

NEW FEATURES!!

Your Drumulator contains newly updated software that adds two important features: 64 song capability and song write-protection. If you already know how to use your Drumulator, simply read the following instructions to learn how to use these features. If you are starting from scratch to learn the Drumulator, wait until you get to the appropriate sections in the owner's manual and read them at that time.

64 Songs

Your Drumulator's song storage capability has been increased from 8 to 64 songs. Songs are now identified by two digit numbers ranging from 11 to 88. These are organized as 8 banks of 8 songs each, e.g. song 37 is the seventh song in bank 3. All of the songs in a bank share the same mix and tempo (however, see note below). The following changes should be made in your manual:

A) Section 3B—SELECTING A SONG

To choose a particular song:

1. Press the SONG/SEGMENT button so that the SONG light glows.
2. Hold down SELECT (the lefthand readout shows So to indicate song). While holding down SELECT choose the appropriate bank by pressing one of the lower row of 8 numbered buttons. The second display from the right will display this bank number.
3. Choose the song number within the bank by pressing another of the lower row of buttons. This number will appear in the rightmost display.
4. Release SELECT. The lefthand readout will show 01 to indicate you are at step one of the song and righthand display will show the contents of that step.

Note—If you release SELECT before entering the second digit of the song number, you will return to the previously selected song.

B) Section 3D—ENDING A SONG

To end a song and automatically link to another song, use the following procedure:

1. Press END. The righthand display will show E and a flashing cursor.
2. Select the bank of the song you want to link to by pressing one of the lower row of numbered buttons. The righthand display will show this number followed by a cursor. Both will flash.
3. Select the song within this bank by again pressing one of the eight numbered buttons. This number will appear in the rightmost display. The display will continue to flash.

Notes:

—If after entering the first digit in step two above you change your mind, simply press enter. The previous contents of the song step will be restored.

—Whenever a song step containing an end and link instruction is displayed, the righthand display will blink. This is to identify it as an end instruction (since the necessity of displaying a two digit song # prevents us from including the E for end) and to differentiate it from a simple segment number.

C) Sections 3G and 3H—SETTING SONG LEVELS AND ACCENTS

Set levels and accents exactly as described in these sections. However, be aware that all songs in a bank will share the same mix and accent settings. (e.g. 11-18 will all have the same mix, 21-28 another, etc.) **IMPORTANT**—When you change a mix or accent setting for a song, you are also making the same change in all the other songs in that bank.

D) Section 3I—SETTING TEMPOS

As in Sections 3G and 3H above, the overall programmed tempo is shared by all songs in a bank. However, you can get around this by using the programmed tempo change feature described in Section 3L of the manual. Simply make step one of each song in a bank a tempo change instruction that changes the bank's overall tempo to the appropriate tempo for that song. This way each song in a bank can, in fact, have a separate tempo. Keep in mind, however, that if you change a song's overall tempo, the tempo of all the other songs in that bank will be changed proportionately.

E) Sections 3J and 3K—COPYING SOUND PARAMETERS

Again, use the techniques described in these sections, but while holding down SELECT, press first the bank and then the song #s exactly as described in "Selecting a Song" above.

F) Section GC—PSEUDO-AUTOMATED MIX DOWN

Since you are no longer limited to 8 songs in a chain, this feature becomes much more useful. You can assemble a master song out of many subsongs and still have plenty of songs left for other uses. Likewise, you can use up five or six songs of a few beats each to program a gradual crescendo or decrescendo at one point in a master song without leaving yourself in the frustrating position of having 80% of your memory left and no songs to use it in.

Song Write Protection

One annoying feature of earlier Drumulator software was that it was all too easy to accidentally change a song step. This usually happened when you chose a new segment (thinking you were in segment mode) only to find you were actually in song mode and had just changed a song step and couldn't remember its previous contents. (Of course you'd previously written out the song steps prior to programming—you did, didn't you?—but having to find it again could be a pain.) Also, people fooling around with your Drumulator could inadvertently change your songs without realizing what they were doing. To overcome these problems, we've added a song edit mode.

When you first turn on your Drumulator you will now find that all your songs are write protected, i.e. you are unable to change the contents of any song step. To enter edit mode:

1. Press and hold SELECT. The display will show So and the number for the currently selected song.
2. While continuing to hold SELECT, press ENTER. The righthand display will now show Ed (for Edit). You may now change the contents of song steps.

Notes:

—Once you are in edit mode you will remain in edit mode until you switch to segment mode or turn your Drumulator off. If you switch to segment mode and then back to song mode, the songs will once again be write protected and you will again have to execute steps 1 and 2 above to make any more changes.

—Changes to levels, accents and tempos can be made in or out of edit mode. You can also copy parameters from segments or songs at any time. Edit mode only affects the actual contents of each song step.

HAVE FUN!
E-Mu Systems, Inc.

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INTERFACING THE DRUMULATOR WITH THE WORLD

SEQUENTIAL CIRCUITS

Poly Sequencer and Prophet 10 Sequencer:

Drumulator clock out to sequencer clock in.

Pro One:

(In song mode) Drumulator trigger out to Pro One ext clock input to drive Pro One arpeggiator. You can also use the individual sound outputs to run the arpeggiator by connecting them to the audio-in jack on the Pro One.

Prophet 600:

Requires drum mod 0.1 to widen trigger pulse from 1 to 10 milliseconds. Connect metronome output of Drumulator to the control footswitch jack on the Prophet 600. This will allow control over the Prophet 600 arpeggiator but not the sequencer which cannot be controlled from an external clock.

ROLAND

For interfacing to most Roland equipment, it is best to use the Drumulator to drive the Roland gear because the Drumulator's clock can be controlled by the run stop button or footswitch. Also, for most Roland equipment a special adaptor cable is required since Roland uses a 5 pin "din" connector and requires 2 signals, "run/stop" and "clock".

If your Drumulator is before serial #2500, it will require changing a capacitor C-74 to a jumper (contact factory).

Connect clock-out of Drumulator to pin 3 of Roland "din" connector. Connect a footswitch (normally open) to a "y" adaptor. Connect one end of the y adaptor to the run/stop jack on the back of the Drumulator. Connect the other end of the "y" adaptor to pin 1 of the Roland "din" connector. Connect ground from the Drumulator to pin 2 of the "din" connector. This configuration works with the TR606 Drumatix, TB303 baseline, TR808, and most other Roland equipment.

The MC-4 Micro Composer can be operated in this way or more simply by connecting clock out of the Drumulator to the external sync input on the MC-4 front panel. The time base on the MC-4 should be set to 24 and the sync switch set to external.

To drive the arpeggiators in the Roland JP-4, JP-8, Juno 6, and Juno 60, Mod. 0.1 must be installed in the Drumulator to widen the trigger pulse from 1 to 10 milliseconds. Once installed, the trigger output on the

Drumulator can be connected to the external clock inputs on these keyboards.

LINN

LM-1:

Linn products run off a 48 pulse/quarter note time base so it is necessary to have the Linn drive the Drumulator. Connect the "Internal Clock Out" of the LM-1 to the "External Clock Input" on the Drumulator. Set the external clock divider on the Drumulator to 2. Set "Auto Correct" on the LM-1 to HI.

Linn Drum:

Connect "Tape Sync Out" on the Linn Drum to the "External Clock Input" on the Drumulator. Set the external clock divider to 2.

OBERHEIM

DMX:

Oberheim uses a 96 pulse/quarter note timebase for their drum machines and sequencers so it is necessary to use them to drive the Drumulator. Connect "Clock Out" of the DMX to "External Clock In" on the Drumulator. Set the external clock divider to 4 on the Drumulator.

DX:

This uses the same connection as the DMX.

DSX:

For some reason, the DSX has a different clock structure than the DMX. The pulse width of the clock signal on the DSX is so narrow that the Drumulator cannot see it. To make it work, the clock pulse from the DSX must be widened through a simple timing circuit or divided in half by a flip-flop which will produce a nice square wave at half the frequency (48 pulses/quarter note). Contact E-mu for more details.

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