

REAL WORLD INTERFACES

TR-909 Version 4 firmware

Robin Whittle 11 October 2018 <http://www.firstpr.com.au/rwi/tr-909/>

This page repeats some parts of the section of the TR-909 page which concerns firmware:

<http://www.firstpr.com.au/rwi/tr-909/#firmware>

This machine has had its firmware updated to the final version released by Roland: version 4. This is achieved with a soldered-in EPROM (Electrically Erasable Programmable Memory), since there is no space for a socket.

This solves a problem with the machine not recognising the first MIDI In Clock byte following the Start byte, if this Clock byte follows by less than 1ms. For many sources of MIDI Sync, it would be the very next byte, which arrives 0.3ms after the Start byte.

To find which version of the firmware your machine has, turn it on with the Track 1 button pressed. One of the 16 button LEDs 1 to 4 will light up. The service manual only mentions versions 1 and 2. In this machine, LED 4 will light up.

Version 4 is missing one feature: the ability to load the "factory patterns" into RAM, otherwise known as "clearing memory".

With version 1 (the only other firmware version I have tested so far) this is achieved by turning the machine on with Track 1 and Pattern 1 buttons pressed. (See page 7 of the service manual for full details.) Therefore to clear all the patterns and to delete any chaining of multiple patterns together, it is necessary to use these steps on each pattern, perhaps by running through them all 1 to 16 and then 16 to 1 for unchaining, and again for clear. Both these steps require that the machine be in Pattern Write mode: Hold the Shift key down and press one of the three Pattern buttons, which will cause the LED in that button to flash.

To unchain (unlink) a pattern, hold down the key 1 to 16 for that pattern and then press and release the Enter key.

To clear a pattern, hold down the Clear button and press and release the key 1 to 16 for that pattern.

Document history

- 2018-10-11 Initial version.