

# Technical Note #97

## DSP4000/4500 Self tests

The test subsystem described below is entered by holding down the [5] key during powerup. The desired test can be executed by tunring the wheel until the name is seen, then hitting [SELECT]. Most tests can be stopped by holding down the select key until the current phase of the test has completed. The tests are designed for Eventide Factory and other Qualified Technicians and should NOT be operated by the casual user. In particular, some of them

- Can erase program memory
- Can erase a card in the Memory Card Slot
- Require extra hardware

## Test All

Runs all DSP4000 tests. Loopback adaptors will be needed for some of these. **Will** erase any card in slot.

#### Test All NL

Runs all DSP4000 tests that do not require loopback adaptors. Will erase any card in slot.

#### Test 4500 All

Runs all DSP4500 tests. Loopback adaptors will be needed for some of these. Will erase factory presets and any card in slot.

#### Test 4500 NL

Runs all DSP4500 tests that do not require loopback adaptors. **Will erase factory** presets and any card in slot.

## Relay Exercise

Test the back panel relays. *Loopback required*.

#### Front Panel Exercise

Displays the state of the keyboard and back panel connectors. *Powerdown needed to* exit.

## **DSP 0,1 Internal Ram**

Test the internal ram of each DSP.

## **DSP 0,1 Static Ram**

Test the static ram connected to each DSP. See Technote 78 for more details.

## **DSP 0,1 Dynamic Ram**

Test the dynamic ram connected to each DSP. Takes 60 seconds to complete

## **Bridge 0 to 1, 1 to 0**

Tests the inter-DSP communciations.

## **System Ram Test**

Tests the 68000 static ram. (U32,35).

## **Battery Backed Ram**

Tests the 68000 battery backed ram (U34).

#### **MIDI Port Test**

Tests the MIDI In and Out functions. *Loopback required*.

#### Serial Port Test

Tests the Serial In and Out functions when installed. *Loopback required*.

#### Foot Switches

Test the operation of the Foot Switch inputs. *Loopback required*.

## Serial Number Test

Test the readability of the electronic serial number. 4500 and 4000CE only.

## 6M Flash Board Test

Test the system flash memory. 4500 only. Will erase the factory presets.

## **Card Test**

Test a RAM or approved FLASH cards in the memory card slot. **Will erase card unless write-protected.** 

## Sampler xx dram

Full test of sampler (if installed). Takes 60 seconds or more. See Technote 74 for more details.

## Sampler xx adrs

Test of sampler memory addressability (if installed). Takes 60 seconds or more. See Technote 74 for more details.

## exit

Leaves test subsystem and starts normal operation. *Powerdown required to re-enter test subsystem.*