

PI-1X4

Pinball Board Setup



IMPORTANT PRELIMINARY INSTRUCTIONS PRIOR TO INSTALLING THE BOARD:

- The pinball game must be turned off and unplugged from outlet before removing/installing any board
- The electronic boards must be handled by their edges to reduce the risk of damage through static electricity
- The AC cord must be in good shape and imperatively plugged into a grounded outlet before turning the pinball game on
- All displays must be in perfect working condition, all coils and their respective diodes must have been checked good
- All fuses must have been checked and strictly comply to game's prescriptions (rating -in amperes- and blowing speed) in the original game's manual
- Pins of all connectors around boards **A1** (CPU) **A2** (power supply) and **A3** (driver) must be clean and corrosion-free



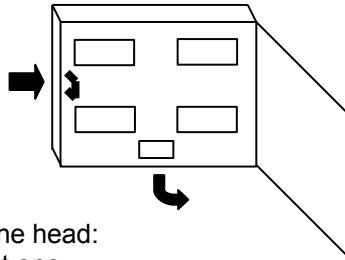
INSTALLING THE BOARD IN A GAME IN UNKNOWN CONDITION WILL VOID THE GUARANTEE

STEP 1

Open the top head, with the key on the left hand side.
The wooden frame, that holds the backglass, swings to the right, unveiling the displays.

STEP 2

Pull the handle and the wooden panel holding displays and lamps will swing to the right.

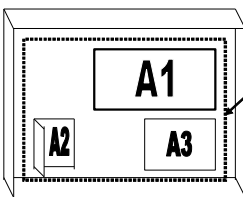


STEP 3

Locate the 3 boards already present in the head:

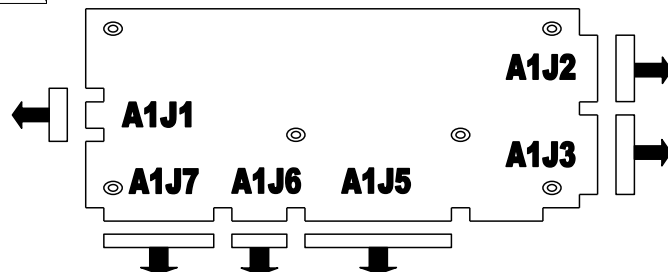
- The main board (**A1**), the biggest one
- The power supply board (**A2**), the smallest on the bottom left corner, affixed to a metal bracket
- The lamps & coils driver board (**A3**), on the bottom right corner

The **PI-1 X4** board will replace all 3 boards.



STEP 4

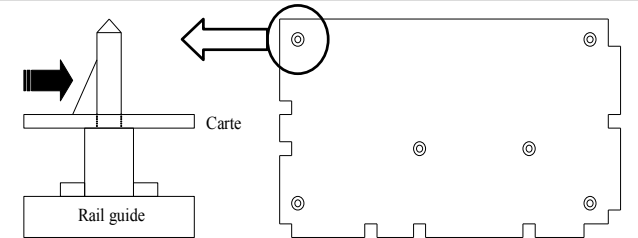
On board **A1**, locate the 6 connectors plugged on the sides. Write down the way they are inserted, then remove them following the arrows below: pull on the **plastic case** of the connector, **and not on the wires!**



STEP 5

The board **A1** is fastened to the head by 6 nylon spacers, each equipped with a little « clip » tip. With your fingertips (or flat pliers), gently push onto each « clip » then pull the board towards you. Once the 6 « clips » are released, the board can be easily removed by pulling it by its edges.

Advice: remove the back-up battery in the center, to avoid further leakage, and recycle it with regular batteries.

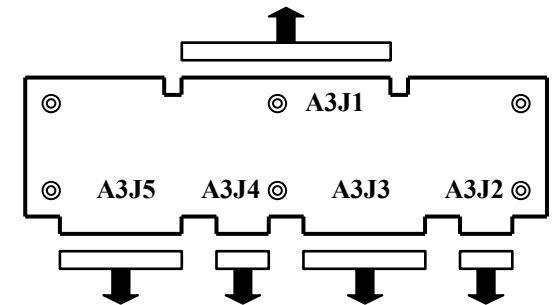


STEP 6 (manual: step 8-X4)

In the same way as for the **A1** board at step 5, locate on the **A3** board its 5 connectors :

- **A3J1** (center top) : to the main board **A1**
- **A3J5 A3J4 A3J3** and **A3J2** (from left to right) bottom side: to the playfield

Write down the way they are inserted, then remove them following the arrows above: pull on the **plastic case** of the connector, **and not on the wires!**



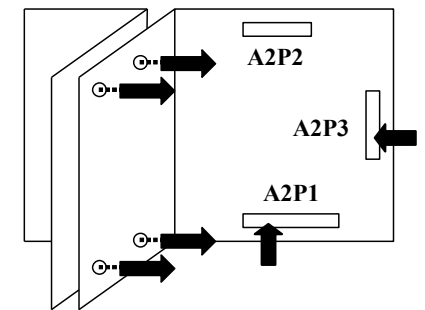
STEP 7 (manual: step 9-X4)

Locate on the **A2** board the 3 male header connectors:

- **A2P1** (bottom side) : to the transformers and fuses assembly in the cabinet
- **A2P2** (top side) : to former **A1** board
- **A2P3** (right side) : to the displays

Write down the way they are inserted, especially the green ground wire (or black on some Cleopatra, Sinbad and Joker Poker games) on **A2P1 pin 3** and **A2P3 pin 5**, then remove them by pulling on the **plastic case** of the connector, **and not on the wires!**

Then remove the board by unscrewing the 4 screws that hold it to its metal bracket.



PI-1X4

Continued from p. 1

STEP 8 (manual: step 10-X4)

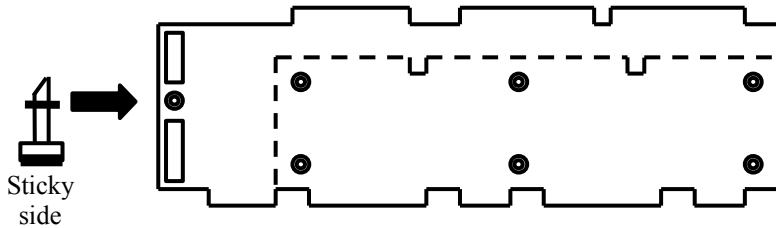
Take the **PI-1 X4** board out of its antistatic bag.

- Store this bag in a safe place, in case the board should be returned for maintenance!



The **PI-1 X4** board fits exactly in the old **A3** board's space, but on its 6 spacers. In the 7th mounting hole on the center left, first insert the provided adhesive nylon spacer.

Peel the protective film off the sticky side, then insert the **PI-1 X4** board on the 6 spacers, and firmly press on the 7th spacer to make it stick to the metal backplate of the head:

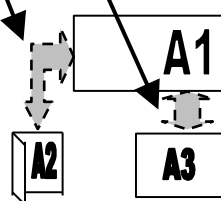


Then re-insert all the connectors of the former **A1**, **A2** and **A3** boards as follows, clockwise from top left corner:

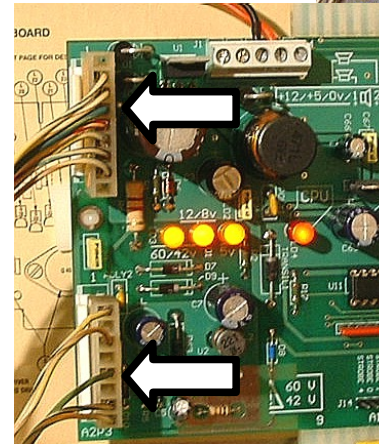
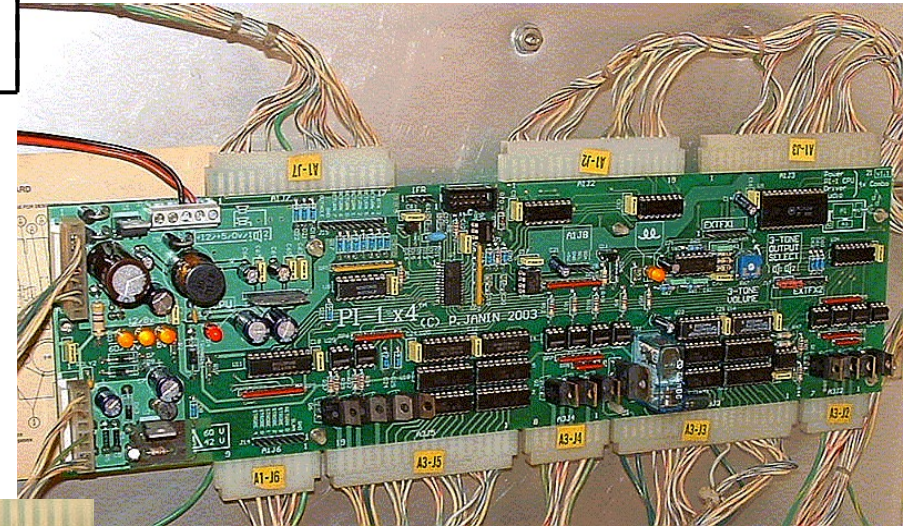
- **A2P1** with a 90° clockwise turn (refer to the arrow showing the green -or black- ground wire as identified at previous step 7)
- **A1J7** with a 180° turn
- **A1J2** and **A1J3**, with a 180° turn and aligned
- **A3J2** **A3J3** **A3J4** and **A3J5**, aligned
- **A1J6**
- and finally **A2P3**, same orientation, on the bottom left corner (as for **A2P1**, refer to the arrow showing the green -or black- ground wire as identified at previous step 7)

There is no possible risk of mistake or confusion of the connectors: each connector has its own specific size, and some have notches (blockers), making mix-ups impossible.

Connection harnesses **A2P2-A1J1** and **A1J5-A3J3** are now useless, to be put aside.



Double-check the location and position of each connector on the following **PI-1 X4** board overview, once the board is installed in the game's front head:



Here is an overview of the power supply section:

- connector **A2P1** on top left corner (note the green -or black- ground wire position)
- connector **A2P3** on bottom left corner (note the green -or black- ground wire position)
- the nylon spacer between those 2 connectors
- the 3 status LEDs: +60V/+42V, +12V/+8V, +5V
- the CPU activity LED (to the right)
- the loudspeaker cable connected to audio output #1 on the screw-clamp connector **J1** (optional connection, refer to manual: step 11-X4)

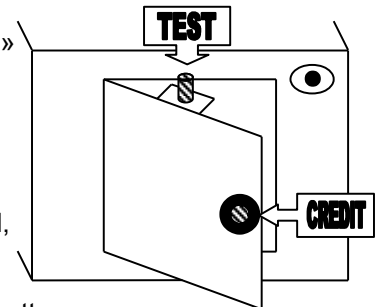
The board is now installed! Remain to be done: connecting the loudspeaker(s), and setting menus language upon 1st power-up.

GAME SELECTION

The full name of the selected game and its identifier (letter) are displayed for 5 seconds:

- **PLAYER1 display:** « GAME » + letter from « A » (*Cleopatra*) to « S » (*Asteroid Annie*) and derivative kit games with a leading « + »
- **PLAYER3/PLAYER4 displays:** game's name in full

To change the game, press the white **[TEST]** button located inside the front coin door within **5 seconds** of power-up, whilst the game name is being displayed: the **PLAYER1** display then flashes. Every time **[TEST]** is pressed, the next game in the list is displayed (as listed on the manual's cover page). To select the game displayed, press the red **[CREDIT]** button (the one that starts a game) on the front of the coin door. By default the game displayed will be automatically selected **5 seconds** after the user last pressed either button.



The full manual is available from www.flipp.com

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