

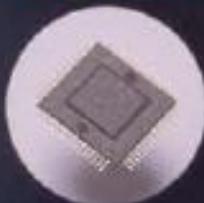
PRODUCT NEWS

Ibanez



MC4102 DIGITAL DELAY PROCESSOR LSI

Ibanez introduced LDPC (Ibanez Digital Processing Conversion) LSI two years ago. Now we have improved a new LSI to perform much better than before (40 dB wider dynamic range and better S/N ratio). It performs equivalent to a 15 bit ROM digital delay system, thus eliminating the need for any analog noise reduction circuitry.



DML20 16kHz BANDWIDTH

DIGITAL MODULATION DELAY III
The Ibanez DML20 Digital Modulation Delay provides chorus/flange/delay effects at a full range of 16kHz. The delay time is from 1msec to 1024msec so that doubling, echo and sound on sound can be achieved with full fidelity.

The modulation section with a full 4:1 sweep ratio provides the user with lush chorusing and flanging. The DML20's stereo output provides three dimensional spatial effects and all of the above without resorting to expensive rack mount effects.

SPECIFICATIONS

INPUT IMPEDANCE	500kΩ
OUTPUT IMPEDANCE	<1kΩ
MAXIMUM INPUT LEVEL	+5dBv
MAXIMUM OUTPUT LEVEL	+5dBv
DELAY TIME	1 FLANGER 1-4ms 2 CHORUS 4-16ms 3 DOUBLING 16-64ms 4 ECHO S. 64-256ms 5 ECHO M. 128-512ms 6 ECHO L. 256-1024ms 16kHz ±0.5 -3dB
BANDWIDTH	4:1
SWEEP RATIO	0.06Hz - 1.9Hz
SPEED RANGE	0.5%400Hz - 208MHz
TOTAL HARMONIC DISTORTION	0.5%400Hz - 208MHz
EQUIVALENT INPUT NOISE	90dBV(MF-A)
POWER SUPPLY	ONE 9V BATTERY (S-009P) / ALKALINE or AC ADAPTER
POWER REQUIREMENT	55mA(DC9V)
SIZE	125Dx70Wx54.9mm
WEIGHT	490g
OPTION	AC109 9V AC ADAPTER



DDL20 16kHz BANDWIDTH

DIGITAL DELAY III

Not only do digital effects provide realistically delayed sound but they offer a wide array of new sound possibilities. For example, complete

doubling effects can be produced with a setting of a short delay time with one repeat using the

stereo output of the DDL20. The DDL20 features delay times from 8msec to 1024msec

with a 16kHz bandwidth and needs no noise reduction circuits so a clean, clear sound is achieved.

SPECIFICATIONS

INPUT IMPEDANCE	500kΩ
OUTPUT IMPEDANCE	<1kΩ
MAXIMUM INPUT LEVEL	+5dBv
MAXIMUM OUTPUT LEVEL	+5dBv
DELAY TIME	1. FILTERING 8-32ms 2. DOUBLING 16-64ms 3. SLAPBACK 32-128ms 4. ECHO S. 64-256ms 5. ECHO M. 128-512ms 6. ECHO L. 256-1024ms 16kHz ±0.5 -3dB
BANDWIDTH	0.5%400Hz - 208MHz
TOTAL HARMONIC DISTORTION	0.5%400Hz - 208MHz
POWER SUPPLY	ONE 9V BATTERY (S-009P) / ALKALINE or AC ADAPTER
POWER REQUIREMENT	55mA(DC9V)
SIZE	125Dx70Wx54.9mm
WEIGHT	440g
OPTION	AC109 9V AC ADAPTER

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