

## TR-707 ROM Expansion

Installation Instructions

### This kit includes:

- 1x Pre-assembled PCB
- 1x Ribbon cable with IDC plug
- 1x 28-way IC socket

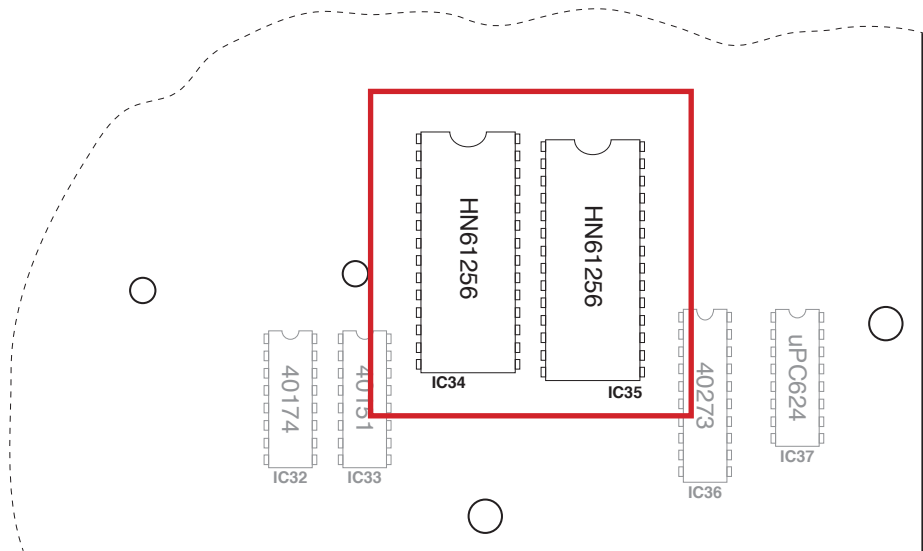
### You will need:

- Fine tipped soldering iron & solder
- De-soldering pump or braid
- Phillips head screwdriver
- Wire strippers

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# Installation

1. Remove the batteries from their compartment.  
Back up your patterns first if you don't want to lose them!
2. Remove the TEMPO knob and all of the slider caps, putting them somewhere safe, and remove the 7x screws on the underside of the case.
3. With the machine face down on a soft surface, lift off the bottom cover. Desolder the wires going to the battery compartment, noting the positive and negative connections. Set the bottom cover aside for now.
4. Carefully disconnect the flat flex ribbon going from the main board off to the cartridge connector. To do so, pry the retaining clip away from the body of the connector, and the ribbon will slide out. Temporarily remove the cartridge connector (2x screws) for better access to the main board.
5. Remove the screws that secure the main PCB assembly into the top case :
  - 2x screws either side of the MIDI sockets on the back panel
  - 2x screws in opposite corners of the circuit board assembly (top right and bottom left)
  - 1x screw holding the ground wire to the panel board
6. Lift the main PCB assembly out of the case, while disconnecting the two cables that join it to the panel board. This is easiest done by holding the machine on end, with sockets facing downwards, and the power button pressed in.
7. With the main board assembly out of the case, locate IC34 and IC35 in the front right-hand corner of the PCB (both marked HN61256P). Carefully de-solder and remove them, and solder the included chip sockets in place of **IC35**.



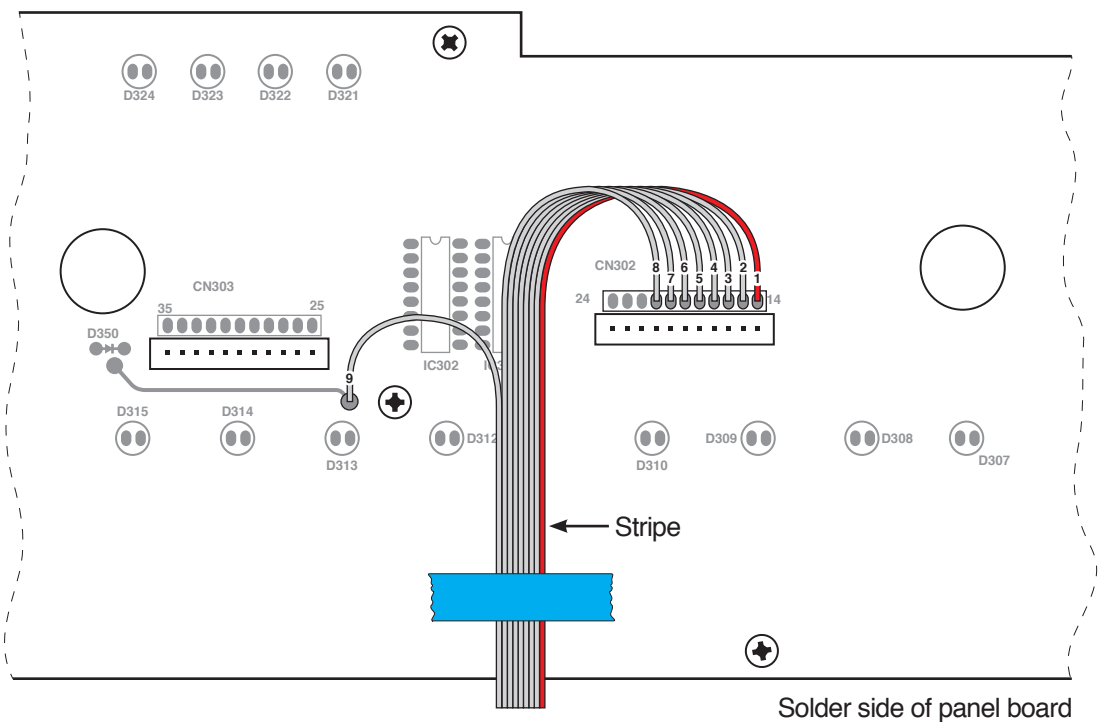
Front right-hand corner of TR-707 main board

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## Installation

8. Plug the expansion board into the socket at IC35, ensuring that the pins are lined up correctly.
9. Separate, strip and tin the wires of the included ribbon cable (striped wire = 1) :
  - Wires 1 to 8 should be separated to 3cm
  - Wire 9 should be separated to 9cm
10. On the panel board, locate the through-hole via directly above D313, and to the left of a mounting screw (see diagram for Step 11). Using a sharp knife, carefully scrape away the solder mask on it to reveal the copper underneath. Apply a blob of solder to it.
11. Solder the wires from the ribbon cable to locations on the panel board as shown below. Once this is done, secure the ribbon cable down with a piece of insulation tape.



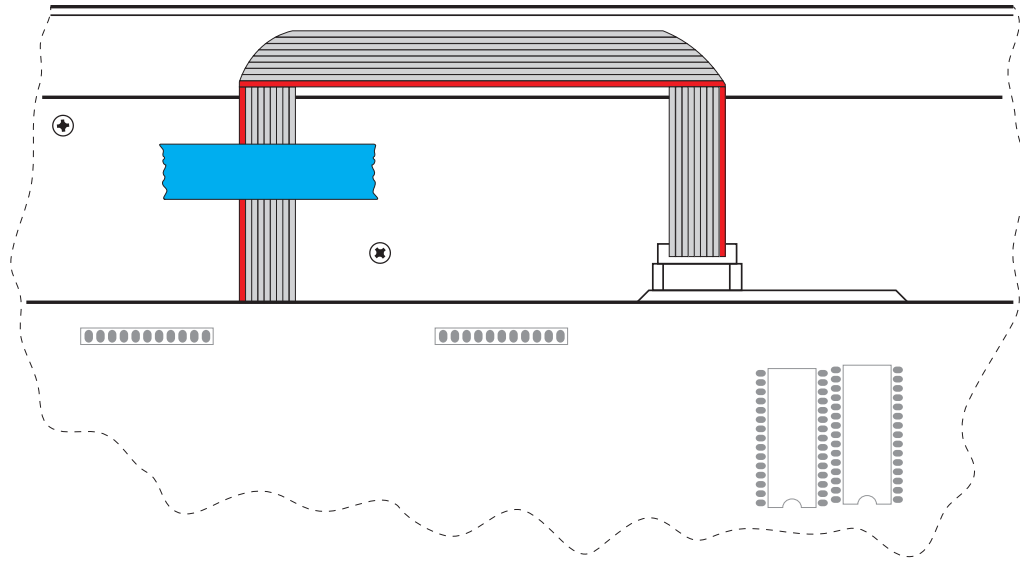
12. Reinstall the main PCB assembly in the top case, reconnecting the two cables that join it to the panel board. Like the disassembly, this is easiest done with the machine on end.

Replace the screws that secure the board assembly in the top case, that you removed in Step 5, also replacing the ground wires.

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# Installation

13. Route and fold the new ribbon cable to the expansion board, and plug it into the header connector. It is keyed and can only be inserted one way round.



View looking into top case

14. Replace the cartridge connector and reconnect the flat flex ribbon. Re-solder the wires to the battery compartment.
15. Replace the bottom cover, 7x case screws, TEMPO knob and slider caps.

# Sound Banks

The ROM Expansion has 8x sound banks, which are listed below.

The bank is selected by holding down one of the first 8 step keys while powering on the machine. The setting will be remembered and recalled at next power-on.

The ROM Expansion kit will replace all of the sounds, except for the last two: crash + ride on the TR-707, quijada and star chime on the TR-727. A future add-on board will allow these to be switched as well.

