

## **M1 TIPS**

9/07, Korg M1 Source, <http://www.geocities.com/tlitt72/>

----

### **REPLACING NEW BATTERY #CR-2032 (round lithium)**

01. Unplug power and all cables to M1.
02. Turn M1 upside-down on padding with keys to back, no weight on joystick.
03. Unscrew and remove bottom plate. Battery is hidden from view under larger processor board.
04. Unscrew and tilt larger processor board to expose battery.
05. Carefully push old battery out of holder, noting it's + side orientation.
06. Insert new CR-2032 battery in same orientation.
07. Reassemble motherboard and bottom plate.

----

### **PREPARE THE M1 FOR MIDI**

- When the M1's battery dies, all the sounds stored in internal memory are lost. Replacing the battery doesn't bring the sounds back.
- When a new battery is inserted (CR-2032 round lithium), the M1 reverts back to it's original factory settings which have MIDI set OFF and memory protects set ON. Not very useful. You must manually change them just once so you can move sounds between PC<->M1 through the MIDI interface with software. The new settings remain in effect until you change them or you install another new battery.
- You make those changes with the M1 in GLOBAL mode. Most people just want to know "What buttons do I have to push to make it work?", so I list the button pushing sequence.

1. Set MIDI Channel To 1. Press GLOBAL, 5, DOWN...(until CH="1"). In the manual this is page 115, the Global section F5-1 MIDI GLOBAL. You want CH= 1, which is Channel 1, the factory default and the channel that nearly all M1 sounds are set to.

2. Set MIDI ON. Press GLOBAL, 5, +, UP, D, UP, F, UP, H, UP. In the manual this is page 116, the Global section F5-2 MIDI FILTERING. You want the four parameters there to = ENA, for ENABled which = ON. PROG:ENA AFTT:ENA CNTL:ENA EXCL:ENA. You do that by moving the cursor to the desired parameter with the A-H buttons and cycling through the options with the UP button. Yeah, it's confusing. Anyway, you want ENA for the four params, not DIS for DISAbled which = OFF.

3. Set All Memory Protects OFF. Press GLOBAL, 6, DOWN, +, B, DOWN, +, B, DOWN. In the manual this is page 116, the Global sections F6-1 PROGRAM MEMORY PROTECT, F6-2 COMBINATION MEMORY PROTECT, and F6-3 SEQ DATA MEMORY PROTECT. You want Internal:OFF for programs, combinations, and sequences. The UP/DOWN buttons cycle through the options. The + button moves from F6-1 to F6-2 to F6-3.

4. Set Memory Allocation To 100/100/4400. While you're at it, give the + button another push, M1 manual page 117, F6-4 MEMORY ALLOCATION, and verify that it's set to 100PROG/100COMBI/4400SEQ so all 100 programs and 100 combinations are transferred into the M1. You don't want 50/50/7700. Press the G button to execute (allow) a new selection. Incidentally, a trick to free up all Sequencer memory (return to 100% available) is to set memory allocation to 50/50/7700 and execute, then reset memory allocation back to 100/100/4400. This initializes (deletes) all ten songs and any of their patterns in the Sequencer, to start off with a clean slate, but at the loss of the programs and combinations stored in slots 50 to 99, so use this trick only if all progs/combis are backed up.

Now the M1 is ready for PC<->M1 MIDI sound data transfers.

The original factory M1 sounds and M1 manual are available for free download at KorgUK:  
<http://www.korguksupport.co.uk/page.cfm?pageid=359>

OR if you don't have a MIDI interface the original factory M1 sounds can be installed back into the M1 through the top slot with a \$50 Factory card from Voice Crystal at: <http://www.voicecrystal.com/korg.htm>

----

### **VERIFY THE MIDI INTERFACE IS OK**

- Inspect the interface and chords for damage. Chords longer than 6' and kinked/bent chords have been reported to garble MIDI data.

- Make sure the MIDI-in and MIDI-out chords are plugged into the correct sockets on both the M1 and interface. (MIDI-out on the interface goes to MIDI-in on the M1, but some interfaces are labeled “TO MIDI-out.”)
- Some interfaces need AC power, others draw from the computer when it’s connected, a few don’t need any power at all.
- Many interfaces have flashing LED lights that indicate MIDI activity.
- Most interfaces require dedicated software to make them work. You could try re-installing the software.
- You could always contact the interface manufacturer for further instruction on how to activate their hardware for your particular PC configuration.

----

## **CHECK SOFTWARE ON THE PC**

This is the most difficult and frustrating. Interface companies love to blame and point fingers at everything other than their stuff. It could be the midi-transfer utility program, the interface drivers, an extension conflict, or even the computer system software, and with Macs the OMS or freeMIDI studio setup programs.

- You need a dedicated M1 librarian program or a generic sysex transfer utility program to move existing sysex sounds between PC<->M1 through a MIDI interface. You need an M1 editor program to actually edit the 127 or so parameters that make up a sound. Of course you can edit the parameters of an existing sound in the EDIT PROGRAM mode directly on the M1, but doing it with software is much easier. The software needed is on my web site. I have personally tested the Mac software and I know it works. I have not received any reported problems with the PC software.
- Removing the M1’s battery will restore factory settings but at the same time erase all the sounds and drum kits that are presently stored in memory. The “Factory” progs/combis on my web site automatically carry all the original factory settings and drum kits along with them, so just MIDI transmit them into the M1 and you’re already there. To transfer an existing sysex sound file from PC->M1, open the transfer program on the PC, File>Open, or Open Any or Open Other. Search for the desired file, click Send or Transmit and a copy of the sounds are transferred through the interface into the M1, replacing any sounds that were already there.
- If you still have sounds in the M1, then try a backup transfer M1->PC first, called a MIDI dump. The dump must be made manually because all keyboards have a different hexadecimal code sequence for this (unless you have a dedicated M1 librarian or M1 editor program.) On the PC open the transfer program, File>New. Look for a Receive or Capture button. On the M1 press GLOBAL, 7, UP, UP, UP, UP (for ALL). Back at the PC click Receive. The program will patiently wait while you go to the M1 and press G to make the dump. A copy of the M1 sounds should be slipping through the midi interface into the PC. The PC should now have a file of the sounds that you can name and move to any folder or directory.

----

## **DRUM KITS**

The factory drum kits 1-3 (4 is blank) are stored in a separate global parameters internal memory and don’t need anything like a card to access them. When you midi-transmit progs and combis into the M1’s main memory this separate global memory is unaltered unless the transmission contains global data where it’s automatically sent to the correct spot. My website has three sources for putting the original factory drum kits back into the M1.

1. Korg has the original factory sounds/drum kits for free download. (The drum kits are always included, as well as all the other factory global data but are not always listed.) The link is on my website. Midi-transmit them into the M1’s internal memory.
2. I have included the original factory sounds/drum kits in the M1 sounds download on my website. Midi-transmit them into the M1’s internal memory.
3. Voice Crystal sells a factory card that has the original factory sounds/drum kits for about \$50 US, a good value. The link is on my website. Insert card in top slot on M1 and transmit them into the M1’s internal memory. Press GLOBAL, 8, G.
4. A local music store that sells Korg products will restore your M1 to factory specs with original factory sounds and drum kits for a fee.

----

## **RE-INITIALIZE M1**

Sometimes the M1 just hangs, won’t play, won’t display, just seems stuck. If you’re brave, you could re-initialize the M1’s entire memory. It might jolt the M1 back into submission. Warning!! This is not for the squeamish, and I hesitate giving out this trick because it completely zeros out the M1, wiping out ALL internal memory and resetting all parameters to factory specs. The global settings have to be edited to remove memory protects and allow midi transmission, and progs/combis/drum kits have to be midi-transmitted back into the M1. To Re-

Initialize The M1 At Your Own Risk: Turn M1 off. Press and hold INT, CARD, and COMBI buttons down while turning M1 on.

----

### **MSC CARD**

The M1 has 100 PCM waveforms and 44 drum waveforms hardwired into it. Programs use the waveforms to create sounds. The M1 was engineered to read up to 100 new waveforms on a card inserted into the M1's rear slot. That card is identified as an MSC card (two rows of gold pins). The M1 reads the waveforms directly off the card and doesn't store them in any internal memory. Waveforms are not transferrable, there's no way to extract a waveform, store it, or create a new one except with wildly expensive electronics by brainy electrical engineer geeks.

An MSC PCM waveform card is usually paired with an MPC prog/combi card (one row of gold pins inserted in the M1's top slot), containing programs and combinations programmed to use the new "external" waveforms.

----

### **VARIOUS BITS**

- Yahoo M1 Discussion Group, <http://launch.groups.yahoo.com/group/M1/>
- M1 Free Sounds, [http://www.recup.ch/banques\\_m1.htm](http://www.recup.ch/banques_m1.htm)
- M1 replacement buttons, 100g button, \$.50, part# 688-SKHHAN, mouser.com
- Hold down INT-POWER buttons for ROM version.
- Korg M1 sounds also work with the Korg T1/T2/T3 series and the Korg Wavestation/EX/AD series (but not WavestationSR), and the software M1 synth in The Korg Legacy Collection Digital Edition.
- The Voice Crystal M1 Factory card is your best bet for restoring the M1's original prog&combi sounds/3 drum kits/global settings. From the M1 manual, p119, "Load From Card":
  1. Turn M1 on.
  2. Insert card in top slot of M1, label facing toward you.
  3. Press GLOBAL, 8, G, G. Wait for loading to finish.
  4. Press PROGRAM. "00 Universe" should appear in the display.

----

### **DAMPER PEDAL POLARITY**

If the pedal is not broken and it's plugged into the damper jack (not the pedal1 or pedal2 jack), then try changing the damper polarity so the pedal sustains when pressed. M1 manual p111. Damper Polarity MUST correspond to footpedal polarity, -(neg) for a downarrow footpedal and +(pos) polarity for an uparrow footpedal. To toggle the damper polarity +/- press: GLOBAL, 2, Up/Down.

----

### **THREE WAYS TO TRANSFER SOUNDS TO M1**

1. Download sounds and transfer them from computer to M1 through a USB MIDI interface using transfer software. Instructions are included with the MIDI interface. Don't forget two MIDI connecting chords.
2. A proprietary RAM card containing sounds inserted in the M1's top slot. (Only on eBay or VoiceCrystal)
3. A proprietary ROM two card set, one card containing original waveforms inserted in the M1's rear slot, and one card containing sounds using those "external" waveforms inserted in the M1's top slot. (Only on eBay)

----

### **SEQUENCE MODE**

Press SEQ, REC, START/STOP. The REC button stays lit and the START/STOP button should pulse. Watch M in the display as it counts the measures passing and the %Free recording space as it approaches 0%. There is no audible beat clock.