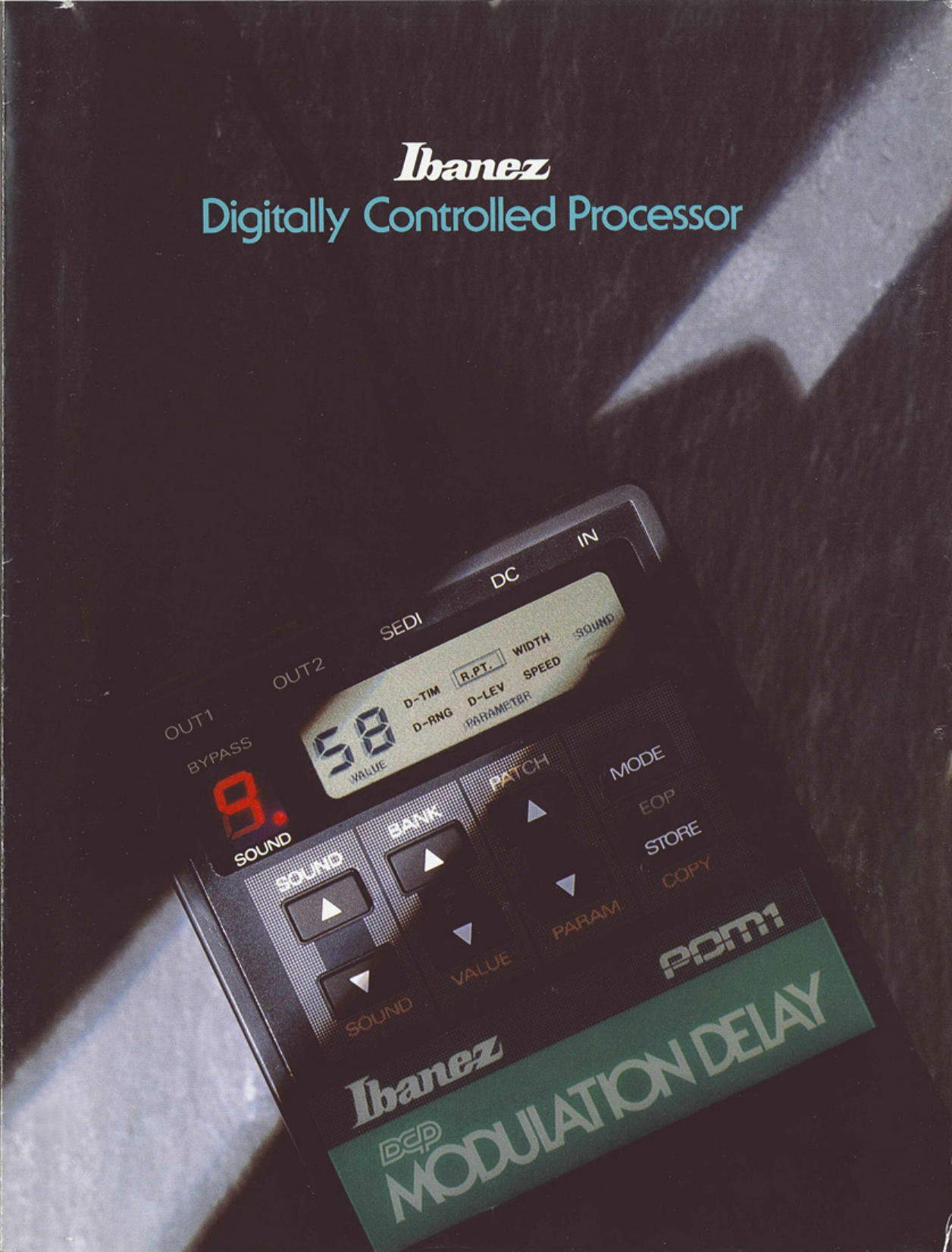
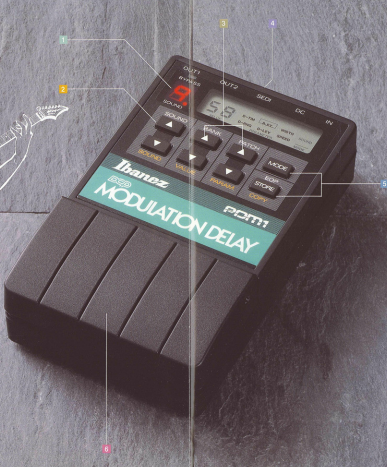
Ibanez

Digitally Controlled Processor



In the late seventies, musical performers musical tastes introduced programmable digital processors to the market.
Now this newly arrived music electronic effects processor uses multiple digital technology. Digital Delays, Pitch Shifters, and digital reverb are now commonplace, better programmability, better quality, and generally have become more after dinner. Breakthroughs in digital technology now allow guitar effects to reach a level of sophistication not available only from the most expensive rack mount equipment.

Now, Ibanez introduces three fully programmable Guitar Effects PDM1 Modulation Delay, PDD1 Digital Delay, PDS1 Distortion.



TWO CUSTOM LSI

MC4102 DIGITAL DELAY CONTROLLED POTENTIOMETER LSI

VCA technology has been widely used in amplifiers and analog audio instrumentation. High performance VCA chips are generally expensive and don't perform well at lower operating voltages (9V or 9V).
Ibanez has developed a custom LSI which goes beyond VCA technology. This LSI has 4 parameters for delayed control, and each parameter has 100 increments to control value.

MC4162 DIGITAL DELAY PROCESSOR LSI

Ibanez introduced DDPC (Ibanez Digital Processing Controller) LSI two years ago. Now we have improved it and it is proportionally better than before. 48 wide dynamic range and better S/N ratio. It performs equivalent to a 12 bit PCM delay and only system clock eliminating the need for an anti-noise reduction circuits.

1 **10 FACTORY PROGRAMS**
Each effect has 10 factory programmed sounds all of which can be modified by the user and stored in a 9 level memory.

2 **SOUND MODE**
Each sound can be given a character using PARAMETER/VARIABLE buttons. In this mode, user can change effects or add long feedback. 15 sounds can be stored in the memory (Original this typo?)

3 **PLAY MODE**
In this mode, the desired number tone sound can change for each song. Each DCP effect has 15 different tracks and patches, so each tank will be able to sequence up to 15 different patches.

4 **SEDI (SMALL EFFECT DIGITAL INTERFACE)**
Multi-effects and processors can be controlled by remote by the DCP. Patches from the PDM1 Master Controller or MIDI will provide the DC power to individual DCP pedals.

5 **COPY MODE**
The copy function enables you to copy a patch to another location. This can save time in programming if you want to make subtle changes to a song, and remember a new patch to a new patch.

6 **FOOTSWITCH**
The DCP footswitch gathers two different functions.
Sound Mode: When DCP unit is in this mode, footswitch is effect on/off.
Play Mode: In this mode, footswitch will advance program numbers. You may advance thru all programs in tenth unit DCP. Third of DCP's footswitch also programmable, in some case you critical, up a separation of programs as few as ten, as as many as ten.

PDM1 MAX. BANDWIDTH 5KHZ MODULATION DELAY

PDM1 can provide Chorusing, Flanging, or straight delay. New LSI allows for 10kHz bandwidth without any noise reduction circuitry.

SPECIFICATIONS

Input Impedance	600 KΩ
Output Impedance	1.1 KΩ
Input Level	1.5 dBm
Maximum Output Level	1.5 dBm
Delay Time Range 01	0.25 - 1 msec
Range 02	1 - 4 msec
Range 03	4 - 16 msec
Range 04	16 - 256 msec
Range 05	256 - 1024 msec
Bandwidth	40 Hz (-1.5) - 10 kHz
Sweep Ratio	1 : 4
Total Harmonic Distortion	0.5% (400 Hz, 1V, 0dB)
Equivalent Input Noise	-90 dB (HP-A)
Power Switch	
Factory Preset	15
User Preset	15
Power Supply	AC ADAPTER AC 9V
Power Requirement	150 mA (DC 9 V)
Size	150(D) × 65(W) × 30(H) mm
Weight	290 g

PDD1 MAX. BANDWIDTH 10KHZ DELAY

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

SPECIFICATIONS

Input Impedance	600 KΩ
Output Impedance	1.1 KΩ
Input Level	1.5 dBm
Maximum Output Level	1.5 dBm
Delay Time 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	40 Hz (-1.5) - 10 kHz
Total Harmonic Distortion	0.5% (400 Hz, 1V, 0dB)
Equivalent Input Noise	-90 dB (HP-A)
Power Switch	
Factory Preset	15
User Preset	15
Power Supply	AC ADAPTER AC 9V
Power Requirement	150 mA (DC 9 V)
Size	150(D) × 65(W) × 30(H) mm
Weight	290 g

PDS1 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 MΩ
Output Impedance	1.1 KΩ
Input Level	1.5 dBm
Equivalent Input Noise	-110 dB (HP-A)
Memory Size	
Factory Preset	10
User Preset	5
Power Supply	AC ADAPTER AC 9V
Power Requirement	150 mA (DC 9 V)
Size	150(D) × 65(W) × 30(H) mm
Weight	290 g

DM14 MIDI INTERFACE

DM14 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)

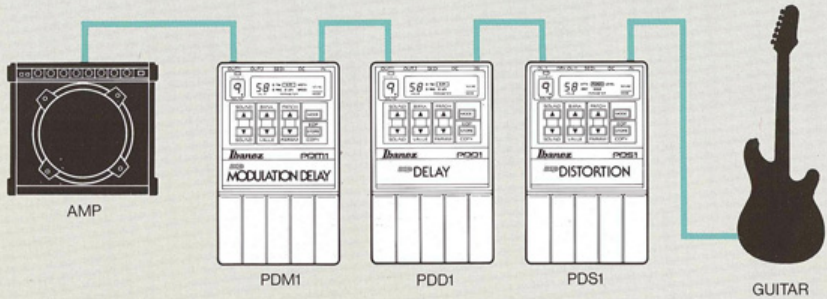
SPECIFICATIONS

Power Supply	AC 100
Power Requirement	30 mA
Size	240(W) × 100(D) × 40(H) mm
Weight	1.1 kg (2.4 lb)
Accessory	AC adapter, MIDI cable (5.3 m) (16 feet) stereo

DCP SYSTEM

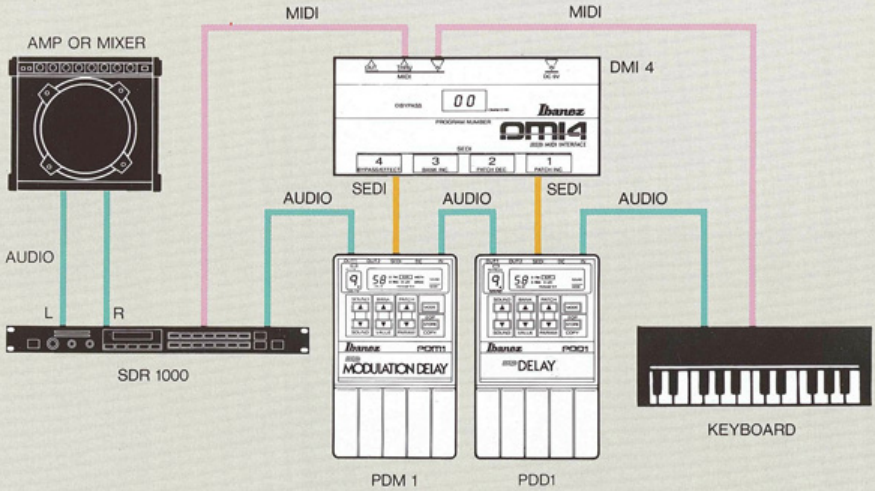
All musicians want to be able to recall the exact sound that they want. But, current compact effects don't allow you to do that. Now, the DCP compact effects and DMI 4 make it possible.

A



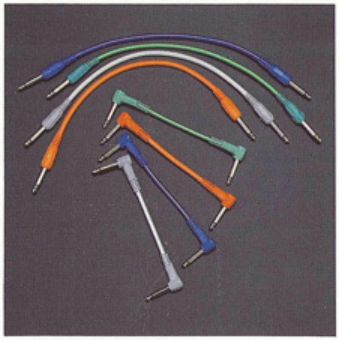
The DCP effects may be used individually, or you can run several in series.

B



Using an external MIDI controller (Keyboard, MIDI Guitar System, etc) will enable you to change program numbers on the DCP effects using the DMI 4 controller.

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.

All specifications subnect to change without notice or obligation.

DCP4SC
DCP SYSTEM CASE
The case is designed for DMI 4 system.

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