

TS612

Version 2.5 Firmware Modification Instruction Sheet

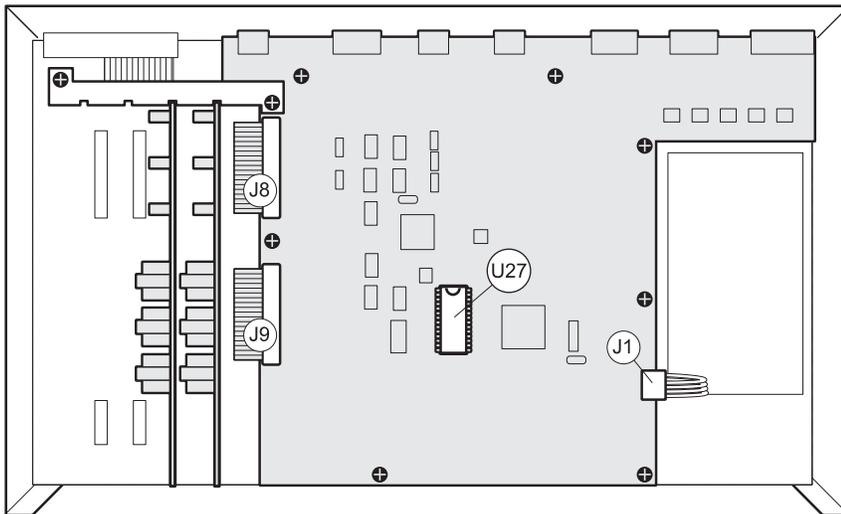
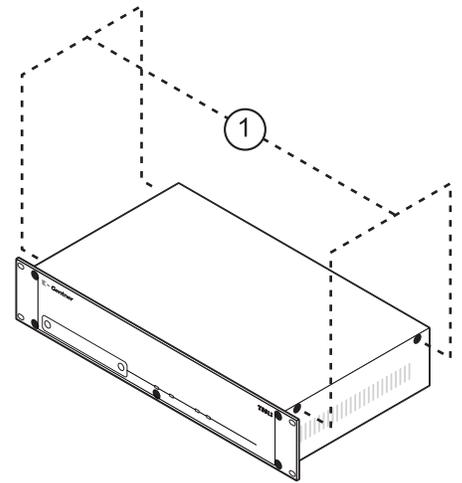
Please follow the steps below to modify your TS612 mainframe from Version 2.2 and earlier to Version 2.53 Firmware upgrade. Read all of the instructions carefully before beginning. If you do not feel comfortable making these modifications, please contact Gentner for additional assistance or factory upgrade. **You will be charged for the repairs if the modification is not performed properly and causes damage to the board.** The modification will take approximately one hour to complete. You will need a #1 Phillips screwdriver, a #2 Phillips screwdriver, 1/4" Hexdriver, 3/16" Hexdriver, and a fine (small) solder-iron tip.



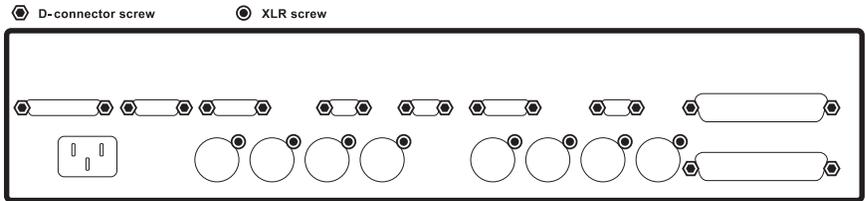
Remove the power source from the TS612 mainframe prior to making modifications.

Step 1 – Remove top lid of TS612 mainframe (right). You will need to remove four (4) screws from the sides of the box.

Step 2 – Replace U27 of top board with Version 2.53 Firmware (see below). Remove old firmware by pulling straight up. Be careful not to bend pins. Ensure the new firmware is placed properly by checking the notch in the U27 IC. The notch should be towards the D connectors at the rear of the mainframe.

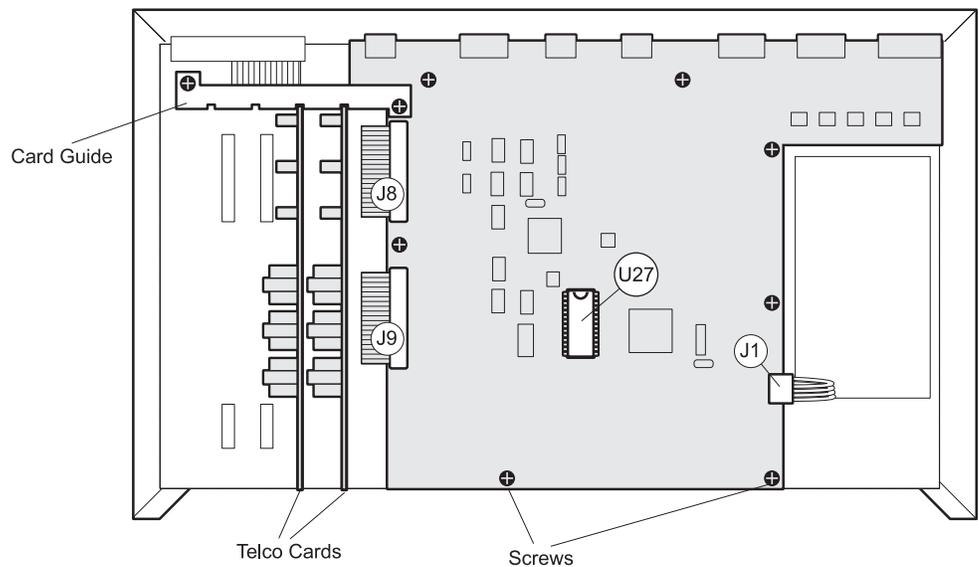


Step 3 – Remove all D-connector and XLR screws from rear of main frame as shown below. You will need to remove 18 D-connector screws and eight (8) XLR screws.



Step 4 – Remove all screws which hold the top PC board and card guide (below). You will need to remove nine (9) screws.

Step 5 – Lift all Telco cards out.



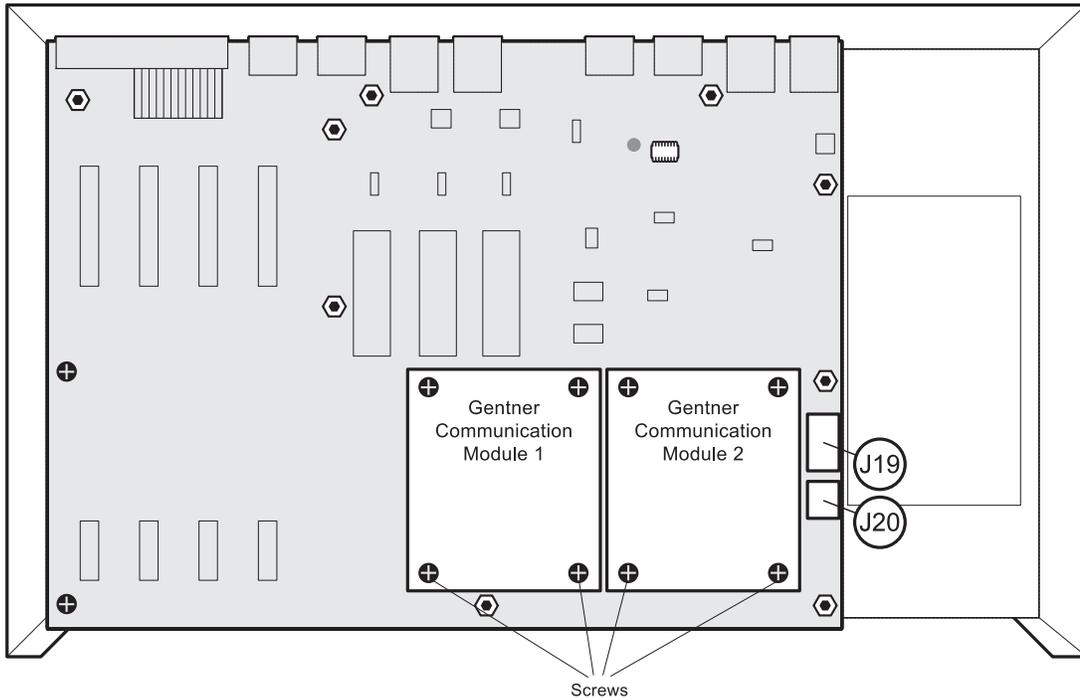
Step 6 – Remove J1, J8, and J9 cables from top PC board (see above).

Step 7 – Remove top PC board.

Step 8 – Remove the screws holding Gentner Communications Modules (hybrid cards) in place. You will need to remove eight (8) screws (see below).

Step 9 – Gently pull up to unplug and remove the two Gentner Communications Modules.

⊕ Hex nut ⊕ Screw

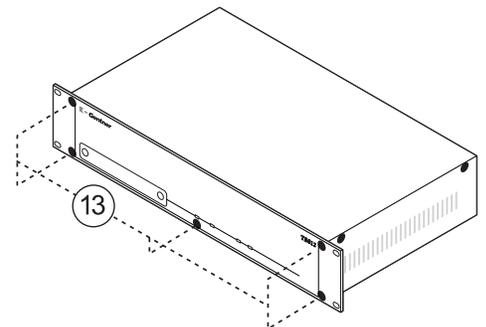


Step 10 – Remove screws and hex nuts in bottom board (see above). You will need to remove two (2) screws and nine (9) hex nuts.

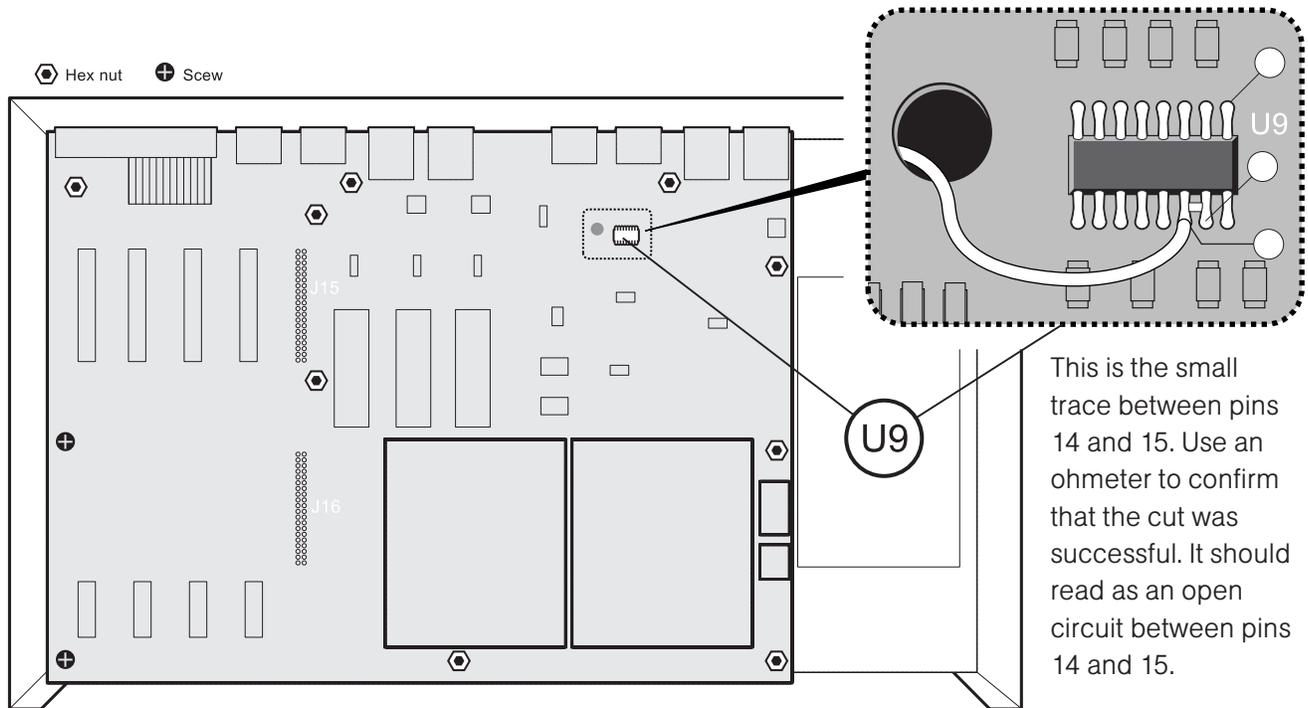
Step 11 – Remove J19 and J20 cables from the bottom board (see above).

Step 12 – Remove the mainframe front panel. You will need to remove five (5) screws (see right).

Step 13 – Remove the bottom PC board.



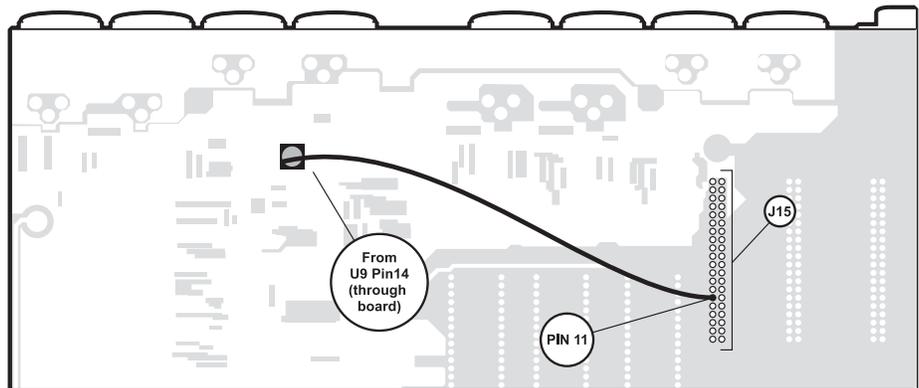
Step 14 – Cut the trace that ties U9 pin 14 to pin 15 (see below).



Step 15 – Jumper U9 pin 14 to J15 pin 11 using 30 gauge wire. To do so, you will need to solder one end of the jumper wire to U9 pin 14 on the front of the PC board, then run the jumper through the hole and solder the other end to J15 pin 11 on the back of the board (as shown in the illustrations above and below).



Prior to reinstalling the top PC board ensure that the LEDs are properly seated in the front panel.



Modification is now complete. Reverse all steps to close the mainframe. When you have finished, reconnect power to the mainframe.

Gentner

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Technology, Service, and Education.™

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