



Model PS-12232-P77 Display System Installation Instructions

Thanks for purchasing this PINSCORE Model PS-12232-P77 Display System.

This model fits the following Williams & Data East pinball machines:

F-14 TOMCAT (LATE)
FIRE!
BIG GUNS

SPACE STATION
CYCLONE
SWORDS OF FURY

PLAYBOY 35TH ANN.
SECRET SERVICE
TIME MACHINE

TORPEDO ALLEY

FEATURES: Plug & play installation, long life, low voltage, low power consumption, adjustable brightness, diagnostic pushbutton, attractive black matte finish, 5 year warranty, RoHS compliant, built in USA.

INSTALLATION TIME: About 20 minutes

TOOLS REQUIRED: 1/4" Nutdriver and/or phillips screwdriver

CONTENTS: This system contains:

- Quantity (1) PS-12232 Rev D PINSCORE Master Board
- Quantity (1) PS-DISP14A PINSCORE 14 digit LED Panel (top pre-assembled)
- Quantity (1) PS-DISP14N PINSCORE 14 digit LED Panel (bottom pre-assembled)
- Quantity (2) PS-LS-14 Foam light shields (pre-assembled)
- Quantity (4) PS-8848 plastic standoffs (pre-assembled)

INSTALLATION:

- 1. Unplug** the AC power from your pinball machine. Remove game backglass. Unplug all display board connecting cables and remove original display board.
- 2. DIP switches.** Remove the PS-12232 board from its package. The 3 bank DIPSWITCH is labeled SW2 and located near the center bottom on the FRONT of the board. The 3 switches have been **factory set** to 1/UP-2/DOWN -3/UP. (ON is UP and OFF is DOWN). No change to these settings is necessary. (No damage will occur if the switches are changed from the factory pre-set, but the display may show scrambled characters).
- 3. Mount** the new board. Hand-tighten the screws so that you may align the displays with the backglass windows before finally securing the board. If further alignment is necessary, you may adjust the insert panel door hinges and latch in the backbox.
- 4. Connect** the cables. Not all connectors are used on all games. The 2 connectors labeled EXTERNAL DISPLAY are NOT used in the PS-12232-P77 system. The ribbon cable goes to the connector labeled MPU CABLE. The power connectors are keyed to prevent incorrect alignment. Ribbon cables are not keyed and it is possible to mis-align the connector. Observe correct polarity on all ribbon cables - the red striped wires on all ribbon cables go to PIN #1 (also labeled as RED) on all boards.
- 5. Double-check** all connections, plug in the machine, and turn the game on. The LED's will light up. Pressing the diagnostic pushbutton labeled SW1/DISPLAY TEST on the PS-12232 board will illuminate all segments of all displays. This indicates that all components of the PINSCORE System are operating correctly. The thumbwheel BRIGHTNESS control labeled R10 on the right side of the board allows you to set your preferred illumination level.
- 6. PLAY PINBALL!** You'll enjoy your PINSCORE Displays for years to come!