



'84

Sound
Effects
Ibanez

Ibanez Multi-Effects Systems

As the relationship between the artist and electronics has matured the professional has seen a need for more sophisticated signal processing capabilities. He needs a system that is easily changed in live situations. It must be compact, easy to set up and yet flexible enough to accommodate his particular sound.

Ibanez was first to meet this challenge with the UE400 Rack System Series — professional quality rackmount

processor systems. The response was tremendous. The UE400 Series have found their way into professional and semi-pro recording studios PA systems as well as musical instrument systems.

Ibanez continues to lead the way with the UE300 Floor System Series — a bold new format for multi-effect systems. And again, the response has been overwhelming. Clearly the time for Ibanez Multi-Effect Systems has come.

UE300 Floor System Series

Each system in the UE300 series contains three integrated signal processors and an external loop for use with external processors. Each effect or the whole system may be switched in and out using the Q-1 silent switching system. The UE300 Series are AC powered and feature multiple outputs for easy connection of the system. LED's indicate the status of each effect and master control. Professional quality and reliability make the UE300 Floor System Series a unique solution for the pedal weary musician. Uniqueness, Ibanez.



UE400 Rack System Series

The UE400 Rack System Series are the most advanced multi-effects systems in the industry. Four signal processors and an external loop permit the artist to place each effect in any desired location — no patch cords are necessary. Changes in the Ibanez Patch program are quick and easy, giving the artist a versatility never before realized. Each UE400 System is AC powered and housed in a standard EIA 19 inch rack mount case. The UE400 Series offers a variety of effects and system bypasses. LED's on the rack unit and the remote footswitches indicate the status of each effect, the Ibanez Patch system and master control. Multiple outputs are provided for enhanced dimensional effects.

The UE400 Rack System Series represents the leading edge of multi-effects system technology — maximum flexibility, easy utilization and the professional quality that is Ibanez.



UE300 FLOOR SYSTEM

UE300 FLOOR SYSTEM

UE300 FLOOR SYSTEM

The UE300 Floor System utilizes a powerful trio of processors for guitars or bass. The exceptionally quiet Compressor/Limiter with variable attack time, the Tube Screamer for a myriad of tube amp sounds, and the Stereo Chorus, the latest time delay sound whose stereo outputs dimensionally enhance all of the effects of the system. The combination of Compressor/Limiter and Tube Screamer is ideal for creating warmth, ultra-sustained distortion. An external loop permits the artist to place additional processors between the Tube Screamers and Stereo Chorus. Q-1 silent switching is provided as well as a remote footswitch for the UE300 Floor System — today's most desired sound in today's most advanced design.

SPECIFICATIONS

Compressor/Limiter Compression Ratio	40 dB
Tube Screamers, Max. Gain	+10dB
Stereo Chorus	—
Time Delay Range	0.3 — 8.5 ms
Input Impedance	100K ohms
Output Impedance	500 ohms
Q-1 Effects Receivable	900KC, 4kHz
Output Impedance	500 ohms
Inputs, 1, 2 and Effect Send	<1K ohm
Dimensions	310W x 190D x 70H mm
Weight	1.3 kg (4.2 lbs.)
Power Requirements	117 VAC, 60 Hz, 3.7 W 220 — 240 VAC, 50 Hz, 5.2 W

SPECIFICATIONS

Anti-Feedback Frequency Range	80 — 1 KHz (Low Range)
	100 — 2 KHz (High Range)
Compressor/Limiter Compression Range	40 dB
Stereo Chorus/Flanger Delay Range	0.3 — 8.5 ms
Input Impedance	100K ohms
Output Impedance	500 ohms
Inputs, 1, 2 and Effect Receivable	<1K ohm
Dimensions	310W x 190D x 70H mm
Weight	2.1 kg, 4.6 lbs.
Power Requirements	120 VAC, 60 Hz, 6W 220 — 240 VAC, 50 Hz, 9W

SPECIFICATIONS

Compressor/Limiter Compression Ratio	40 dB
Tube Screamers, Max. Gain	+10dB
Stereo Chorus/Delay Range	—, 0.3 — 8.5 ms
Input Impedance	100K ohms
Output Impedance	500 ohms
Inputs, 1, 2 and Effect Receivable	<1K ohm
Dimensions	310W x 190D x 70H mm
Weight	2.1 kg, 4.6 lbs.
Power Requirements	120 VAC, 60 Hz, 6W 220 — 240 VAC, 50 Hz, 9W



Effects Devices Features



LED INDICATOR

An easily visible LED indicates the INPUT/OUTPUT status of the device and allows connection errors or malfunctions to be visually checked during setup, avoiding embarrassing performance disasters.



BATTERY COMPARTMENT

The battery may be easily accessed without the use of tools or torque. The compartment protects the battery from mechanical shock and circuit board from battery leakage.



SILENT Q-1 SWITCHING

The Q-1 switching system uses field-effect transistors for absolutely silent action. The smooth action switchplane is enlarged for easy actuation.



CASE DESIGN

This case has a sloped front, human engineered for comfortable activation in any position, standing or sitting. The control knobs are recessed for protection. A rubber pad on the case bottom prevents device movement during use. The case is made of diecast zinc for years of dependability. Overall dimensions are 124 mm x 74 mm x 63 mm and it weighs 0.670 kg, 1.2 lbs.



CIRCUIT DESIGN

Ibanez Effects Devices circuits are state-of-the-art designs providing maximum performance and reliability with low noise. Only top grade components and circuit board materials are used. All finished assemblies are fully tested to rigorous quality assurance specifications.



AC/DC POWER CAPABILITY

Ibanez Effects Devices operate on 9 volts DC, typically from an internal battery source, but can also be safely powered by an external AC adapter via the rear mounted power jack.

PT9 Phaser

A phaser uses phase shift networks to create "notches" and "peaks" in the signal response. The PT9 Phaser has three phaser sections that notches and peaks more or "wavers". The PT9 Phaser uses eight phase shift networks that provide rich, deep phasing for guitar, keyboard or bass. The PT9's sweep circuit is exceptionally smooth and provides adjustable sweep width and speed. The feedback control adjusts the level of phasing intensity. The PT9 Phaser – versatility and sonic quality for stage or studio.

SPECIFICATIONS

Input Impedance	500k ohms
Output Impedance	<10k ohms
Maximum Input Level	-5 dBm
Maximum Output Level	+10 dBm
Sweep Speed Range	0.08 – 12 Hz
Equivalent Input Noise	-80 dBm (IHF-A)



CF9 COMPRESSOR/LIMITER

Compressor/Limiters are very useful devices for increasing volume and for controlling signal peaks. Set until now, the attack time of the Compressor/Limiter was fixed – either you liked the way it sounded or you didn't. The CF9 Compressor/Limiter lets the artist choose his attack time, feel for the right sound, compress signal when needed, and for a more percussive attack when desired. The CF9 also uses a new VCA configuration for low noise operation even at the longest sustain. The CF9 Compressor/Limiter – an unequal value for guitar, keyboard or bass.

SPECIFICATIONS

Input Impedance	500k ohms
Output Impedance	<10k ohms
Maximum Input Level	+5 dBm
Maximum Output Level	+10 dBm
Sweep Speed Range	-40 – 40 dB
Anattack Time Range	.8 – 20 ms
Equivalent Input Noise	-85 dBm (IHF-A)



FL9 Flanger

Flanging is a time delay effect using very short time delays mixed together with the input (dry) signal to produce a "wavy" or "swell" effect in the signal's response throughout the audible spectrum. When the time delay is varied the peaks and notches move or "waver". The FL9 Flanger features an extremely quiet time delay section creating an unusually noise-free flange. The sweep speed and width may be chosen to either sweep from the second to the third dimension or sweep across a more random octave. The CF9 Stereo Chorus is the industry's finest realization of an exciting new sound!

SPECIFICATIONS

Input Impedance	500k ohms
Output Impedance	<10k ohms
Maximum Input Level	-4 dBm
Maximum Output Level	+10 dBm
Sweep Speed Range	0.08 – 12 Hz
Equivalent Input Noise	-75 dBm (IHF-A)



AD9 ANALOG DELAY

Discrete echo is one of the most dramatic effects in the music industry. Delay units and "reverberation disk" units have given way to the convenience and reliability of solid state delay. The AD9 Analog Delay uses a combination with pre-and post-delay for an exceptionally clean delay. The Delay Time control adjusts the delay time, the Decay control controls the decay time and the mix control mixes dry and delayed signals. The Repeat control permits the number of repeats to be controlled without runaway. Two outputs enable the dry and delayed signals to be separately routed for dramatic special movement. The quality and features of the AD9 Analog Delay make it the professional's choice.

SPECIFICATIONS

Input Impedance	500k ohms
Output Impedance	<10k ohms
Maximum Input Level	-5 dBm
Maximum Output Level	+10 dBm
Sweep Speed Range	-40 – 40 dB
Attack Time Range	.8 – 20 ms
Equivalent Input Noise	-85 dBm (IHF-A)



C99 STEREO CHORUS

The chorus effect uses a small time delay that is varied to produce a slight pitch bend. When the time delay is varied the resulting sound moves with the resultant sound moves with a rich, thick undulation. This is the effect of multiple voices playing in unison. The C99 Stereo Chorus provides stereo outputs that add on exciting dimensions of movement to the second. The sweep speed and width controls let the artist choose either a slow sweeping action or a more random octave. The C99 Stereo Chorus – the industry's finest realization of an exciting new sound!

SPECIFICATIONS

Input Impedance	500k ohms
Output Impedance	<10k ohms
Maximum Input Level	-4 dBm
Maximum Output Level	+10 dBm
Sweep Speed Range	0.2 – 2.5 ms
Equivalent Input Noise	-100 dBm (IHF-A)



T99 TUBE SCREAMER

The warm and powerful sound of an overdriven tube amplifier has long studied effects device manufacturers. The T99 Tube Scream has captured this distinctive sound in a remarkably functional format. The Overdrive control and Output Level control adjust the intensity of overdrive and output volume. The Tone control adjusts the brightness for warmth and smoothness of cutting tone. From the first to the last note of sustained notes, the T99 Tube Scream provides the most sustained of tones, the T99 Tube Scream provides the artist with the widest range of usable, distastefully tube sounds.

SPECIFICATIONS

Input Impedance	500k ohms
Output Impedance	<10k ohms
Maximum Input Level	-5 dBm
Maximum Output Level	+10 dBm
Equivalent Input Noise	-100 dBm (IHF-A)



SD9 SONIC DISTORTION

The Distortion sound has been around for gone time and it's as popular today as ever. The SD9 Sonic Distortion has taken the traditional idea of distortion to create a wider new range of possibilities. The Tone control allows the artist to modify the distortion with base or treble boost for existing new colorations. The Distortion control and Output Level control adjust the intensity and level of distortion. Versatility and performance – The SD9 Sonic Distortion is a cut above.

SPECIFICATIONS

Input Impedance	500k ohms
Output Impedance	<10k ohms
Maximum Input Level	-5 dBm
Maximum Output Level	+10 dBm
Equivalent Input Noise	-100 dBm (IHF-A)



PF9 Phaser

A phaser uses phase shift networks to create "notches" and "peaks" in the signal response. The PF9 Phaser has three phaser sections that notches and peaks more or "wavers". The PF9 Phaser uses eight phase shift networks that provide rich, deep phasing for guitar, keyboard or bass. The PF9's sweep circuit is exceptionally smooth and provides adjustable sweep width and speed. The feedback control adjusts the level of phasing intensity. The PF9 Phaser – versatility and sonic quality for stage or studio.

SPECIFICATIONS

Input Impedance	500k ohms
Output Impedance	<10k ohms
Maximum Input Level	-5 dBm
Maximum Output Level	+10 dBm
Sweep Speed Range	-40 – 40 dB
Attack Time Range	.8 – 20 ms
Equivalent Input Noise	-85 dBm (IHF-A)



AD9 Analog Delay

Discrete echo is one of the most dramatic effects in the music industry. Delay units and "reverberation disk" units have given way to the convenience and reliability of solid state delay. The AD9 Analog Delay uses a combination with pre-and post-delay for an exceptionally clean delay. The Delay Time control adjusts the delay time, the Decay control controls the decay time and the mix control mixes dry and delayed signals. The Repeat control permits the number of repeats to be controlled without runaway. Two outputs enable the dry and delayed signals to be separately routed for dramatic special movement. The quality and features of the AD9 Analog Delay make it the professional's choice.

SPECIFICATIONS

Input Impedance	500k ohms
Output Impedance	<10k ohms
Maximum Input Level	-5 dBm
Maximum Output Level	+10 dBm
Sweep Speed Range	-40 – 40 dB
Attack Time Range	.8 – 20 ms
Equivalent Input Noise	-85 dBm (IHF-A)



GE9 Graphic EQ

Equalizers are extremely useful frequency response modifiers. EQ's can change the sound of voices, instruments and signal processors such as distortion devices, phasers and time delay effects. They are also widely used in feedback control applications. The GE9 Graphic EQ combines the simplicity of a graphic with the higher quality circuitry. The GE9 has six extremely sharp parametric filters for 15dB of boost or cut. The Level slider allows the signal level to be adjusted without disturbing the filter settings. The GE9 Graphic EQ is a useful addition to any musician's system.

SPECIFICATIONS

Input Impedance	500k ohms
Output Impedance	<10k ohms
Maximum Input Level	+10 dBm
Maximum Output Level	+10 dBm
Filter Center Frequencies	100, 200, 400, 800, 1.6K, 3.2 KHz
Filter Bandwidth	3 octaves
Filter Control Range	-10 dB center decreased
Level Control Range	+10 dB center increased
Equivalent Input Noise	-100 dBm (IHF-A)



P99 Parametric EQ

Parametric EQ's are a powerful method of equalization. An filter's center may be adjusted over a wide frequency range allowing the artist to affect a specific frequency band of interest. This feature is most useful for getting that very special sound from voice, instruments or signal processors. The P99 Parametric EQ combines the simplicity of a graphic with the higher quality circuitry. The P99 Parametric EQ has six extremely sharp parametric filters for 15dB of boost or cut. The Level slider allows the signal level to be adjusted from mid to high gain. The graphic filter's center action may be bypassed wherever the emphasis is desired, making the P99 ideally suited for any type of instrument. The P99 Parametric EQ provides simplicity with maximum flexibility.

SPECIFICATIONS

Input Impedance	500k ohms
Output Impedance	<10k ohms
Maximum Input Level	-5 dBm
Maximum Output Level	+10 dBm
Low Filter Cut-off Frequency	75 – 5.6 KHz
Mid Filter Cut-off Frequency	100 – 1.6 KHz
High Filter Cut-off Frequency	5.6 KHz
Filter Control Range	-10 dB center decreased
Equivalent Input Noise	-100 dBm (IHF-A)



AF9 Auto Filter

Auto Filters are automatic "washout" type sliding filters that are triggered by the input level. The AF9 Auto Filter has taken that idea several steps further. The AF9 provides three selectable filter types, two slide directions and two slide ranges. The Sensitivity control adjusts the auto threshold and range of a given filter. The AF9 Auto Filter's three filter types determine the filter's width. The chosen filter's slide action may be bypassed wherever the emphasis is desired, making the AF9 ideally suited for any type of instrument. The AF9 Auto Filter truly represents the state-of-the-art.

SPECIFICATIONS

Input Impedance	500k ohms
Output Impedance	<10k ohms
Filter Types	Low Pass Shelving Mid Pass Bandpass High Pass
Filter Frequency Range	100 – 2 KHz (Low range) 200 – 4 KHz (High range)
Equivalent Input Noise	-90 dBm (IHF-A)





UE400 RACK SYSTEM

The UE400 Rack System contains four professional signal processors, an external effects loop and the Insta-Patch switching system. The Compressor provides smooth, clean sustain, the Phaser uses eight phase shift stages for professional-quality phase sweeps, the Overdrive provides a wide range of distortion sounds and the Stereo Chorus/Flanger for the most popular of time delay effects. The external loop allows integration of other signal processors into the systems control. The remote footswitch uses silent FET switching for each section of the system and master control — allowing the artist to change complex processor combinations at the touch of a switch. The UE400 Rack System with Insta-Patch — the most powerful signal processing system available.

SPECIFICATIONS

Com/Limit Compression Ratio	40 dB
Phaser Stages	8 stages
Overdrive Max. Gain	+30 dB
Stereo Chorus/Flanger Delay Range	3.2 — 8.8 ms (Chorus) 1.46 — 12.0 ms (Flanger)
Input Impedance	
(Input, Effect Receive)	500K ohms
Output Impedance (Main Out, S. Chorus Out, Effect Send)	<1K ohms
Dimensions	
Rack Unit	482(w) x 995(h) x 232(d) mm
Footswitch	340(w) x 42(h) x 70(d) mm
Weight	Rack Unit — 3.8 kg, 8.8 lbs Footswitch — 1.2 kg, 2.7 lbs
Power Requirements	
117 VAC, 60 Hz, 7.0W	
220 — 240 VAC, 50 Hz, 9.2 W	

UE405 RACK SYSTEM

The UE405 Rack System provides four popular and versatile signal processors along with an external loop capability and Ibanez's Insta-Patch switching system. The Compressor/Limiter is a low noise limiter with variable attack time. The Stereo Chorus provides a moving texture to the sound and stereo outputs for enhanced multi-dimensional effects. The Parametric Equalizer is the most versatile EQ in the industry. The Analog Delay provides professional delay effects from long echo to hard reverbs. The external loop facility permits the artist to insert additional signal processors at any point in the system. The remote footswitch with silent FET switching provides single-touch control of each section and the entire system. The UE405 Rack System with Insta-Patch — the professionals' choice for signal processing systems.

SPECIFICATIONS

Com/Limit Compression Ratio	40 dB
Stereo Chorus Delay Range	3.2 — 8.8 ms
I/O Frequency Crossover Range	25 Hz — 10 kHz
Analog Delay Range	<200 ms
Input Impedance	
(Input, Effect Receive)	500K ohms
Output Impedance (Main Out, S. Chorus Out, Effect Send)	<1K ohms
Dimensions	
Rack Unit	482(w) x 995(h) x 232(d) mm
Footswitch	340(w) x 42(h) x 70(d) mm
Weight	Rack Unit 3.9 kg, 8.8 lbs Footswitch 1.2 kg, 2.7 lbs
Power Requirements	
117 VAC, 60 Hz, 7.0W	
220 — 240 VAC, 50 Hz, 9.2 W	

*IBANEZ electronic accessories sold and serviced by

Ibanez

©1986 Ibanez Corporation of America