

SOFTWARE | HARDWARE | SERVICE

UTC RETAIL™

4170 POS System

4170 Installation Guide

Thank you for selecting UTC RETAIL's innovative Model 4170 Point of Sale solution!

This Installation Guide will help you efficiently install the 4170 POS. The document is intended for use by technical experts who assemble POS systems.



4170 POS System Installation Guide

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This Installation Guide was prepared by UTC RETAIL for use by Qualified Service Personnel only. All attempts have been made to ensure that the information presented in this manual is correct. No liability, expressed or implied, will be assumed by UTC RETAIL, its dealers, or affiliates, for damage resulting from the use of this information.

If a unit needs to be shipped to UTC RETAIL for repairs, please return it in the original packaging material and shipping container. If you purchased the 4170 POS System through a dealer, and the dealer is unable to answer your questions, please call UTC RETAIL Technical Support at 1.800.349.0546.

This equipment has been tested and found to comply with the limits for a Class "A" digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his/her own expense.

WARNING: CMOS Battery Damage



Replace your system's CMOS RAM battery only with identical CR-2032 3V Lithium-Ion coin cell (or equivalent) battery type to avoid risk of personal injury or physical damage to your equipment. Always dispose of used batteries according to the manufacturer's instructions, or as required by the local ordinance (where applicable). The damage due to not following this warning will void your motherboard's manufacture warrantee.



All access to internal components is restricted to Authorized Service personnel only.

If applicable, the key for this device should be in the possession of Qualified Service Personnel Only and used for access by an Authorized and Qualified Service Person.

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Preparing for Installation

Safety Precautions

DANGER: High Voltage



This unit contains high voltage. There is a risk of electrical shock if the case is opened. If service is required, contact an authorized service agent or UTC RETAIL (UTC).

WARNING: CMOS Battery Damage



Replace your system's battery only with CR-2032 (or equivalent) 3V Lithium-Ion coin cell battery to avoid risk of personal injury or physical damage to your equipment. Always dispose of used batteries according to local ordinance, where applicable. Any damage due to not following this warning will void your motherboard's manufacturer warranty.

WARNING: Access to Internal Components



All access to internal components of the 4170 POS unit is restricted to Authorized Service Personnel only. Opening the case or service by anyone else will automatically void the warranty on this product.

WARNING: Connect AC Power Cable last



To avoid accidental power-up during installation, connect the AC Power Cable last.

WARNING: Electrical Shock



Use caution when connecting cables. To avoid electric shock, do not connect safety extra-low voltage (SELV) circuits to telephone-network voltage (TNV) circuits. Local Area Network (LAN) ports contain SELV circuits, and telephone ports contain TNV circuits. Some LAN ports and some telephone ports use RJ-45 connectors.

CAUTION:



Damage to the logic module components may occur if AC power is not removed from the product prior to attaching any accessories.

CAUTION:



Do not hot plug to the I/O panel serial ports. Turn off the 4170 POS Unit before connecting serial port cables.

Site Specifications and Power Requirements

Power Requirements	Voltage Frequency Current (max with peripherals)	120 VAC \pm 10% 50/60 Hz 5A
Site Wiring	A dedicated, unswitched power line is recommended. The AC outlet should be close to the 4170 POS. Do not use extension cords.	
Environmental Conditions		
Temperature	Constant operation at or near the temperature limits stated below should be avoided. Do not exceed the limits shown.	
	Operating temperature: Storage temperature:	0°C to 40°C (32°F to 104°F) -20°C to 60°C (-4°F to 140°F)
Humidity	Constant operation at or near the humidity limits stated below should be avoided. Do not exceed the limits shown.	
	Humidity	Up to 90% non-condensing
Airflow Requirements	The ambient air temperature must not exceed 40°C (104°F). Do not stand the Workstation on its side; it must rest on its 4 bottom feet. Do not block the air vents on any side of the 4170 POS Workstation. Airflow through these vents is required for system cooling. Do not install the 4170 POS in a location not having sufficient ventilation. Leave several inches of clearance on all sides where the air vents are located.	

AC Power Line and Data Line Transient Protection

The 4170 POS is a modern computer that can interface with a large variety of peripherals. This complete POS system represents a significant financial investment for your site. As such, it must be protected against energy transients (lightening strikes, switching transients), complete power loss or brownouts as you would protect any piece of computer equipment. UTC RETAIL has a large variety of power and data line conditioner equipment and uninterruptible power supplies (UPS) that can be sized for your system; contact your UTC RETAIL representative for information.

Product Information

4170 POS System Components

You will find the following components inside the 4170 POS System box:

- 4170 POS
- Safety Sheet
- A/C power cord

Note: Options such as the keyboard, customer display, printer and LCD monitor may be shipped in separate boxes.

Peripheral Support

- The 4170 POS System keyboard options are the UTC RETAIL Model M750 or a standard PC type keyboard.
- The M750 keyboard was designed for POS environments; it has a built-in 3-track MSR and comes in QWERTY layouts.
- The 4170 POS System was designed to coordinate with the UTC RETAIL Pole Display options.
- The 4170 POS System supports many different printers, such as the Epson H6000 or TM-T88.
- The 4170 POS System supports UTC RETAIL 15" flat panel LCD displays. The displays are available in touch screen and non-touch configurations.

User Guide

To download the User Guide for this product, go to www.utcretail.com

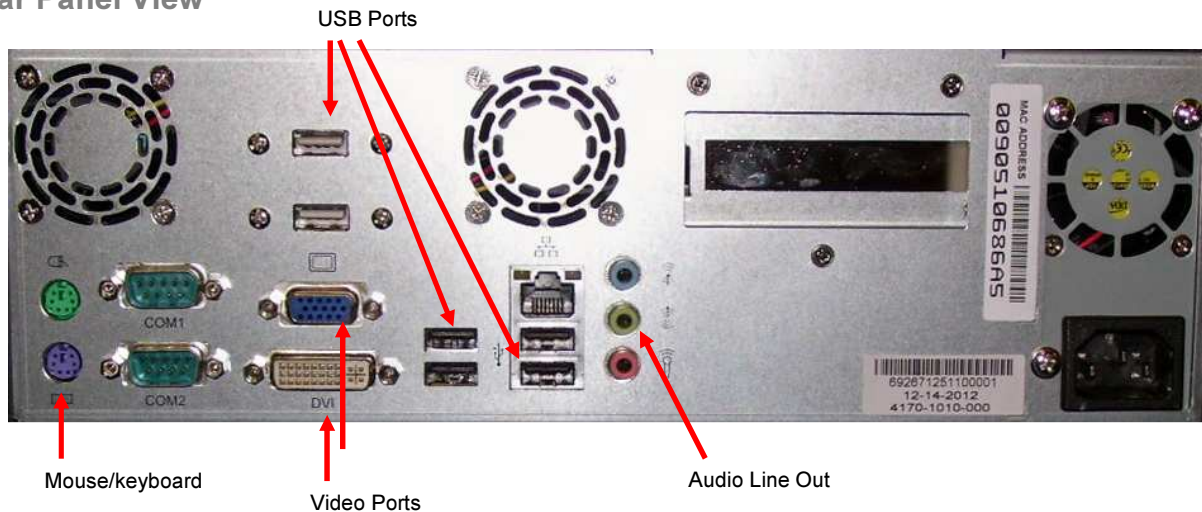
Installing the 4170 POS Workstation

Power Cord

Plug the supplied AC cord into the power jack on the rear of the chassis. Stand the system on its feet and route the power cable so it does not interfere with the system's operation.

Rear Panel

Rear Panel View



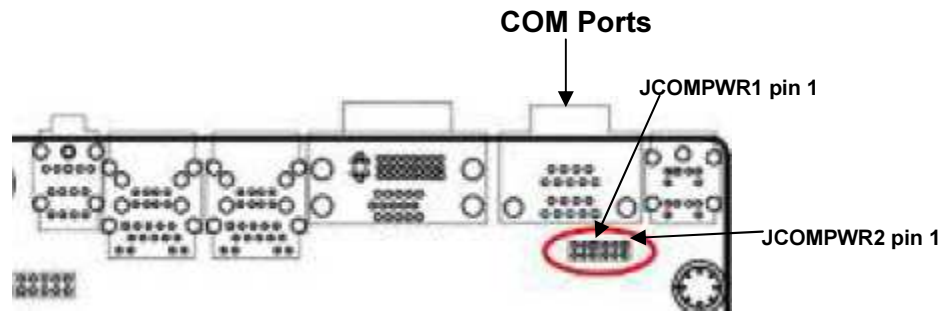
COM Port Power

The RS232 ports (COM1, COM2) can be configured to supply power to pin 9 of their DB9 connector. COM2 is set by default to have +5VDC on its pin 9.

The pin 9 power options are 0, 5, or 12 VDC.

There are power selection jumpers located on the motherboard. The table below summarizes the RS232 DB9 pin definitions:

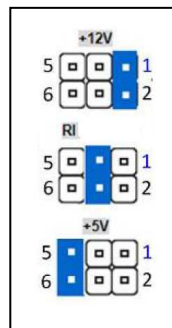
PIN NO.	1	2	3	4	5	6	7	8	9
Signal	CD	RX	TX	DTR	GND	DSR	RTS	CTS	RI or 5V/12V output



JCOMPWR1: Selects RI or voltage output for COM1 DB9 pin 9

JCOMPWR2: Selects RI or voltage output for COM2 DB9 pin 9

Pins jumpered	Pin 9 Setting
1 – 2	+12V
3 – 4	RI
5 – 6	+5V



Power Requirements

The 4170 POS System has one AC power cord. A dedicated, clean power source is recommended. UTC RETAIL offers a variety of UPS options. Contact your sales agent.

Voltage: 120 VAC \pm 10%

Current: 5 Amps maximum, with all peripherals connected

PCIe Slot Support Options

The PCIe slot can support a standard low-profile PCIe card when an adapter riser card is also installed (UTC RETAIL P/N 11820015).

Hard Drive Removal

The 4170 POS System is equipped with one easily accessible hard drive.

To remove a hard drive, follow these steps:

1. Shut off all power to the system; unplug the power cord from the AC outlet.
2. Remove the three cover screws and lift off the 4170 system's cover.
3. Disconnect the HDD cabling.
4. Remove the 4 hard drive screws; remove the hard drive.
5. Replace hard drive.
6. Reconnect the cabling.

Troubleshooting

4170 POS Workstation User Guide provides troubleshooting procedures for possible problems encountered when installing the product. Access the document at: www.utcretail.com.

Please call UTC RETAIL's Technical Support at 800.349.0546 if you have any problems not addressed in the Troubleshooting Procedures or has questions about other sections of this documentation.