t.c. electronic
ULTIMATE SOUND MACHINES

TC2290 SERVICE AUDIOTEST

1. CHECK

a) Performance test OK.

b) Correct PROM version.

c) Mechanical assembly.

d) Voltage selector & fuse size.

2. POWER UP

a) Power the TC2290 on. Note that the power on time must not be too long.

3. NOISE TEST

a) Connect XLR in- & outputs.

b) See SPEC 7, Check that the memory size is correct

c) Factory preset 86:   Set common output volume to 99,

   Set Delay Time to 0mS,

   Input Gain to max. (CW). Turn the volume up to max.

   The noise should contain a modulated "zzssszzzss" sound.

d) Lift and drop the TC2290.   The noise should not change nor sound differently!

e) Check buttons, LED's and displays. Check for clicks in the noise. The loudest clicks are heard when switching the PAN routing DIR & DLY buttons.

4. AUDIO QUALITY

a) Apply a well known audio signal.   Calibrate the Input Gain properly.

b) DIR / DLY Route A/B test: Locate TWO successive "EMPTY" presets. Recall one of these.

   Set Delay Time to 1mS

   Set DLY Output Volume to 0

   Set DIR Output Volume to 99

   Store this in the first "empty" preset

   Set DLY Output Volume to 99

   Set DIR Output Volume to 0

   Store this in the second "empty" preset.

Toggle between these two presets (eventually with the KEY A and KEY B buttons).

There must NOT be ANY audible difference. (TOLERANCES: Output Volume: 97-99. PAN: 48-52).

5. EXT. EFFECTS

a) Factory Preset 81.   Switch the EXT. EFFECTS ON manually.

Insert a shorted jack-phone plug in the RETURN sockets one by one.

RETURN 1 - 4: Output signal should be muted.

RETURN 5: The output signal should pan from left to right.

b) Loop from SEND #1 to RETURN #1 with an ordinary jack-jack cable.

Toggle EXT. EFFECT #1 ON/OFF: No audible difference should be heard.

Repeat test b) above for EXT. EFFECTS loops #2 - 5.

6. DIRECT OUT

a) Check the DIRECT OUT connector.

7. MORE AUDIO TEST

a) Check ENV/PAN   Factory Preset 89.   Press PAUSE on your audio source

b) Check AUTO-PAN   Factory Preset 92.

c) Check DYN FUNCTION   Factory Preset 82.   Press PAUSE on your audio source

d) Check DYN FUNCTION   Factory Preset 83   Press PAUSE on your audio source

e) Check DLY MOD   Factory Preset 85   Chorus

f   Check DLY MOD   Factory Preset 86   Flanger

f) Check FEEDBACK   Factory Preset 86   Press LEARN twice (300 - 500 mS)

Press PAUSE on your audio source

8. SAMPLING: (PROM v. 27.12 and above)

a) Recall factory preset 78   Press KEY A (Recording Armed)

Apply a well known audio signal   Press LEARN. The TC2290 will now record a sample.

b) When it has stopped recording: Press LEARN to play the sample.

c) Press LEARN rapidly in order to test the SA02 (PROM v. 28.12 or above). The TC2290 must playback the sample at every trig. If it playback only at every second trig the SA02 is defective or not installed correctly.

d) Press the DYN MOD button   Trig the sample playback by audio input

(9. MIDI)

a) Press MIDI ENABLE and set the proper MIDI channel.

b) Connect an extern MIDI device to MIDI IN. Check Prg. Changes as well as activity on the MIDI THRU socket Check MIDI OUT when changing preset on the TC2290.

(10. ASSIGN)

a) Check the ASSIGN SWITCH input with a TC0050