PI-80 Board Setup

Flippp!
Cartes électroniques pour flippers
Replacement boards for electronic pinballs

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 and **A6/A7** (sound) boards 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) **A3** (driver) and **A6/A7** (sound) must be clean and corrosion-free

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

STEP 1

Open the pinball game's front head, with the key on the left or top (latest System80A games) side. Depending on the game, the backglass must be sled upwards then swung towards you, and/or a wooden frame swings to the right, unveiling a wooden panel that holds the displays and the lamps. Pull the handle and the panel will swing to the right, giving access to the boards.

STEP 2

The boards in the front head are installed in one of the following 3 layouts:
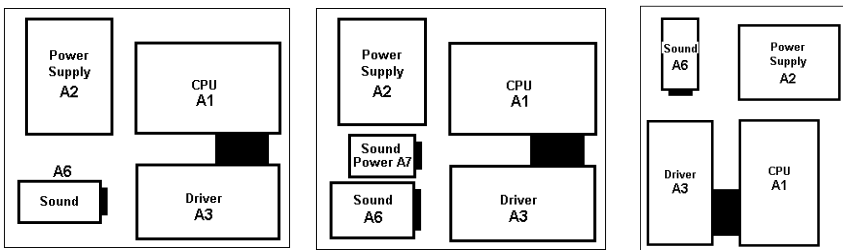
• **A1** : the main « CPU » board, the biggest of all
• **A2** : the power supply, mounted on a metal plate (heatsink), and connected to the **A1** board by a small 4-wire harness
• **A3** : the « driver » board that drives coils and lamps, connected to the **A1** board by a large wire harness (in black on drawings)
• **A6** : the sound board, speech-capable (larger) or not (smaller)
• **A7** : the power supply that goes with the speech sound **A6**

The **PI-80** board will replace the 3 boards **A1 A2 A3**.

STEP 3

Locate, on **A1** and **A3** boards, the 6 connectors plugged on the sides:
• **A1** board: connectors **A1J1** to **A1J6**
• **A3** board: connectors **A3J1** to **A3J6**
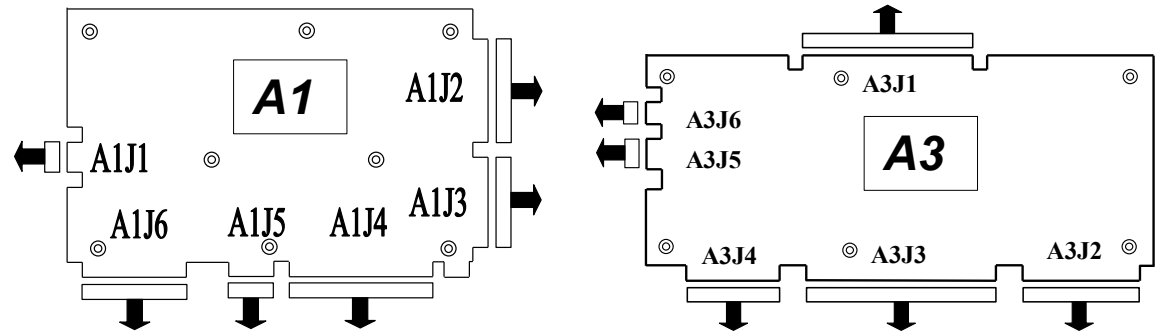
Write down the way they are inserted, then remove them following the arrows above: pull on the **plastic case**, and **not on the wires!** The wire harness between **A1J4** and **A3J1** is no longer used.

STEP 4

Free each « clip » tip (nylon spacers, drawn as circles on the drawings) that hold those 2 boards in place in the front head: with your fingertips (or flat pliers), gently push onto each « clip » then pull the board towards you.
Each board can then be easily removed by pulling it by its edges.
*Advice: remove the black battery, on the left hand side of CPU **A1**, to avoid leakage, and recycle it.*
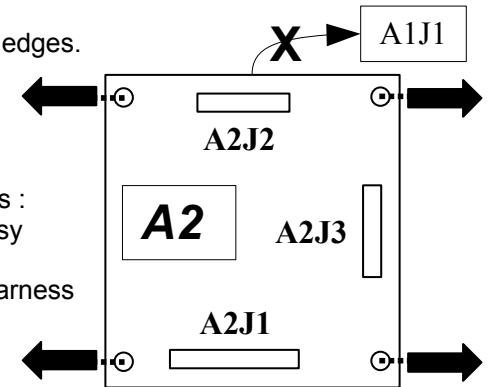
STEP 5

Locate, on **A2** board, the 3 connectors plugged on its sides :
• **A2J1** (bottom side) : to the transformers and fuses assy in the cabinet
• **A2J2** (top side) : to former **A1** board by a small wire harness to be removed (no longer used)
• **A2J3** (right side) : to the displays

Write down the way they are inserted, then remove them by pulling on the **plastic case**. Then remove the board by unscrewing the 4 screws that hold it to the 2 mounting brackets.

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STEP 6

Take the new **PI-80** board out of its antistatic bag.
Hold it carefully and from the sides.
• Store this bag in a safe place, should the board be returned!

The board fits exactly in the old **A3** board's space, on its 6 spacers. Then re-insert all connectors of the former **A1**, **A2** and **A3** boards as follows, clockwise from top left corner:
• **A2J1**, then **A2J3** further to the right, same orientation
• **A1J6** and **A1J5**, with a 180° turn and aligned
• **A1J3** & **A1J2** with a 180° turn and swapped (top: A1J3, bottom: A1J2)
• **A3J2**, **A3J3** and **A3J4**, aligned, same orientation
• and finally **A3J5** and **A3J6**, aligned, same orientation
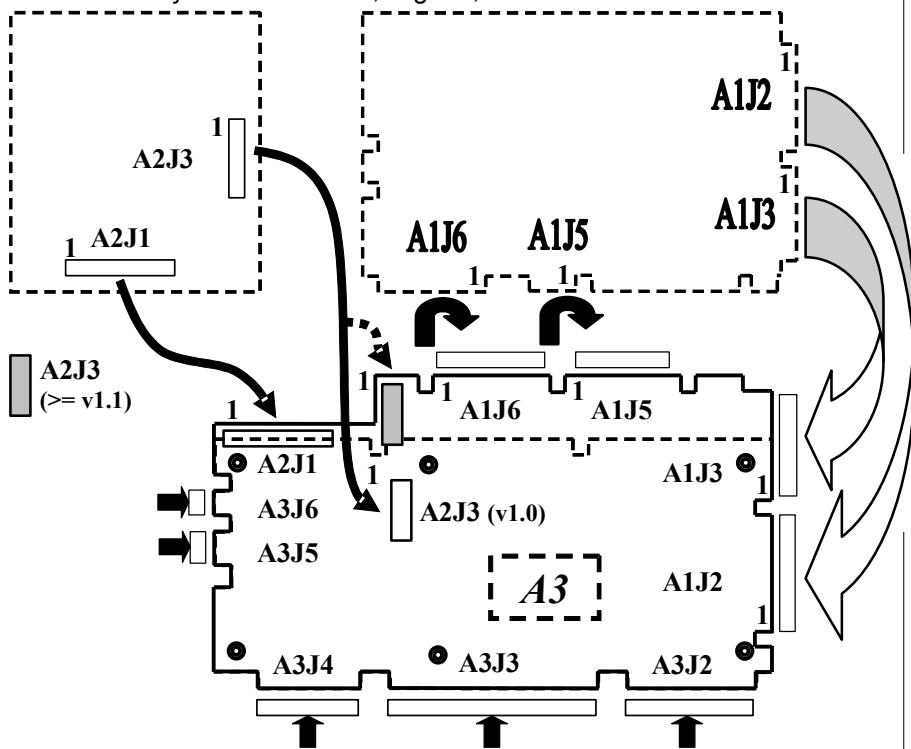
There is no possible risk of mistake or confusion of the connectors: each connector has its own specific size, and some have notches (blockers), making mix-ups impossible.

Note: connection harnesses **A2J2-A1J1** and **A1J4-A3J1** are no longer used.

Double-check the location and position of each connector on the following **PI-80** board overview, once installed:

On some games, the wire harnesses running to **A2J1** and **A2J3** are very short. Some of the white holding clips (screwed on the wooden panel) should then be removed to slacken the wire harnesses.

Upon power-up, the 3 LEDs «12V» «5V» and «60V» must be brightly lit, and the «CPU» LED (on the center **MCU** board) must be flashing :
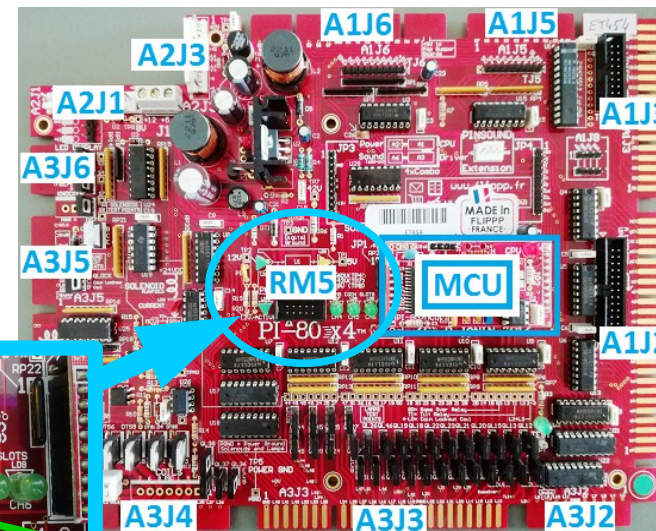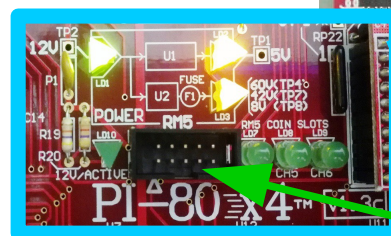
Optional coin validator **Comestero RM5** or compatible

GAME SELECTION and SPECIFIC SETTINGS

The full name of the selected game and its identifier (the same 3-digit number written on the old « GAME PROMs » of the original CPU board) are displayed for 5 seconds :

• PLAYER1 display: game's identifier = 3-digit « number »
• PLAYER2 display: « SYS80 » or « SYS80A » depending on the series the game belongs to
• PLAYER3/PLAYER4 display: game's name in full

To change the game, press the small **[TEST]** button, located inside the front coin door, within 5 seconds of power-up: the currently selected game flashes.

Every time **[TEST]** is pressed, the next game is displayed in the list of all available games.

To select the displayed game, press the red **[CREDIT]** button. By default, the game displayed will be automatically selected **5 seconds** after the user last pressed either button.

Upon the very first game selection, or in case of game selection change, a menu with the game's specific settings (if any) will be brought up (refer to the manual for each game's specific settings).

The full manual is available from *www.flippp.com*   **...Let's flippp!!!**