



# **Version 3.10**

## **Software Upgrade**

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# **Marion Systems**

# **MPC-SCSI**

## **SCSI Hard Disk Interface**

**For the Akai MPC60 and MPC60-II**

## **Installation Instructions**

**By Roger Linn**

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## Before you begin...

The installation process you are about to do may be difficult if you have not previously opened electronic products, installed circuit boards and changed integrated circuits in sockets. Before you begin, please read over these installation instructions carefully and decide whether you are comfortable doing this installation. If you have not previously done installations such as this and don't feel comfortable doing it, have the installation done by a technician or someone who is familiar with the process. Please note that in the event of a problem resulting from incorrect installation, we will try to help you but are not liable for any damage to your MPC60 or MPC60-II as a result of problems resulting from your installation. If you do decide to do it yourself, please follow the instructions slowly and carefully. Thanks.

For this installation, unplug the power cord and gather the following tools:

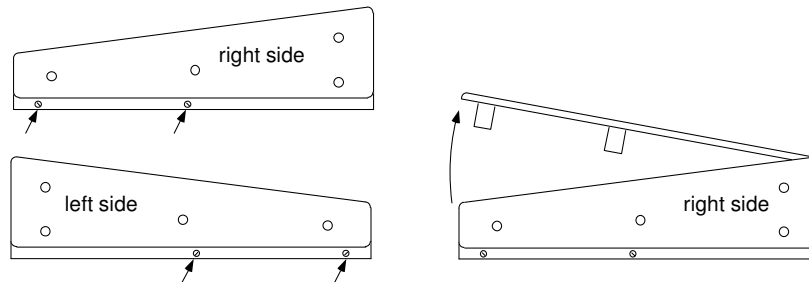
- A medium Phillips screwdriver
- A small flat blade screwdriver (to remove chips from sockets)
- A drumstick or something like a drumstick (to prop the lid of the MPC60 open)

## Open the MPC60

Opening the chassis is different for the original MPC60 than for the MPC60-II. Instructions for both are shown below.

### *Opening the original MPC60*

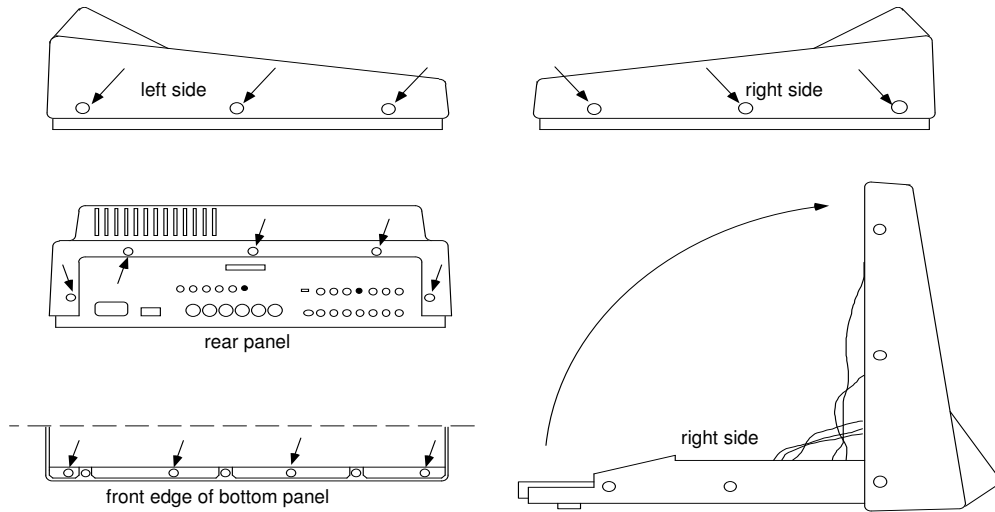
- Remove 2 screws on each side as indicated in the diagram by the arrows.



- The top is hinged at the back. Lift the lid from the front edge, lifting from under the padded arm rest. Prop up the lid, using something like a drumstick.

### *Opening the MPC60-II*

- As shown by the arrows in the diagram below, remove 3 screws on the right side, 3 screws on the left side, 5 screws on the rear panel, and 4 screws on the front edge of the bottom panel.



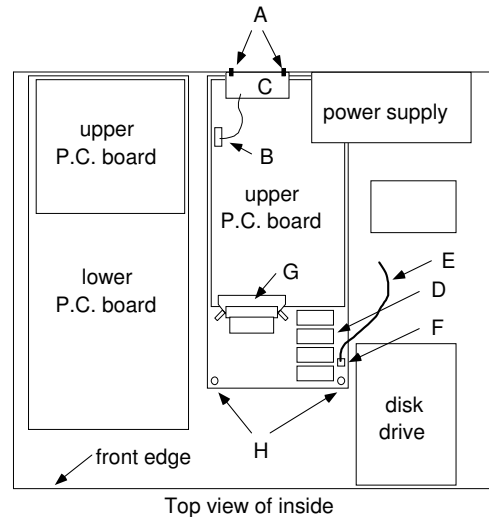
• Without the screws, the lid is not connected to the bottom of the chassis, but many wires connect between the two sections. *Carefully* lift the front of the top section and place the back of the top section under the back of the bottom section as shown. Prop up the lid, using something like a drumstick.

### Install the new ROM chips

Now that the chassis is open, the remaining steps are nearly identical for both the MPC60 and MPC60-II. The following instructions refer to the diagram to the right.

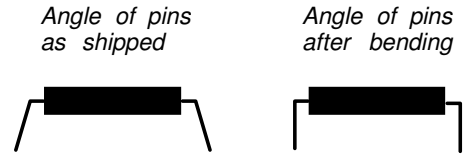
- If you have an MPC60 (not an MPC60-II), you must remove the RS-232C connector assembly from the rear panel. To do this, remove 2 screws “A” from rear panel. Discard these screws— they will not be used later. Then, disconnect connector “B” from inside and remove P.C. board assembly “C”. This will not be reinstalled.

- If you have an MPC60-II, you must remove the rear panel cover plate. To do this, remove 2 screws “A” from rear panel and remove cover plate from inside. Be very careful when lifting lid to gain access to these screws so as not to disconnect any internal wires. This cover plate and the 2 screws will no longer be used.

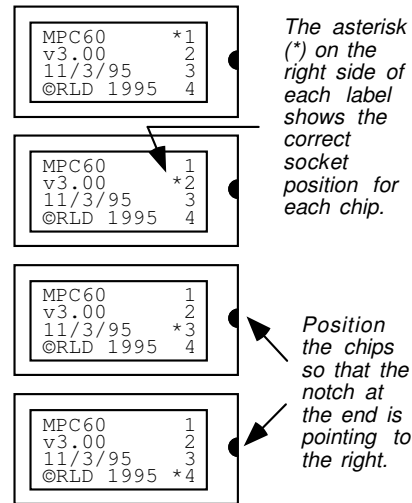


- Locate the 4 existing ROM chips “D” in their sockets. *Before you remove them, write down which chip goes in which socket in case you want to reinstall the old chips later.* To remove the old chips, carefully insert a small blade screwdriver between one of the chips and its socket on one end and very gently twist the screwdriver to pry the chip up a small amount. (Don’t insert the screwdriver between the socket and the P.C. board, as this will remove the socket!) Then, do the same thing on the other end of the chip and again pry it up a small amount. Do this a little bit on each end a few times until the chip is removed from the socket. Repeat this process for the 3 remaining chips.

- Find the 4 new ROM chips supplied in this kit and remove them from the shipping tube. First, *very carefully* bend the pins on each chip so that the 2 rows of pins are parallel to each other. (See diagram at right.) This can be done by pressing one edge of the chip, then the other, against a flat surface such as a table.



- Notice that each chip has 4 numbers on the right side of its sticker. (See diagram at right.) An asterisk (\*) next to the number shows which of the 4 sockets the chip should be inserted into. Gently insert the 4 chips into the 4 sockets, orienting them as shown and being very careful not to bend any of the pins while inserting. After you have installed all 4 chips, visually inspect them to see if any pins are not correctly inserted into the socket.



**Correct position of 4 ROM chips**

- Disconnect wire “E” from connector “F” by squeezing the small plastic pin on the side of the connector. Leave wire “E” disconnected for now.

- Remove large flat cable from connector “G” by pushing restraining pins on either side away from each other and gently remove connector from socket. Leave it disconnected for now.

- Remove 2 screws and washers “H” and set them aside for now. Don’t lose them— they will be used later. In the same holes, install the 2 hexagonal spacers supplied with this kit.

*For the remaining steps, refer to the diagram on right*

- Place MPC-SCSI board on top of 2 hexagonal spacers as shown in diagram. Secure it in place with 2 screws and washers, which were removed from holes “H”.

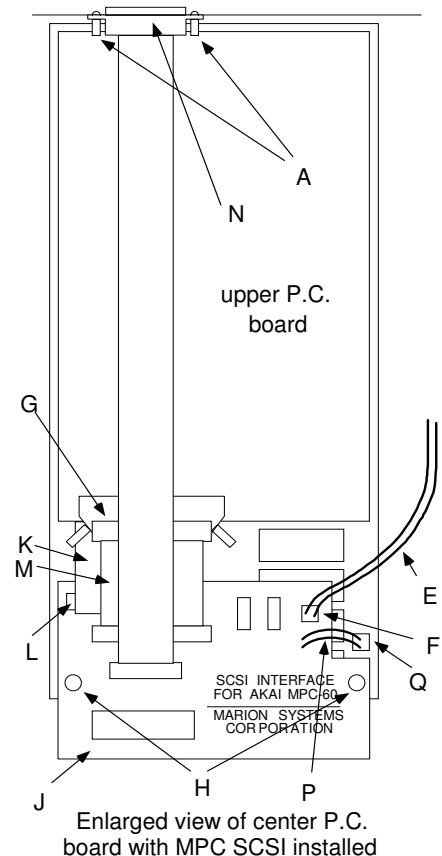
- Install flat cable “K” (which you previously disconnected from connector “G”) into socket “L” on MPC-SCSI board. (You must fold end of cable over towards the front of the chassis to install it onto the connector.)

- Install flat cable “M” (attached to MPC-SCSI board) into socket “G” on upper P.C. board.

- Remove 2 hexagonal threaded spacers from connector “N” (attached to MPC-SCSI board by long flat cable) and insert connector into hole in rear panel. Secure it to the rear panel with the 2 hexagonal threaded spacers you just removed.

- Connect wires “P” to connector “Q” and connect wires “E” to connector “F”.

- Check to see that all cables are connected. If everything looks OK, close the lid and you’re done. (On the MPC60-II, carefully place the top section back down on the bottom section.). Don’t put the screws back in yet— we’re going to test it first.



## **Test the installation**

- Connect the power cord and turn the power switch on. The screen should quickly display some text. If not, immediately turn the power off, disconnect the power cable and check all previous steps. Especially check the installation of the new ROM chips, checking for bent pins, direction of notch at end of chip, and chips not fully inserted into sockets. Also, check to see that all connectors are connected correctly.
- If text appeared on the screen when power was turned on, indicating correct operation, then proceed with reassembling the unit. To do this, first turn power off and disconnect power cord, then install all screws in the same places as during disassembly.

## **Using the new software and a hard disk**

To get started quickly using your new software, read the section of the manual entitled “What are the new features in Version 3.0?” To start using a SCSI hard disk, read the section “Using the Marion Systems MPC-SCSI interface for external hard disk storage”.

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