

User Guide

NCR EX15 POS (4505)

Release 1.0



BCC5-0000-5295

Issue A



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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 EX15 POS (4505)* 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 rebut 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, contact your local support team and provide 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 in 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 *NCR EX15 POS (4505) Site Preparation Guide* (BCC5-0000-5294) 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.

Contact your local service partner 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.



Note: For Orderman Channel, please log in to <https://rma.orderman.com/> and return the product to Service Depot Salzburg.

Table of Contents

Chapter 1: Product Overview

Available Models	2
Specifications	3
Mounting Configurations	5
Integrated Stand	5
Tilt Angle	5
Wall Mount	6
Label Locations	7

Chapter 2: Hardware Installation

Installation Restrictions	8
Ergonomic Workplace	9
Installing the Terminal	10
Connecting the Cables	11
Routing the Cables	12
Connecting AC Power	14
Connecting to a Network	15
Disconnecting the Power Supply Cable	16
Installing the Transaction Printer	17
Installing the Cash Drawer	18
Installing the Second Cash Drawer	19
Installing the Scanner	20
Powering Up the Terminal	21
Connector Pinouts	22
19 Vdc Power Input Port	22
COM Port (RJ50)	22
Cash Drawer Port	23
e-SATAp Port	23

USB 3.0 Port	24
USB 2.0 Port	24
Network	24
VGA Port	25
Serial Connections	26
COM Port Voltage Settings	26
Serial Adapter Cable Pinouts – RJ50 to DB9	27
Accessing the Jumpers	28
Removing the Stand	29
Removing the Touch and LCD Assembly	31

Chapter 3: Operation and Cleaning

Touchscreens	34
Projected Capacitive Touchscreen	34
Using the PCap Touchscreen	34
Cleaning the Touchscreen	34
Magnetic Stripe Reader	35
Using the MSR	35
Care of Cards	35
Card Thickness	35
Dallas iButton Reader	36
Using the Dallas iButton Reader	36
Addimat Key Reader	37
Using the Addimat Key Reader	37
Cleaning the Cabinet	38

Chapter 4: BIOS Setup

Entering BIOS Setup	39
Selecting Menu Options	39
Setting the LCD Brightness	40
Setting the Serial Port (COM 1) Voltage	42

Chapter 5: Initial Terminal Imaging

Introduction	44
Imaging Procedure	44

Revision Record

Issue	Date	Remarks
A	Nov 2018	First Issue

Chapter 1: Product Overview



CCP-75245

The NCR EX15 POS (4505) is an entry level integrated touch POS that delivers exceptional value and efficient performance in a sleek, compact design. It has a bezel-free projected capacitive display that supports 10-point multi-touch capability. Powered by an Intel® Celeron® J1900 Quad Core Processor, the EX15 delivers excellent performance while allowing fan-less operation.

Available Models

Model	Description
4505-2004-0001	EX15 POS, 15" PCAP, 4GB Memory, 128GB SSD, POSReady 7
4505-2004-0002	EX15 POS, 15" PCAP, 4GB Memory, 128GB SSD, Windows 10
4505-2004-0003	EX15 POS, 15" PCAP, 4GB Memory, No Media, No OS



Note: Storage devices, power cord, operating system, and peripherals are ordered as features.

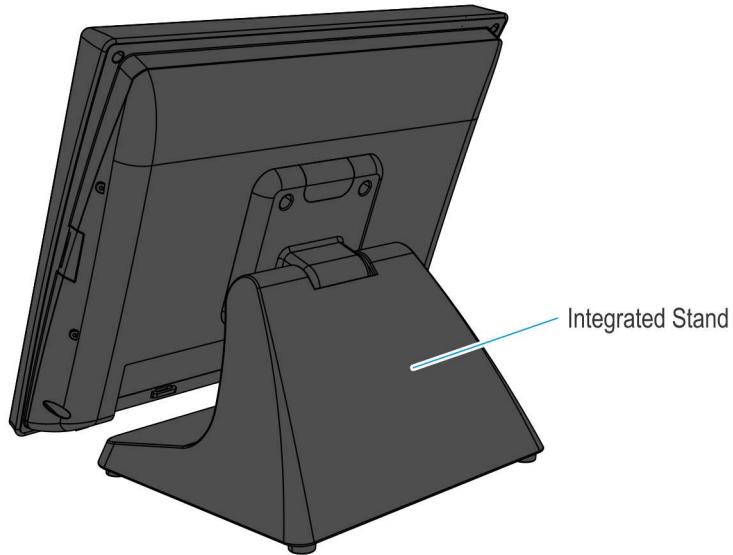
Specifications

Feature	Specifications
Processor	Intel® Celeron® J1900 2.0GHz/2.4GHz (burst) (Quad-core)
Primary Display	<ul style="list-style-type: none"> LCD Panel: 15" LED-backlit display Resolution: 1024 x 768 (default) Brightness: 250 cd/m² Touchscreen: Flat Projected Capacitive (PCap) Touch (USB)
Memory	<ul style="list-style-type: none"> Support for 204-pin DDR3L SODIMM, 1333/1600MTs unbuffered (one slot) Support for up to 8 GB of system memory
Storage	Single Non-RAID 2.5" SATA HDD/SSD
LAN Support	<ul style="list-style-type: none"> 10/100/Gb Ethernet support RJ45 LAN connector on rear IO, with link/activity/speed LEDs
Operating Systems	<ul style="list-style-type: none"> POSReady 7 (64 bit) Windows 10 (64 bit)
Ports	<ul style="list-style-type: none"> (3) USB 2.0 (1) USB 3.0 (1) eSATAp/USB2.0 combo (4) RJ50 COM (1) Gigabit Ethernet (1) Line out (1) Speaker (1) VGA (1) RJ12 Cash Drawer (1) DC 12V out (1) DC 19V in
Power Supply	<p>External DC power adapter, 100 to 240Vac full range</p> <ul style="list-style-type: none"> 19V Power supply with 65W output power
Supported Power Cords	<ul style="list-style-type: none"> International China United Kingdom
Power Button	System on/off trigger
Enclosure	<ul style="list-style-type: none"> External cabinetry: PC/ABS plastic and diecast aluminum Internal cabinetry: Sheet metal chassis and brackets as needed

Feature	Specifications
Dimensions (L x W x H)	370 x 245 x 303 mm (14.56 x 9.64 x 11.93 in.) Note: These dimensions are for a terminal (without MSR) mounted on a stand. For dimension of other configurations, refer to the Site Preparation guide.
Base Dimension (L x W)	249 x 209 mm (9.8 x 8.2 in.)
Terminal Weight	7.1 kg (15.65 lbs) for 15" LCD and MSR when mounted on a stand Note: Weight varies by configuration. For more information, refer to the Site Preparation Guide.
Operation Temperature	0°C to 40°C
Storage Temperature	-25°C to 70°C
Humidity	10% to 90%, non-condensing
Mounting Options	<ul style="list-style-type: none"> • Integrated Stand • Wall Mount
Secondary Display	<ul style="list-style-type: none"> • 2x20 Customer Display through one of the RS232 ports • 10.4" Customer Display through the VGA port
Identification Reader Options	<ul style="list-style-type: none"> • Magnetic Stripe Reader (MSR) • Dallas iButton Reader • Addimat Key Reader
Printer Options	<ul style="list-style-type: none"> • 7167 POS Printer • 7197 POS Printer
Scanner Options	<ul style="list-style-type: none"> • 2357 Class Handheld Scanner
Cash Drawer Options	2177-2001 Standard Duty Cash Drawer Note: The EX15 POS supports dual cash drawer configuration.

Mounting Configurations

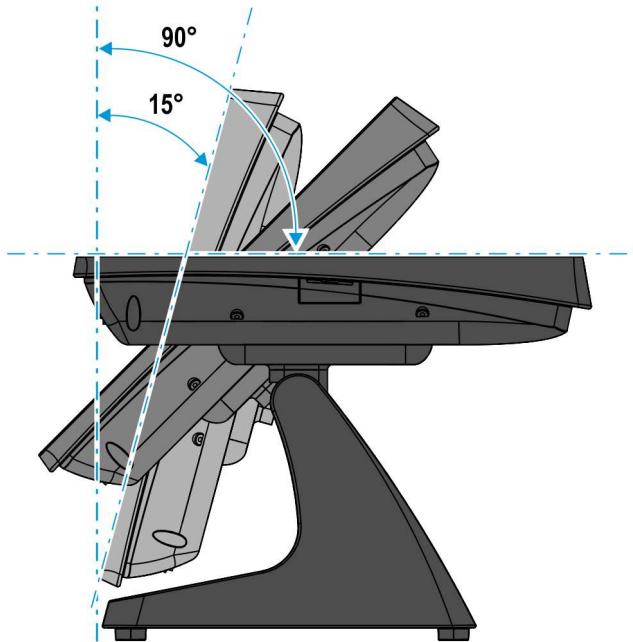
Integrated Stand



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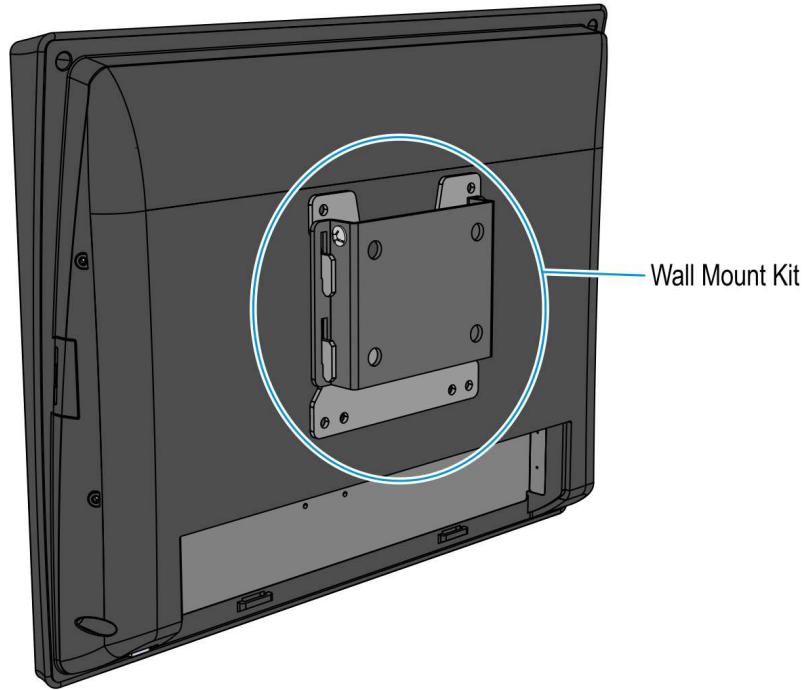
Tilt Angle

When mounted on the integrated stand, the display may be tilted for the best viewing angle. The angle can be adjusted within 15 to 90 degrees up/down.



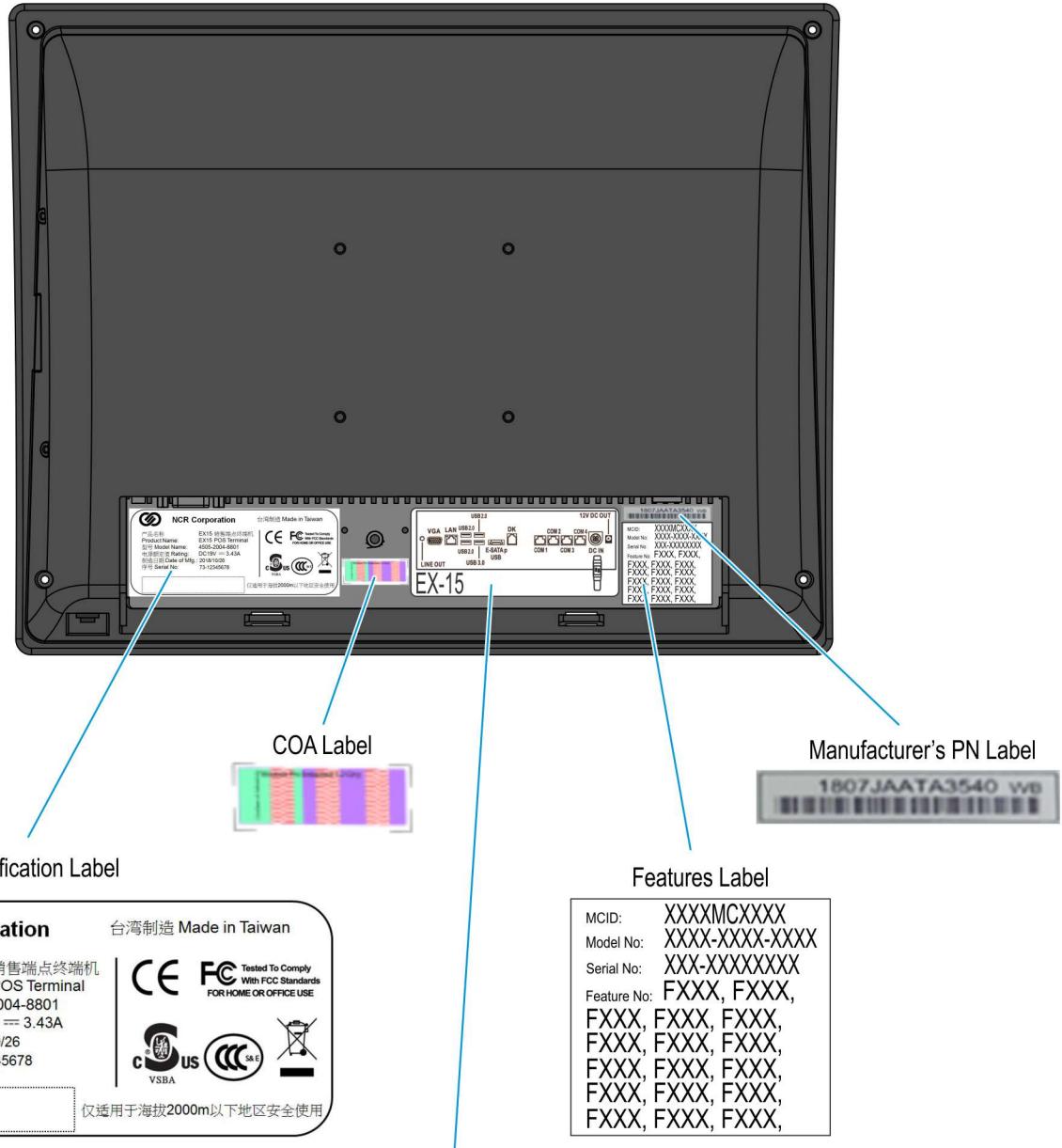
CCP-75617

Wall Mount



CCP-75282

Label Locations



MCID:	XXXXMCXXXX
Model No:	XXXX-XXXX-XXXX
Serial No:	XXX-XXXXXX
Feature No:	FXXX, FXXX, FXXX, FXXX, FXXX, FXXX, FXXX, FXXX, FXXX, FXXX, FXXX, FXXX, FXXX, FXXX, FXXX, FXXX, FXXX,

Chapter 2: Hardware Installation

Installation Restrictions

- The NCR EX15 POS (4505) conforms to all applicable legal requirements. To view the compliance statements see the [NCR RealPOS Terminals Safety and Regulatory Statements](#) (B005-0000-1589).
- Install the EX15 POS 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 EX15 POS 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 EX15 POS terminal.



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



Caution: Do not connect or disconnect the transaction printer while the terminal is on. This can result in system or printer damage.

Ergonomic Workplace

The NCR EX15 POS (4505) has a high-brightness LCD with an anti-glare screen. For best results, 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 position 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 Terminal

The terminal can be mounted using the following mounts:

- Integrated Stand
- Wall Mount Bracket

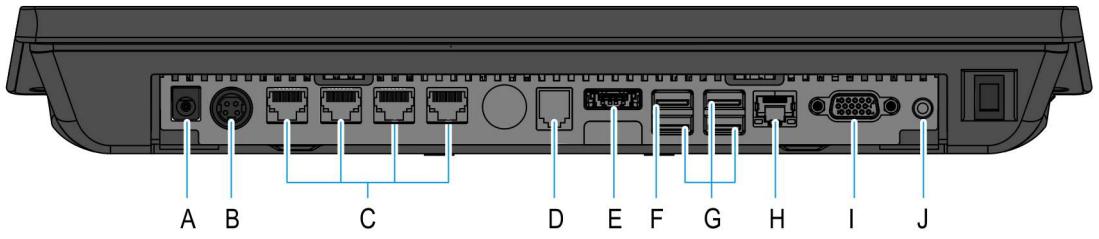
This chapter explains how to perform an "Out-of-box" installation of a EX15 POS configured with the standard Table-Top Stand and how to connect optional peripheral devices. For installation procedures for the other mounting options, see their associated kit instructions.

The EX15 POS comes fully assembled and ready to use. All that is required to install is connect the AC Power Cord, LAN Cable, and peripheral device cables.

For more information about the EX15 POS I/O ports, refer to [Connecting the Cables](#) on the next page.

Connecting the Cables

The following are the default I/O ports for the NCR EX15 POS (4505).

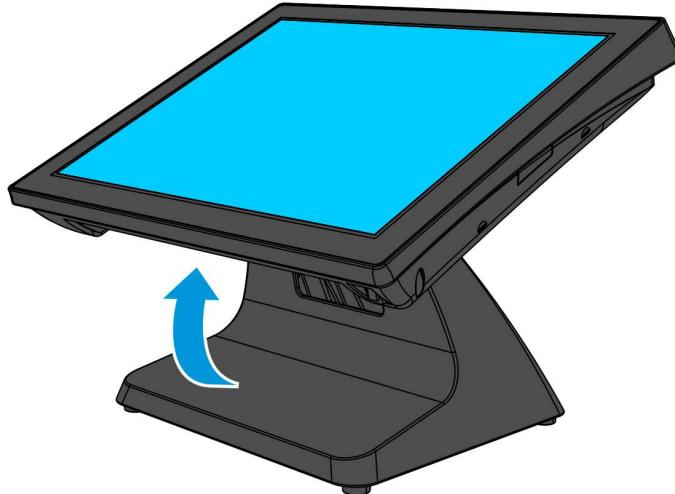


CCP-75201

Port	Port Name	Description
A	DC OUT	12 Vdc power output
B	DC IN	19 Vdc power input
C	COM	COM 1/2/3/4 connectors
D	DK	Cash Drawer output
E	E-SATAp	E-SATA + USB connector
F	USB 3.0	(1) USB 3.0 connector
G	USB 2.0	(3) USB 2.0 connectors
H	LAN	Gigabit LAN connector
I	VGA	VGA output
J	Line Out	Audio line output

Routing the Cables

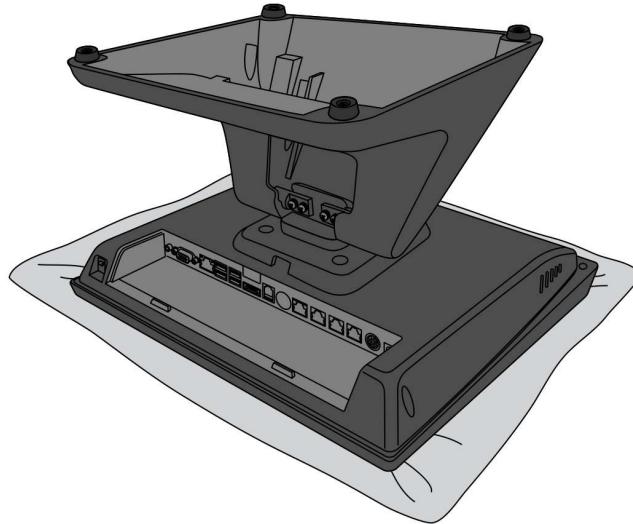
- Pivot the display toward the back.



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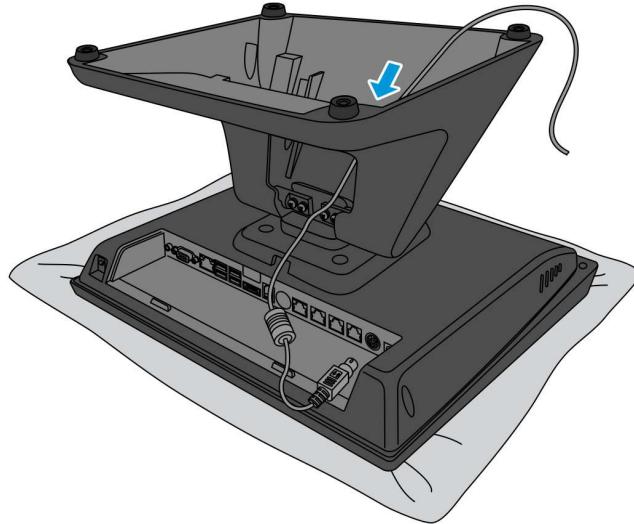
- Lay the terminal face down on a flat surface.

Caution: Always use a soft material (cloth, foam) to protect the display screen when placing the terminal face down.



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3. Route the cables through the base of the stand, and then connect them to their assigned ports. For more information, refer to [Connecting the Cables](#) on page 11.

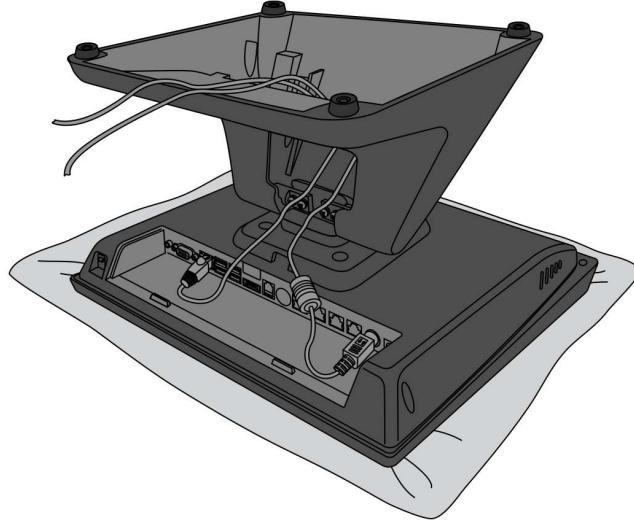


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4. Position the cables on the back of the stand, and then return the terminal to its upright position.



Caution: Ensure that no cables are pinched.



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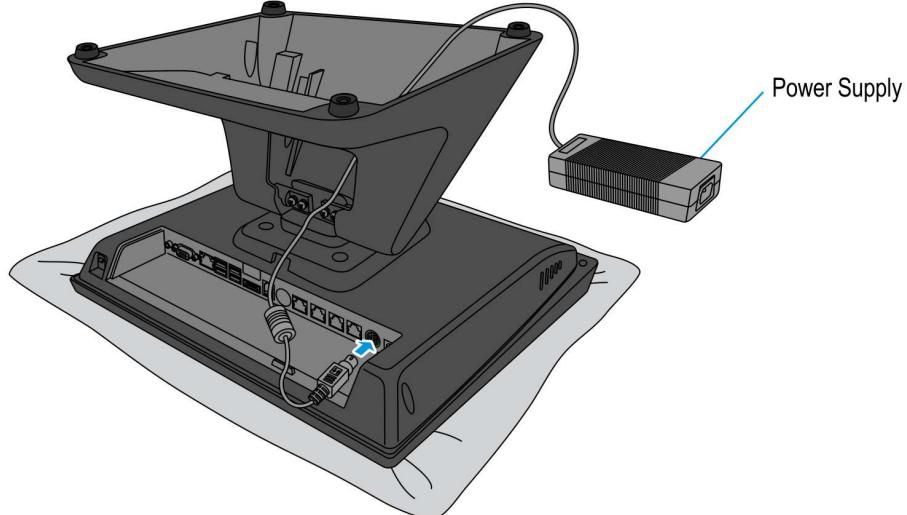
Connecting AC Power

The NCR EX15 POS (4505) receives power from an external 19V power supply.



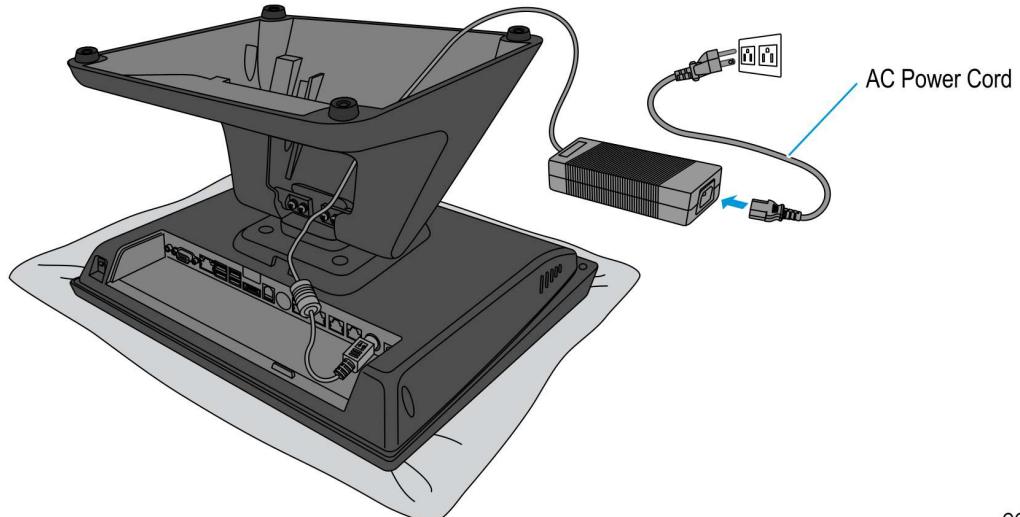
Caution: The EX15 POS requires the 19V power supply that is shipped with the terminal. Use of other power bricks may cause damage to the unit.

1. Connect the Power Supply cable to the DC IN port on the terminal.



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2. Connect the AC Power Cord to the Power Supply and then to an AC outlet.



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Caution: Do not connect or disconnect the Power Cable from the terminal with the AC Power Cord connected to an AC outlet.

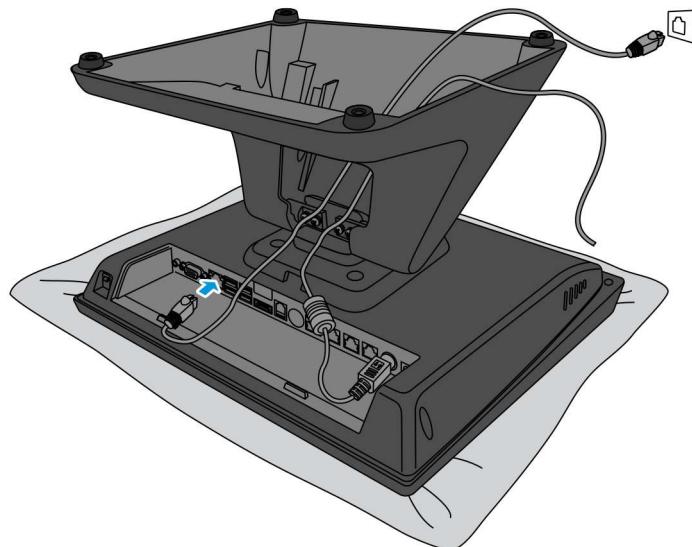


Caution: To avoid damage to the Power Supply and its cable, mount the Power Supply in a secure position (for example, on the floor or countertop).

Connecting to a Network

Most business configurations require the terminal to connect to a network. Connecting to a network enables communicating with other systems and devices also on the network. Depending on business configurations, connecting to a network may allow connection to the Internet.

To connect the EX15 POS terminal to a network, connect the 10/100/1000 Ethernet cable to the LAN port on the terminal. The other end of the 10/100/1000 Ethernet cable should be connected into the network hub.



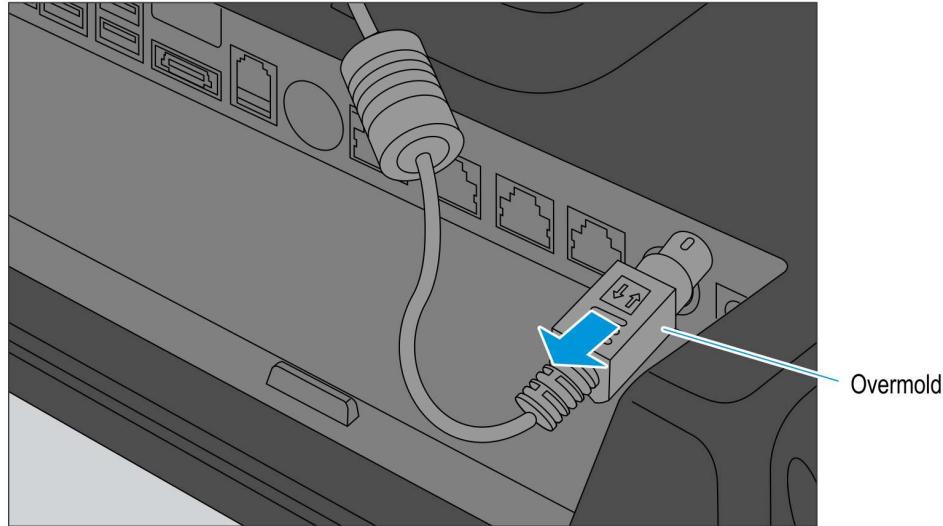
CCP-75242



Note: Consult with your business Information Technology (IT) representative to determine the available connection, and to locate the network hub.

Disconnecting the Power Supply Cable

The Power Supply Cable connector locks into position when connected to the terminal. It cannot be disconnected by simply pulling on the cable. To disconnect the Power Supply Cable, slide its overmold out from the DC IN port to unlock the connector, and then pull the connector away from the port.

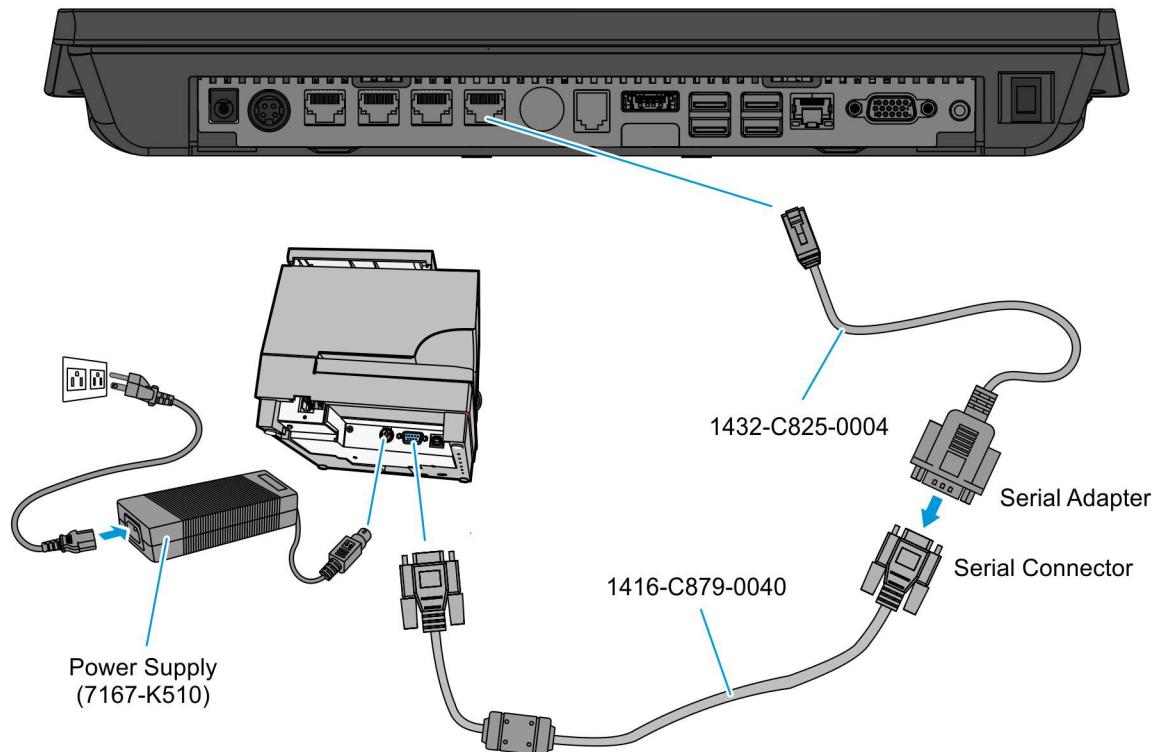


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Installing the Transaction Printer

To connect the printer to the EX15 terminal, follow these steps:

1. Connect one end of the Printer Communications Cable (1416-C879-0040) to the printer and the other end to the Serial Adapter (1432-C825-0004).
2. Connect the other end of the Serial Adapter to one of the COM ports on the EX15.
3. Connect the Power Supply Cable to the printer.
4. Connect the AC Power Cord to the Power Supply and then to an AC outlet.



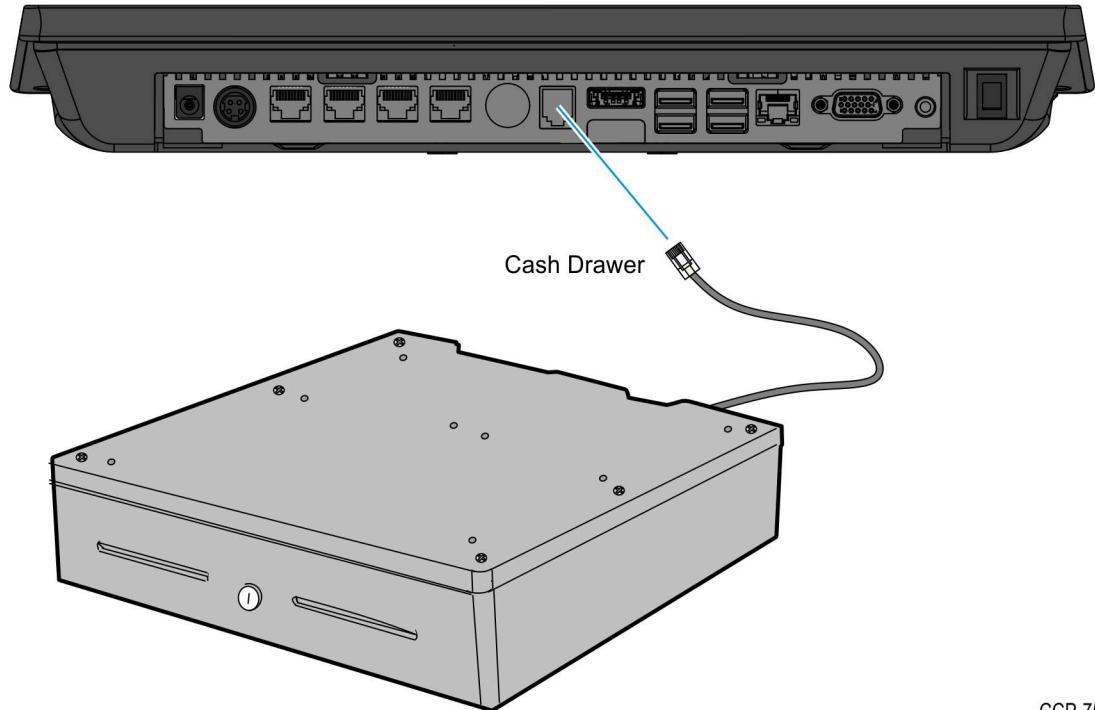
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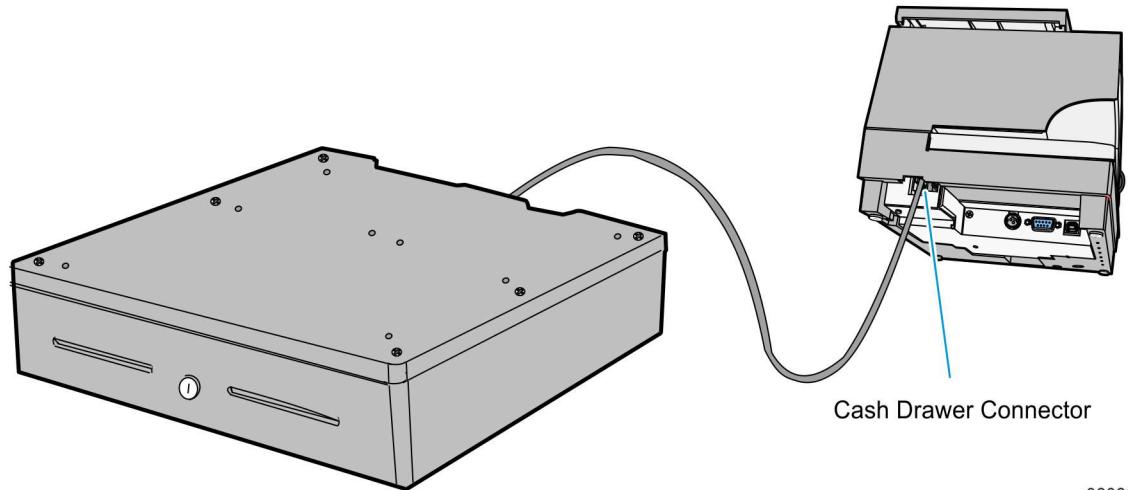
Note: For more information on the POS printer, refer to printer documentations on <https://info.ncr.com>.

Installing the Cash Drawer

The Cash Drawer can be connected to the Cash Drawer connector or to the transaction printer.



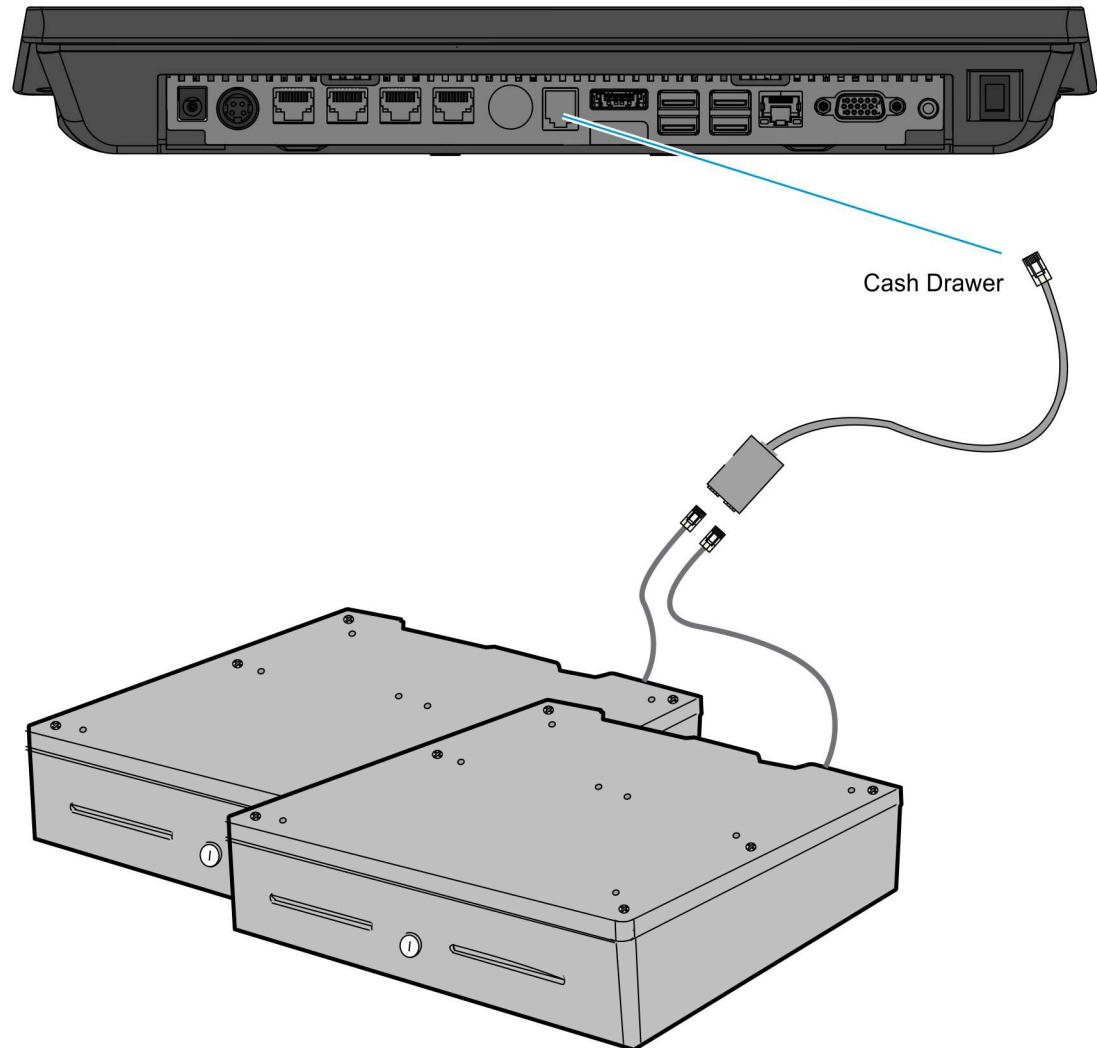
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Installing the Second Cash Drawer

The terminal supports a 2-drawer configuration with a Dual Cash Drawer Cable. Connect this cable to the terminal or transaction printer cash drawer connector using the 24V Dual Cash Drawer Cable (1432-C829-0014).



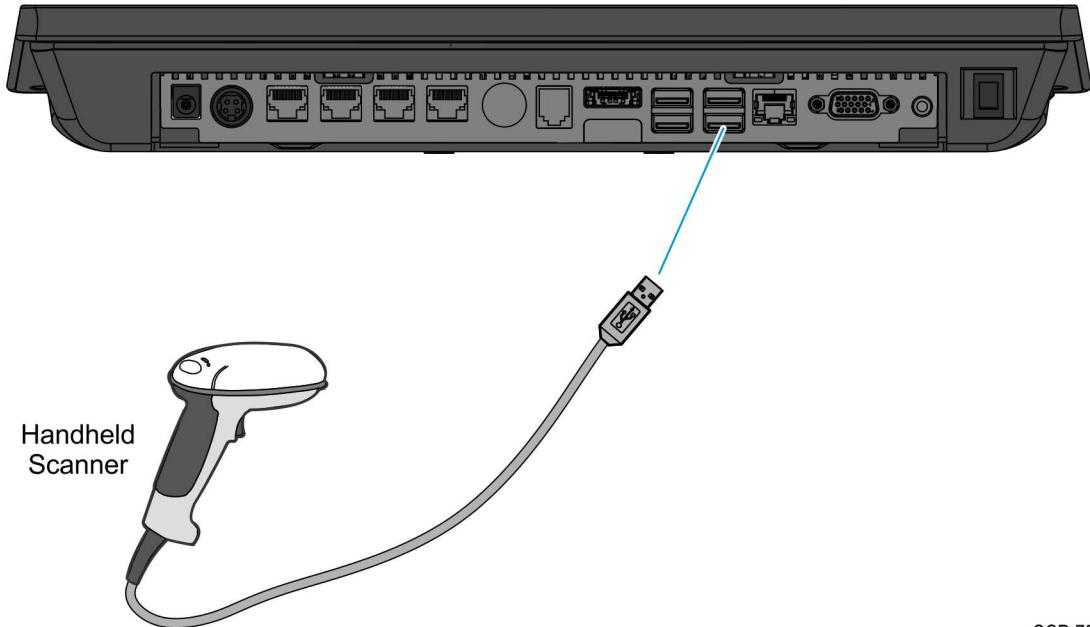
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Note: This option is not available in Orderman Channel.

Installing the Scanner

The Handheld Scanner can be connected to any of the USB ports of the EX15 terminal.



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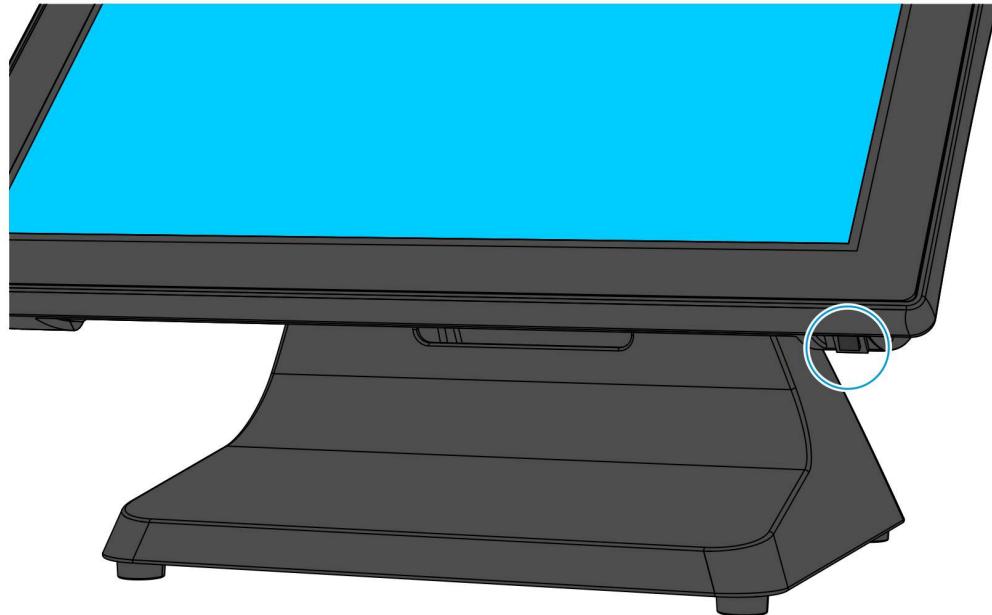
Note: For more information on the handheld scanner, refer to its documentations on the manufacturers' site, <https://www.honeywellaidc.com/products/barcode-scanners/>.



Note: This option is not available in Orderman Channel.

Powering Up the Terminal

1. After installing the terminal, power up the system by pressing the Power Switch, which is located on the lower right side of the display.



COP-75247

The system installs the system devices, system settings, and then reboots to continue setup. Complete the System Setup. This varies from OS to OS but the following is typical.

2. The initial setup procedures are performed.
 - Starting Windows
 - Preparing the computer for first time.
 - Checking video performance
3. Accept the **License Terms Agreement**.



Note: Depending on the installed operating system and the selected settings, the amount of time it takes to boot up may vary.

Connector Pinouts



Note: This section discusses about connector pinouts as seen from the IO row.

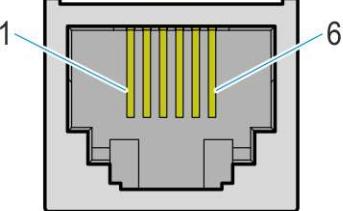
19 Vdc Power Input Port

Pin Diagram	Pin	Signal Name
	1	GND
	2	24V
	3	GND
	4	24V

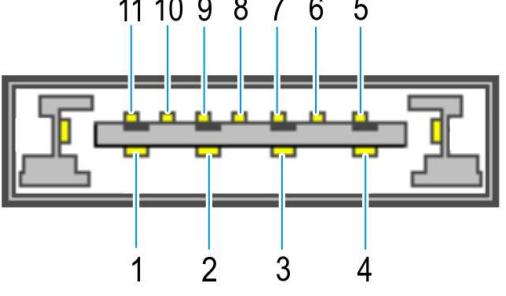
COM Port (RJ50)

Pin Diagram	Pin	Signal Name
	1	NC
	2	DCD
	3	DSR
	4	RX
	5	RTS
	6	TX
	7	CTS
	8	DTR
	9	GND
	10	RI/5V/12V

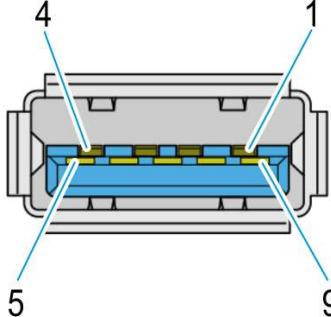
Cash Drawer Port

Pin Diagram	Pin	Signal Name
	1	GND
	2	COIL-DRIVER
	3	+SENSE
	4	+24V / +12v
	5	COIL-DRIVER 2
	6	GND

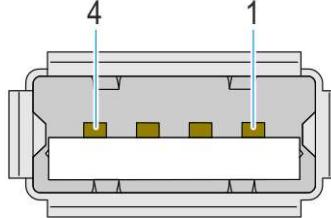
e-SATAp Port

Pin Diagram	Pin	Signal Name
	1	USB VBus
	2	USB D-
	3	USB D+
	4	USB GND
	5	GND
	6	A+
	7	A-
	8	GND
	9	B-
	10	B+
	11	GND

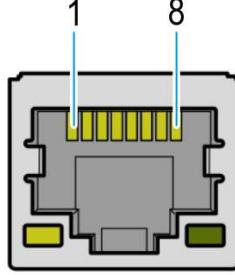
USB 3.0 Port

Pin Diagram	Pin	Signal Name
	1	VBUS
	2	D-
	3	D+
	4	GND
	5	Rx-
	6	Rx+
	7	GND
	8	Tx-
	9	Tx+

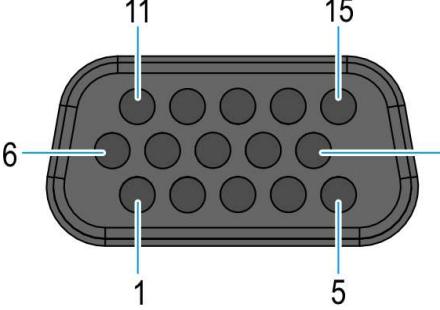
USB 2.0 Port

Pin Diagram	Pin	Signal Name
	1	VBUS
	2	D-
	3	D+
	4	GND

Network

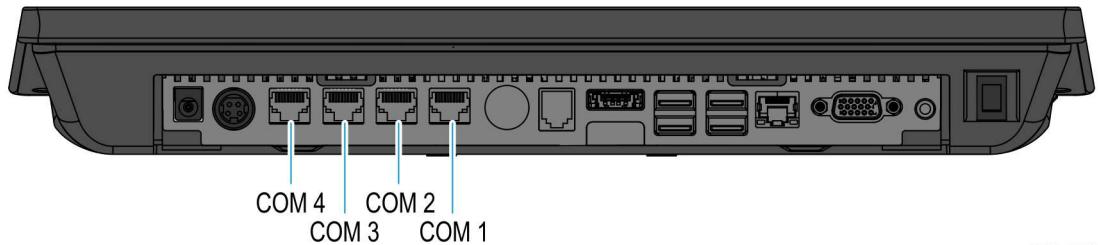
Pin Diagram	Pin	Signal Name
	1	BI_DA+
	2	BI_DA-
	3	BI_DB+
	4	BI_DB-
	5	BI_DC+
	6	BI_DC-
	7	BI_DD+
	8	BI_DD-

VGA Port

Pin Diagram	Pin	Signal Name
	1	RED
	2	GREEN
	3	BLUE
	4	RES
	5	GND
	6	RGND
	7	GGND
	8	BGND
	9	KEY
	10	SGND
	11	ID0
	12	SDA
	13	HSYNC or CSYNC
	14	VSYNC
	15	SCL

Serial Connections

The EX15 POS provides four 10-pin RJ50 COM ports.



CCP-75911

COM Port Voltage Settings

Set the COM Port voltage based on the voltage requirement of the peripheral to be attached.

COM 1	By BIOS setting only	For more information, refer to Setting the Serial Port (COM 1) Voltage on page 42.	
COM 2, 3, 4	By jumper setting only JP11 - COM 2 JP12 - COM 3 JP13 - COM 4	 1 3 5 2 4 6 1-2 = 0V / R1 3-4 = +5V 5-6 = +12V Default = 0 V	For more information, refer to Accessing the Jumpers on page 28.

Serial Adapter Cable Pinouts – RJ50 to DB9

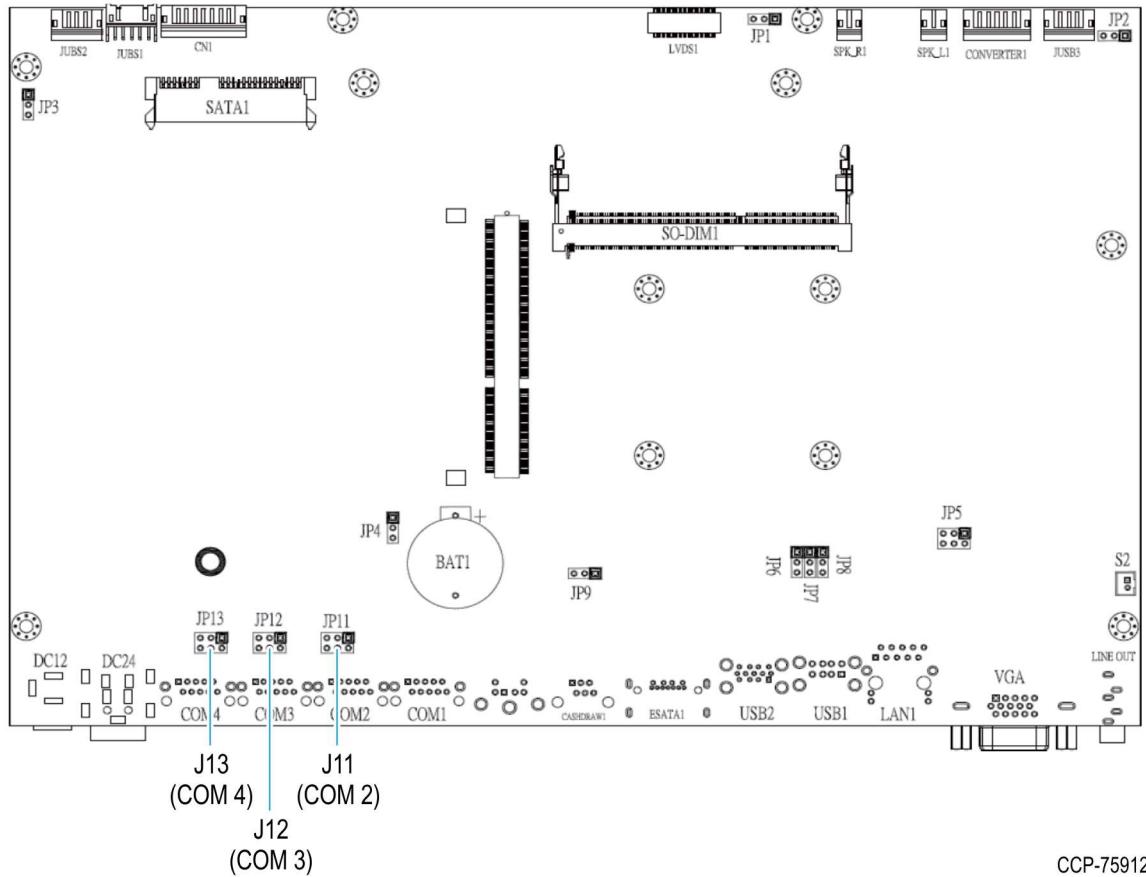
DB9 port is available through the serial adapter cable.



RJ50 Pin	Signal Name	DB9 Pin
1	VCC	9
2	GND	5
3	DTR	4
4	CTS	8
5	TX	3
6	RTS	7
7	RX	2
8	DSR	6
9	DCD	1

Two detailed pinout diagrams. The left diagram shows the RJ50 connector with pins numbered 1 through 10 from right to left. The right diagram shows the DB9 connector with pins numbered 1 through 9 from top to bottom. Arrows point from the corresponding numbers in the table to the respective pins on each connector, indicating the signal mapping between them.

Accessing the Jumpers

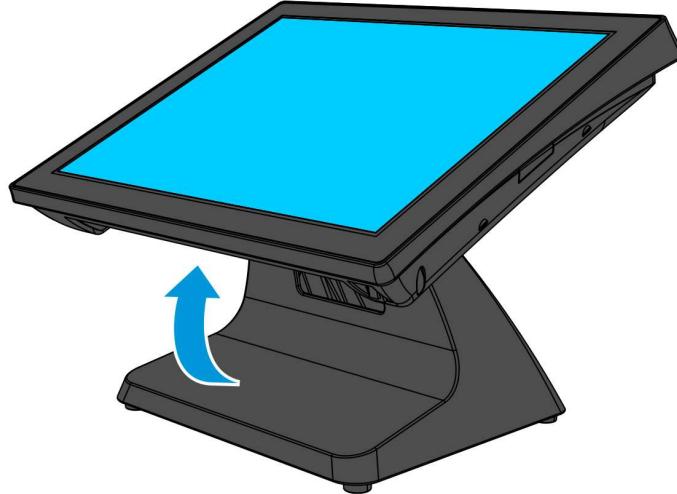


To access the jumpers, follow these steps:

1. Removing the Stand on the next page.
2. Removing the Touch and LCD Assembly on page 31.

Removing the Stand

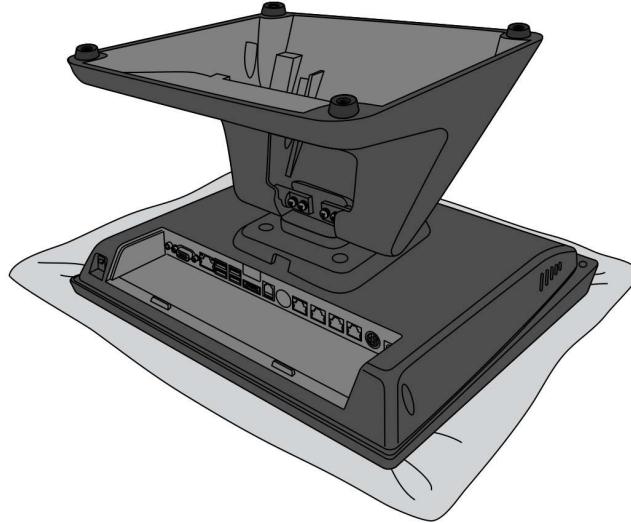
- Pivot the display toward the back.



CCP-75246

2. Lay the terminal face down on a flat surface.

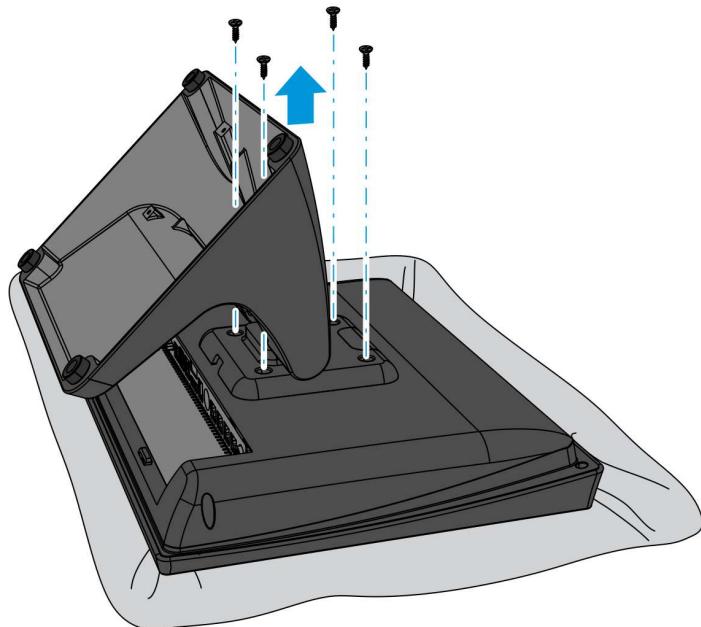
⚠ Caution: Always use a soft material (cloth, foam) to protect the display screen when placing the terminal face down.



CCP-75202

3. If the EX15 POS is installed with a customer display, disconnect the Customer Display cables from the terminal.

4. Remove the four screws that secure the stand to the back of the display.



CCP-75268

5. Remove the stand and lay it down on a flat surface.

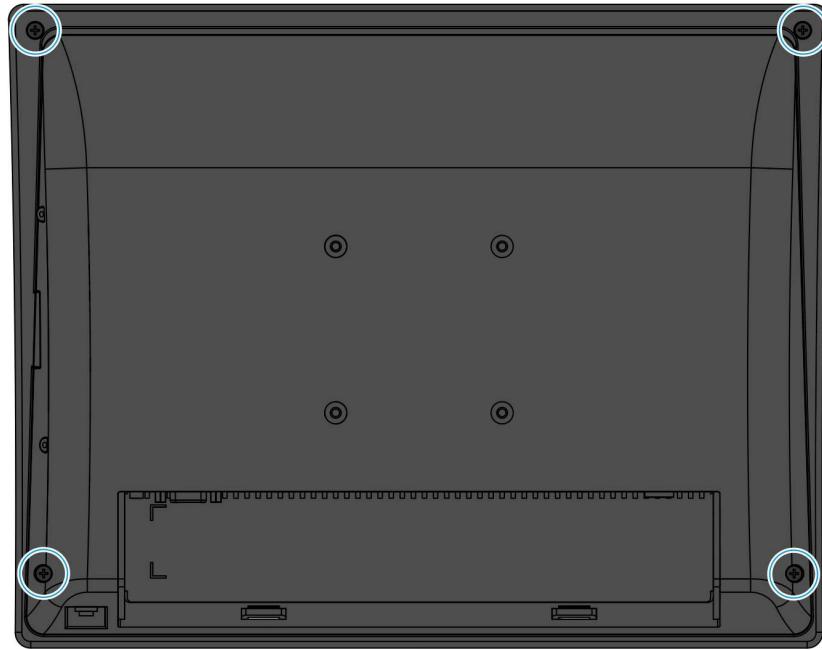
Removing the Touch and LCD Assembly

1. Remove the stand from the back of the display. For procedures, refer to [Removing the Stand](#) on page 29.



Note: If the EX15 POS is installed with a Customer Display, disconnect the Customer Display Cables before removing the stand.

2. Remove the four screws on the back cover.

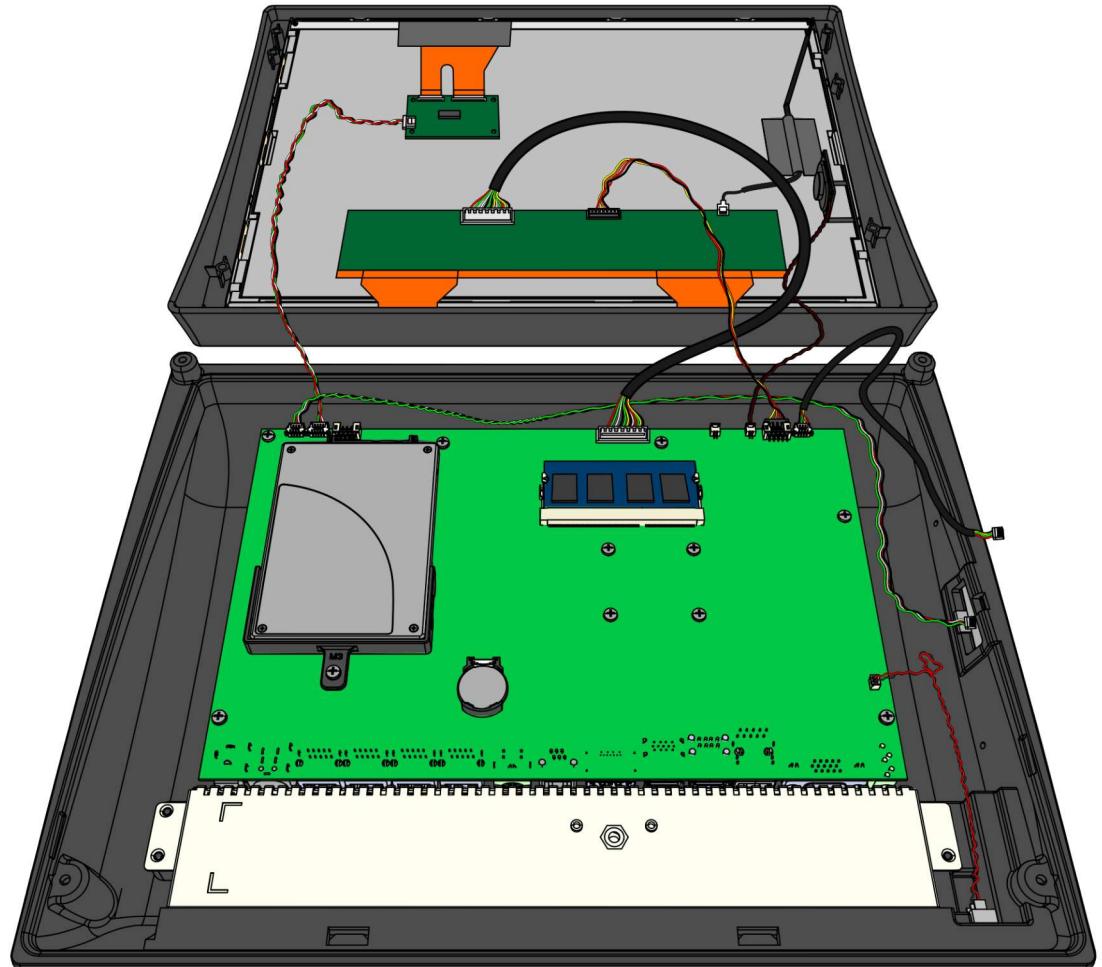


CCP-75620

3. While holding the unit together, turn it over so that it is facing up and its peripheral or peripheral cover is on the right side.

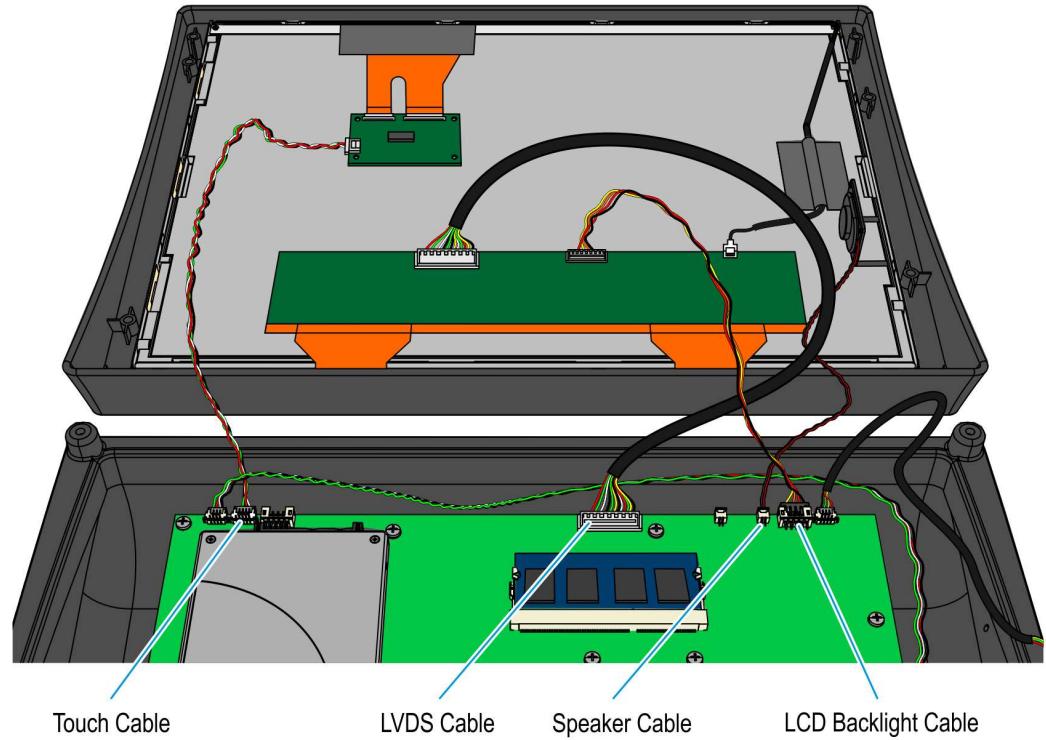
4. Lift the bottom part of the Touch and LCD Assembly, rotate towards the back, and place right beside the unit.

Caution: At this point, the Touch, LCD Backlight, LVDS, and Speaker cables are still connected to the motherboard. To avoid damage, be careful not to pull too much on the cables.



CCP-75625

5. When replacing the Touch and LCD Assembly and the Motherboard, disconnect the following cables from the motherboard. When servicing other components, it is not required to disconnect the cables from the motherboard.



CCP-75635

Chapter 3: Operation and Cleaning

Touchscreens

The NCR EX15 POS (4505) supports Projected Capacitive (PCap) Touchscreen.

Projected Capacitive Touchscreen

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

- Fast processing of touch 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 EX15 POS (4505) 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.

Cleaning the Touchscreen

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.

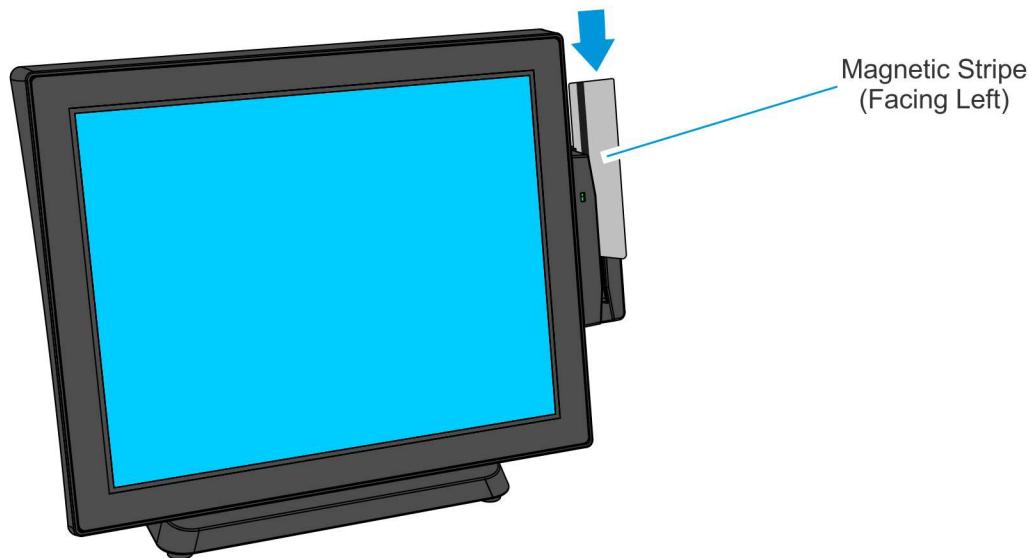
Magnetic Stripe Reader

The NCR EX15 POS (4505) includes an MSR option. The MSR comes with ISO Track 1/2/3 single/dual/triple track support and interfaces through a USB connection in the display head.

The card reading is bi-directional and can be 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 left and with the stripe in the slot.



CCP-75296

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.

Dallas iButton Reader

The NCR EX15 POS (4505) offers a Dallas iButton Reader as a kit. It reads the unique registration number or ID code of Dallas Touch Memory Buttons, which is used for employee login to the POS software application.

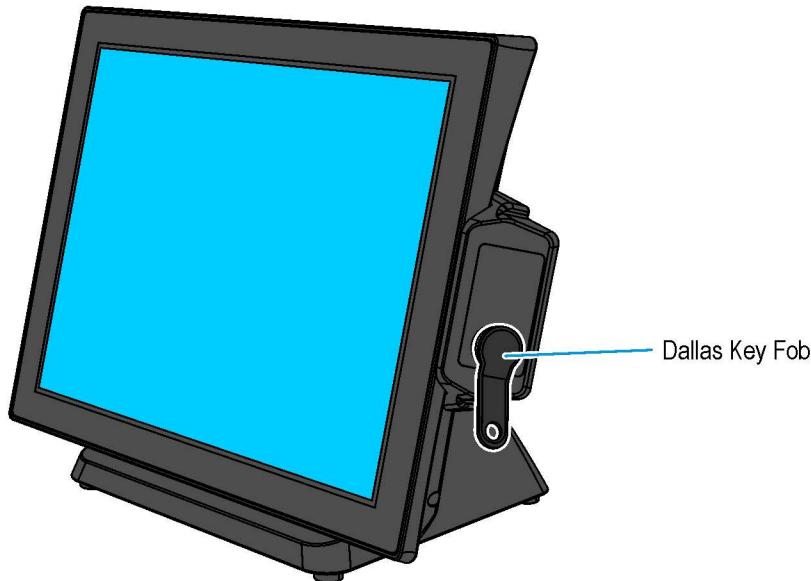
The Dallas iButton Reader is mounted on the right side of the display and interfaces through a USB connection in the display head.



Note: For more information, refer to *EX15 Dallas iButton Reader Kit Instructions* (4505-K150).

Using the Dallas iButton Reader

Place the Key Fob on the round metal surface of the iButton Reader.



CCP-75615

Addimat Key Reader

The NCR EX15 POS (4505) offers an Addimat Key Reader as a kit. It reads the unique registration number or ID code of Addimat Key Sticks, which is used for employee login to the POS software application.

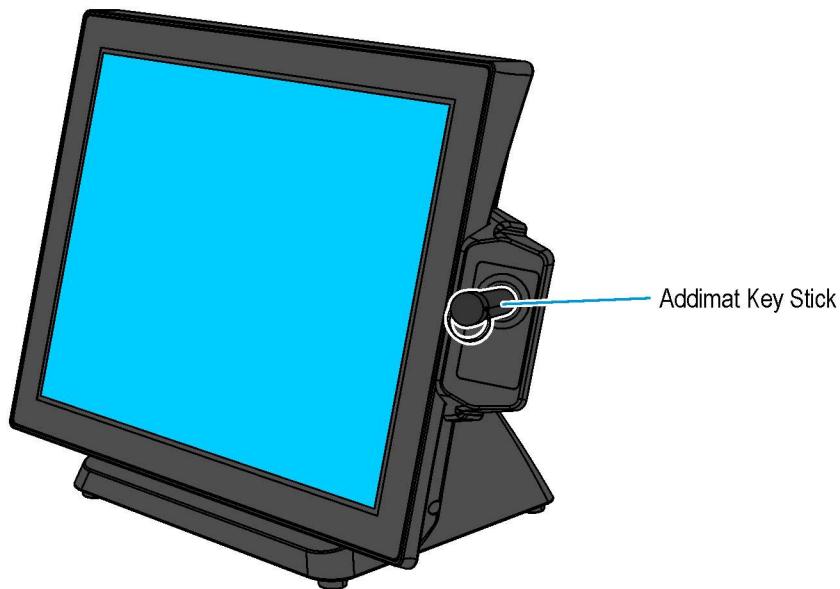
The Addimat Key Reader is mounted on the right side of the display and interfaces through a USB connection in the display head.



Note: For more information, refer to *EX15 Addimat Key Reader Kit Instructions* (4505-K151).

Using the Addimat Key Reader

Insert the Key Stick into the slot of the Addimat Key Reader.



CCP-75616

Cleaning the Cabinet

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: BIOS Setup

Entering BIOS Setup

1. Connect an alphanumeric USB keyboard to the terminal.
2. Apply power to the terminal.
3. When the terminal boots, press [**F2**] to display the BIOS setup.

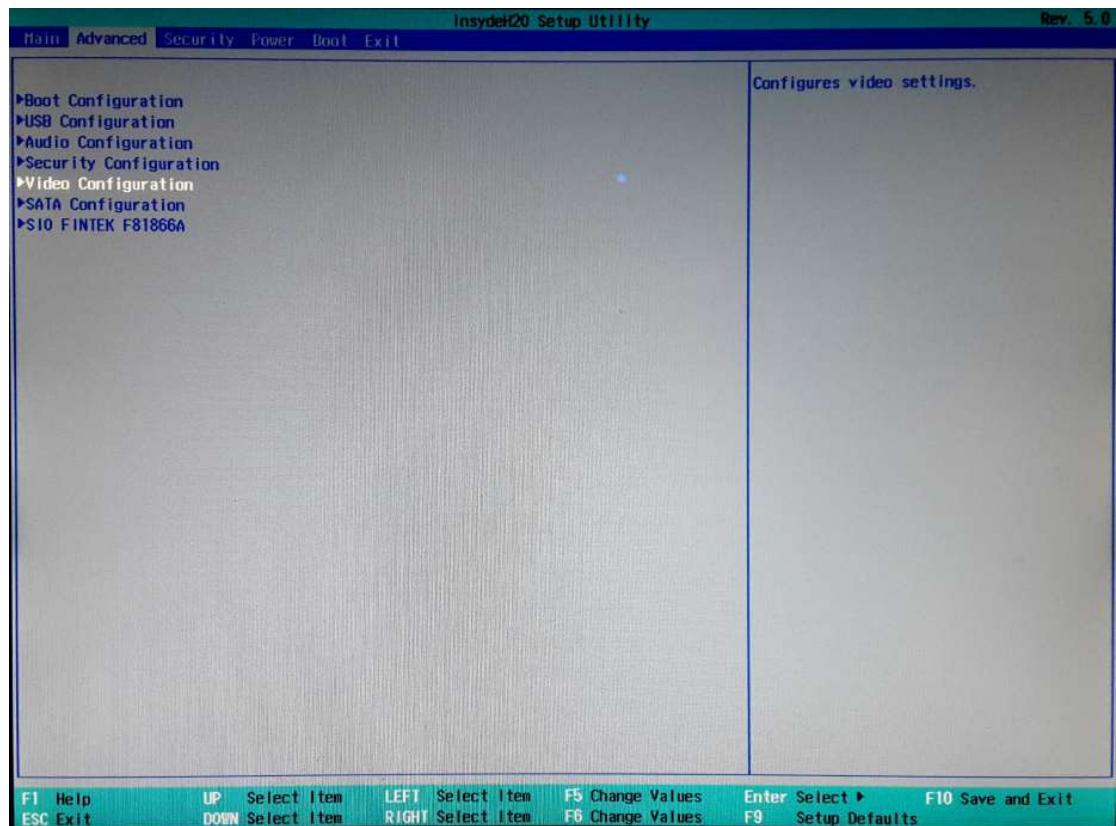
Selecting Menu Options

The following keyboard controls are used to select the menu options and to make changes to their values.

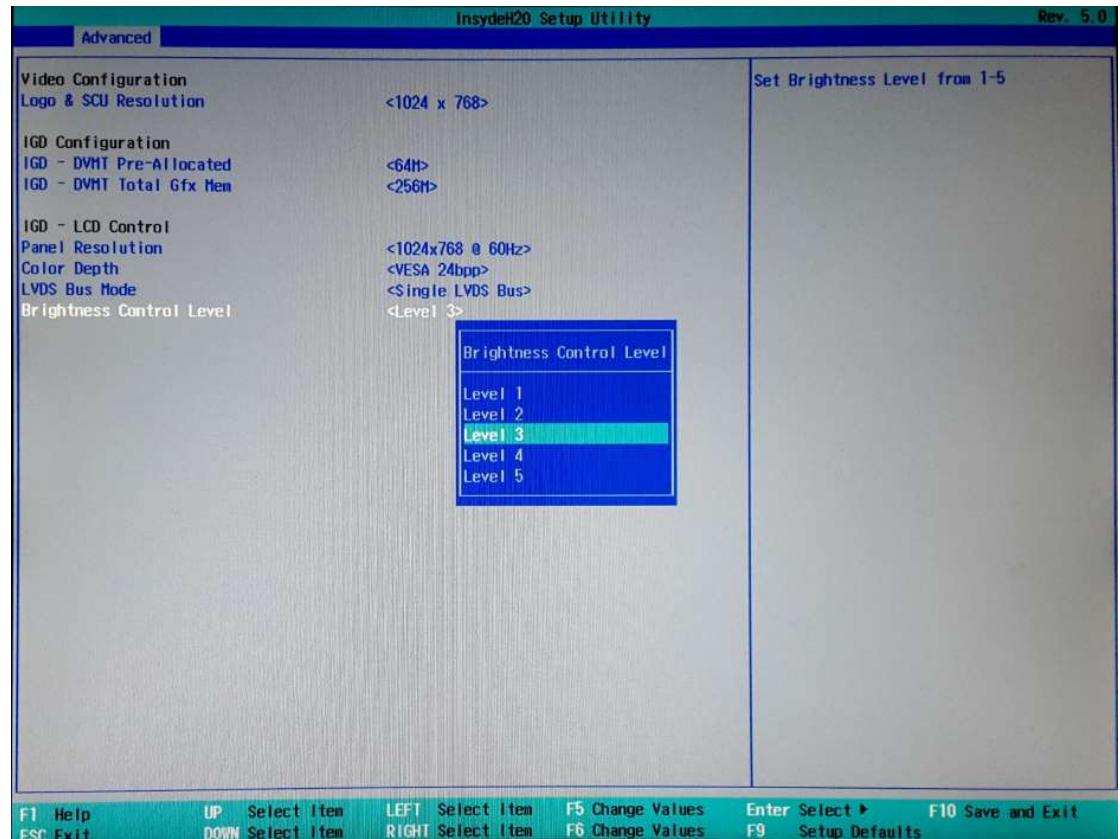
- To select (highlight) options and menu screens, use the arrow keys.
- To select a submenu, use the [**Enter**] key.
- To exit from a submenu, use the [**Esc**] key.
- To change field values, use the [**F5**] and [**F6**] keys.
- To view help information on the possible selections for the highlighted item, select the [**F1**] key.
- To save the changes, select the *Exit Menu* and do any of the following:
 - Select **Exit Saving Changes**, and then press [**Enter**].
 - Select **Save Changes**, and then press [**Enter**].

Setting the LCD Brightness

1. Select **Advanced→Video Configuration**.

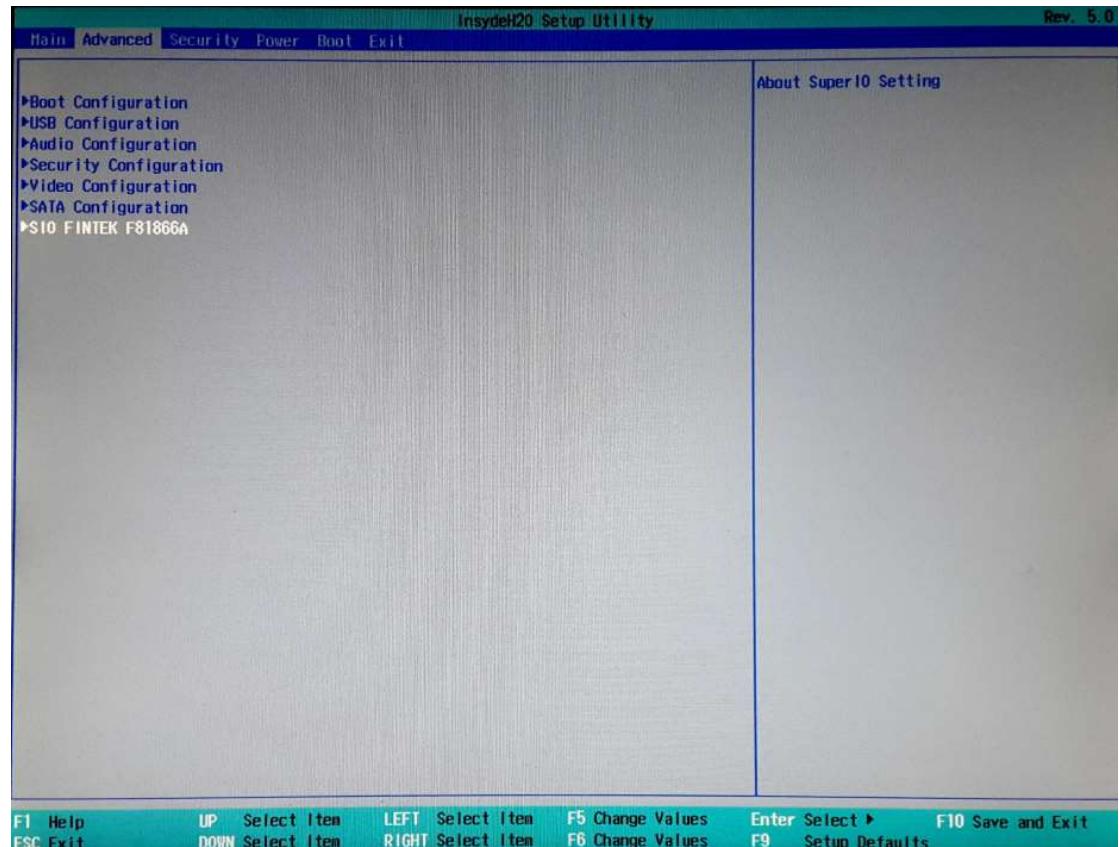


2. Select **Brightness Control Level**, and then select a brightness level.

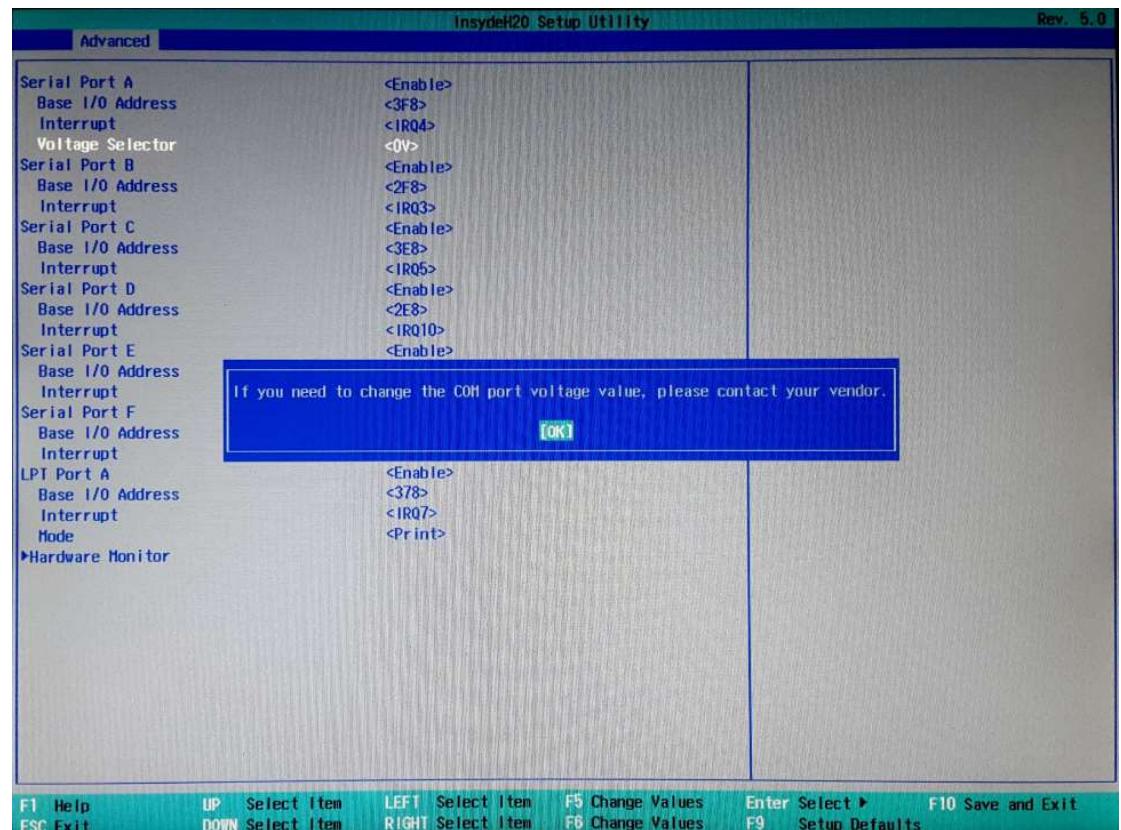


Setting the Serial Port (COM 1) Voltage

1. Select **Advanced**→**S10 FINTEX F81866A**.



2. Select **Voltage Selector**, and then select **OK**.



Chapter 5: Initial Terminal Imaging

Introduction

Factory default HDD/SSD images for the EX15 POS are distributed on bootable auto-imaging USB Flash Drive media. The following procedures describe how to apply/restore an image on the terminal.



Warning: Using this procedure will replace any previously stored OS images.



Note: A USB Keyboard is required to perform this operation.

Imaging Procedure

1. Connect the USB flash drive to the target terminal that you wish to image.
2. Connect a USB keyboard to the terminal.
3. Power on the terminal and boot from the USB Flash Drive. This can be done by pressing **F10** during the boot and choosing the USB option (**NCR**), or by entering *BIOS Setup* and changing the boot order.
4. The system boots in the Windows PE OS environment. Press **Y** on the keyboard at the confirmation prompt to re-image the terminal.
5. When the imaging process is complete, enter **Exit** on the keyboard to reboot the system.
6. After the reboot, remove the USB Flash Drive and disconnect the keyboard.