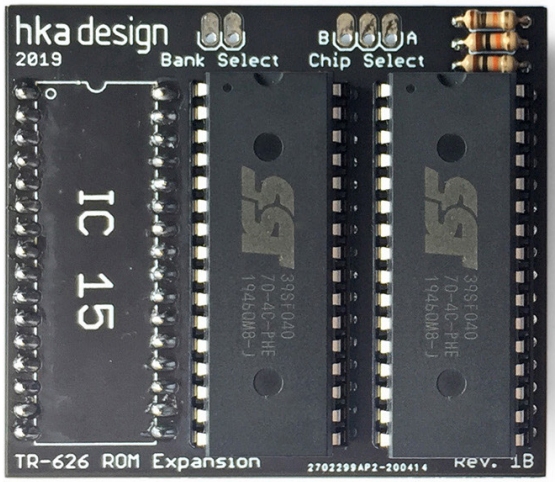
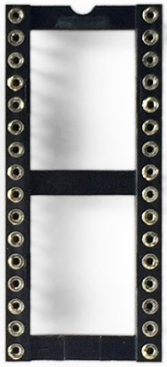
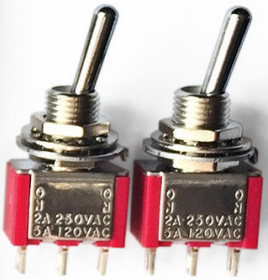
hka design







TR-626 ROM Expansion

Installation Instructions
& Sound Chart

This kit includes:

1x	Pre-assembled PCB
1x	32-way IC socket
2x	SPDT toggle switches

You will need:

- Fine tipped soldering iron & solder
- De-soldering pump or braid
- Phillips head screwdriver
- Wire strippers
- Small gauge stranded-core wire

Installation

1. Remove any batteries if they are installed, and remove the 7x screws on the bottom of the TR-626. Also remove the two knobs from the top. With the TR-626 lying top down, remove the bottom case and disconnect the cable from the battery compartment.

2. Unscrew and remove the jack board that sits above the main board & RF shield.

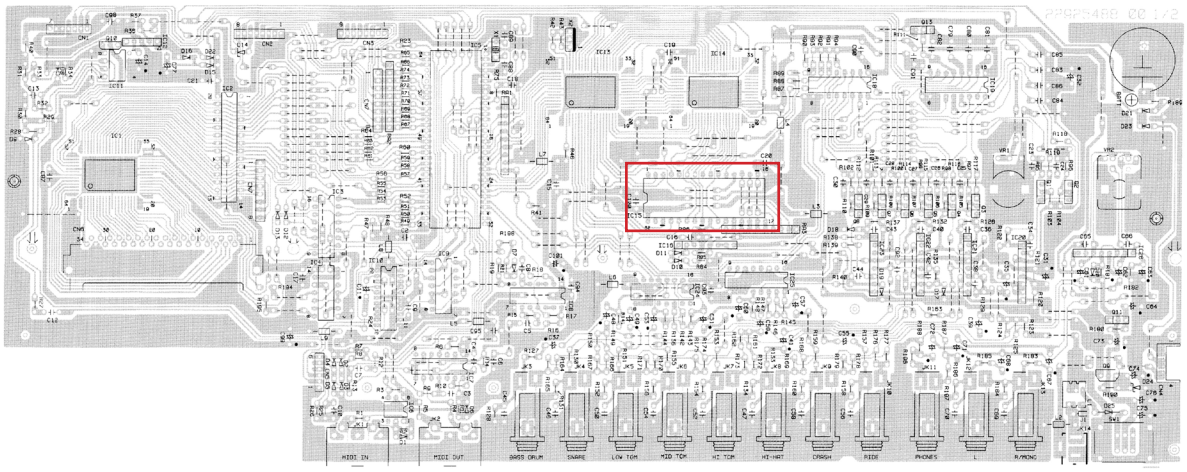
3. Remove the 5x screws that secure the RF shield to the underneath of the main board. On some early machines, the RF shield is instead soldered to the main board and will have to be desoldered.

4. Remove the 4x screws that hold the main board to the top case. Remove the main board, carefully disconnecting the 3x Molex connectors that join it to the top case.

5. Remove the 2x screws that hold the RF shield to the panel board. Discard the RF shield and the card sheet (if present) and replace the screws again.

   Note: It is possible to retain the RF shield, but requires cutting a suitable rectangular hole for the expansion board to go through. It's much easier to leave it out entirely.

6. Locate IC15 on the main board (it is located roughly in the centre). Desolder it, being careful not to lift any pads or damage any pins. Fit the included 32-way IC socket in its place.

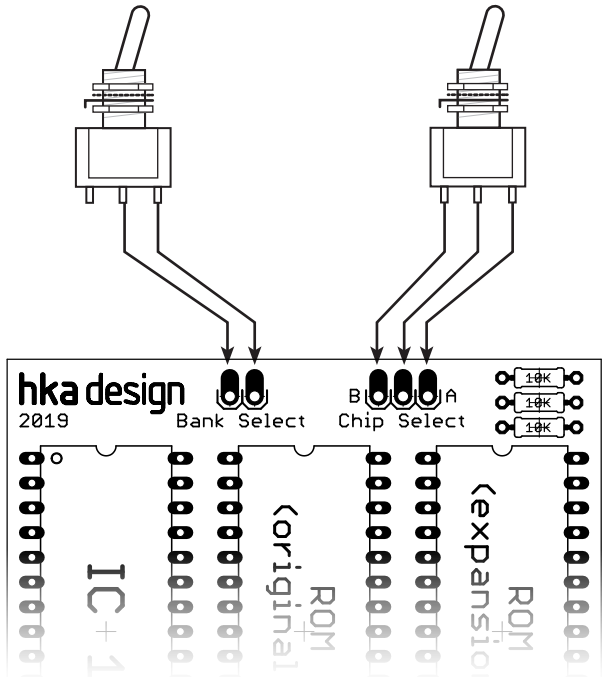


7. Plug the board into the socket on the main board, making sure that all the pins are aligned correctly. The board extends towards the jack sockets at the back of the case. You may need to bend the capacitors at an angle so that they do not hit any pins on the underneath of the board.

   Current versions of the kit now have two ROM chips already installed on the expansion board and the TR-626's original ROM is no longer required.

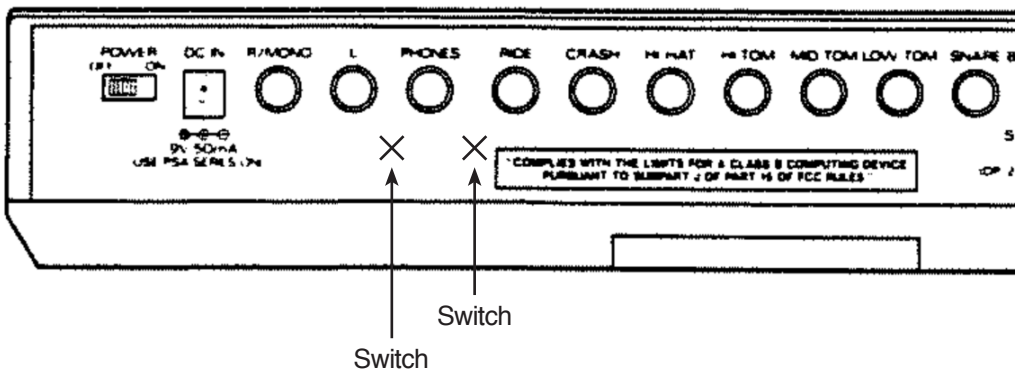
   For older versions of the kit, install the TR-626's original ROM chip in the left-hand socket on the expansion board, labelled "ROM B".

8. Connect the toggle switches to the expansion board using 5x 35cm lengths of wire as shown:



9. Reinstall the main board in the case, reconnecting the Molex connectors from the panel boards (CN2 and CN3 connect to CN102 and CN103 respectively). Replace the 4x screws.

10. With the main board reinstalled, mark and drill 2x 6mm diameter holes for the toggle switches between the L, PHONES and RIDE output jacks and 1cm up from the bottom edge of the top case. Fit the toggle switches.



11. Reinstall the jack board and reconnect the cable going to it from the main board. Also reconnect the cable from the battery compartment and replace the bottom case, with the 7x screws that hold it on. Replace the two knobs.

Troubleshooting

Here are a couple of the more common things that can go wrong with the installation:

Sounds have a digital-sounding distortion, like they are ring modulated

Check your soldering on the chip socket that you fitted - this is nearly always caused by dry or bridged solder joints. You can check your work by fitting the original Roland sound ROM back into the socket on the TR-626 voice board and seeing if the problem persists.

Another thing worth checking is that the pins on the underneath of the expansion board are not touching the metal cans of the electrolytic capacitors below it. It should be possible to angle them out of the way, but you can also fit a small insulating sheet cut out of card or thin plastic if they won't bend far enough.

The drum machine isn't working after fitting the modification

Make sure that you plugged all of the connectors back in, and that you plugged them into the right places - CN2 and CN3 on the voice board should go to CN102 and CN103 respectively on the switch board.

Also make sure that you haven't pinched any wires in the two halves of the case or in the screw pillars.

The case won't go back together fully

Have the card sheet and RF shield been removed as talked about in Step 5?

Check to see that the toggle switches are not preventing the bottom case from going on - the tolerances here are quite tight. If necessary, you can file a flat edge onto part of the battery compartment.

There are loud pops in the audio output when using the toggle switches

Although there is often a subtle click in the audio output when changing bank, a loud pop is usually caused by the metal cans of electrolytic capacitors underneath the expansion board making contact with the solder pins of the ROM chips. See the fix at the top of this page.

Sound Banks

The modified TR-626 has four sound banks, with each of the two ROM chips holding two banks. The CHIP SELECT switch sets which of the two chips is selected. The BANK SELECT switch sets which bank is selected on the current chip. Both switches can be used while the TR-626 is running.

Stock TR-626 Bank

TAMBOURINE COWBELL	LOW AGOGO LOW TIMBALE	HI AGOGO HI TIMBALE	HAND CLAP LOW CONGA	SHAKER OPEN HI CONGA	CLAVES MUTE HI CONGA	CHINA CYMBAL CRASH CYMBAL	CUP RIDE CYMBAL
BASS DRUM 2 BASS DRUM 1	SNARE DRUM 2 SNARE DRUM 1	SNARE DRUM 3 RIM SHOT	LOW TOM 2 LOW TOM 1	MID TOM 2 MID TOM 1	HI TOM 2 HI TOM 1	CLOSED HI-HAT	OPEN HI-HAT

TR-909 / TR-808 Bank

707 TAMB. 808 COWBELL	909 RIM SHOT 808 CLOSED HAT	909 CLAPS 808 OPEN HAT	808 CLAPS 808 LOW CONGA	808 MARACAS 808 MID CONGA	808 CLAVES 808 HI CONGA	808 CYMBAL 909 CRASH CYM.	808 BASS LONG 909 RIDE CYM.
808 BASS 909 BASS	909 SNARE 2 909 SNARE 1	808 SNARE 808 RIM SHOT	808 LOW TOM 909 LOW TOM	808 MID TOM 909 MID TOM	808 HI TOM 909 HI TOM	909 CLOSED HAT	909 OPEN HAT

LinnDrum / LM-1 Bank

LD TAMB. LD COWBELL	LM-1 LOW CONGA LM-1 CLOSED HAT	LM-1 HI CONGA LM-1 OPEN HAT	LD CLAPS LD LOW CONGA	LD CABASA LD HI CONGA	LM-1 CLAPS LM-1 CABASA	LD CLAPS* LD CRASH CYM.	LM-1 CLAPS* LD RIDE CYM.
LM-1 BASS LD BASS	LD ROCK SNARE LD SNARE	LM-1 SNARE LD RIM SHOT	LM-1 LOW TOM LD LOW TOM	LM-1 MID TOM LD MID TOM	LM-1 HI TOM LD HI TOM	LD CLOSED HAT	LD OPEN HAT

DMX / TR-707 Bank

DMX TAMB. DMX COWBELL	707 COWBELL 707 CLOSED HAT	707 TAMB. 707 OPEN HAT	DMX CLAPS 1 DMX LOW CONGA	DMX SHAKER DMX HI CONGA	DMX CLAPS 2 707 CABASA	DMX CLAPS 1* DMX CRASH CYM.	DMX CLAPS 2* DMX RIDE CYM.
707 BASS DMX BASS	DMX ELEC. SNARE DMX SNARE	707 SNARE DMX RIM SHOT	707 LOW TOM DMX LOW TOM	707 MID TOM DMX MID TOM	707 HI TOM DMX HI TOM	DMX CLOSED HAT	DMX OPEN HAT

* As the TR-626 lacks individual outputs for hand claps, these two expansion banks have the clap sounds duplicated to the China Cymbal and Cup sound locations so these sounds can come out of the Crash and Ride outputs. They also share polyphony with the Crash / Ride Cymbal voice.