Order and Configuration Guide.

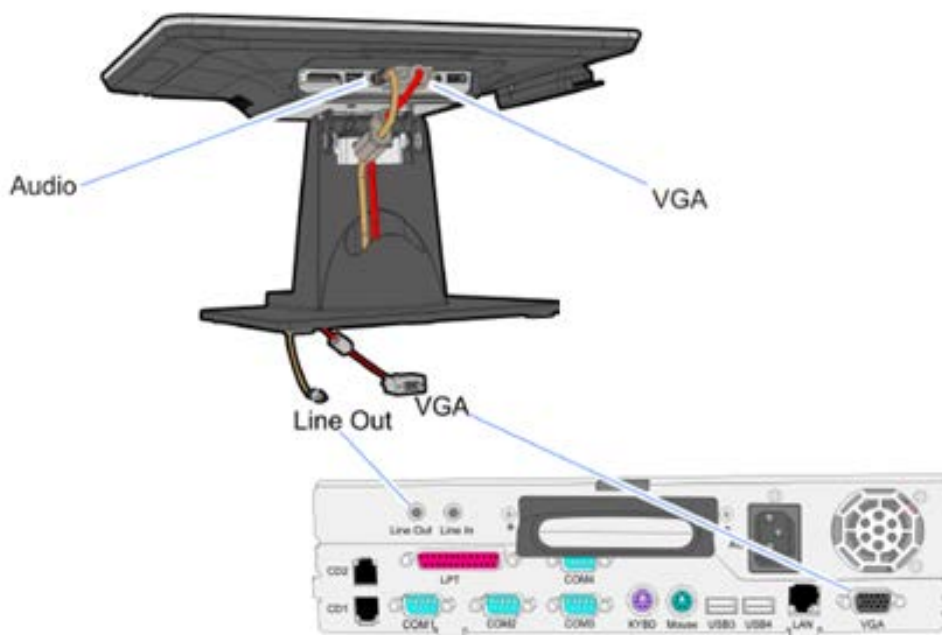
<b>Product ID</b>	<b>Description</b>	<b>Configuration Notes</b>
<b>Powered USB Cables for Class 5968/5985</b>		
1432-C477-0005	Cable, 12V Powered USB, 0.5m	0.5 meter (19.68") 12V USB power cable with latching 1x8 connector on the display end and a latching 12V USB plus power connector on the terminal end. Requires 12V USB port on host terminal. Provides both power and touch communication. To be used only on displays attached to the XR POS table top stand. Included with 7702-K452 integrated display kit. See 770X Order and Configuration guide
1432-C477-0008 5968/5985-F107	Cable, 12V Powered USB, 0.8m	0.8 meter (31.496") 12V USB power cable with latching 1x8 connector on the display end and a latching 12V USB plus power connector on the terminal end. Requires 12V USB port on host terminal. Provides both power and touch communication. For integration to 7701-F453 XR5, 7702-F453/K453 XR7 extension stand and cables feature or kit. See 770X Order and Configuration guide
1432-C477-0013 5968/5985-F108	Cable, 12V Powered USB, 1.3m	1.3 meter (51.18") 12V USB power cable with latching 1x8 connector on the display end and a latching 12V USB plus power connector on the terminal end. Requires 12V USB port on host terminal. Provides both power and touch communication.
1432-C478-0040 5968/5985-F109	Cable, 12V Powered USB, 4m	4 meter (157.48") 12V USB power cable with latching 1x8 connector on the display end and a latching 12V USB plus power connector on the terminal end. Requires 12V USB port on host terminal. Provides both power and touch communication.

### 5968/5985 Audio Cable

The 5968/5985 both have amplified sound within the display. Additionally, these displays also use DisplayPort and HDMI which transmit audio. If using the display with DisplayPort or HDMI a separate audio cable is not necessary provided the controlling terminal transmits audio on the DisplayPort or HDMI/DVI video interface. VGA requires an audio cable if sound is desired. This cable would be connected to the “line out” port on the terminal and not the “amplified audio out” port since the display has an internal amplifier.

Product ID	Description	Configuration Notes
<b>Audio Cables for 5968/5985</b>		
1432-C235-0013 5968/5985-F126	Audio Cable, 1.3m	1.3 meter (51.18”) black cable for use on terminals with a line-out or audio port.  Note: 1m cables may be substituted in feature until used up.
1432-C235-0046 5968/5985-F127	Audio Cable, 4m	4.6 meter (157.48”) black cable for use on terminals with a line-out or audio port.

 **Note:** The display has an internal audio amplifier. In order to obtain high quality speaker output the connection from the host terminal should be driven with a *Line* level signal and NOT by an *amplified* or *Speaker* level signal. If an *amplified* or *Speaker* level signal is the only connection option the volume on the terminal should be reduced to eliminate audio distortion.



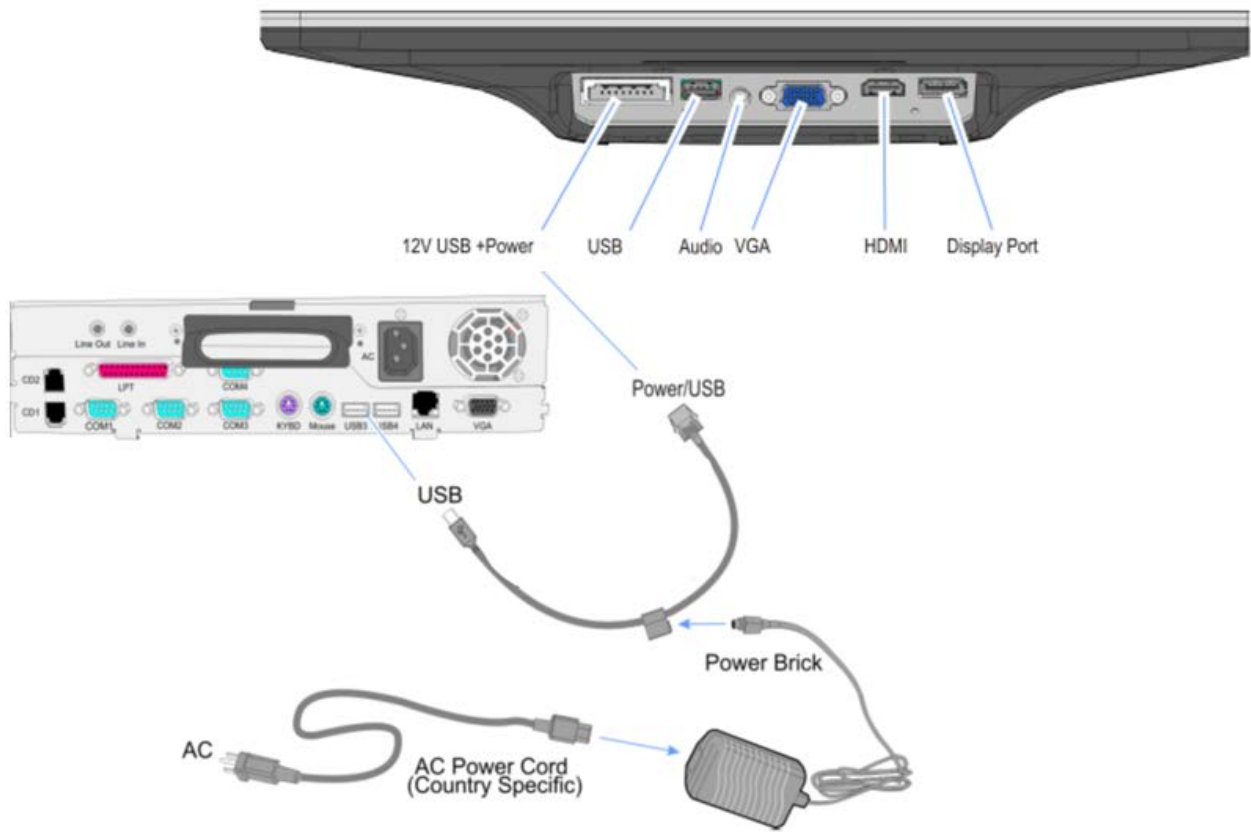
## **5968/5985 External Power Supply**

To use an external power supply utilizing a power brick, configure per the below tables. You must choose a 1432-C480-0013 or 1432-C479-0040 cable, power supply (5915-K100) and a local power cord.

Product ID	Description	Configuration Notes
<b>External Power Cables for 5968/5985**</b>		
1432-C480-0013 5968/5985-F121 1432-C591-0013	Cable, USB Type A with power connector, 1.3m	USB cable with latching 1x8 connector on the display end; an USB connector on the terminal end and power connector in the middle with a barrel connector for an external power supply. Requires USB type A port on host terminal. Requires both an external power brick and a local power cord.
1432-C479-0040 5968/5985-F122 1432-C591-0040	Cable, USB Type A with power connector, 4m	USB cable with latching 1x8 connector on the display end; an USB connector on the terminal end and power connector in the middle with a barrel connector for an external power supply. Requires USB type A port on host terminal. Requires both an external power brick and a local power cord.
5915-K100 5968/5985-F120 (replaced 5967-K101)	Kit, 12VDC power adapter, 40W, DOE VI, 4 pin Mini-DIN connector	Order the local power cord and the powered USB cable separately.

\*\* External power cable transition in process, order feature to avoid confusion.

<b>External Power for 5968/5985</b>			
1416-C325-0030	5968/5985-F100	US Power Cord	3 meter (118.11") length
1416-C323-0030	5968/5985-F101	International Power Cord	3 meter (118.11") length
1416-C321-0030	5968/5985-F102	UK Power Cord	3 meter (118.11") length
1416-C322-0030	5968/5985-F103	Australian Power Cord	3 meter (118.11") length
1416-C391-0030	5968/5985-F104	China Power Cord	3 meter (118.11") length
1416-C320-0030	5968/5985-F105	SEV Power Cord	3 meter (118.11") length
1432-C366-0030	5968/5985-F106	India Power Cord	3 meter (118.11") length
1416-C009-0018	5968/5985-F208	IRAM Power Cord, Argentina	3 meter (118.11") length
1424-C124-0030		POS; Japan Power Cord, 3 prong	



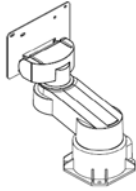
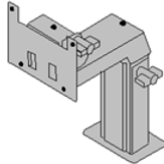
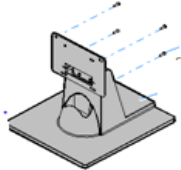


## **5968/5985 Peripheral Feature Options**


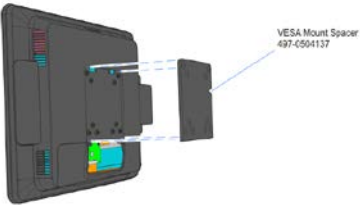


The 5968/5985 offers options installable during manufacturing as features. An attachable MSR (ISO or JIS), an attachable biometric fingerprint reader or on projected capacitive 15" touch displays an integrated camera. Not all options are available based on the display model. Please select the appropriate feature or the "No cover" feature.

<b>Product ID</b>	<b>Description</b>	<b>Configuration Notes</b>
<b>5968/5985 Port A features</b>		
5968/5985-F140 7702-K140	Filler plate, right side	When a Port A feature is not ordered, the cover is required. This is installed on the right side of the display.
5968/5985-F141 7702-K141	3-Track ISO encrypted MSR for 5968 15" displays, Black	Mounts on the right side of the 15" display: internal USB connection. If ordering the kit use 7702-K141. Kit includes correct screw sizes for both 15" and 10.4" displays.
5968/5985-F142 7702-K142	JIS MSR for 5968 15" displays, Black	Mounts on the right side of the 15" display: internal USB connection. If ordering the kit use the 7702-K142. Kit includes correct screw sizes for both 15" and 10.4" displays.
5968/5985-F143 7702-K141	3-Track ISO encrypted MSR for 5968 10.4" displays, Black	Mounts on the right side of the 10.4" display: internal USB connection. If ordering the kit use the 7702-K141. Kit includes correct screw sizes for both 15" and 10.4" displays.
5968/5985-F145 7702-K142	JIS MSR for 5968 10.4" displays, Black	Mounts on the right side of the 10.4" display; internal USB connection. If ordering the kit use the 7702-K142. Kit includes correct screw sizes for both 15" and 10.4" displays.
5968-F349 7702-K349	Keypad for 15" Displays	Mounts on the right side of the 15" display: internal USB connection. For 15" Touch displays only.
<b>5968/5985 Port B features</b>		
5968/5985-F150	Filler plate, left side	When a Port B feature is not ordered, the cover is required. This is installed on the left side of the display
5968/5985-F151 7702-K151	Biometric fingerprint reader – left side	5968 (15") or 5985 (15") displays only. Mounts on the left side of the display, internal USB connection. If ordering the kit, use 7702-K151.
5968/5985-F170 7702-K170	Imager, Side Mount for 15"	5968 (15") or 5985 (15") displays only. Mounts on the left side of the display: internal USB connection. If ordering the kit, use 7702-K170
5968/5985-F171 7702-K141	MSR, Encrypted for 15"	5968 (15") or 5985 (15") displays only. Mounts on the left side of the display, internal USB connection. If ordering the kit, use 7702-K141.

5968/5985-F172 7702-K142	MSR, JIS for 15"	5968 (15") or 5985 (15") displays only. Mounts on the left side of the display, internal USB connection. If ordering the kit, please use 7702-K142.
5968/5985-F173 7702-K170	Imager, Side Mount for 10.4"	5968 (10.4") or 5985 (10.4") displays only. Mounts on the left side of the display, internal USB connection. If ordering the kit, please use 7702-K170. Kit includes correct screw sizes for both 15" and 10.4" displays.
5968-F973	Imager, Side Mount for 10.4	5968 (10.4") display only; mounts on the left side of the display, internal USB connection. 90 degree mount.
<b>5968 Camera Features (15" Projected Capacitive models only)</b>		
5968-F155	No camera option	Choose if no camera is desired on the 5968 15" PCAP display.
5968-F156 7702-K156	Operator camera	Camera for 5968 15" PCAP display. Integrated into glass. Camera is not available on 5968 15" resistive touch, 5985 15" non-touch display models nor on 5968 10.4" PCAP display.

**5968/5985 Display Mounts**

Product ID	Description	Configuration Notes
<b>Table Top Mount Features and Kits</b>		
5968-K024	X-Series integration tray mount, black 	VESA 75mm and 100mm mount that installs on the 82xrt, XR6 and XR8 Integration trays. Full swivel and tilt mount. VESA plate connects with four screws to back of display. <u>This mount is only used with the integration tray.</u> Consult terminal O&C for more info.
5968-K039	Checkstand mount, black 	VESA 75mm and 100mm mount that screw mounts to counter. VESA plate connects with four screws to back of display.  Adjusts from 11" to 15" in height.
5968-F031 5985-F031 5968-K031	X-Series table top stand, black 	VESA 75mm and 100mm table top stand with tilt display mount, connects with four screws to back of display. Fits into VESA block on rear of display.
5915-K033	XL-Series stand, black 	NCR custom 100mm table top stand with tilt display mount, connects with 2 hooks and 2 screws to back of display.
7702-K031	XR Point of Sale operator base/stand, black 	NCR XR-series table top stand. Not a VESA stand; custom for the X-Series. Mounts with 2 hooks and 2 screws.

Product ID	Description	Configuration Notes
<b>X-Series Mount Kits</b>		
7702-K320	Kit, Display wall mount bracket  100mm VESA and custom NCR pattern	 <p>For 15" displays only. 10.4" display has a 75mm VESA pattern.</p>
7702-K321	Kit, mount plate adapter for third party mounts.  75mm VESA, 100mm VESA and custom NCR pattern	 <p>For 10.4" and 15" displays when TPP mount does not provide a sufficiently sized flat mounting area. Not needed with 7702-K305, K306, K307 or 1668 Space pole kits. Consult space pole O&amp;C for options.</p>
Product ID	Description	Configuration Notes
<b>Pole Mount Feature</b>		
5985-F300	Feature, Pole mount for 10.4" Non-Touch Display  	For 10.4" non-touch display only  Must order both 5985-F300 and 5934-K020
5934-K020	12" Pole mount and table top mount  	

Product ID	Description	Configuration Notes
<b>Miscellaneous Kits</b>		
7702-K949	X-Series Keypad replacement key tips and key lenses	Kit includes: "0" key tip [1] '00" key tip [1] 1x1 key tip [1] 1x1 lens [1] 1x1.5 lens [11] 2x1.5 lens [1]

## Notes:

**1) The POS cannot be awakened from standby mode via Touch. All NCR POS systems remove power from the +12V USB connection so the Touch Display has no power. Without power, touch events cannot be detected.**

**2) After waking from Standby (via keyboard, mouse, or power switch), touch will not respond for approximately 30 seconds.**

ACTION: This delay can be reduced significantly by changing the OS device manager configuration for the Touch Controller / Power Management option "Allow this device to bring the computer out of standby" by un-checking the check box.

**3) If wake from standby via Touch is required, the Touch Display must be powered from an independent source such as a power brick. If the Touch Display is powered by power brick, restrictions noted in 1) and 2) no longer apply.**

## Platform Software, Firmware & Drivers

### **Video Firmware and Romflasher**

The latest version of NCR firmware and Romflasher software is downloadable from NCR's public website for drivers and patches: [http://www5.ncr.com/support/support\\_drivers\\_patches.asp](http://www5.ncr.com/support/support_drivers_patches.asp) Navigate to the specific device page by selecting "Retail Support Files", then "[NCR RealPOS and SelfServ Peripherals \(Firmware, Drivers, Utilities\)](#)", and then the appropriate product class under "Displays".

### **Touch Driver Software**

Required touch driver software is included in pre-loaded Operating System software but not automatically installed. If a terminal is ordered with an Operating System features, installation files are included in the software loaded on the hard drive of the terminal.

The latest version of touch driver software is also downloadable from NCR's public website for drivers and patches: [http://www5.ncr.com/support/support\\_drivers\\_patches.asp](http://www5.ncr.com/support/support_drivers_patches.asp) Navigate to the specific device page by selecting "Retail Support Files", then "[NCR RealPOS and SelfServ Peripherals \(Firmware, Drivers, Utilities\)](#)", and then the appropriate product class under "Displays".

### **NCR Software OSD (On Screen Display) Utility**

There are no hardware on-screen display buttons. To modify/update display settings you must use the NCR Software OSD utility.

The latest version of the NCR Software OSD Utility is downloadable from NCR's public website for drivers and patches: [http://www5.ncr.com/support/support\\_drivers\\_patches.asp](http://www5.ncr.com/support/support_drivers_patches.asp) Navigate to the specific device page by selecting "Retail Support Files", then "[NCR RealPOS and SelfServ Peripherals \(Firmware, Drivers, Utilities\)](#)", and then the appropriate product class under "Displays".

### **Supported Terminals and Platform Software**

OPOS and JavaPOS drivers for NCR touch drivers are not bundled into the Platform Software (RPSW or RPSL) software. The Touch drivers are included in the Windows operating system images. For the Linux operating systems (NLPOS9 SP2, SLEPOS 10 SP1) the touch screen drivers are automatically installed via the Linux Terminal Support CD.

Peripheral support of OPOS or JavaPOS (e.g., MSR) NCR retail platform software is downloadable from NCR's public website for drivers and patches: [http://www5.ncr.com/support/support\\_drivers\\_patches.asp](http://www5.ncr.com/support/support_drivers_patches.asp). Select "Retail Support Files", then "Retail Platform Software", and then the appropriate files under [NCR RealPOS and SelfServ Platform Software \(Windows RPSW, DOS and Linux RPSL\)](#)

## Information Products

Below is a list of reference information published to support the 5968/5985 displays.

These publications are available at:

Publications Site	Description
<a href="http://ipinternal.ncr.com">http://ipinternal.ncr.com</a>	Internal site for technical manuals, kit instructions, and user guides for <b>New</b> products Also contains Legacy products that are already converted to HTML HTML and PDF formats
<a href="https://onlinehelp.ncr.com/">https://onlinehelp.ncr.com/</a>	NEW external site for technical manuals, kit instructions, and user guides for <b>New</b> products Also contains Legacy products that are already converted to HTML HTML and PDF formats
<a href="http://info.ncr.com">http://info.ncr.com</a>	Internal site for technical manuals, kit instructions, and user guides for <b>Legacy</b> products PDF format <b>Note:</b> Legacy products that are already converted to HTML format can still be searched in this site. When opened, the PDF file contains the link to the new publications site (ipinternal.ncr.com).
<a href="https://info.ncr.com">https://info.ncr.com</a>	External site for technical manuals, kit instructions, and user guides for <b>Legacy</b> products PDF format <b>Note:</b> Legacy products that are already converted to HTML format can still be searched in this site. When opened, the PDF file contains the link to the new publications site (onlinehelp.ncr.com).

ID	Description
B005-0000-2338	NCR RealPOS 5968/5985 Parts Identification Manual*
B005-0000-2337	NCR RealPOS 5968/5985 User's Guide
B005-0000-2344	MSR Wedge Configuration Utility User Guide
B005-0000-2031	NCR MSR Configuration User Guide

Base client and third-party software are also available on the public NCR Platform Software Website:

[http://www.ncr.com/support/support\\_drivers\\_patches.asp?Class=External\display](http://www.ncr.com/support/support_drivers_patches.asp?Class=External\display)

## Product Technical Reference

The X-Series displays are designed to operate in a Class 3 working range, which applies to a broad spectrum of fully to partially conditioned office and commercial environments. Dependent upon local climatic conditions, heating, cooling and humidity control capability may not be provided at all or be inadequate to maintain desirable human comfort levels on a day-to-day basis under adverse climatic conditions. A summary of the environmental requirements is shown in the table below.

	Temperature	Relative Humidity	Dew Point
<b>Operating Range</b>	5 to 40 °C	10-90%	26 °C
<b>Storage Range</b>	-10 to 50 °C	10-90%	N/A
<b>Transit Range</b>	-40 to 60 °C	5-95%	N/A

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

The X-Series displays are not certified for use in outdoor locations where the unit could be directly exposed to moisture. Exposure to direct sunlight should be restricted (unit requires shading).

The X-Series shall meet the safety requirements set forth in NCR RSD Regulatory Compliance Guidelines Document 497-0412176. The following reports are available for the X-Series displays:

- UL Report (US and Canada)
- EU Declaration of Conformity (safety and EMC)
- TUV report
- TUV certificate
- Certification Body (CB) report (to all national deviations)
- Compliance with EU Harmonic distortion requirements (EN610001-3-2 and EN610001-3-3)
- NOM/NYSE certificate (Mexico)
- GOST Certificate (Russia)
- PSE (Japan)
- China safety certification
- China Emissions testing
- VCCI Japan emissions testing
- Australia/NZ Tick mark
- Korea MIC emissions testing

### Product Dimensions

15" terminal with MSR:

- WIDTH 15.45" (392.6 mm)
- HEIGHT 13.35" (339.3 mm)
- DEPTH 11.75" (298.3 mm)

## Appendix A – UPP Configurations

UPP – Unique Preconfigured Product is the term assigned to PIDs that are released for use by sales organizations such as Hospitality and PCR that order products through NOL (NCR Online) instead of WOT (Web Order Tool). The NOL system does not allow for dynamic feature selection to build a configuration, thus requiring pre-defined models with select features bundled into the configuration. The UPP PID is created by Hardware Solution Management at the request of the Industry / Software Solution Management teams and is based on the typical configurations and options they intend to offer. As noted below, the UPP description contains abbreviated information that defines the feature content included in the pre-configured product.

UPP Description Key:

- Hardware model class (5968 is touch and 5985 is non-touch)
- MSR or no MSR, cables included and their length, stand or not

Example:

**If the UPP 5968-1110-0001 were exploded into the appropriate QuoteBuilder features, you would see the following detail:**

5968-1110-0001	
PID/Feature	Description
5968-2110-9090	X-Series 10.4 Inch Resistive Touch Display with Port A/B, lead unit, configurable
5968-F031	Table top stand, black
5968-F109	Cable, 4m powered 12V USB to 1x8 latch-n-lock
5968-F112	Cable, 4m Display Port to Display Port
5968-F143	Encrypted MSR for 10.4" inch Display right side (Port A)
5968-F150	Filler plate on the left side of display (Port B)

The list of available UPPs is dynamic and will be updated during the production life of the RealPOS X-Series displays. If you do not see a configuration that meets the customer's requirements, please contact Product management and submit a UPP request form. The request will be evaluated based on volume, timeframes, and business justification. If the UPP request is approved there is an extended lead time required to set-up and release the UPP in the various NCR systems.

Product Id	Primary Description
5985-1010-0001	X-Series 10.4" Display XD, 4m powered USB cable, 4m display port cable, with stand
5985-1010-0002	X-Series 10.4 inch Display XD, 4m powered USB cable; 4m display port cable; no stand
5985-1010-0003	X-Series 10.4" 4m powered USB cable; 4m display port cable; no stand, for pole mount
5985-1010-0005	X-Series 10.4" Display XD, no cables, no stand. Can be used with 7702-F/K453
5985-1010-0007	X-Series 10.4 inch Display XD, 1.3m powered USB cable; 1m display port cable; stand
5985-1010-0009	X-Series 10.4" Display XD. .84m powered USB cable; .84m display port cable; no stand
5985-1015-0003	X-Series 15" Display XD; 4m powered USB cable; 4m display port cable; stand
5985-1015-0004	X-Series 15" Display XD. 4m powered USB cable; 4m display port cable; no stand
5985-1015-0006	X-Series 15" Display XD. No cables, no stand. Can be used with 7702-F/K453
5985-1015-0008	X-Series 15" Display XD. 1m powered USB cable; 1m display port cable; stand
5985-1015-0010	X-Series 15" Display XD;.84m powered USB cable; .84m display port cable; no stand; no MSR
5985-2010-9091	X-Series 10.4" Display with Port A/B; no cables; no stand. Can be used with 7702-F/K453.

Product Id	Primary Description
5968-1110-0001	X-Series 10.4 inch Resistive Touch Display. MSR; 4m powered USB cable; 4m DP cable; stand
5968-1110-0002	X-Series 10.4 inch Resistive Touch Display XB. MSR; 4m powered USB cable; 4m DP cable; no stand
5968-1310-0008	X-Series 10.4 inch PCAP Display with Port B, MSR, 4m powered USB cable, 4m DP cable and stand
5968-1310-0009	X-Series 10.4 inch PCAP Display with Port B, 1.3m powered USB cable, 1.3m DP cable and no stand
5968-1310-0010	X-Series 10.4 inch PCAP Display with Port B, 4m powered USB cable, 4m DP cable and stand
5968-1310-0011	X-Series 10.4 inch PCAP Display with Port B, 0.84m powered USB cable, 0.84m DP cable and no stand
5968-1310-0012	X-Series 10.4 inch PCAP Display with Scanner, 4m powered USB cable, 4m DP cable and no stand
5968-1310-0013	X-Series 10.4 inch PCAP Display w/Scanner, MSR, 4m powered USB cable, 4m DP cbl, no stand
5968-1310-0014	X-Series 10.4 inch PCAP Display w/Scanner, 0.84m powered USB cable, 0.84m DP cbl, no stand
5968-1310-0015	X-Series 10.4 inch PCAP Display w/Scanner, MSR, 0.84m powered USB cbl, 0.84m DP cbl, no stand
5968-1315-0003	X-Series 15 inch PCAP LED Touch Display. MSR; 4m powered USB cable; 4m DP cable; stand
5968-1315-0004	X-Series 15 inch PCAP LED Touch Display, MSR; 4m powered USB cable; 4m DP cable; no stand
5968-1315-0005	X-Series 15 inch PCAP LED, MSR; 1m Powered USB Cable; 1m DP Cable; Stand
5968-1315-0006	X-Series 15 inch PCAP LED Touch Display, 4m Powered USB Cable; 4m HDMI to DVI Cable ; Stand
5968-1315-0007	X-Series 15 inch PCAP LED Touch Display, MSR; .84m powered USB cable; .84m DP cable; no stand

## Change Control

Summary Of Changes		
Last Change Date	Description of Change	Author
5/13/15	Initial Release	Alan Ader
7/07/15	Update with UPPs and PID/description changes	Alan Ader
6/21/16	Update 10.4" PCAP, Port B, Cables, UPPs	Todd Babb
12/16/16	Updated 7702-K320 and K321 to document they can only be used to mount 15" displays.	Fran Harrington
4/17/17	Updated description of imager. Removed reference to UV validator. Removed definition of wide screen. Updated configuration map. Removed 5967-K101 and added 5915-K100 power supply kit. Added XL-series stand. Updated UPP listing.	Fran Harrington
5/31/17	Added 5985-F300 mount option, updated UPP listing	Fran Harrington
7/5/17	Added clarifying verbiage to the mounting kits	Fran Harrington
9/13/17	Added height of 5968-K039	Fran Harrington
11/13/17	Added additional VESA pattern info to displays/kits.	Fran Harrington
2/16/2018	Removed 15" 5943/5967, added 5968-F349, 7702-K349, 7702-K949. Removed 5968-F149, 7702-K149, 7702-K900.	Fran Harrington