

**2 x 160 PROGRAMS / EFFECTS INDEX**

**00 → 010 STEREO GEN.** Adds a short delay to the signal to create a pseudo stereo effect out of mono sources.

**011 → 030 HALO** It's a digital recreation of the old magnetic Montarbo reverb. A typical 60s effect, with a real vintage character.

**031 → 040 ECHO** Classic multiplex effect. Delay time increases with program number.

**041 → 050 ECHO + REV.** Delay and reverb blended together make for the impressive effect you can listen on most contemporary productions).

**051 → 060 VOICE REV.** Reverbs specially tailored to enhance vocals' character.

**061 → 070 PERCUSSION REV.** Ambience effects that enrich both acoustic and electronic percussions.

**071 → 080 HALO + REVERB** Halo and reverb effects blended together.

**081 → 089 PING PONG** Basically an auto-panned delay, popular on many rock hits, the samples are being routed alternatively to full left and full right master.

**090 BOUNCE** Repeats start widely spaced to become closer and closer.

**091 → 100 EARLY REFLECTIONS** Adds early reflections without the decaying reverb. Useful to thicken many different sounds.

**101 → 110 STEREO FLANGER** It may be considered as a very intense chorus, with two voices crossing their stereo image and with feedback acting as 'comb filter'. The frequencies corresponding to the filter's notches and peaks change continuously, thus producing the typical flanging sound.

**111 → 120 STEREO CHORUS** It produces a warm and rich sound. Three voices are derived from the input signal and are sent to the Left and Right channels and to the center. The result is that even the thinner voice will sound like an ensemble. It is ideal to enliven a guitar accompaniment and to 'fatten' a voice.

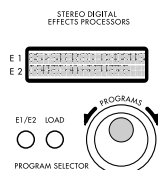
**121 → 130 DETUNE** Slightly alters the tuning of the source to simulate a 'doubling' effect with increased tuning alterations.

**131 → 136 DUAL PITCH** A wonderful 'harmonizer' with two voices trasposing the input signal pitch in real-time. Your voice will be automatically accompanied by a chorus.

**137 → 140 SINGLE PITCH** Harmonizer with one voice trasposing the input signal pitch in real-time.

**141 → 150 PITCH CHANGE + REV.** It's the combination of the two effects which most of all let your voice sound warmer and thicker. Beside your voice, the Pitch Change provides a voice in the center of the stereo image. To the resulting harmonizer effect a warm Plate type Reverb effect, particularly suited for voice, is added in cascade.

**151 → 160 REVERSE REVERB** Unmistakably a 'must' of many 80's records, starts at low level, builds up and quit abruptly. Usually served with percussion.

**• Mono input channels:**

Micro (sensitivity / impedance)	- 60dB / 2,2 kΩ
Line (sensitivity / impedance)	- 30dB / 33 kΩ
Insert-in (sensitivity / impedance)	0dB / 33kΩ
Phantom power supply	48 V
Channel gain range	30dB
Equalization	HF ±15dB @ 15 kHz MF (freq) 0,18÷3 kHz MF (level) ±15dB LF ±15dB @ 50 Hz

**• Stereo input channels:**

Micro (sensitivity / impedance)	-60dB / 2,2 kΩ
Line L/R (sensitivity / impedance)	- 48dB / 10KΩ
Channel gain range	34dB
Equalization	HF ±15dB @ 15 kHz MF ±15dB @ 600 Hz LF ±15dB @ 50 Hz

**• All channels:**

Equivalent input noise	-127dB
Crosstalk (between channels)	> 70dB / 1kHz
Peak LED indicator	+ 16dB, 6dB before clipping
Fader (throw / attenuation)	100mm / > 80dB

**• Dual Multieffect DSP**

A-D and D-A conversion	24 bit Delta-Sigma conversion
Internal DSP	56 bit
Bandwidth	40Hz ÷ 15kHz

**• External effect send**

Nominal level	2 -10dB
---------------	------------

**• Effect return (stereo)**

Nominal level	2 -10dB
---------------	------------

**• Monitor outputs**

Nominal level / max. level	4 0dB / +22dB
Insert-in/out: nominal level	0dB
Equalization	HF ±15dB @ 15 kHz MF (freq) 0,18÷3 kHz MF (level) ±15dB LF ±15dB @ 50 Hz

**• Master outputs**

Nominal level / max. level	<b>L, R, Mono</b> 0dB / +22dB
Insert-in/out: nominal level	0dB
Frequency response	25Hz ÷ 30kHz, (+0dB/-2dB)
THD	< 0,03%
SN ratio	80dB (nom.levels, EQ flat)
Stereo graphic equalizer	31-63-125-250-500 Hz, 1-2-4-8-16 kHz / -12dB
Center freq./range	

**• L/R Tape in-out: Nominal levels**

In: -20dB	Out: -10dB
-----------	------------

**• Headphones: Load impedance**

200 ÷ 600Ω
------------

**• Dimensions:**

<b>521:</b> 82 (W) x 10,5 (H) x 69 (D) cm
<b>523:</b> 106 (W) x 10,5 (H) x 69 (D) cm

**• Weights:**

<b>521:</b> 20 kg
<b>523:</b> 28 kg