

Ibanez
Digitally Controlled Processor

OUT1
BYPASS

8.
SOUND

OUT2

SEDI

DC

IN

58
VALUE

D-TIM R.P.T. WIDTH SOUND
D-RNG D-LEV SPEED
PARAMETER

SOUND

BANK

PATCH

MODE

EOP

STORE

COPY

SOUND

VALUE

PARAM.

PDM1

Ibanez

DCP

MODULATION DELAY

In the late seventies, musical instrument manufacturers introduced programmable digital processors to the market.

Since then, nearly all rack mount electronic effects have been utilizing digital technology. Digital delays, Pitch Shifters, and digital reverbs now have more memory, better programability, better specs, and certainly have become more affordable. Recent breakthroughs in digital technology now allow compact effects to reach a level of sophistication once available only from the most expensive rack mount equipment.

Now, Ibanez introduces three fully programable Compact Effects:
PDM1 Modulation Delay
PDD1 Digital Delay
PDS1 Distortion



1

2

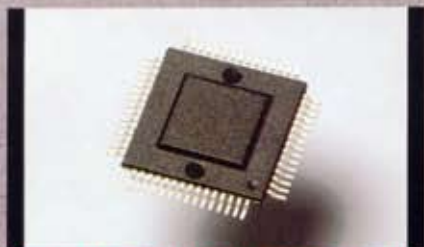


TWO CUSTOM LSI

MC4105F DIGITALLY CONTROLLED POTENTIOMETER LSI

VCA technology has been widely used in synthesizers and mixing boards. Unfortunately, high performance VCA chips are generally expensive and don't perform well at lower operating voltages such as 9 volts.

Ibanez has developed a custom LSI which goes beyond VCA technology. This LSI has 6 parameters (6 different controls), and each parameter has 100 increments to control value.



MC4102 DIGITAL DELAY PROCESSOR LSI

Ibanez introduced I.D.P.C. (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 PCM digital delay system, thus eliminating the need for any analog noise reduction circuitry.

6



1 10 FACTORY PROGRAMS

Each effect has 10 factory programmed sounds, all of which can be modified by the user and stored in to a user location.

2 SOUND MODE

Users can create their own sounds by using PARAM. & VALUE buttons. In this mode, user can change effect on or off from footswitch. 19 sounds can be stored in the memory (location 0 is bypass)

3 PLAY MODE

In play mode user can set up their own sound sequence for each song. Each DCP effect has 10 different banks and patches, so each bank will be able to sequence up to 10 different patches.

4 SEDI (SMALL EFFECT DIGITAL INTERFACE)

Multi-pin cable that transmits program change commands to the DCP effects from the DMI4 Master Controller, in addition to providing DC power to individual DCP pedals.



5 COPY MODE

The copy mode enables you to copy a patch to another location. This can save time in programming if you want to make subtle changes in a sound, and enter it as a new patch in a new location.

6 FOOTSWITCH

The DCP footswitch performs two different functions:
 Sound Mode: When DCP unit is in this mode, footswitch turns effect on/off.
 Play Mode: In this mode, footswitch will advance program numbers. You may advance thru all programs or insert an EOP (End of PATCH) command after any program number, in which case you can call up a sequence of pre-set patches as few as two, or as many as ten.



PDM1 16KHz BANDWIDTH
DCP MODULATION DELAY

PDM1 can provide Chorusing, Flanging, or straight delay. New LSI allows for 16kHz bandwidth without any noise reduction circuitry.

SPECIFICATIONS

Input Impedance	500 K Ω
Output Impedance	<1 K Ω
Maximum Input Level	+5 dBV
Maximum Output Level	+5 dBV
Delay Time Range 00	0.25 - 1 msec
Range 01	1 - 4 msec
Range 02	4 - 16 msec
Range 03	16 - 64 msec
Range 04	64 - 256 msec
Range 05	256 - 1024 msec
Bandwidth	16 kHz (+0.5, -3 dB)
Sweep Ratio	1 : 4
Speed Ranges	0.06 Hz - 13 Hz
Total Harmonic Distortion	0.5% (400 Hz, -20 dB)
Equivalent Input Noise	-90 dB (IHF-A)
Memory Size	
Factory Preset	10
User Preset	9
Power Supply	AC ADAPTER AC 109
Power Requirement	150 mA (DC 9 V)
Size	132(D) x 80(W) x 42(H) mm
Weight	260 g



PDD1 16KHz BANDWIDTH
DCP DELAY

PDD1 is the same as PDM1, but without the modulation section.

SPECIFICATIONS

Input Impedance	500 K Ω
Output Impedance	<1 K Ω
Maximum Input Level	+5 dBV
Maximum Output Level	+5 dBV
Delay Time Range 00	1 - 4 msec
Range 01	4 - 16 msec
Range 02	16 - 64 msec
Range 03	64 - 256 msec
Range 04	256 - 1024 msec
Bandwidth	16 kHz (+0.5, -3 dB)
Total Harmonic Distortion	0.5% (400 Hz, -20 dB)
Equivalent Input Noise	-90 dB (IHF-A)
Memory Size	
Factory Preset	10
User Preset	9
Power Supply	AC ADAPTER AC 109
Power Requirement	150 mA (DC 9 V)
Size	132(D) x 80(W) x 42(H) mm
Weight	260 g



PDS1
DCP DISTORTION

PDS1 Distortion is basically designed like Ibanez MS10. All filters (such as attack, punch, edge) have been improved to provide more variety in distortion sounds.

SPECIFICATIONS

Input Impedance	1 M Ω
Output Impedance	<1 K Ω
Maximum Gain	+55 dB
Equivalent Input Noise	-110 dB (IHF-A)
Memory Size	
Factory Preset	10
User Preset	9
Power Supply	AC ADAPTER AC 109
Power Requirement	100 mA (DC 9 V)
Size	132(D) x 80(W) x 42(H) mm
Weight	260 g



DMI4
DCP MIDI INTERFACE

DMI 4 is the interface unit for SEDI to MIDI. Controller has 4 SEDI inputs to accept DCP units, and will send program change information to DCP pedals (from external Midi controller)

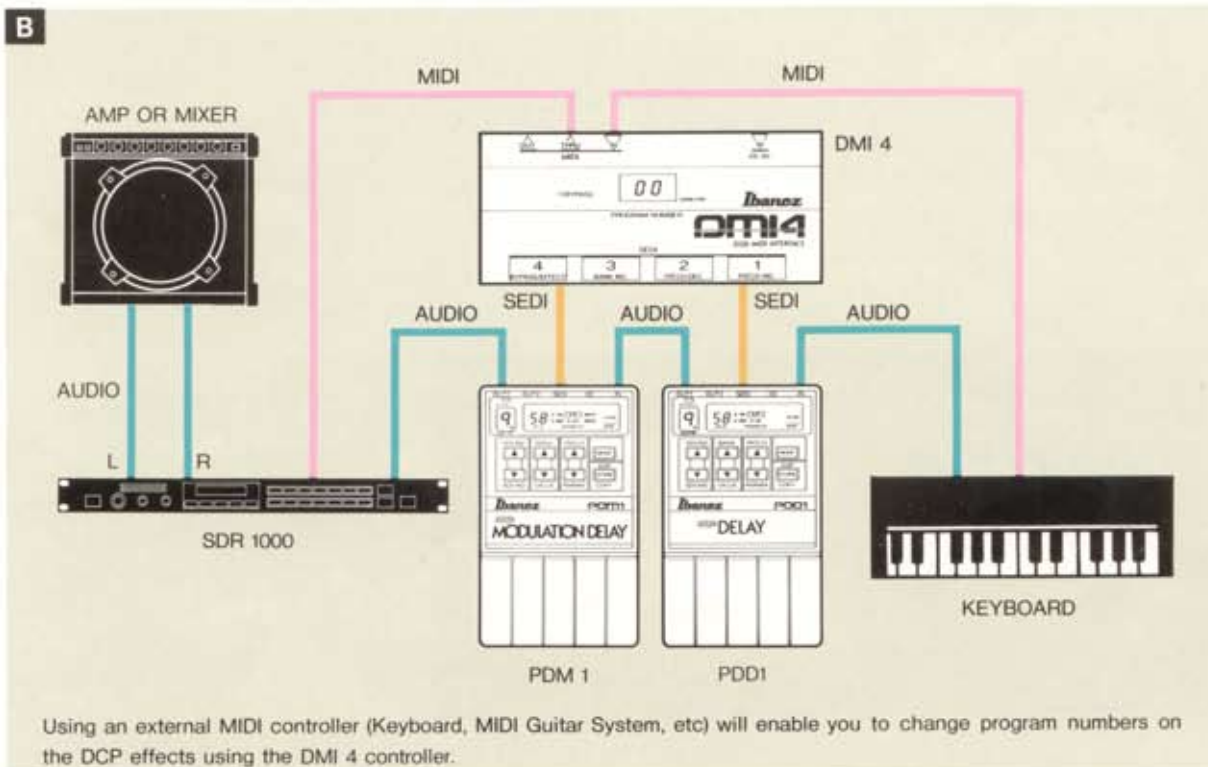
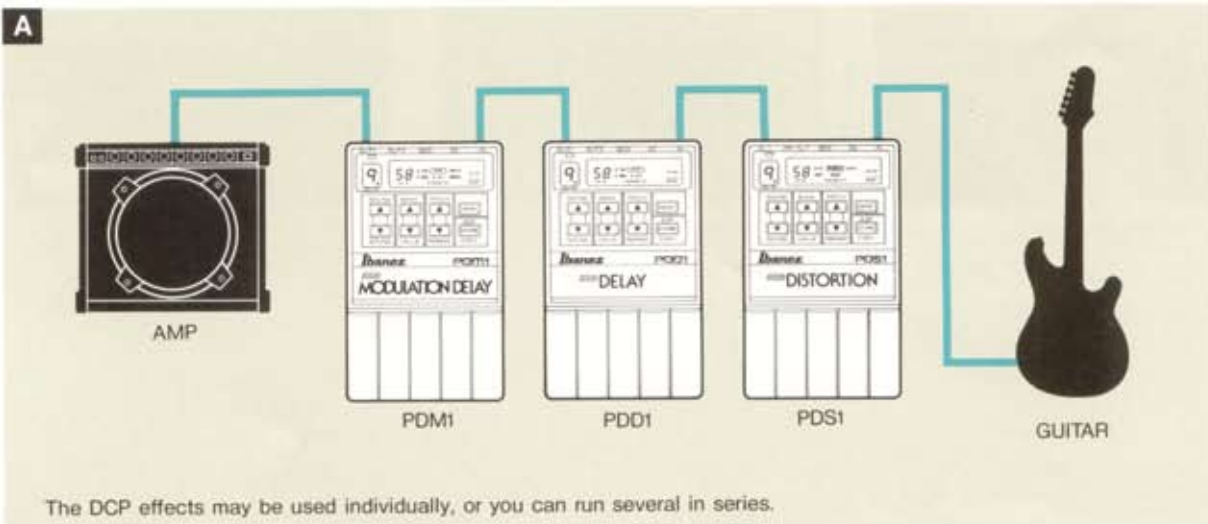
SPECIFICATIONS

Power Supply	AC 109
Power Requirement	80 mA
Size	240(W) x 108(H) x 40(D) mm
Weight	800 g
Accessory	AC adapter, SEDI cable (0.3 m x 4) switch sticker

DCP SYSTEM



All musicians want to be able to recall the exact sound that they want. But, current compact effects don't allow you to do that. Now, the DCP compact effects and DMI 4 make it possible.





**SEDI 30
SEDI CABLE**

Cable for SEDI (Small Effect Digital interface), Connect SEDI out of DCP unit to DMI 4 BUS input.



**CN404
CONNECTION CABLE**

Color connection cable set. 4 inch (10 cm)×4 pcs.

**CN104
CONNECTION CABLE**

Color connection cable set. 1-1/4 feet (40 cm)×4 pcs.



**AC109
AC ADAPTER**

The AC109 AC adapter is the optional power supply available for all "Power Series" and "DCP" effects. It is a 200 mA regulated power supply that is suggested for extended use situations.

NOTE: The use of any AC adapter, other than the AC109 may damage or impede the performance of any "Power Series" and "DCP" effect.



**DCP45C
DCP SYSTEM CASE**

The case is designed for DMI 4 system.

All specifications subject to change without notice or obligation.