

# PostMark<sup>®</sup>

## Point of Sale Terminal Camera Video Overlay System



## Description

PostMark® interfaces point of sale terminals (POS) with security cameras to produce a continuous overlay of transactions superimposed on the camera video output. PostMark® can either interface between a point of sale terminal and pole display or work standalone connected to a point of sale terminal.

## Specifications

Dimensions:	5 1/2" x 3 1/2" x 1 1/4"
Weight:	7.8 oz.
Input voltage:	8.0 to 14.0 volts DC (60 ma max.)
DC plug:	2.1 mm x 5.5 mm, center tip positive
Operating temperature:	-10 C to +70 C
Text area:	28 columns by 11 rows (308 characters)
Text / background:	Adjustable brightness and translucent (see-through) levels
Video level:	1 volt peak to peak
Video impedance:	Input 75 ohm, output 75 ohm resistively terminated
RS-232 serial or TTL input:	9,600 baud, 8 data bits, 1 stop bit, inverted data

## Installation

On the back of PostMark® there are five connectors (see figure 1.) Make the following hookups:

Connector	Hookup
VIDEO IN (optional)	<ul style="list-style-type: none"><li>• Attach noise free NTSC (or optional PAL) video source</li><li>• Not required if self-generated screen mode selected</li></ul>
VIDEO OUT	<ul style="list-style-type: none"><li>• Attach to monitor, VCR, DVR, video transmitter, etc.</li></ul>
REGISTER / PC	<ul style="list-style-type: none"><li>• Attach using supplied cable to RS-232 port of POS register / PC.</li></ul>
POLE DISPLAY (optional)	<ul style="list-style-type: none"><li>• Attach to RS-232 input of pole display.</li><li>• Not required</li></ul>
DC 8-14 V	<ul style="list-style-type: none"><li>• +8 to +14 volts DC (60 ma max.)</li><li>• 2.1 mm x 5.5 mm DC coax plug, center tip positive</li><li>• Wall power supply included</li></ul>

The PostMark® serial port must be configured to match the electrical configuration (pin out) of the point of sale terminal and optional pole display. This is done once per unit by setting jumpers on the circuit board. To open the enclosure remove the two back screws, remove the panel and bezel, and slide the circuit board out. Just below the DB-9 serial connectors are a column of 14 jumpers.

## Jumper Description Table:

Jumper(s)	Description
P5, P9, P4, P8, P3, P7, P2, P6, P1	These jumpers tie the REGISTER / PC connector pins to the POLE DISPLAY connector pins to allow the POS system RS-232 signals to pass-through to the pole display.
TX, RX, GND	These jumpers tie REGISTER / PC pins to the PostMark® circuit. TX is never used.
CTS	This jumper ties the REGISTER / PC RTS and CTS pins together. This may be required for some REGISTERS / PC's.
DCE	This jumper ties the REGISTER / PC DCE and DTE pins together. This may be required for some REGISTERS / PC's.

*For any installation, at minimum, the RX and GND jumpers must be installed.*

## Common Jumper Configurations:

POS System / Pole Display	PostMark® Jumper Settings
Default POS system and no pole display	RX and GND
Default POS system and pole display	P5, P3, RX and GND
VersiTouch point of sale software Epson DM-D110 pole display (Configure VersiTouch, Epson DM-D110, and PostMark® for EMAX emulation)	P5, P3, RX, CTS, DCE, and GND

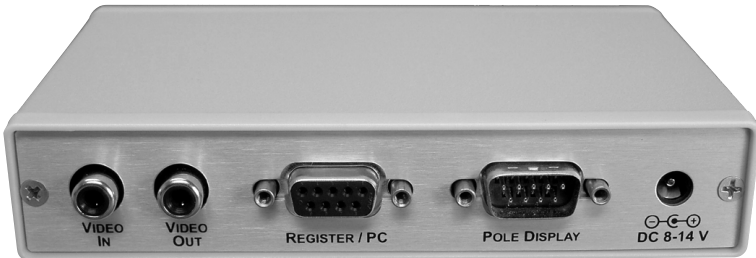


Fig 1.0 - Back view of PostMark®.

# Configuration

PostMark® configuration is performed through an on-screen menu system. At any time press the "MENU" button to enter the on-screen menu configuration. The "UP, DOWN, and ENTER" buttons move the cursor and change the values (see figure 2.).

The on-screen configuration allows PostMark® to be tailored for the specific customer application. The on-screen text can be repositioned and the number of rows can be adjusted. The text can be made translucent (see through) and have a background frame. The POS system and pole display RS-232 serial data format can be configured.

## Main Menu:

Menu Option	Action
Set Screen Parameters	Displays Screen Parameters Menu
Set Pole Display Parameters	Displays Pole Display Parameters Menu
Save Changes and Exit	Save all the options that have been changed in non-volatile memory
Discard Changes and Exit	Discard all the option changes that have been made since entering the menus



Fig 2.0 - Front view of PostMark®.

## Screen Parameters Menu:

Menu Option	Action
Screen Mode	<ul style="list-style-type: none"> <li>• SELF-GEN - PostMark® generates its own blue background screen. No camera required.</li> <li>• OVERLAY - Overlay the on-screen text on the incoming camera video source</li> <li>• OFF - Pass the camera video through without overlaying the on-screen text</li> </ul>
Background Frame	<ul style="list-style-type: none"> <li>• OFF - Do nothing</li> <li>• ON - Display a black frame behind the on-screen text</li> </ul>
Translucent Text	<ul style="list-style-type: none"> <li>• OFF - Do nothing</li> <li>• ON - Allows the on-screen text to be see-through (less intrusive)</li> </ul>
Manual Adjustment	<ul style="list-style-type: none"> <li>• OFF - Do nothing</li> <li>• ON - Allows the on-screen text and background brightness to be adjusted via internal potentiometers</li> </ul>
Total Rows	The number of on-screen text rows that are displayed (1 - 11)
Horz Position	<ul style="list-style-type: none"> <li>• LEFT - Left screen justify the on-screen text</li> <li>• CENTER - Center screen justify the on-screen text</li> <li>• RIGHT - Right screen justify the on-screen text</li> </ul>
Vert Position	<ul style="list-style-type: none"> <li>• TOP - Top screen justify the on-screen text</li> <li>• CENTER - Center screen justify the on-screen text</li> <li>• BOTTOM - Bottom screen justify the on-screen text</li> </ul>
Exit to Main Menu	Exit to Main Menu

## Pole Display Parameters Menu:

<b>Menu Option</b>	<b>Action</b>
Pole Display Rows	Number of pole display rows (1 - 4)
Pole Display Columns	Number of pole display columns (20)
Select Emulation Type	Displays the Select Emulation Type Menu. The selection from that menu will change the Start and End values.
Start	Select the start byte sequence the POS system will generate (values in decimal)
End	Select the end byte sequence the POS system will generate (values in decimal)
Exit to Main Menu	Exit to Main Menu

## Select Emulation Type Menu:

<b>Menu Option</b>	<b>Action</b>
EMAX	EMAX pole display emulation
IEE	IEE pole display emulation
TAPS	TAPS pole display emulation
Ultimate PD2000	Ultimate PD2000 pole display emulation
Ultimate PD2000XL	Ultimate PD2000XL pole display emulation
None	Do not change Start and End byte sequences

## Trouble Shooting Tips

<b>Problem</b>	<b>Solution</b>
Green LED off (won't power up)	<ul style="list-style-type: none"><li>• Verify power supply output (8 to 14 VDC).</li><li>• Verify polarity of supply to PostMark®.</li><li>• Verify the 250 ma internal fuse is good.</li></ul>
Screen is unreadable	<ul style="list-style-type: none"><li>• Verify the PostMark® "VIDEO IN" has a valid, noise free, video signal.</li></ul>
No information on-screen or text doesn't update	<ul style="list-style-type: none"><li>• Verify proper REGISTER / PC configuration.</li><li>• Verify jumper settings.</li></ul>

## Warranty & Service

If the product fails to perform as described in our product description or specification, within 1 year from the date of shipment to the buyer, we will repair or replace the product and/or accessories originally supplied. Failure due to improper installation, misuse, abuse or accident is not covered by this warranty. Incidental and consequential damages are not covered by this warranty.

The buyer must obtain a Return Material Authorization by calling (248) 524-1918, and shipping the defective product to Intuitive Circuits LLC, 2275 Brinston, Troy, MI 48083, freight prepaid. After the warranty expires, we will promptly supply an estimate for the repair cost.

## Intuitive Circuits, LLC

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