

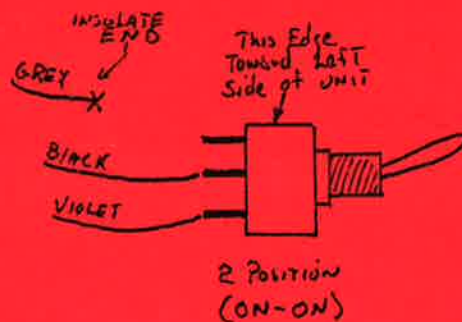
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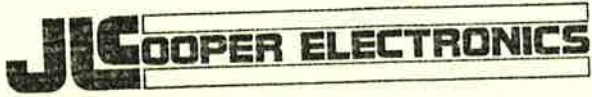
1) If you plan to use only two sets of drum chips on your 3 KIT Board, you should install them in the KIT 1 and KIT 2 positions, and make sure not to switch the selector switch to the "3" position. This is because the Drumulators microprocessor control chip (EPROM) is part of the set of 5 chips in a set. If you try to select a control chip that isn't plugged in, the microprocessor will run crazy. While that won't harm any electronics, it could possibly effect some memory ( pattern and song ) contents. If you do it by accident, turn off the power, THEN switch the selector back to 1 or 2.

If you don't eventually plan to add a third set, it might be better to replace the switch with a two position selector. Wire it as shown below. Even though the switch will switch between the "1" and "3" positions, it will be selecting the "1" and "2" chip sets respectively. Any service center could do the modification if you don't feel comfortable about it.

2) You should replace the "PROM" chip in your standard EMU set of chips with a 64 SONG update (ask your service center.) The cost is low.

If you don't do this, you will get strange results when you switch between the DigiDrum set and the original EMU set. This is because the contents of the main microprocessor control chip (EPROM) is different, and if you switch from one to the other, it is like an actor reading from one script, then suddenly picking up the script for a different play and starting to read from the same page on it. The results won't make any sense.





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Drumulator 3 Kit Board

Installation Manual

This is a document covering the installation of the 3 Kit Board into the EMU Drumulator. The 3 Kit Board is a internally mounted piggy-back printed circuit board that allows the Drumulator to contain three separate sets of sound and control EPROM chips at the same time. Selection from among the three sets is accomplished via a miniature three position toggle switch which is mounted thru a 1/4" hole to be drilled by the installer.

It is assumed that the installer is reasonably familiar with electronic musical equipment in general, and hopefully the Drumulator in specific. Equipment needed for the installation include a 1/4" drill and a small phillips screwdriver.

- 1) Remove the AC cord from the line.
- 2) On a padded surface, lay the Drumulator upside down.
- 3) Remove and save the 8 philips screws along the edges of the bottom metal plate.
- 4) Carefully lift up the metal plate and lay aside.
- 5) Remove the three small philips screws located:
  - a) Next to IC 13H
  - b) Next to IC 5H
  - c) On the edge of the PC board toward the front, exactly in the center.
- 6) Replace these three screws with the 3/8" Male-Female standoffs provided.
- 7) Using a small bladed screwdriver, CAREFULLY remove the EPROM IC 12K, which is the program memory.
- 8) LEAVE THE 3 KIT BOARD ON ITS FOAM BACKUP FOR ALL CHIP INSTALLATIONS- THIS WILL HELP PROTECT THE PINS ON THE BOTTOM.
- 9) Orient the 3 Kit Board so that the words "KIT 1A", "KIT 1B", etc. are toward the top of the board. In this position, the notch end of ALL of the EPROMS will be toward the top.
- 10) Making sure that the notch on the EPROM is correctly oriented, plug the IC 12K into the socket on the 3 Kit Board labeled "PROM 1". Be particularly careful not to bend under any pins.
- 11) Likewise, remove IC 1E, IC 3E, IC 4E, and IC 5E and plug them into the sockets on the 3 Kit Board labeled, respectively, "KIT 1A", "KIT 1B", "KIT 1C", and "KIT 1D".
- 12) At this time, if you have your other drum sounds, plug them into the proper sockets. With each set of chips, you should have an control EPROM which will plug into the "PROM" socket and a set of four sound EPROMS which will plug into the "KIT" "A", "B", "C", and "D" sockets. Naturally, the set of five chips should all go into either the "2", OR "3" set of sockets.
- 13) Now the trick is to plug the 3 Kit Board into the just-vacated sockets 5E and 12K without bending any pins. Using plenty of light, visually line up the plugs labeled "5E" and "12K" into their respective sockets. Once you are very sure that all of the pins are aligned, press firmly to seat the plugs into the sockets.

- 14) Using the screws removed in step 5) above, secure the board to the standoffs.
- 15) Using a 1/4" drill, make a hole in the plastic front edge of the DRUMULATOR about 2 inches from the right side, and up 7/8" from the bottom. See Fig. 1.
- 16) On top of this hole, mount the included switch label, carefully centering the two holes.
- 17) Into this hole, mount the three position switch. One side of switch should have a black "X". This edge should end up toward the left edge of the DRUMULATOR.

At this time, carefully put the unit back upright and test to see if there are any problems before actually screwing all of the bottom screws in place. If there are any problems, they are almost certainly due to pins either on the EPROMS or on the plugs which have become bent over. In either case, bend them back with UPMOST care, the pins on the plug are prone to snapping off when re-bent.

Assuming that there are no problems, re-insert the 8 bottom screws and use in good health.

