

SOFTWARE | HARDWARE | SERVICE

**UTC RETAIL™**

# 2190 POS System

## 2190 User Guide

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Thank you for selecting UTC RETAIL's innovative Model 2190 Point of Sale solution!

This guide is designed to acquaint you with the features and functionality of the 2190 Point of Sale System.



## 2190 POS System User Guide

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All rights reserved. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or otherwise, without the prior written permission of UTC RETAIL.

This User 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, 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 2190 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.

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## Product Information

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The 2190 Touch Screen POS Workstation is designed for use in restaurants, convenience stores, cafeterias and other specialty retail establishments. It is highly configurable, has easy access to connectors, and includes a large selection of interface ports for connectivity to printers, cash drawers, scanners, keyboards, and other peripherals.

### **2190 POS System Components**

You will find the following components inside the 2190 POS System box:

- 2190 POS
- Safety Sheet
- A/C power cord
- Two (2) RJ-45 to DB-9 serial port adapter dongles

***Note:** Options that were purchased from UTC RETAIL such as a keyboard, customer display and printer may be shipped in separate boxes.*

Depending on the configuration you have purchased, the following optional items may also be installed onto the 2190 POS:

- Magnetic Stripe Reader (MSR) unit
- Rear Customer Display (RCD) unit
- 8.4" Rear LCD Display
- 10.4" Rear LCD Display

### **Peripheral Support**

- The 2190 POS System accepts a standard PC keyboard with a USB interface. UTC RETAIL P/N 10718020 contains both a USB keyboard and USB mouse.
- The 2190 POS System was designed to coordinate with the UTC RETAIL PD1200 Pole Display option.
- The 2190 POS System supports many different printers, such as the Epson H6000 or TM-T88.

## 2190 POS System Specifications

2190	
Processor	Intel® 3955U Dual-Core CPU (2M Cache, 2.0 GHz)
System Memory	4GB DDR3-1066 (up to 8GB)
Hard Drive	500GB (min), 128GB SSD optional
Graphics	Intel® HD Graphics 510
Video Out Port	VGA for external display
Audio	Line output, Mic input
RS-232 Ports	3 (one port powered at +5V/1A)
USB Ports	6 (4 USB 3.0, 2 USB 2.0)
Network Port	10 / 100 / 1000 Realtek LAN
Customer Displays (optional)	<ol style="list-style-type: none"> <li>1. 2-line x 20 character PD1200 VFD – free standing</li> <li>2. 2-line x 20 character VFD – integrated</li> <li>3. 8.4" LCD (customer facing)</li> <li>4. 10.4" LCD (customer facing)</li> </ol>
MSR (optional)	Integrated ISO 3 Track, Programmable
Keyboard options	Standard PC with USB interface
Cash Drawer	Optional
Dimensions (W x D x H)	12.75" x 11.75" x 4.25"
Operating Systems	Windows 7 Professional, POSReady 7, Windows 10 Professional, Windows 10 IoT Enterprise

## I/O Panel

### Connector Panel View



The photo above is of the interface connector panel below the touchscreen LCD. The system power on/off switch is circled in red above and was deliberately chosen for its small size to prevent accidental power downs. The cash drawer port accepts a RJ12 jack; your POS application can access this port directly. The LAN jack is for standard RJ45 network cables, DC IN is the port for the supplied AC adapter and VGA is a standard D-SUB15-pin SVGA port. The blue USB ports indicate the USB v 3.0 ports and the black USB ports indicate the USB v 2.0 ports.

## COM Ports

There are 3 COM ports on the 2190; they are standard RS-232. The COM3 port has been configured to supply +5VDC power to pin 9 of the DB9 connector on the supplied adapter cable. COM3 may supply up to 1 A of current; do not exceed this limit.

Note: COM3 may also be configured for pin 9 to be RI (ring indicator). This configuration must be performed at the UTC RETAIL facility.

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 output (as explained above)

Use the supplied RJ48 – DB9 adapter cables to connect to the COM ports. Additional cables are available as P/N 11801015. See the drawing below for the adapter's pinout.

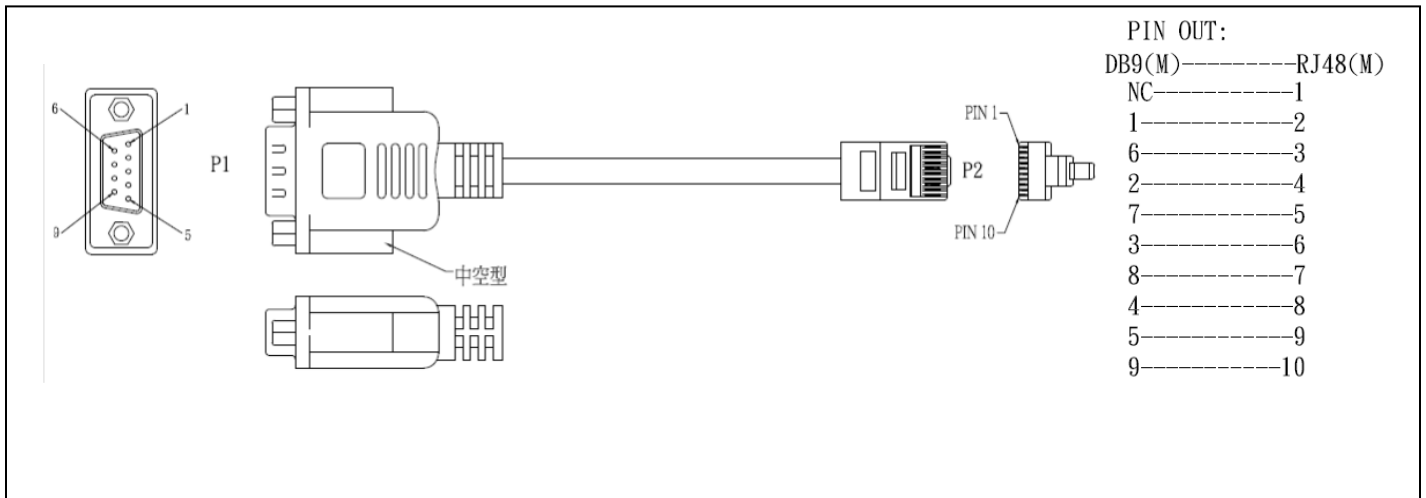


Figure 1, Serial Port Adapter Pinout

## Cash Drawer Interface

The 2190 POS I/O panel has a single cash drawer port which is capable of driving a 24VDC cash drawer. The interface is compatible with the APG Cash Drawer (<http://www.cashdrawer.com/>) CD-005A specification, seen below.

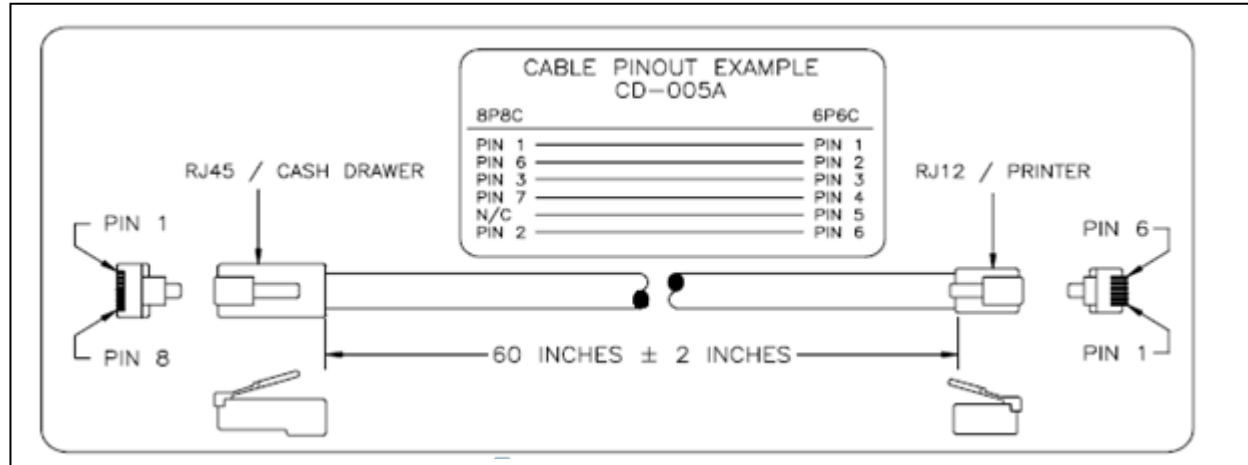


Figure 2, Cash Drawer Interface

## Supported Peripheral Options Details

	USB	Serial
<b>Printer Options</b>		
H6000IV	✓	✓
TM-T88V	✓	✓
<b>Keyboard Options</b>		
Standard PC keyboard	✓	
<b>Pole Display Options</b>		
PD1200 with external power adapter	✓	✓

## Power Requirements

The 2190 POS System has one AC power cord. Connect the power cord to the AC adapter installed into the system's base. A dedicated, clean power source is recommended. UTC RETAIL offers a variety of UPS options. Contact your sales agent.

Voltage: 120 VAC ± 10%

Current: 5 Amps maximum, with all peripherals connected

## Connect Power Cable

Place the 2190 POS face down on a clean, soft surface, ensuring you do not scratch the front bezel or the touchscreen.

Plug the supplied AC cord into the power adapter mounted into the base. See photo below. Stand the system on its feet and snake the power cable through the cutout in the rear of the base.



Figure 3, AC Power Cord Attachment

## Expansion Options

None, the system does not accept any internal expansion cards.

## Hard Drive Removal

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The 2190 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 single screw on the rear panel and lift off the hard drive access cover.
3. Disconnect the HDD cabling.
4. Replace hard drive.
5. Reconnect the cabling and install the door.



Figure 4, HDD seen under the opened door



## **System Installation Guide**

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Please refer to the 2190 POS System Installation Guide, which may be downloaded from the UTC RETAIL website at [www.utcretail.com](http://www.utcretail.com).

Note: Consideration should be taken to ensure that none of the unit vents are blocked. Blocking the vents may cause damage to the unit. The 2190 POS has no internal cooling fans and relies on ambient air to provide system cooling.

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Please call UTC RETAIL Technical Support at 800.349.0546 if you have any problems not addressed in this manual or have questions about sections of this documentation.