User Guide

NCR XL15 (5915)

Release 1.0

BCC5–0000–5162
Issue C

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Preface

Audience

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

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Safety Requirements

The *NCR XL15* conforms to all applicable legal requirements. To view the compliance statements see the *NCR RealPOS Terminals Safety and Regulatory Statements* (B005-0000-1589).

Caution: The on/off switch is a logic switch only. The AC line voltage primaries are live at all times when the power cord is connected. Therefore, disconnect the AC power cord before opening the unit to install features or service this terminal.

Lithium Battery Warning

Warning: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type as recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

Attention: Il y a danger d'explosion s'il y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du même type ou d'un type recommandé par le constructeur. Mettre au rébut les batteries usagées conformément aux instructions du fabricant.

Battery Disposal (Switzerland)

Refer to Annex 4.10 of SR814.013 for battery disposal.

IT Power System

This product is suitable for connection to an IT power system with a phase-to-phase voltage not exceeding 240 V.

Peripheral Usage

This terminal should only be used with peripheral devices that are certified by the appropriate safety agency for the country of installation (UL, CSA, TUV, VDE) or those which are recommended by NCR Corporation.

Warning: DO NOT connect or disconnect the transaction printer while the terminal is connected to AC power. This can result in system or printer damage.

Warning: DO NOT connect or disconnect any serial peripherals while the terminal is connected to AC power. This can result in system or printer damage.

Grounding Instructions

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. 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. Improper connection of the equipment-grounding conductor can result in a risk of electric shock.

The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor.

If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal. Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if you are in doubt as to whether the product is properly grounded.

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.**

Out of Box Failure (OBF)

If you experience an out of box failure (OBF) during installation or staging related to a missing, wrong or defective unit or item, simply provide NCR with a detailed description of the issue and the item will be replaced free of charge. For assistance with this process send an email to *CustomerSat.Retail@ncr.com* with the following details:

- NCR Sales Order # (Sales Order # are located on the box)
- Date of Product Installation
- Product Model #
- Unit Serial #
- NCR part # of defective/missing/wrong component
- Description of Failure (please be specific. For example: "display will not power on")
- Customer/Requestor's contact name, phone number and/or e-mail address
- Address to ship replacement part(s)

Transport the product n its original packaging to prevent impact damages.

If you do not have access to a computer, you may leave a voice message at: 1-800-528-8658 (USA), or (International) +1-770-623-7400. When leaving a message, please provide a phone number and/or an email address so NCR can contact you if additional details are needed.

Note: Used equipment that experiences a failure does not qualify as an OBF and should go through the NCR warranty process.

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 *Site Preparation* section of this document and the *NCR Workstation and Peripheral AC Wiring Guide* (BST0-2115-53).

For detailed warranty arrangements please consult your contract documents.

Returning Defective Hardware for Service

Use the following procedure to report/return defective hardware.

Call the *NCR Customer Care Center* at 1-800-262-7782 and have the following information available when you place the call.

- Class/Model number of the defective equipment
- Serial Number of the defective equipment
- Equipment location in the store
- Description of the problem, including any system error codes, error condition, or guidance to the area of failure.

The NCR Agent will provide you with a work order number, which serves as your Return Material Authorization (RMA). Please provide the RMA on the outside of the shipping box.

Note: A work order must be opened for each device that is shipped for repair.

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Revision Record

Issue	Date	Remarks
A	Feb 2017	First Issue
B	July 2017	Added 0.5m Display Port Cable (1432-C483-0005) Added 0.5m Powered USB Cable (1432-C477-0005)
C	Aug 2017	Removed Converter Cable (7932-4297-9998) Added Adapters (1432-C790-0001 and 1432-C791-0000)

Chapter 1: Product Overview

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The XL15 display offers flexibility and ultra–thin design that will look great in any retail environment. The XL15 display features bright, high contrast LCD to make it easy to read. This stylish display is available as a 15–inch, projected capacitive (PCAP) or resistive touchscreen, or LED backlight non–touch.

The XL15 display is compatible with any product that has a display port video and a USB interface and can be used as an associate display or rear mounted to a terminal or free standing to display pricing and promotional messages. This is available with an encrypted magnetic stripe reader (MSR) for enhanced security. Whichever option is preferred, these displays are sure to enhance the appearance of the wrap stand or checkout and save valuable counter space.

Base Models

Base Model	Description
5915-1015-9090	XL15, 15" Display, No Touch
5915-1115-9090	XL15, 15" Display, Resistive
5915-1315-9090	XL15, 15" Display, PCAP

Features and Benefits

Features		Description
Touch Displays	15" Resistive	• Single Touch Interface • Standard 4:3 Aspect Ratio • 1024x768 XGA resolution • 350 NIT LED–Backlit LCD • Narrow Bezel Design • Display Port • Software OSD Support
	15" Projected Capacitive (PCap)	• Zero Bezel – Alll Glass Front • 10–Point Multi–Touch Interface • Standard 4:3 Aspect Ratio • 1024x768, XGA Resolution • 350 NIT LED–Backlit LCD • Display Port • Software OSD Support
Non–Touch Displays	15" LED Backlight	• Zero Bezel – All Glass Front • 350 NIT LED LCD • Standard 4:3 Aspect Ratio • 1024x768, XGA Resolution • Display Port • Software OSD Support
Peripherals	MSR, NCR Encrypted USB 3-Track	Provides a 3-Track, Encrypting MSR.
	Filler Plate, Right Side	Provides a blank plate when an MSR is not installed.
	Filler Plate, Left Side	Provides a blank plate when a Port B feature is not installed.

Optional Features

Optional Features			Description
Power Cord	**1416–C325–0030**	US Power Cord	Provides a 3m (118.11 in.) power cord for an external power supply.
	1416–C323–0030	International Power Cord	
	1416–C321–0030	UK Power Cord	
	1416–C322–0030	Australia Power Cord	
	1416–C391–0030	China Power Cord	
	1416–C320–0030	SEV Power Cord	
	1416–C366–0030	India Power Cord	
	1416–C009–0018	Argentina Power Cord	

Optional Features			Description
Display Port Cables	**1432–C483–0005** **Note:** Current cable will be replaced with **1432–C614–0005** in future release.	0.5 m (19.69 in.) Display Port Cable	Provides a display port cable used for integration with XR7 terminal. To be used only on displays attached directly to the XR7 POS table top stand.
	1432–C483–0008 **Note:** Current cable will be replaced with **1432–C614–0008** in future release.	0.8 m (31.50 in.) Display Port Cable	Provides a display port cable used for integration with XR7 terminal using the rear display arm of the POS table top stand.
	1432–C483–0013 **Note:** Current cable will be replaced with **1432–C614–0013** in future release.	1.3m (51.18 in.) Display Port Cable	Provides a display port cable.
	1432–C483–0040 **Note:** Current cable will be replaced with **1432–C614–0040** in future release.	4m (157.48 in.) Dislay Port Cable	Provides a display port cable.

Optional Features			Description
External Power Cables	**5915–F120**	Universal Switching MEPS Power Supply - 12V, 2.5 A output for Touch (ROHS)	Provides a 12VDC Power Adapter, 40W, DOE VI, 4 pin Mini-DIN connector.
	1432–C480–0013 **Note:** Current cable will be replaced with **1432–C591–0013** in future release.	1.3m USB Type A with power connector	Provides a 1.3m (51.18 in.) USB cable with latching 1x8 connector on the display end, a USB connector on the terminal end, and a barrel connector in the middle for an external power supply. Requires both an external power brick and a local power cord.
	1432–C479–0040 **Note:** Current cable will be replaced with **1432–C591–0040** in future release.	4m USB Type A with power connector	Provides a 4m (157.48 in.) USB cable with latching 1x8 connector on the display end, a USB connector on the terminal end, and a barrel connector in the middle for an external power supply. Requires both an external power brick and a local power cord.

Optional Features			Description
Powered USB Cables	**1432–C477–0005**	0.5m 12V Powered USB	Provides a 0.5m (19.68 in.) 12V USB power cable with latching 1x8 connector on the display end and a latching 12V USB + Power connector on the terminal end. Provides both power and touch communication.
	1432–C477–0008	0.8m 12V Powered USB	Provides a 0.8m (31.50 in.) 12V USB power cable with latching 1x8 connector on the display end and a latching 12V USB + Power connector on the terminal end. Provides both power and touch communication.
	1432–C477–0013	1.3m 12V Powered USB	Provides a 1.3m (51.18 in.) 12V USB power cable with latching 1x8 connector on the display end and a latching 12V USB + Power connector on the terminal end. Provides both power and touch communication.
	1432–C478–0040	4m 12V Powered USB	Provides a 4m (157.48 in.) 12V USB power cable with latching 1x8 connector on the display end and a latching 12V USB + Power connector on the terminal end. Provides both power and touch communication.

Optional Features			Description
Audio Cable	**1432–C593–0013**	1.3m with 3.5mm plug Male	Provides a 1.3m (51.18 in.) black cable for use on terminals with a line–out or audio port.
	1432–C593–0040	4m with 3.5mm plug Male	Provides a 4m (157.48 in.) black cable for use on terminals with a line–out or audio port.
Miscellaneous Adapters	**1432–C790–0001**	Cable, HDMI (Terminal) to DisplayPort (Display) active adapter	Allows connection of a display with DisplayPort to a terminal with an HDMI connection. Must also order the DisplayPort cable. Powered by a USB port on terminal.
	1432–C791–0000	Adapter, passive, DVI-D to HDMI	Allows connection of a display with DisplayPort to a terminal with an DVI connection. Must also order the DisplayPort cable and the 1432-C790-0001 adapter.

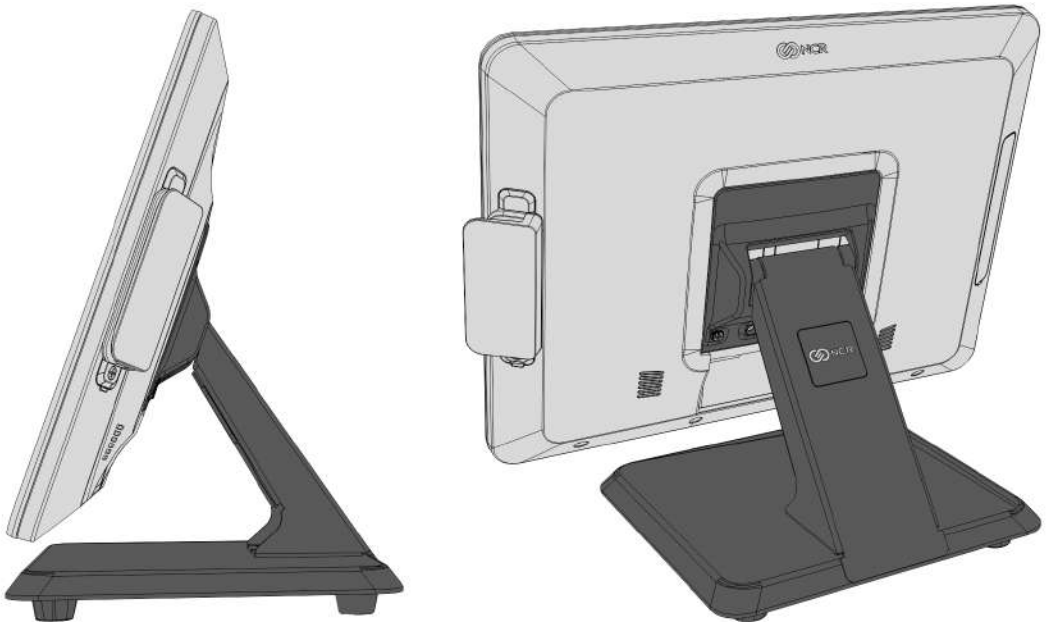
Specifications

Feature	Specifications
Bezel	Zero bezel, flat screen (PCAP)
Touch – PCAP	Projected Capacitive (10 point multi-touch)
Touch – Resistive	5 Wire Resistive
Touchscreen Life Expectancy	• PCAP – Unlimited • Resistive – 50 million at one point
Touch Driver	AUO
Touch Interface	USB
Calibration	Only resistive touchscreen requires calibration.
Surface hardness	• PCAP – No Known Degradation • Resistive – 4H
Touch Response Time	• PCAP – 10ms • Resistive – 50ms
Video Interface	Display port
Backlight	LED
Open USB Ports	0
LCD Luminance (cd/m2)	350
Contrast Ratio	800:1
Native Resolution	XGA (1024x768)
Additional Resolutions Supported	• VGA (640x480) • SVGA (800x600)
User Adjustable OSD Controls	Allows for brightness adjustment through software OSD.
Viewing Angle	160H / 150V
Display Response Time	<8ms (typ)
Audio	Single unamplified speaker; requires amplification from source (terminal).
Power	1x8 latching 12V USB from POS or external power supply

Feature	Specifications
Power consumption	• 7.5w (Typical) • 3.3w (Standby)
External USB Connectivity	None
MSR Option	NCR Encrypted 3-Track
Biometrics	None
Camera	None
Physical Mounting Interface	VESA 75 mm & NCR 100 mm
Color	Black
LED Life **(hours to ½ brightness of backlight)**	50,000 hours
Retail Hardened	Moisture/Dust Sealed display, Software OSD, Latching Cables
Certifications	TUV/UL/CU/NOM/KC/CCC
Display Area	304.128(H) x 228.096(V)
Operating Temperature	5° to 40°C
Operating Humidity	10% to 90%
Dimensions **(no stand/ no MSR) (w x d x h)**	380mm (14.96”) x 44mm (1.73”) x 304mm (11.97”)
Weight	3.4kg (7.5 lbs)

Display Mounts

XL–Series Stand (5915–F033, 5915–K033)



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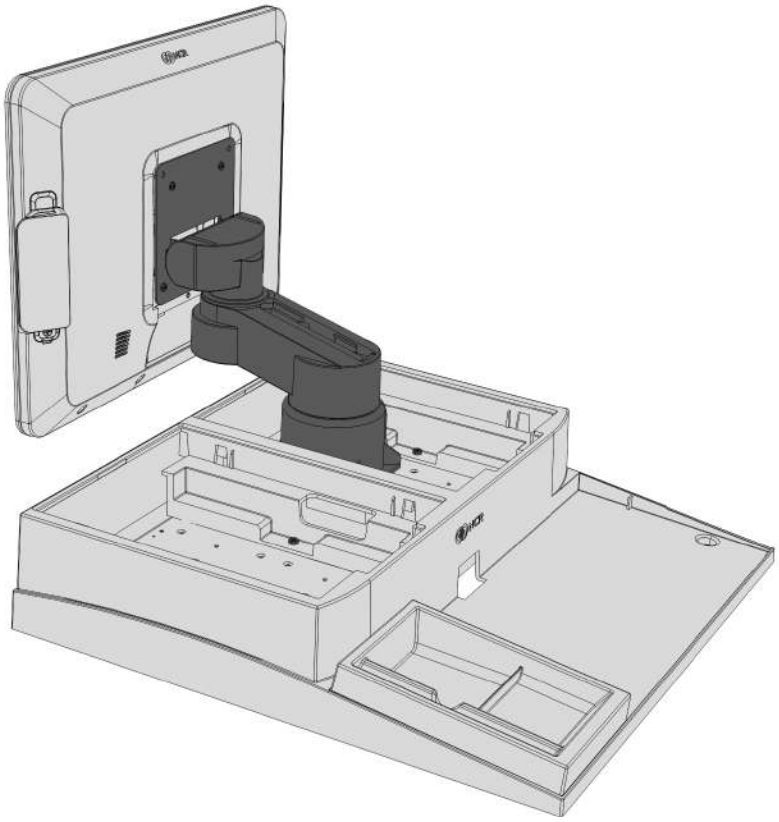
Integration Tray Mount (5968–K024)



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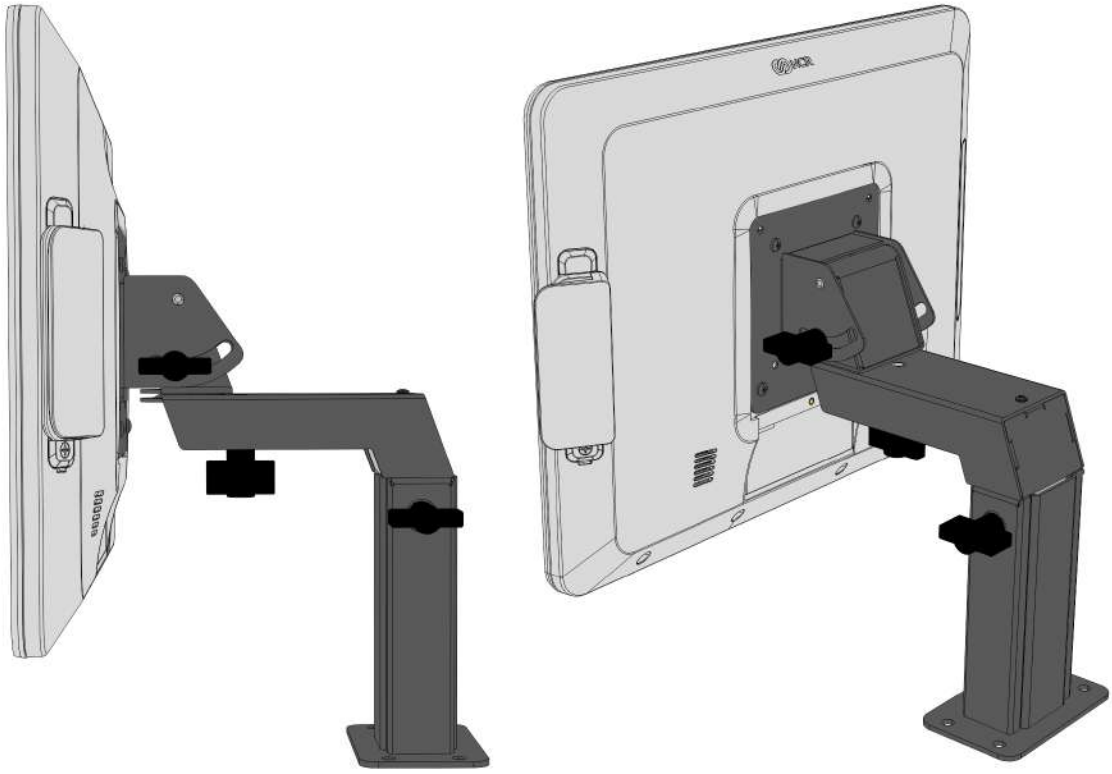
Checkstand Mount (5968–K039)



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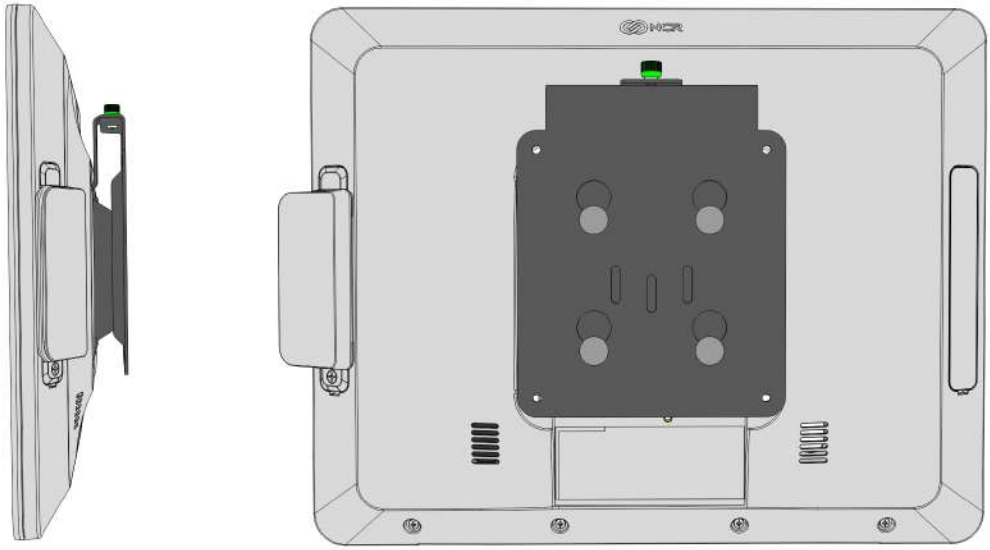
Wall Mount (7702–K320)



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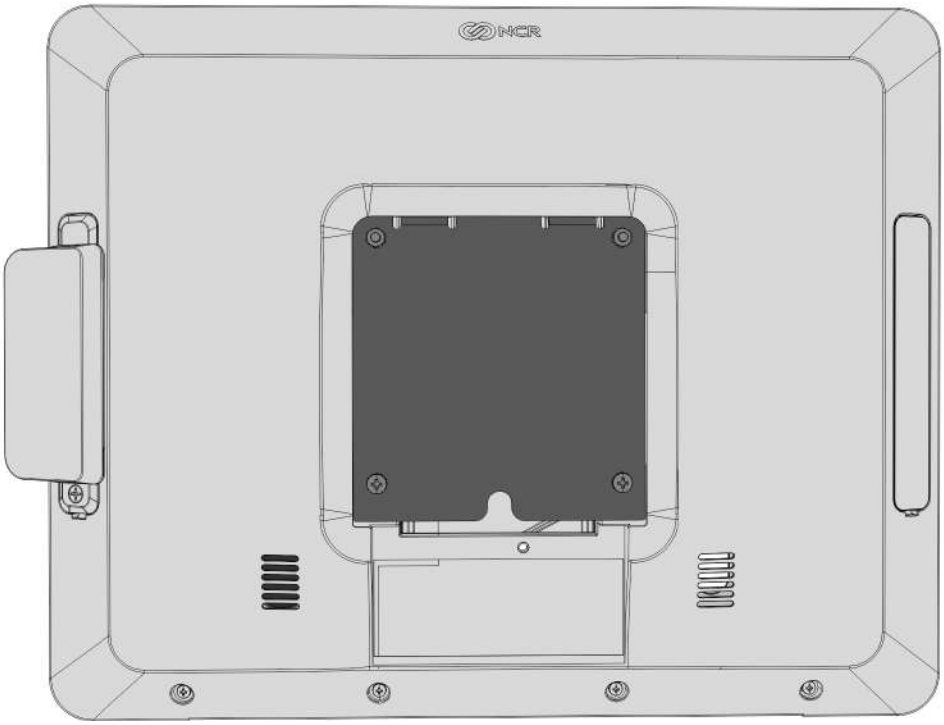
Third Party Mounts

VESA Adapter (5915–K320)



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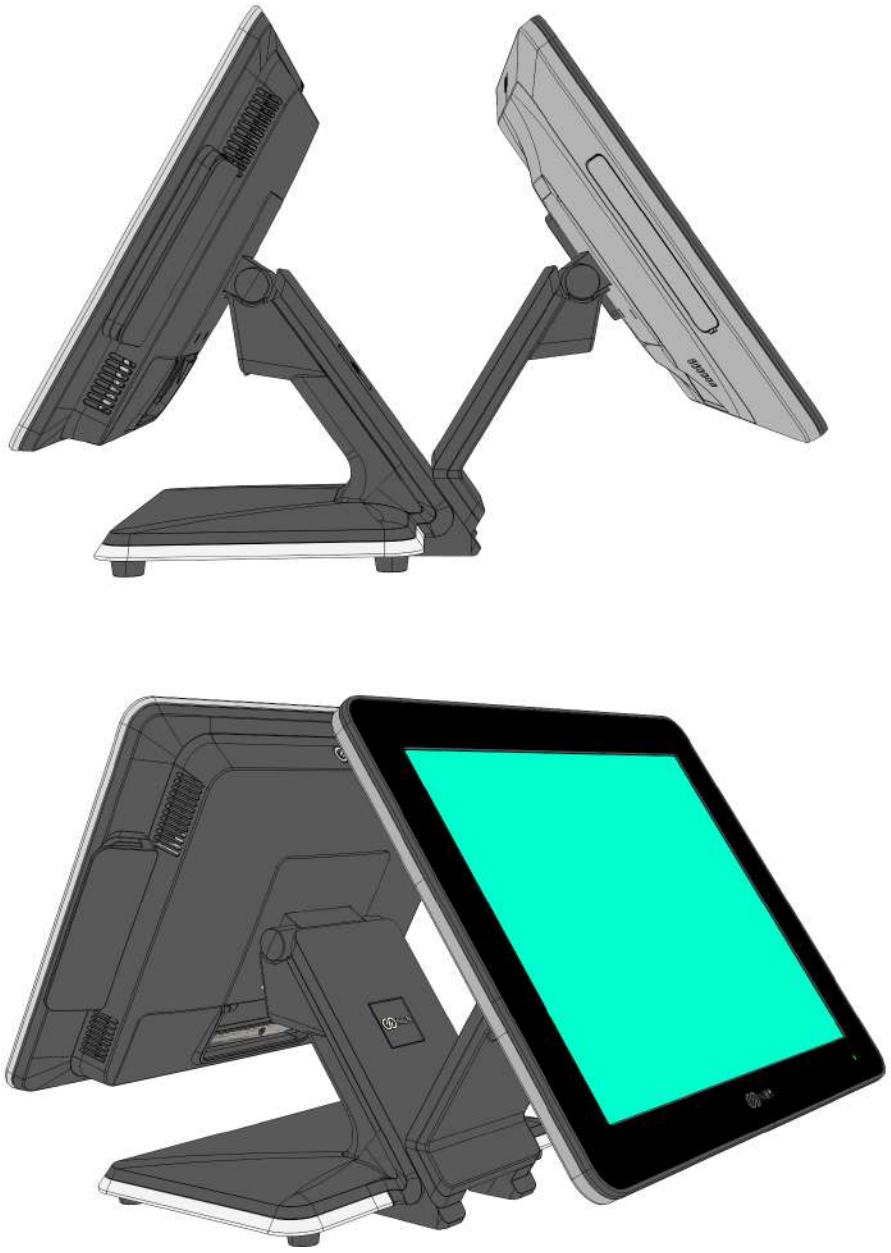
Customer Display (7702–K453)



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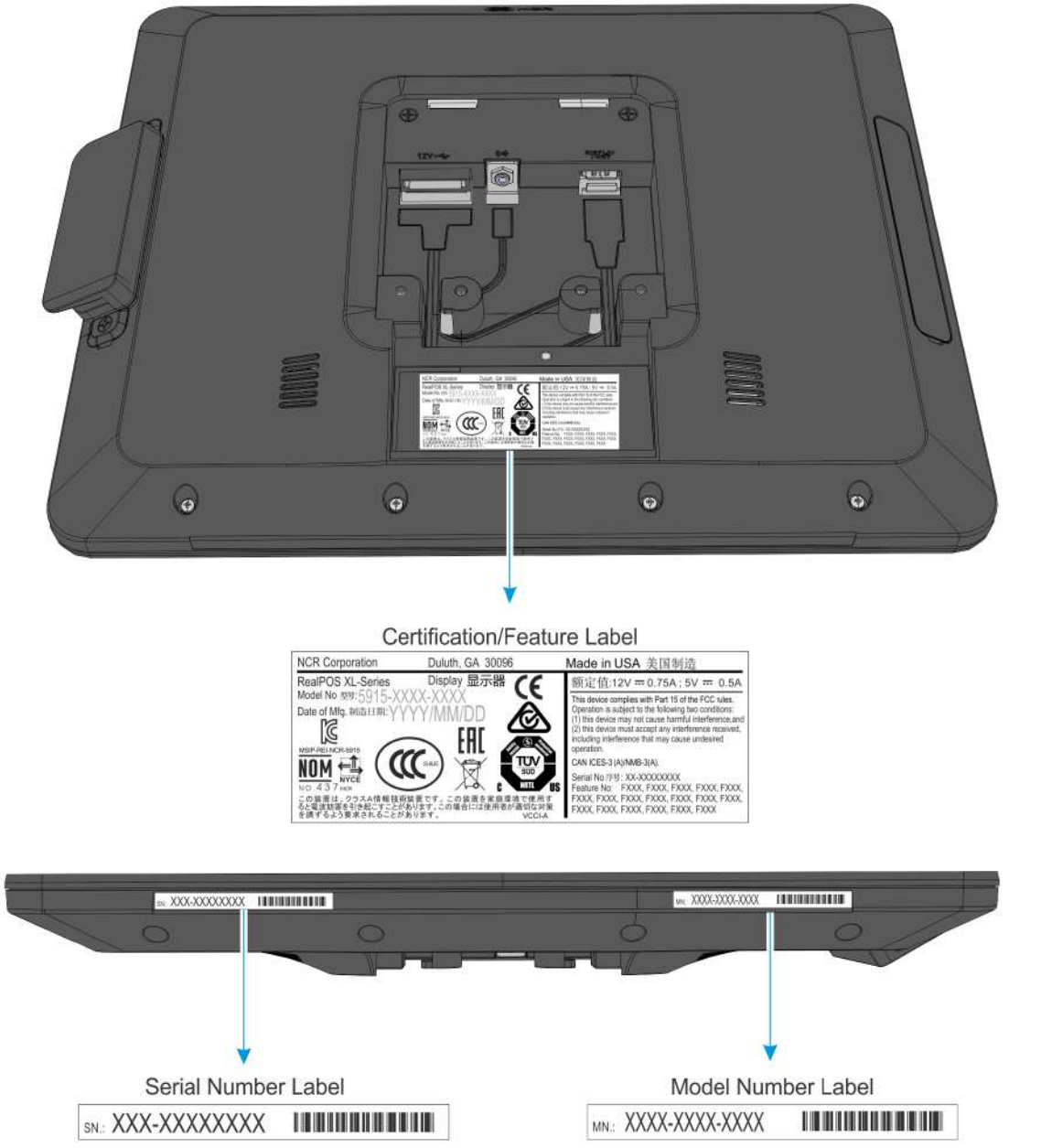
Front Panel Power LED

Color	Description
Off	System OFF or No Power, No Video Signal
Green	System ON
Red	System Sleep

Label Locations



Chapter 2: Hardware Installation

Installation Restrictions

Before installing the NCR XL15 (5915) Display, read and follow the guidelines in the XL15 POS Site Preparation Guide and the NCR Workstation and Peripheral AC Wiring Guide (BST0-2115-53).

- Install the display near an electrical outlet that is easily accessible. Use the power cord as a power disconnect device.
- Do not permit any object to rest on the power cord. Do not locate the display where the power cord can be walked on.
- Use a grounding strap or touch a grounded metal object to discharge any static electricity from your body before servicing the display.

Warning: This unit contains hazardous voltages and should only be serviced by qualified service personnel.

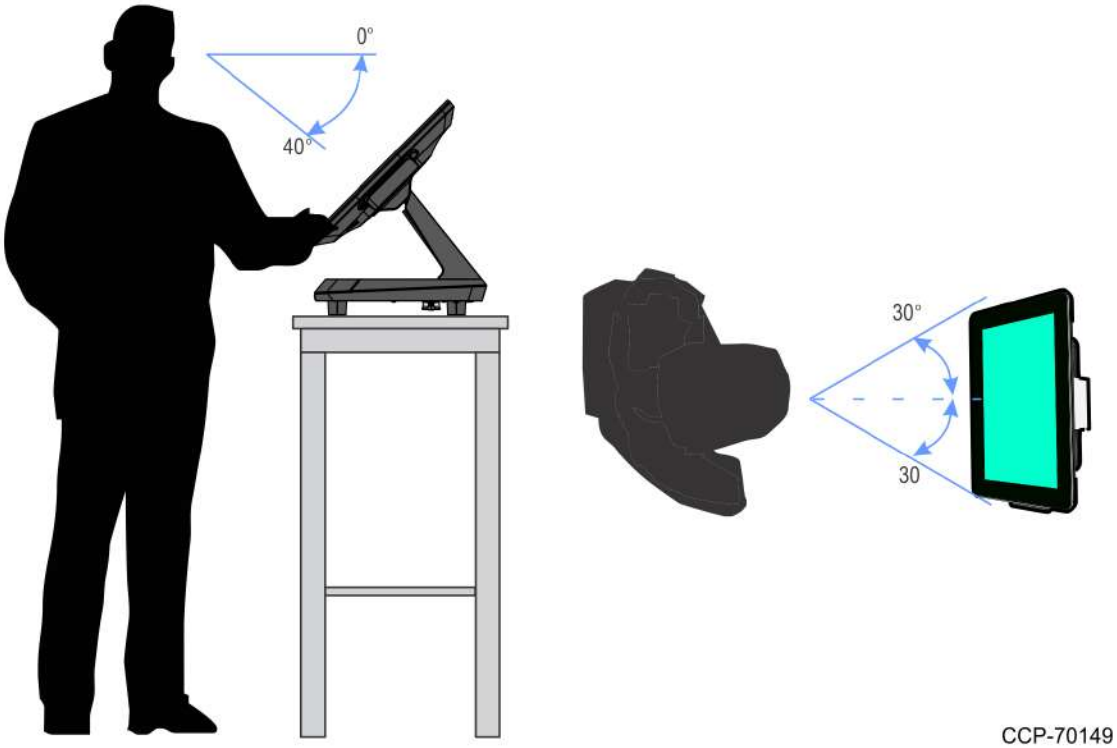
Caution: This device should only be powered by a power supply source which meets Safety Extra Low Voltage (SELV) and LPS (Limited Power Source) requirements per UL1950, IEC 950, and EN 60 950. The power source must be certified by the appropriate safety agency for the country of installation.

Caution: Use a grounding strap when installing this feature.

Ergonomic Workplace

The NCR XL15 has a high brightness LCD, please observe the following when considering the terminal workplace.

- Avoid direct glaring and reflective glaring light. Locate the terminal in a controlled luminance surrounding. When installed next to windows orient the terminal so it does not reflect the outside light.
- If possible, avoid reflective glaring caused by electric light sources.
- Position the terminal for ideal viewing angles.



Installing the Display

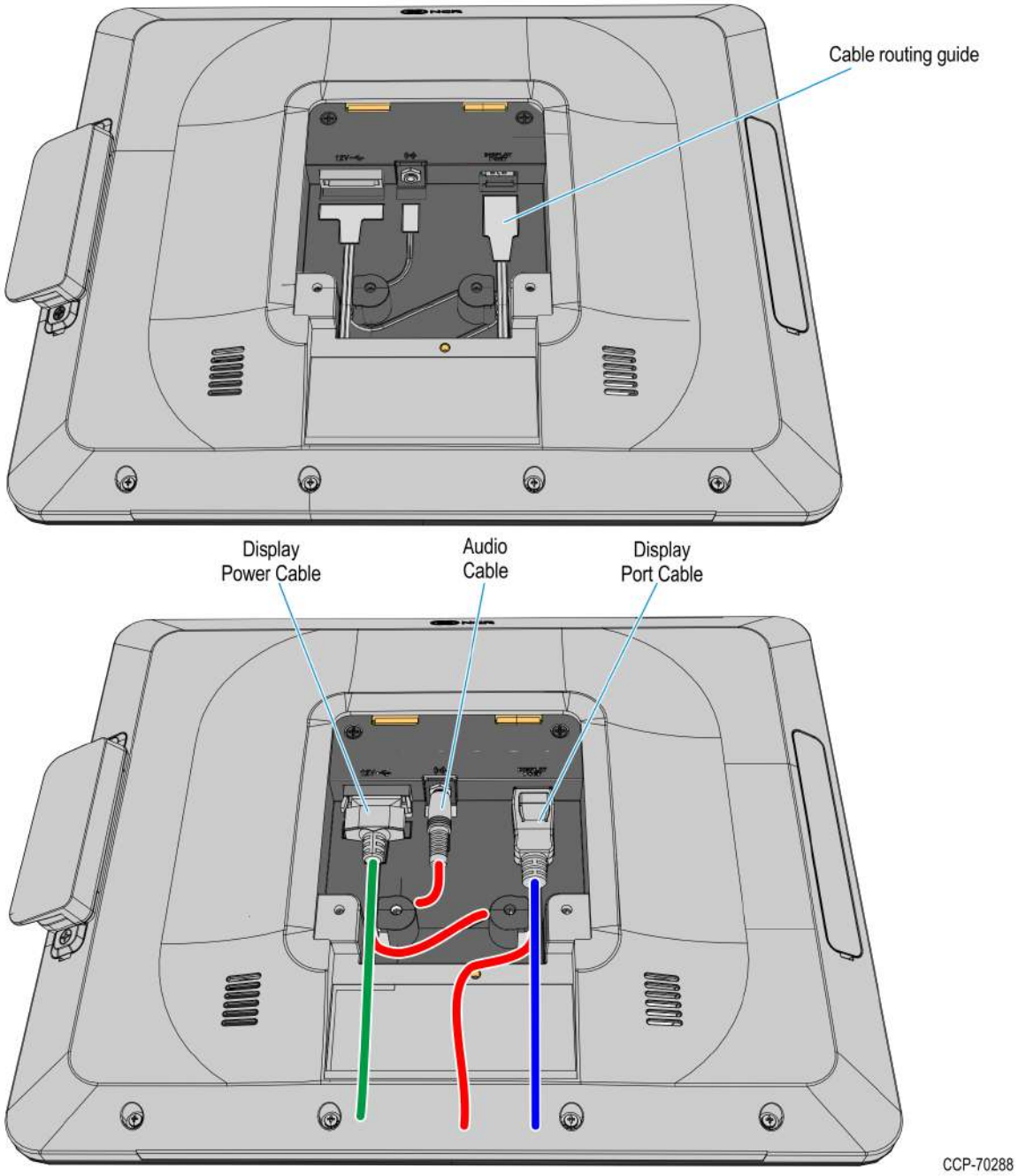
The XL15 Display can be mounted using a variety of mounts:

- XL–Series Stand (5915–K033)
- Wall Mount (7702–K320)
- Integration Tray Mount (5968–K024)
- Checkstand Mount (5968–K039)
- Third–Party VESA Mounts

This chapter explains how to perform an "Out–of–box" installation of the 5915 display mounted on the XL–Series Stand and how to connect cables to a POS terminal. For installation procedures for the other mounting options see their associated kit instructions.

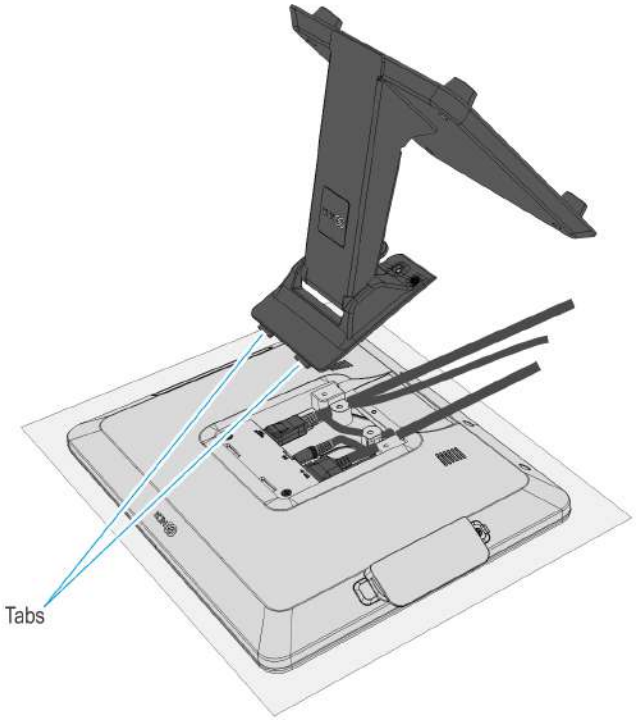
XL-Series Stand

1. Connect the Display cables and route them according to the imprinted routing guide.
   a. Connect and route the Audio Cable first. Route the cable looping around the cable strain relief posts as shown.
   b. Connect the Display Power Cable and route straight down over the Audio Cable.
   c. Connect the Display Port Cable and route straight down over the Audio Cable.



2. Mount the XL–Series Stand on the Display.

a. Insert the VESA tabs into the slots in the rear of the Display and then slowly rotate the stand assembly downward.



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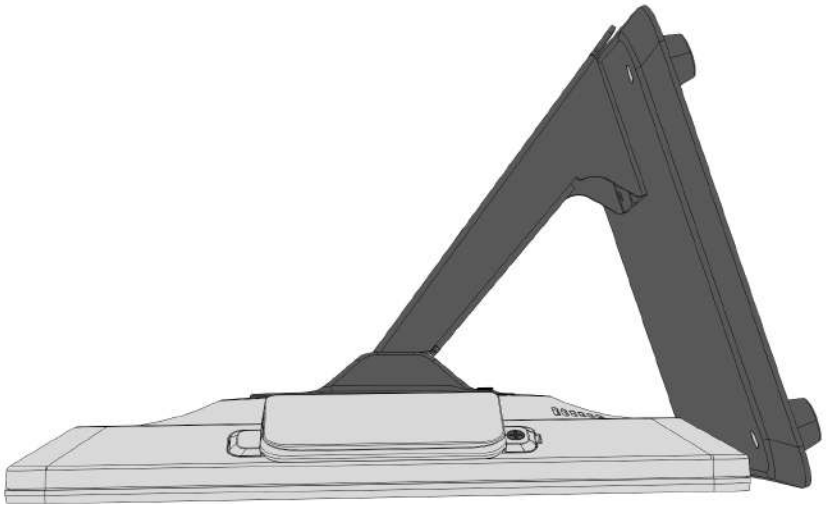
b. Rotate the Stand to the orientation shown below.



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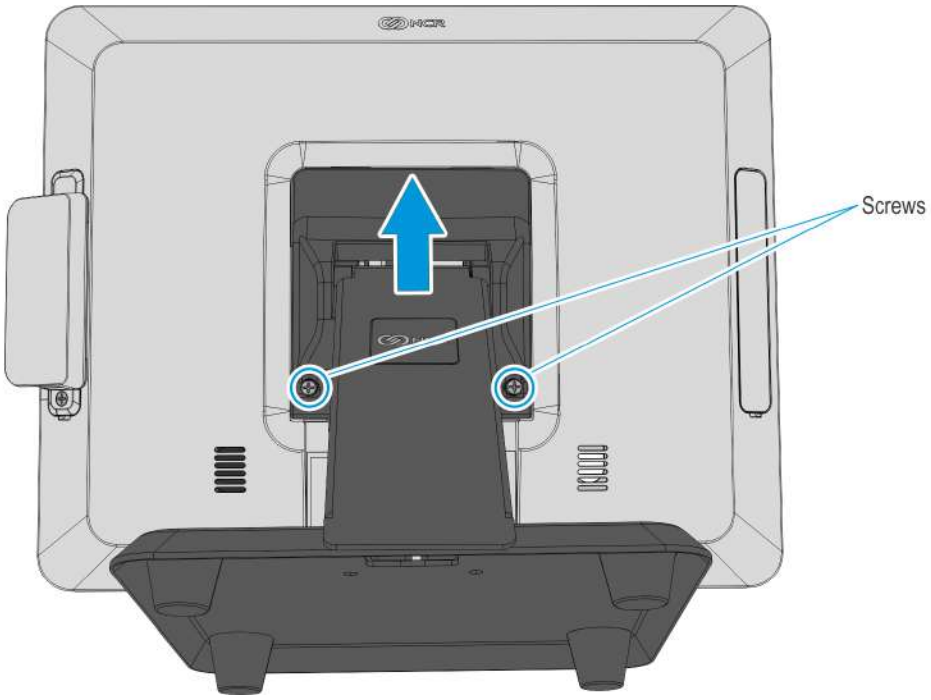
3. Gently push the Stand assembly forward to properly align its mounting holes with the display. Secure the Stand with screws (2).



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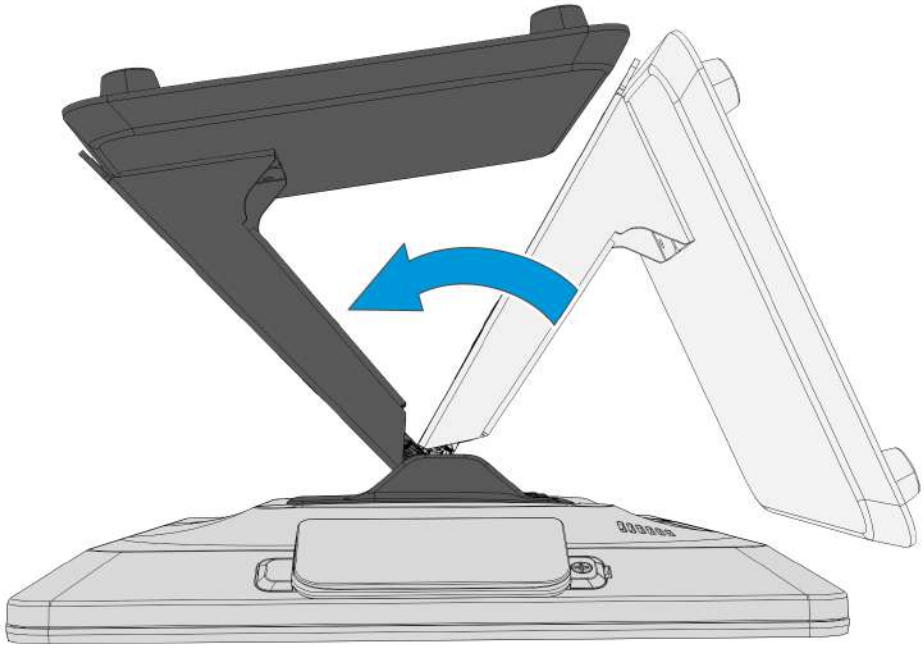
4. Pivot the display towards the back as shown.



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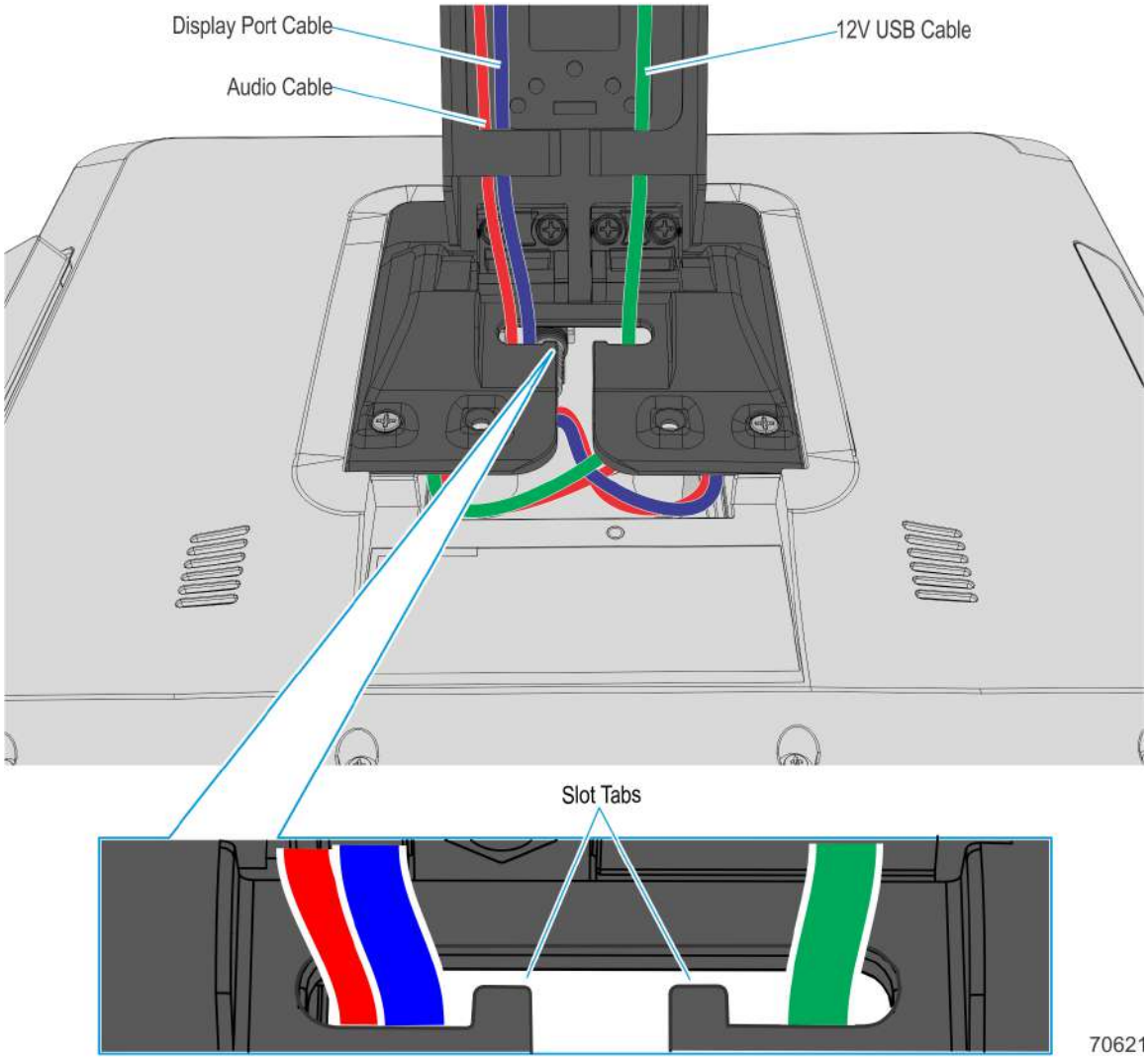
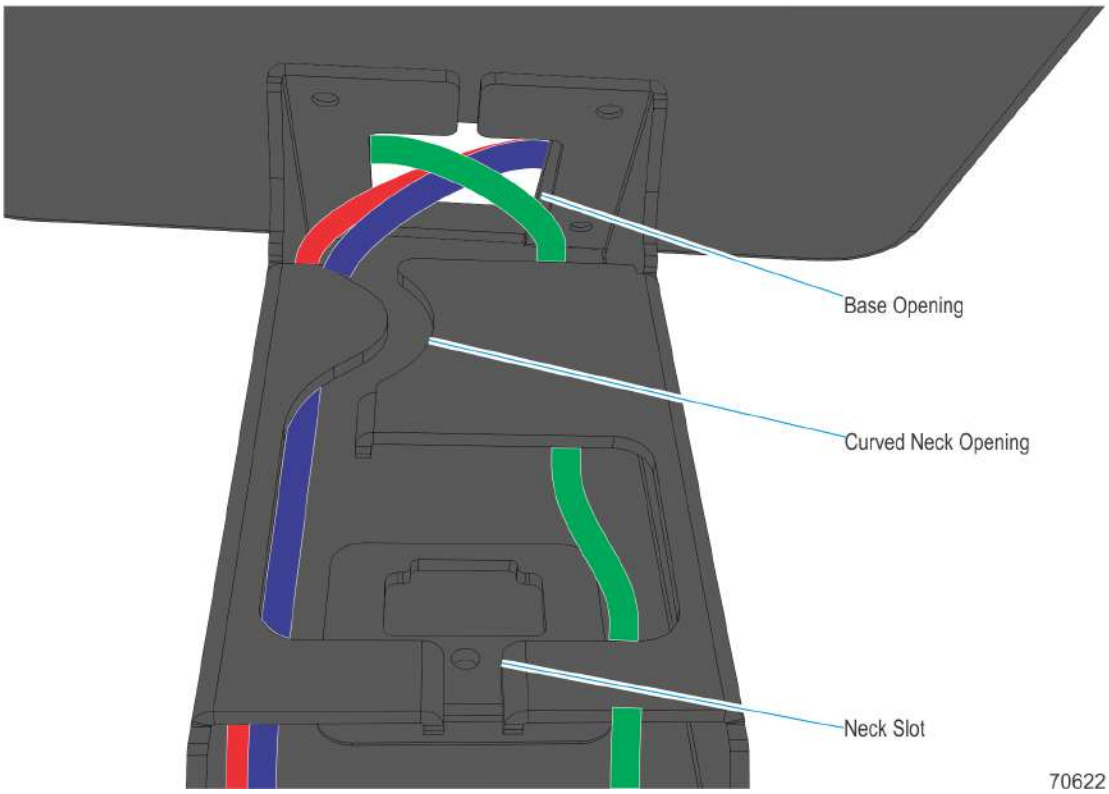
5. Route and secure the Display cables to the Mounting Bracket then through the Stand and then out the base opening.
   a. Route the Audio Cable first to the left slot and make sure it is behind the tab in the slot.
   b. Route the Display Port Cable to the left slot and make sure it is behind the tab in the slot.
   c. Route the USB Cable to the right slot and make sure it is behind the tab in the slot.



d. Route the cables through the neck slot then push cables through the curved neck opening and then out the base opening. Align the Audio Cable and Display Port Cable to the left side and the 12V USB Cable to the right side.



e. Pull cables such that most of the cables have been fed through the base opening.

6. Position the display and stand assembly in an upright position.

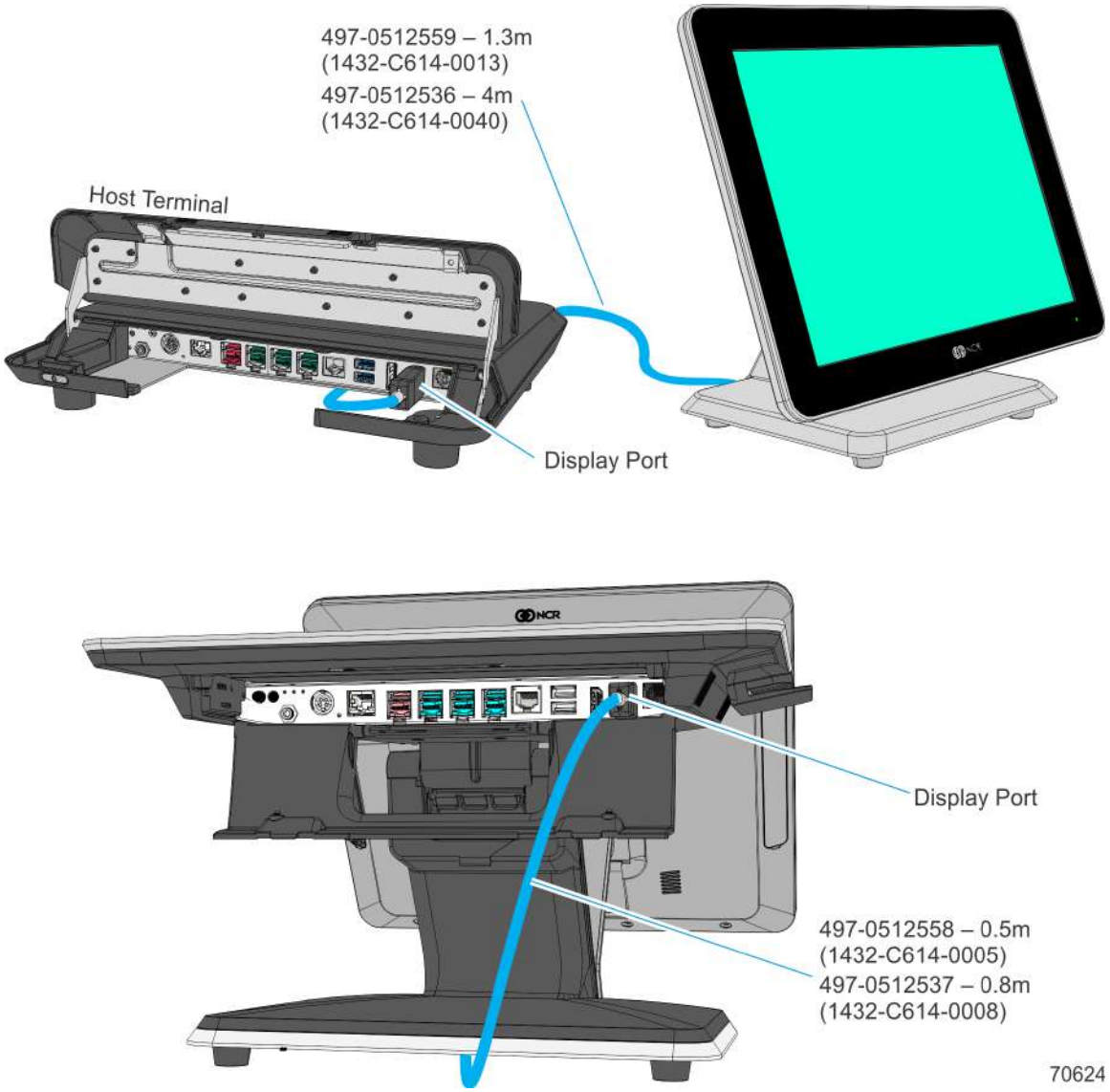
Connecting to a POS Terminal

The following illustrations show the host terminal cable connections. The required cables vary depending on the available video connectors on the host terminal.

Display Port Cables

The Display Port Cable provides video to the display.

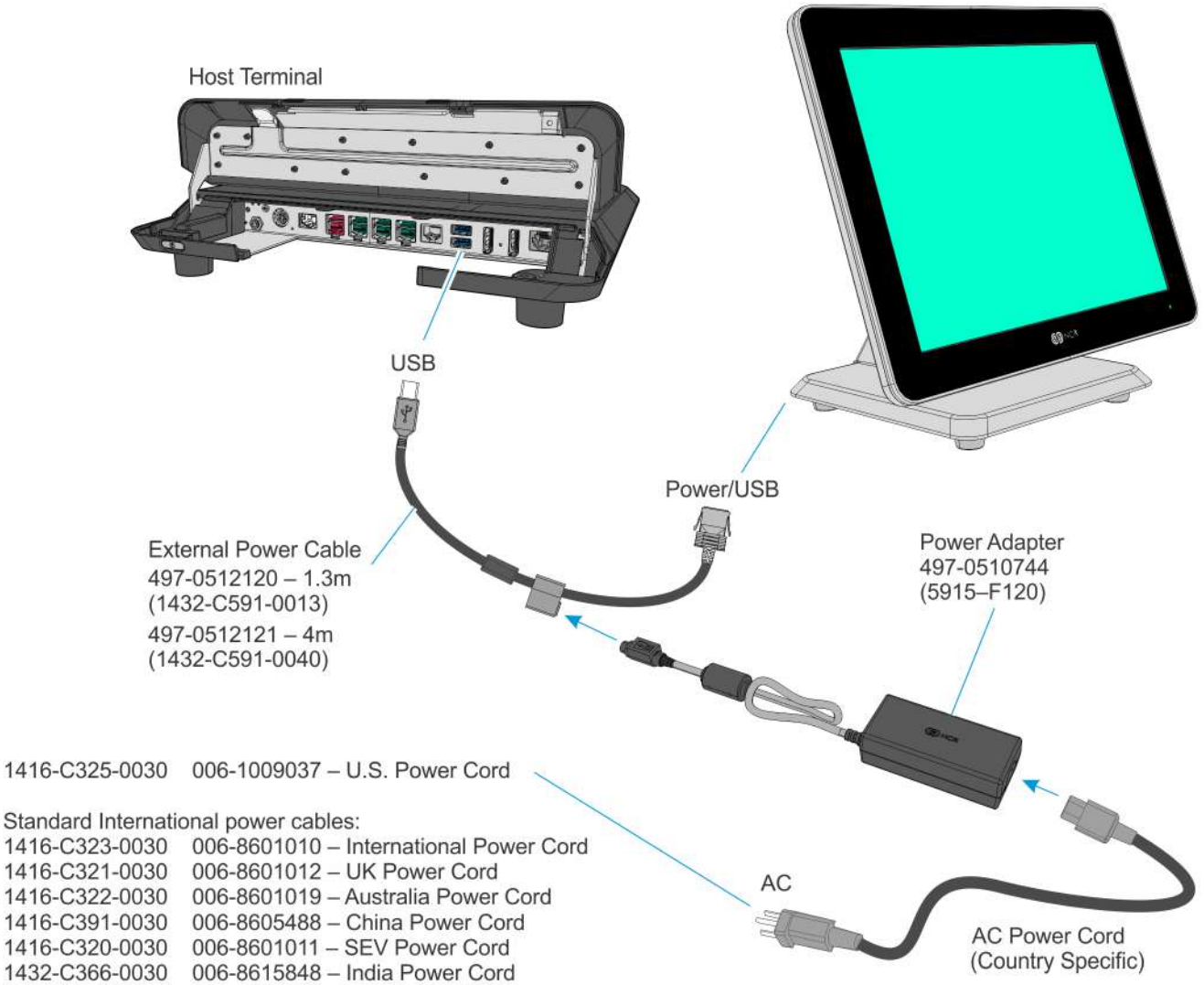
- Connect the Display Port Cable to the Display Port connectors on both the display and the terminal.



External Power Cables

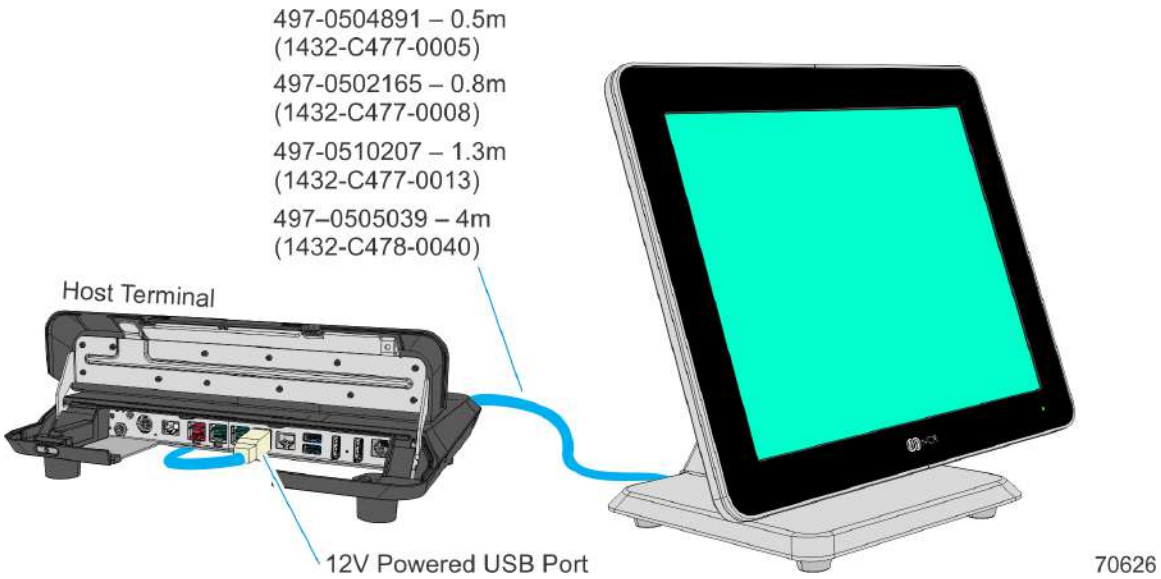
An External Power Cable provides both USB and power to the display when the host terminal does not have a USB 12V port available, but does have an available standard USB port.

1. Connect the External Power Cable to the display Power connector.
2. Connect the other end of the External Power Cable to the USB connector on the host terminal.
3. Connect the Power Adapter DC Cable to the External Power Cable (middle of cable).
4. Connect the AC Power Cord to the Power Adapter and an AC outlet.



Powered USB Cables

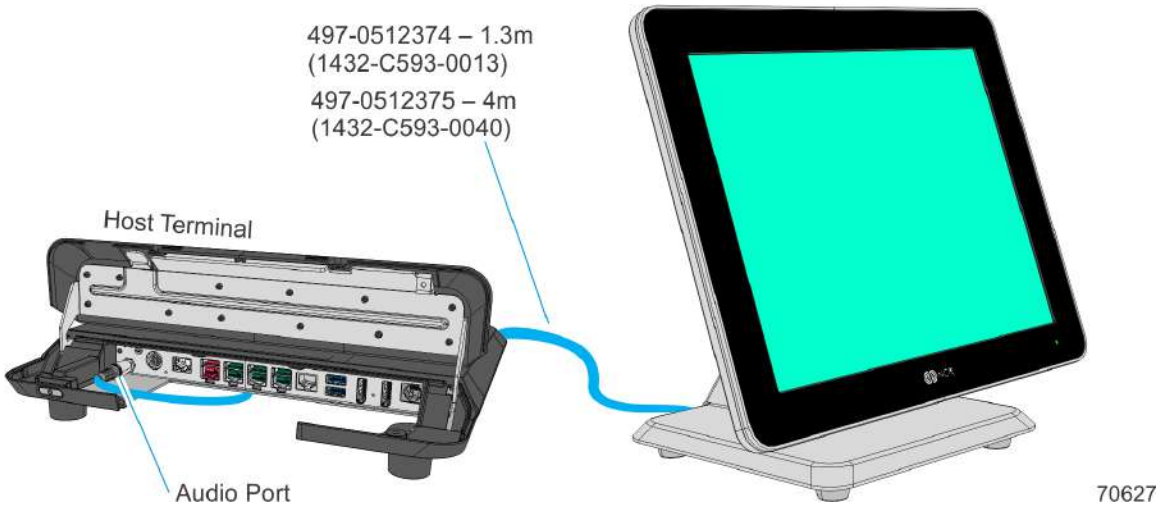
The Powered USB Cable provides both USB and power to the display.



Audio Cable

The Audio Cable provides audio to the display.

- Connect the Audio cable to the Audio Port connectors on both the display and the terminal.



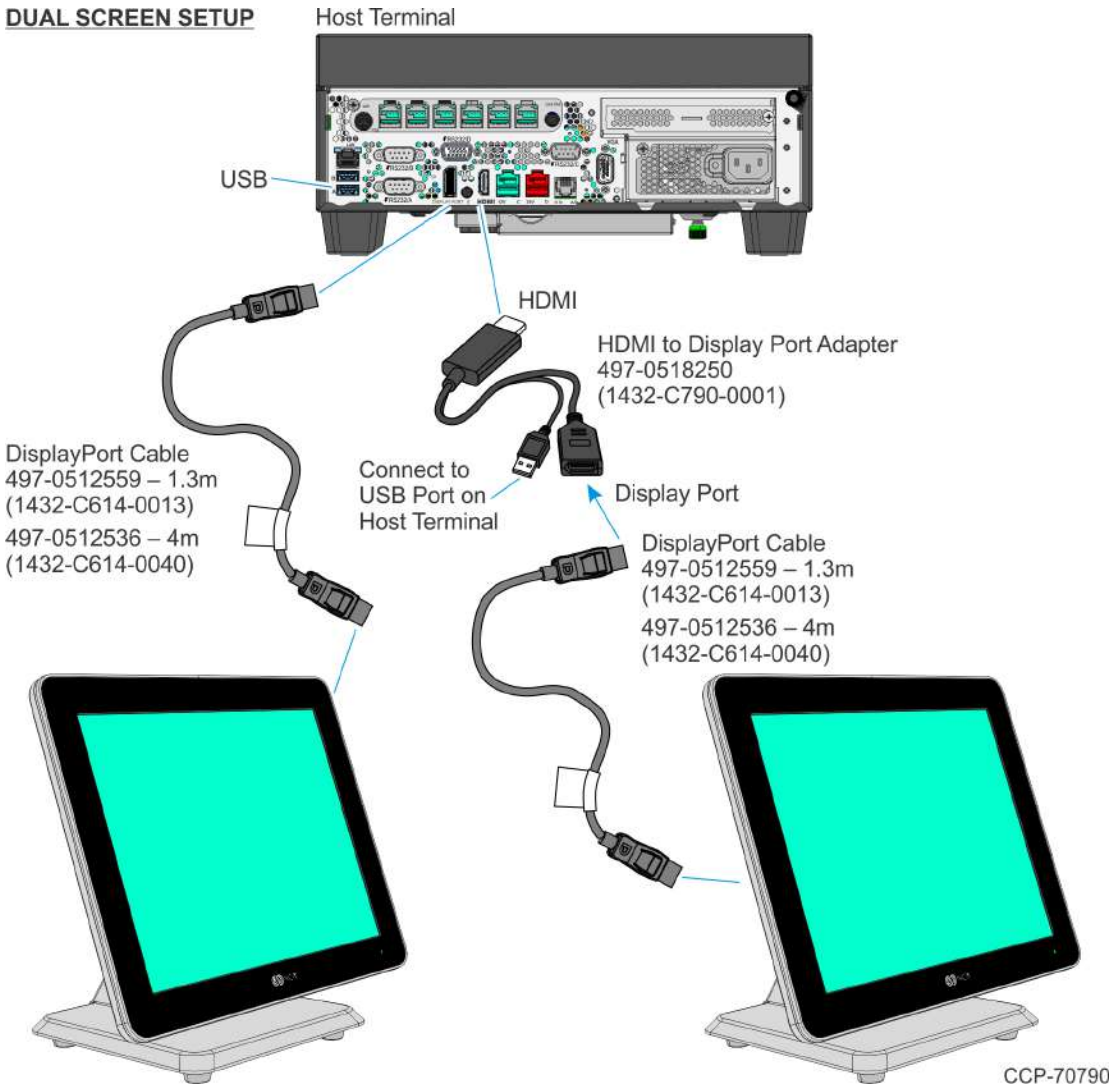
Adapters

HDMI to Display Port Adapter

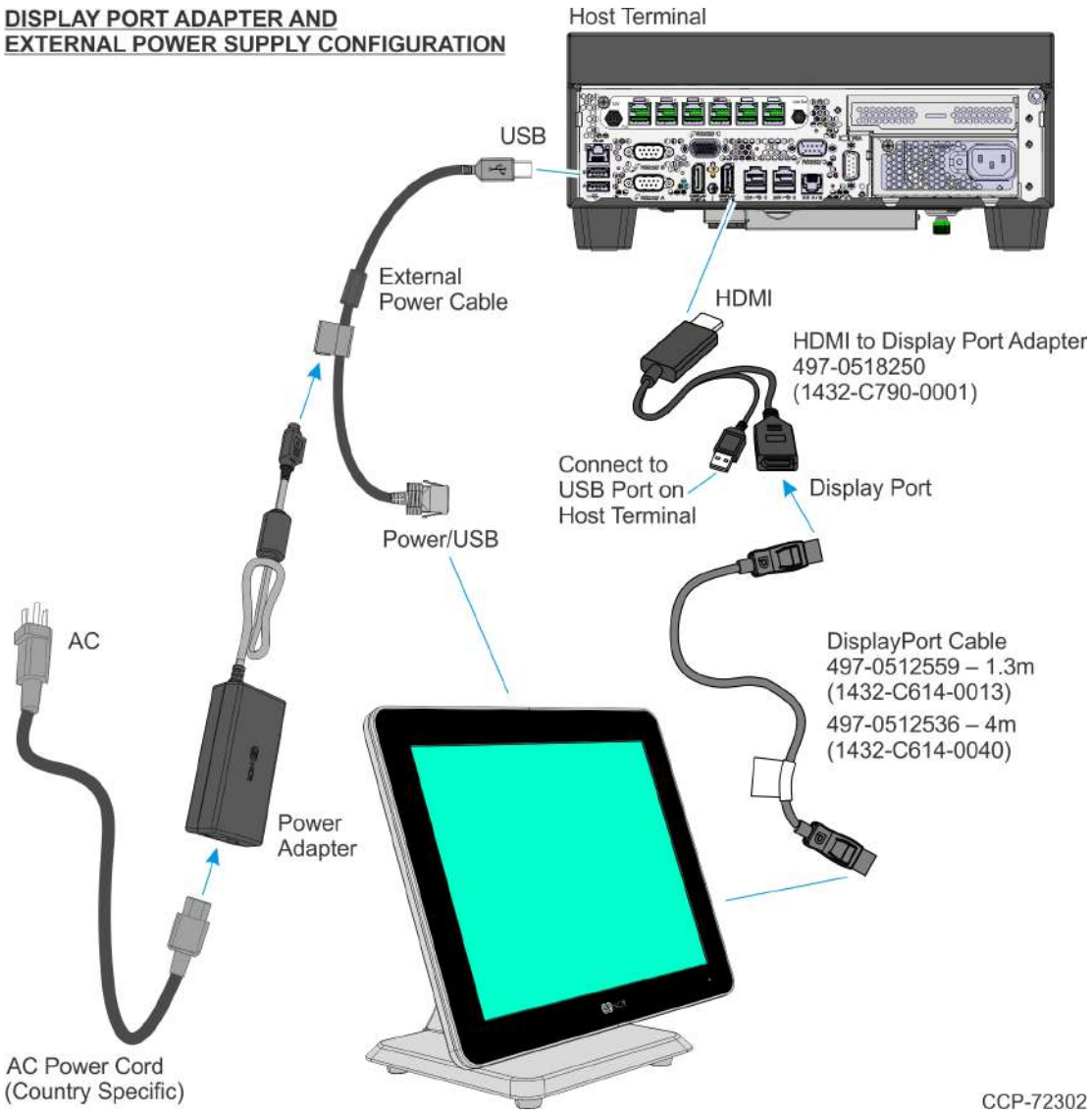
The HDMI to Display Port Adapter allows connection of a display with Display Port to a host terminal with an HDMI connection. The adapter must be used with a Display Port Cable.

1. Connect the Display Port Cable to the display.
2. Connect the other end of the Display Port Cable to the Display Port connector of the HDMI to Display Port Adapter.
3. Connect the HDMI connector of the Adapter to the HDMI port of the host terminal.
4. Connect the USB connector of the Adapter to any available USB port on the host terminal.

Note: The HDMI to Display Port Adapter includes a USB extension cable in case the USB cable of the Adapter is not long enough to reach the desired USB port.



DISPLAY PORT ADAPTER AND EXTERNAL POWER SUPPLY CONFIGURATION



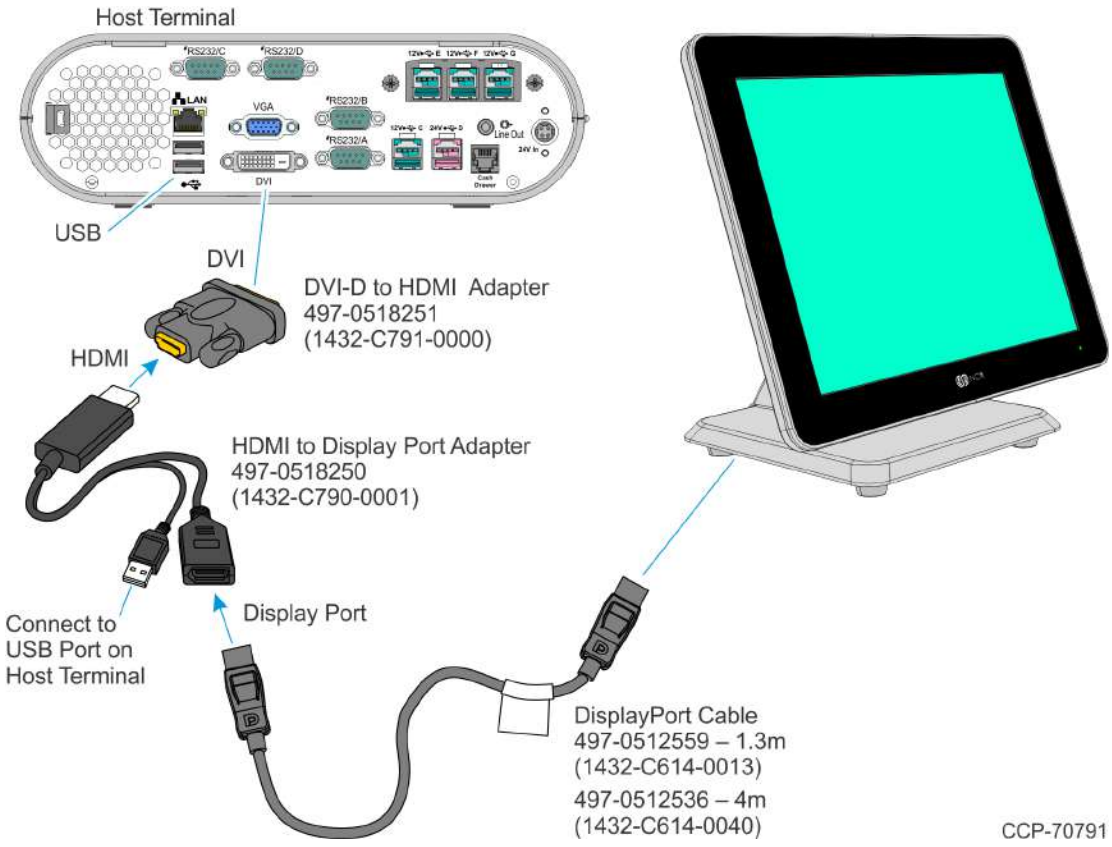
DVI-D to HDMI Adapter

The DVI-D to HDMI Adapter allows connection of a display with Display Port to a host terminal with a DVI connection. The adapter must be used with a Display Port Cable and an HDMI to Display Port Adapter.

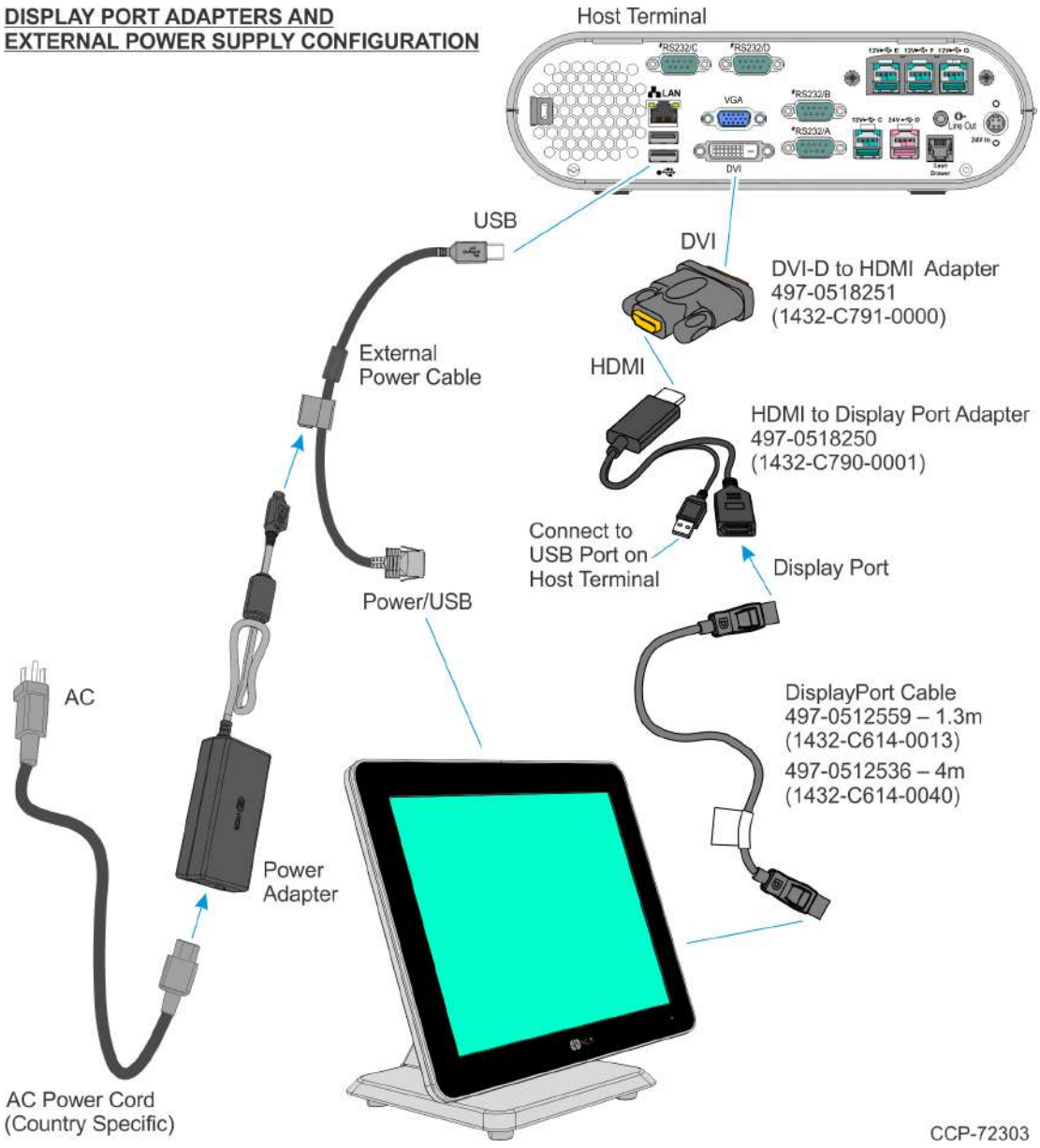
1. Connect the Display Port Cable to the display.
2. Connect the other end of the Display Port Cable to the Display Port connector of the HDMI to Display Port Adapter.
3. Connect the HDMI connector of the HDMI to Display Port Adapter to the HDMI end of the DVI-D to HDMI Adapter.
4. Connect the DVI end of the DVI-D to HDMI Adapter to the DVI port of the host terminal.
5. Connect the USB connector of the Adapter to any available USB port on the host terminal.

Note: The HDMI to Display Port Adapter includes a USB extension cable in case the USB cable of the Adapter is not long enough to reach the desired USB port.

HOST TERMINAL WITH A DVI CONNECTION



DISPLAY PORT ADAPTERS AND EXTERNAL POWER SUPPLY CONFIGURATION



Chapter 3: Operation and Cleaning

Touchscreens

There are two types of touchscreens for the NCR XL15 (5915):

- Projected Capacitive (PCap) Touchscreen
- Resistive Touchscreen

Projected Capacitive Touchscreen

PCap touchscreens have all the benefits of normal capacitive touchscreens and more.

- Fast processing of tough information
- High sensitivity (use conductive pencils, with hands, and with thin gloves.
- Multi-touch capability (10-finger)
- High resolution
- Improved legibility and display brightness due to optimal light transmission

In addition, the technology of PCap touchscreens is characterized by significantly higher robustness and stability than common capacitive touchscreens because the active touch surface is located on the back side of the touchscreen. instead of the front side. Therefore, the active surface is not directly touched and does not wear off by normal use.

Since most surface contamination do not cause interference to the touchscreen the NCR XL15 (5915) can be used in public or severe environmental conditions.

Using the PCap Touchscreen

The PCap touchscreen responds to the lightest touches. Touching with a single finger resembles the left mouse button. Two fingers are used to zoom IN (fingers brought together) or zoom OUT (fingers pulled apart). Circular motion can be used to rotate an element on the screen. This function must be supported by either the Operating System or the application.

Resistive Touchscreen

The resistive TFT touchscreen is constructed of a hard-coated polyester top sheet that is overlaid on a conductive-coated glass layer. Voltage is applied to the top sheet. As a user touches the screen, the top sheet compresses and comes into contact with the glass layer, causing current to flow to the four corners in proportion to the distance from the edge. This controller then calculates the position of the finger, based on the current flow. Because the controller derives both the "X" and "Y" touch coordinates from the stable glass layer, the accuracy and operation of the touchscreen is unaffected by any damage that may have occurred to the top sheet.

Using the Resistive Touchscreen

The resistive touchscreen functions as traditional single-touch screens.

Touchscreen Cleaning Procedures

1. Using a soft cloth dampened with isopropyl alcohol or a mild non-abrasive soap & water solution, gently wipe the touchscreen clean.
2. Wipe the screen and edges dry.
3. Make sure the glass and screen edges dry completely before using the unit.
4. Do not use sharp objects to clean around the edges of the touchscreen

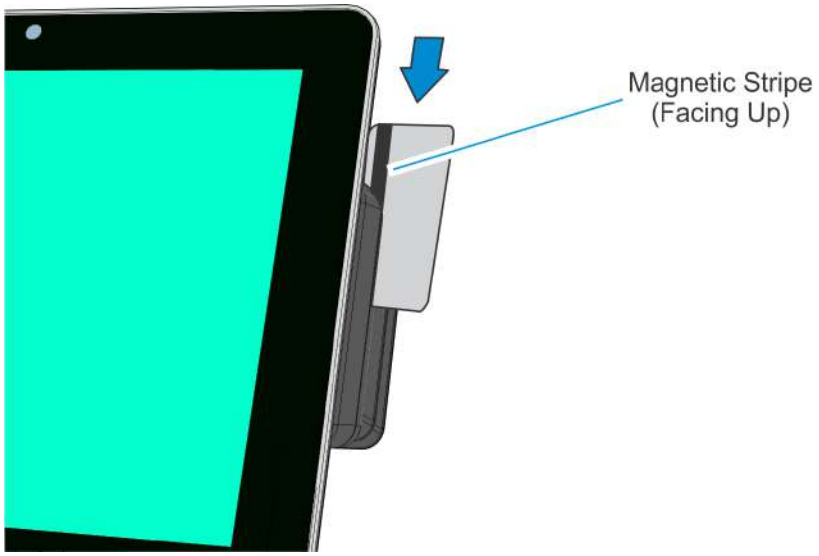
Magnetic Stripe Reader

The NCR XL15 (5915) features an ISO 3-Track Encrypted MSR head.

The card reading is bi-directional and is mounted on the right side of the display.

Using the MSR

Swipe the card through the slot in the MSR in a quick and steady movement. The magnetic stripe must be facing up and with the stripe in the slot.



Care of Cards

- Cards should never come in contact with liquids.
- Cards should never be bent or folded in any way.
- Cards should never come in close proximity of a magnetic field.

Card Thickness

The MSR module accepts standard cards within the thickness range of 0.68 – 0.84 mm.

Cabinet Cleaning Procedures

1. Disconnect the unit from the power outlet before cleaning.
2. Use a cloth lightly dampened with a mild detergent.
3. Do not use alcohol (methyl, ethyl, or isopropyl) or any strong dis-solvent. Do not use thinner or benzene, abrasive cleaners, or compressed air.

Warning: Do not use any other types of cleaners such as vinegar, solvents, degreasers, or ammonia-based cleaners. These can damage the unit.

4. Avoid getting liquids inside the unit. If liquid does get inside, have a qualified service technician check it before you power it on again.
5. Remove external dust around the cooling vents.

Chapter 4: NCR Software OSD Utility

Introduction

The NCR Software OSD is an application that is used to adjust display parameters, such as Brightness, Contrast, and color. It also provides monitor identification information, such as the name, serial number, and manufacturer.

Supported Features

Note: Not all features are supported on every monitor. The button is inactive and grayed out when the feature is not supported

- Brightness
- Contrast
- V Position
- H Position
- Phase
- Clock
- Red/Green/Green Video Gain
- Color Temperature
- Auto Setup
- Restore Default Settings
- V Moire
- H Moire
- V Size
- H Size

Installing the Utility

1. Download the OSD Utility from the NCR website:

   http://www.ncr.com

   a. At this site, select the **Support** tab.

   b. Select **Drivers and Patches** → **Retail Support Files**→ **NCR RealPOS and Peripherals**→ **Displays**→ **5915**.

   c. Download the application.

   There are several versions to choose from. There are GUI versions that are used to run locally on each system or Console versions for customers who want to run the application from a Command Line to many systems concurrently.

   ### *Windows*

   - *NCR_Software_OSD_GUI_x86* - (32-Bit)
   - *NCR_Software_OSD_Console_x86* - (32-Bit)
   - *NCR_Software_OSD_GUI_x64* - (64-Bit)
   - *NCR_Software_OSD_Console_x64* - (64-Bit)

   ### *Linux*

   - *NCR_Software_OSD_GUI_x86* - (32-Bit)
   - *NCR_Software_OSD_Console_x86* - (32-Bit)

2. Click on the version of choice and Save it on your local system.
3. Unzip the application to a folder of your choice on the target system.
4. In the unzipped folder, navigate to the OSD executable.

   Example: (32-Bit GUI version)

   NCR_Software_OSD_GUI_x86_V2.1.7.1 >> **x86**

5. Run the *.exe file.

   NCR_Software_OSD_GUI_x86.exe >> **[Enter]**

6. Answer **Yes** at the Security warning.

Running the Utility (GUI Version)

1. Unzip the application to a folder of your choice on the target system.
2. In the unzipped folder, navigate to the OSD executable.

   Example: (32-Bit version)

   NCR_Software_OSD_GUI_x86_V2.1.6.3>> **x86**
3. Execute the **NCR_Software_OSD_GUI_x86.exe** file to start the application.
4. Answer **Yes** at the Security warning.

Main Menu

Monitors Detected Panel

This panel lists all the monitors connected to the system. If more than one monitor is connected, the first monitor is selected by default.

Center Panel

The Center Panel displays information pertaining the selected control.

Control Buttons

The Control Buttons show the available features that can be modified. Unavailable features are greyed out.

Refresh Button

Refreshes data in the Monitors Detected panel (OSD does not auto detect). Use this button after connecting a new monitor to refresh the data.

About Button

Displays a brief description of the utility.

Help Button

Opens the Help File.

Close Button

Closes the OSD application

Information

Provides information about the selected monitor. Information includes:

- Device manufacturer
- Date manufactured
- EDID version
- Input type
- Dimensions
- Monitor name
- Monitor serial number
- Preferred timing
- Controller type
- Firmware level
- Firmware version (for Dynamo display only)
- Display mode (for Dynamo display only)
- Timing Report
  - Horizontal frequency
  - Vertical frequency
  - Timing status
- Raw EDID
- Raw capabilities string (CAPS)

Brightness

Provides tools for adjusting Display brightness settings.

Contrast

Provides tools for adjusting Display contrast settings.

Positioning

Provides tools for gradually moving the image on the Display to a specific region (either left, right, up, or down).

Size

Provides tools for increasing or decreasing the height and width of the image on the Display.

Phase

Provides tools for increasing or decreasing the phase shift of the sampling clock.

Clock

Provides tools for increasing or decreasing the video sampling clock frequency.

Colour

Provides tools for adjusting Display color settings.

Sharpness

Provides tools for increasing or decreasing the sharpness settings of the Display.

Restore

Provides the following functions:

- Auto Setup - sets horizontal position, vertical position, clock and phase.
- Auto Color - sets red/green/blue gain.
- Factory Defaults - restores all factory defaults including brightness, contrast, and color.
- Brightness/Contrast - restores factory defaults for brightness and contrast.
- Geometry Settings - restores factory defaults for geometry settings such as horizontal position and vertical position.
- Colour Settings - restores factory defaults for colour settings.

Degauss

Provides tools for CRT display to perform a degauss cycle.

Moire

Provides tools for increasing or decreasing the vertical or horizontal moiré picture cancellation.

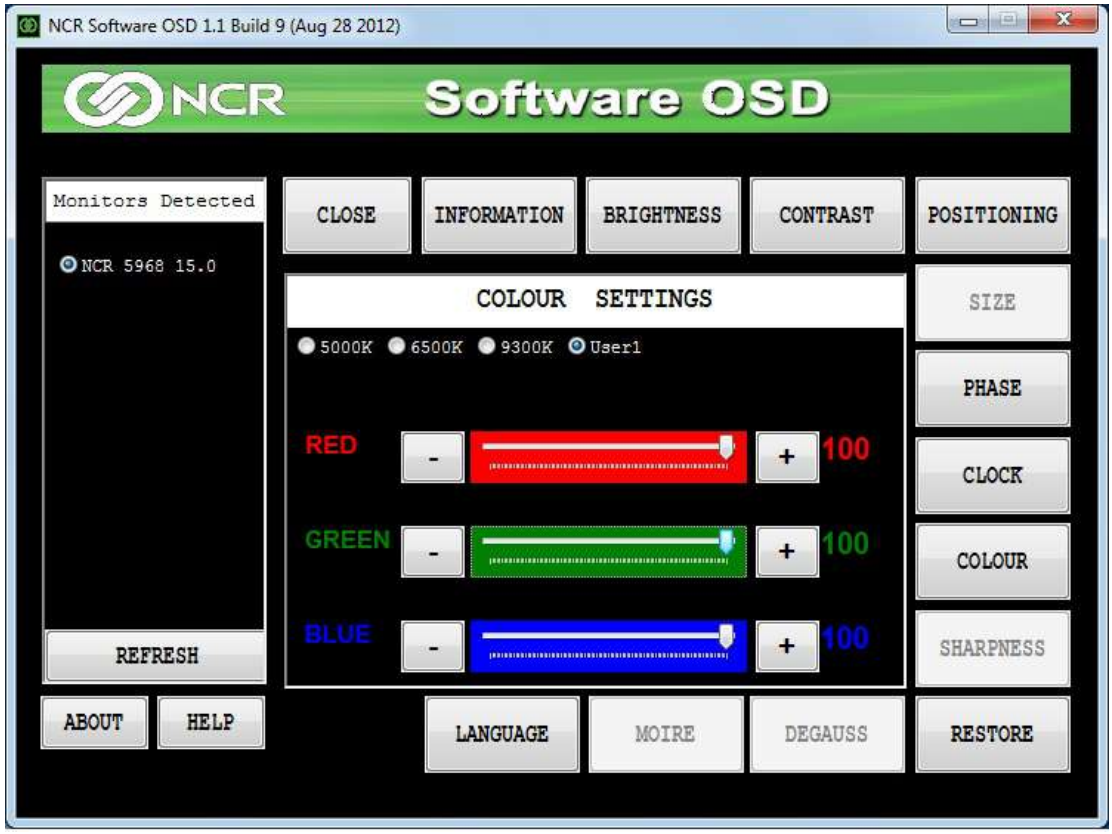
Language

Provides listing of the supported languages and permits changing the OSD language.

Display Adjustment Procedures

The adjustment procedures are similar for most features. The color adjustment shown below is an example.

1. Select the **Colour** button.
2. The default Colour Settings menu has the 6500K radio button selected. To activate the color slides select **User1** .

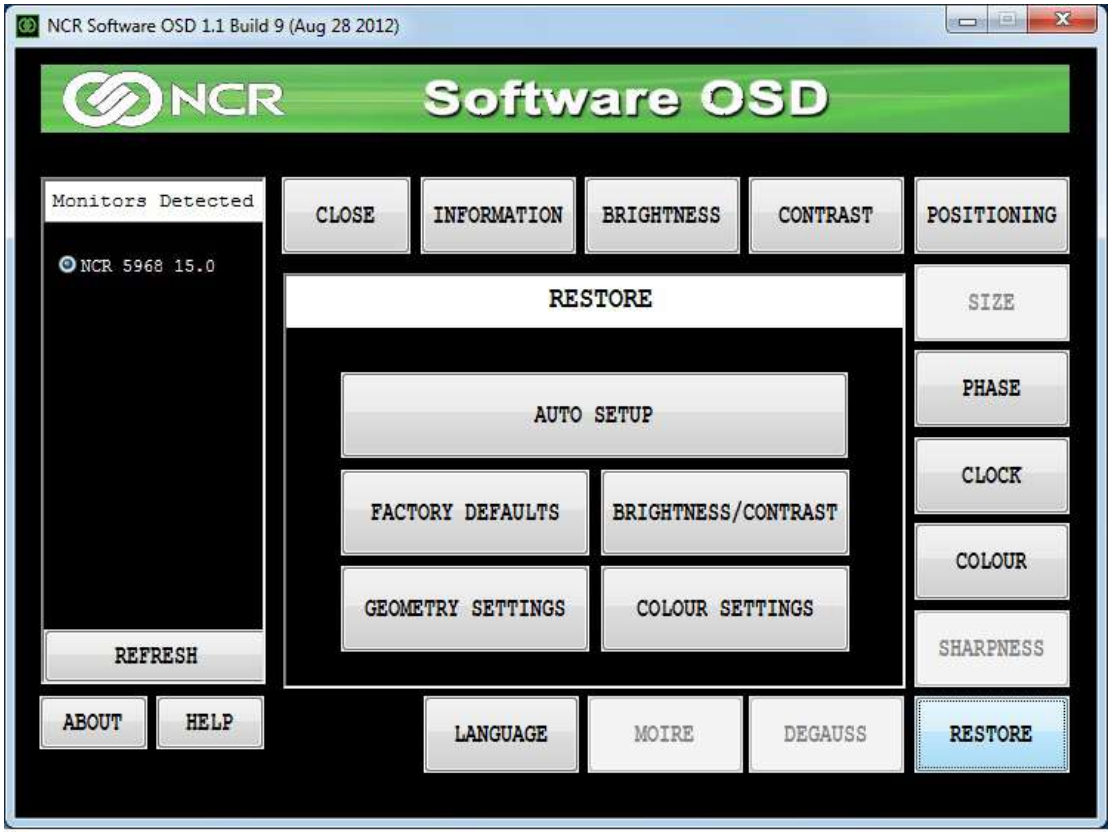


3. Drag the slider to the right to increase the value of the property or to the left to decrease it. Alternatively, you can click on the "+" and "-" buttons.

Resetting Factory Defaults

Should the need arise the display settings can be reset to the factory defaults.

1. Select the **Restore** button.



2. All settings or just specific groups can be reset. Select the button of choice in the *Restore* window.
   - Auto Setup - re-positions the window in the center of the display
   - Factory Defaults - resets everything to the factory defaults
   - Brightness/Contrast - resets the brightness and contrasts settings only
   - Color Settings - resets the color settings only

Running the Utility (Console Version)

1. Unzip the downloaded application to a folder of your choice on the target system.
2. In the unzipped folder, navigate to the OSD executable.

   Example: (32-Bit version)

   NCR_Software_OSD_Console_x86_V2.1.7.1 >> **x86**
3. Open a Command Line dialog window.
4. From the Command Line dialog, navigate to the OSD executable (*.exe) file.
5. Execute the file to start the application.

   NCR_Software_OSD_Console_x86.exe >> [**Enter**]

   A list of the available script command options are displayed, followed by several example scripts. If you need further assistance with creating scripts please contact your NCR representative for help.

Chapter 5: Touchscreen Calibration

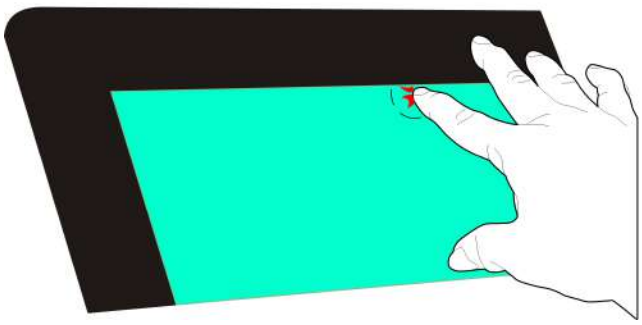
Only units with resistive touchscreens need to be calibrated. PCap displays do not require calibration.

Proper Touchscreen Methods

Before performing the calibration procedure please observe the following guidelines for proper/improper methods of touching the screen.

- Face the monitor directly.
- Perform the calibration in the position (sitting or standing) that you normally expect to use the touch screen.
- Touch the calibration target firmly and precisely with your fingertip. During calibration, be careful to keep your fingernails and other fingers away from the touch screen as you touch each target.
- The hand and calibration finger should be perpendicular (straight up) from the touch-screen during touch down and removal of the calibration finger. Keep the other fingers closed and away from the touch-screen.

- Do NOT touch the bezel with your other fingers.



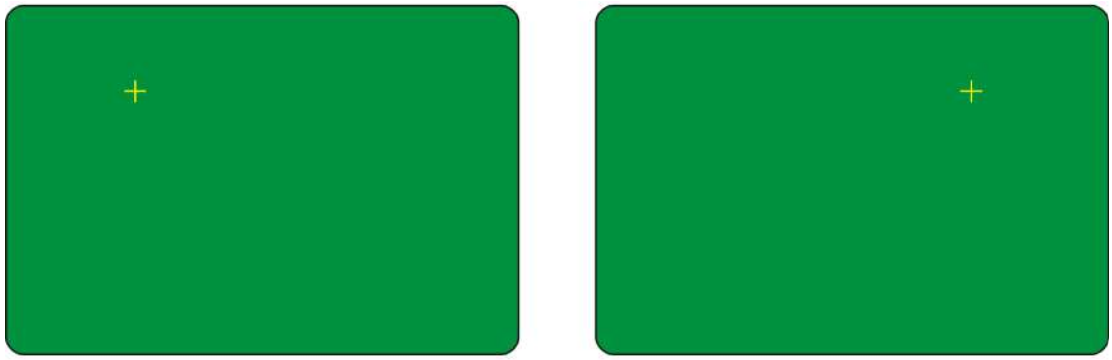
Calibrating the Touchscreen

Resistive Touchscreen Calibration

1. Run the calibration program.
   a. Open Windows Explorer.
   b. Navigate to the calibration program.

      C: >> **Install** >> **Touch** >> **Drivers** >> **Resistive Touch Calibartion**

2. Touch the center of the cross-hair target. When the target is touched, it disappears and another target appears.



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3. Repeat the procedure for each target as they appear.