

IBANEZ COMPACT EFFECTS



Ibanez

OVERALL FEATURES

Overall Features

Q-1 SILENT SWITCHING

The Q-1 (Quiet One) silent FET footswitch provides noise-free, reliable switching. The sure-grip switchplate gives you sure footing for fast smooth switching while playing.



QUICK CHANGE II BATTERY POCKET

The Quick Change II Battery Pocket provides easy access to the battery from the top of the effect pedal, making battery changes a breeze, even if the pedal is mounted on a footboard.



FRONT MOUNTED INPUT and OUTPUT JACKS

All connections to Power Series effects are located on the front panel, for easy hookup with less mounting space.



POWER SERIES
Ibanez

DIGITAL EFFECTS

Digital signal processing had an almost immediate impact on the music scene upon its introduction a few years back. Effects such as time delay, chorusing and flanging suddenly had fidelity and precision. The signal reproduced by the digital unit had identical characteristics to the original signal; all the highs and lows were there. What's more, easy and accurate delay changes were now possible, right down to the millisecond so even the most subtle tone variations could be achieved. However there were limitations. Digital units were expensive, their modulation sections (needed for chorusing and flanging) tended to have limited sweep ratios and they were all big, bulky rack mountable type units.

The price barrier was the first to fall when, who else but Ibanez introduced the affordable DM1000 in 1982, and as technology moved ahead, so did the capabilities and features of our digital effects. Now the ultimate achievement in digital effect processing is here with the introduction of the new Power Series Digital Effects by Ibanez. Even though these units are all compact effects, they have specs and features that rival the large rack mounts, at prices that are hard to beat.

Through the use of I.D.P.C. (Ibanez Digital Processing Conversion), we are able to miniaturize in one IC what used to take up to 50 times the space. This break-through in technology permits high quality, low cost digital processing without sacrificing specifications. All Power Series Digital Effects feature a wide 7 kHz bandwidth for sharp, crisp clarity and true stereo outputs for maximum effect. Units with modulation control have an 8:1 sweep modulation ratio for smooth chorusing and flanging, and of course all units feature the technology and quality that you expect from Ibanez.



DDL10 DIGITAL DELAY II

The DDL10 is a straight forward delay unit with variable delay times ranging from 19 msec to 900 msec. The MODE selector divides delay times into four intervals and ultra fine tuning is achieved by the D-TIME knob. There is a REPEAT control to vary multiple repeats and a D-LEVEL control that lets you select how much effect signal is mixed with the dry. The stereo output jacks deliver a dry and normal effect out, allowing dramatic doubling, slap back and delay effects.



DML10 DIGITAL MODULATION DELAY II

The new Ibanez DML10 is the most versatile compact effect ever developed. This one compact effect is capable of doing everything that the large rack mount digitals can do. To begin with, it can produce delays from 0.9 msec up to 900 msec that are easily controlled by the four position mode selector. The D-TIME knob fine tunes your delay time so that you can zero in on just the delay time that you want. There is a modulation section with a full 8:1 sweep ratio giving you lush chorusing and flanging effects. The stereo output jacks produce normal effect and dry (no effect) outputs for real stereo imaging, doubling and sound c...ound effects.



DCF10 DIGITAL CHORUS/FLANGER

Why buy a separate chorus and flanger?

Here is a pedal that will operate either as a chorus or a flanger and will do so with such high fidelity that you may never use a traditional chorus or flanger again. Because it's digital, the DCF10 boasts the same 7 kHz bandwidth that all Power Series Digital Effects have. It also has an 8:1 sweep ratio with variable speed and width controls. Delay times are variable from .25 msec to 128 msec and are easily and precisely controlled via the four position MODE selector and D-TIME knob. The REGEN knob controls delay time repeats and adds "SWELL" to the flanging effect. The stereo outputs provide normal and inverted effect signals for true stereo chorusing.

DISTORTIONS

Distortion is probably the most important key factor that a guitar player must consider.

Different styles require different amounts and different types of distortion. Basically, there are two categories that distortion can be broken down into. The first is the classic-type overdriven tube amplifier sound and the other is the tight, massive type that is used mostly by Heavy Metal musicians. The classic tube type overdrive is a more subtle type of distortion, so subtle in fact that sometimes it is difficult to even detect that a distortion device is being used at all. In this case the distortion is mainly producing rich overtones and slightly distorted harmonics. Here, dynamics are ever present and very important.

In the case of massive, Heavy Metal type distortion, there is no doubt that distortion is being used. The guitar always has a "crunch" to it even at low volumes. The sound is very thick as if several stacks of amps were being used at the same time. The sound is so massive in fact, that often the guitar wants to play itself do to the natural feedback that is produced by such a high gain level.

These distortion sounds are so different and so widely used, Ibanez is featuring 3 types of distortion units in the Power Series line.



TS10 TUBE SCREAMER CLASSIC

The TS10, Tube Screamer Classic, is the original Tube Screamer that Ibanez became famous for. It provides the sound of an overdriven tube amp. It features a DRIVE control to vary the intensity of the distortion, a TONE control for equalization, and a LEVEL control that varies the overall gain when the distortion is engaged. This is the sound that first made rock and roll famous!



MS10 METAL SCREAMER

If you are looking for that hot and heavy, massive metalmania distortion, hook up with an Ibanez MS10. It has more "raw gain" than any other distortion available. It has five controls to let you really capture the rage in your guitar.

There is a DRIVE control that varies the amount of distortion, an ATTACK control for pre-distortion, treble boost and PUNCH and EDGE controls that provide post distortion equalization. Plug into an MS10 and you will swear that you have a wall of power behind you.



DS10 DISTORTION CHARGER

Here is the most versatile and unique distortion unit ever produced!! The DS10 can satisfy any type of distortion from classic type to massive metal overdrive. The DS10 starts out as a basic overdrive with two band, post-distortion equalization, but that's only the beginning. What separates the DS10 from the rest is the addition of a high frequency enhancement section. Basically, what happens here, is that high frequency signals are sampled, phase-shifted, and remixed into the output. The result is a clear yet sweet sound. Combine the ENHANCE circuit with the built in distortion for a wide range of effects or use it independently by way of the out "B" jack. Once you have tried a DS10 Distortion Charger, you will agree that this is what distortion units could have been all along.

DELAY CHORUS FLANGER PHASER

Phase shifting and delay effects have been around for years. Originally, delay was produced by recording a sound on to a magnetic tape loop and playing it back as many times as the delay was desired. Tape delays are difficult to control, tapes wear out and as the tape head gets dirty, the fidelity drastically decreases.

Analog type delays such as the Ibanez CD10 are the perfect replacement for tape echoes because they still retain the mellow tones that tape echoes are noted for, yet there is no tape to change or heads to clean.

Phase shifters were originally designed to simulate the effect of a rotating speaker.

Phase shifting produces a sweeping, controllable vibrato by using phase shift networks that peak and notch the signal response. This "leading/lagging" of the signal is also mixed back into the original signal through the feedback control and a swirling sensation is added. A similar effect to the phase shifter is the flanger. Like the phase shifter, the flanger has controls to vary the speed, width and feedback of effect signal. The flanger utilizes short time delays to produce a tone filtering effect, rather than phase shifting. When the short time delays are varied and mixed with the original signal, a melodic sweeping effect is produced.

Chorus, like flanging, utilizes short time delays (though longer than those used in flanging) to produce a tone filtering effect. Chorus also uses a slightly different LFO (Low Frequency Oscillator) so that the width and speed of the signal sweep is also different. The result is a more subtle, sweet doubling type effect. Chorus is also often done in stereo, with two amps. In this case, one effect output is exactly 180° out of phase with the other output producing dramatic special effects.



CD10 DELAY CHAMP

One of the most effective ways to fatten up the sound of an electronic instrument is to add depth and extension. The best way to do this is by using some sort of a delay. By utilizing slightly repeated, tight echoes, one can achieve a very rich and melodic tone.

The CD10 is the perfect device for this. The CD10's analog circuitry mimics the vintage tonality of an old tape echo, yet because of its reliable hi-tech circuitry, the CD10 is able to work night after night with very few battery changes. The CD10 features delay times up to 300 msec with low noise and a wide dynamic range giving you both economy and versatility without sacrificing performance. Normal and dry stereo outputs allow you to add even more dimension and depth to your delay effect.



SC10 SUPER STEREO CHORUS

If you have been shopping around for a stereo chorus, look no farther. The SC10 is the basic chorus unit of the Power Series, that goes far beyond just being basic. In addition to the usual speed and width controls, there is a new delay time control that lets you capture even the most subtle of choring effects. The analog BBD circuitry provides rich mellow tones while drawing very little current, giving you long battery life. The SC10 also features normal and inverted stereo outputs allowing you to play in full, rich, true stereo.



TC10 TWIN CAM CHORUS

The TC10 can do everything that a regular stereo chorus can do, and then some. We have combined two individual sweep sections into one unit. Use Modulator "A" for true vibrato and high speed pitch bends and Modulator "B" for normal choring effects. Use either separately or mix both together for truly unique sweeps and complex patterns. Step out even farther and tap into the normal and inverted stereo outputs for the ultimate in choring.



PC10 PRIME DUAL CHORUS

So, you have been out looking at stereo choruses and flangers and you like the unique quality that each one gives to your instrument, but you are not yet ready to buy two separate pedals. Well look no farther. For just about the same price of either you can have both in the new Ibanez PC10. The PC10 has two completely separate modulation sections that can be accessed by either the top mounted A/B switch or by plugging in an optional footswitch.

In the "A" mode, depressing the unit's footswitch will give you effect "A" or dry. In the "B" mode, depressing the unit's footswitch will give you effect "B" or dry. In the A/B mode, depressing the unit's footswitch will give you effect A or effect B alternately. In addition there is a stereo output jack that when accessed by a 1/4" stereo plug gives you both normal and inverted effect outputs enabling you to play in true stereo.



PH10 BI-MODE PHASER

The Ibanez PH10 Phase Shifter is the phase shifter of the '80s. It features a mode selector that allows you to go from a six stage phase shift to a ten stage phase shift. This is a considerable advantage when you realize that most phase shifters only use a four stage phase shift. The PH10 also features speed, width and feedback controls, allowing you to get just the sound that you want. The PH10 is truly the phase shifter of today.



SF10 SWELL FLANGER

If you are looking for a flanger that will give you years of continuous service, yet not cost you can arm and leg, check out an Ibanez SF10. It's BBD circuitry delivers rich, smooth flanging effects that will enrich the tone of any electronic instrument. The SF10 features four control knobs that give you complete control of the delay time, speed, width and feedback of the effect, allowing you to produce an almost unlimited array of flanged effects.

COMPRESSORS & EQS

There are two fundamental elements that form or make up the tonality of sound. One is the attack and sustain of the envelope (that is the gain of the waveform, where the waveform begins, ends and how long or short the waveform is). The other is the arrangement of the harmonics (that is the actual harmonic shape or "tone" of the wave form). Compressor-sustainers are devices that are designed to vary the envelope where as graphic equalizers very precisely boost or cut various frequencies therefore providing control of the harmonic spectrum. The new Ibanez Power Series line up features something slightly different. Instead of just one compressor or eq to cover the wide spectrum of instruments, Ibanez introduces (along with its regular Compressor/Sustainer) a Bass Compressor/Sustainer. Instead of just a guitar Graphic Equalizer, there is the addition of the new Bass Graphic Equalizer. Yes, once again, Ibanez comes through with the latest innovations, fulfilling the needs of today's musician.



CP10 COMPRESSOR/SUSTAINER

Compressor/Sustainers, unlike distortion effects, do not drastically alter the sound (distort it) to create sustain. Instead, they maintain the basic integrity of the original sound while at the same time adding subtle changes to the attack and sustain. They also even-out the overall output gain providing a clean, uniform sound. The Ibanez CP10 Compressor/Sustainer is a high tech, studio quality effect in a compact case. It's ultra low input noise (-107dBv) combined with the latest VCA circuit provides clean, distortion free compression and sustain. The CP 10 also features three controls giving you complete control of the attack time, sustain and output level.



BP10 BASS COMPRESSOR

The new BP10 has all of the high tech specs and characteristics of the CP10, including it's low noise characteristics. What's different here is that the range of the attack time has been shortened to better match the needs of low frequency bass notes. If the attack time is too long, it over emphasizes the attack causing a loss of both clarity and overall crispness. The BP10 provides clarity and eliminates the unwanted garble in "slapping" and picking techniques, giving you the smoothest and most responsive bass tones possible.



GE10 GRAPHIC EQ

The Ibanez GE10 graphic equalizer controls the seven octave ranges between 100 Hz and 6.4 kHz with +/- 15dB of equalization at each octave. There is also a master gain control that provides an overall +/- 15dB of variation in the output level without disturbing any of the filter settings.

The GE10 is most useful as an overall tone altering device but it has other uses too. By manipulating the 3.2 kHz and 6.4 kHz filters, troublesome feedback howls can be reduced or eliminated. The GE10 can also be used as a gain booster by increasing the level control.



BE10 GRAPHIC BASS EQ

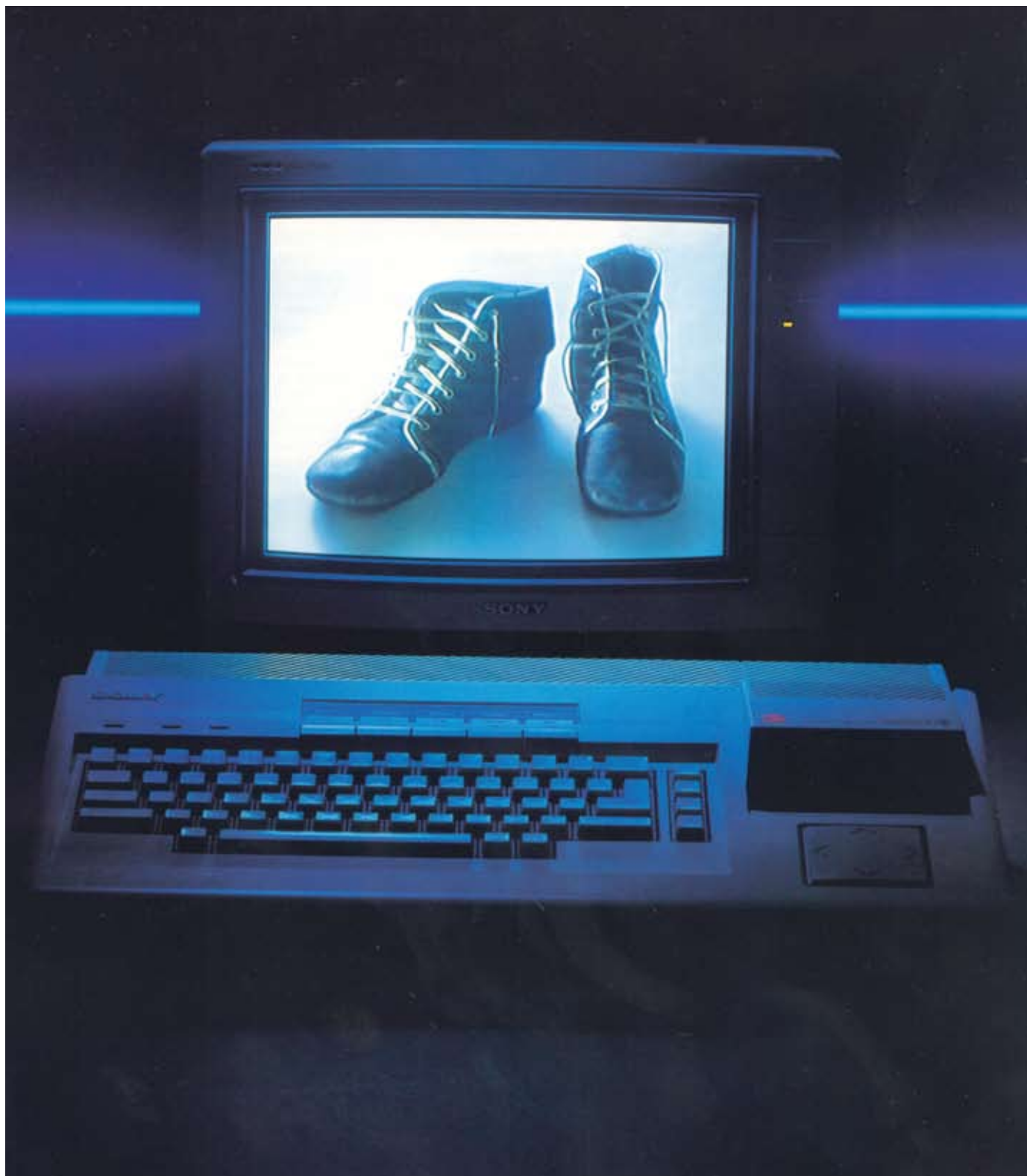
The BE10 is a redesigned version of the GE10 for bass guitar. Unlike guitar eqs, that start at 100 kHz, the BE10 begins it's eq range at 63 Hz. The reason for this is simple. Guitar equalizers just can not properly handle the low notes that a bass guitar creates. The open 'E' on a bass resonates at 41 Hz, far below the 100 Hz cutoff of a guitar eq. By beginning the equalization process at 63Hz instead of 41Hz, the tone and "punch" of the low 'E' is realized but the harmonic rumbling is left out. The result is a frequency range that lets you reach the fullest dynamic potential of your bass guitar, with the full freedom to get any tone that you desire.

LOOP SELECTOR



LS10 DUAL LOOP SELECTOR

The Ibanez LS10 is a switching device which allows you to group your effects into two discrete loops and either switch between them or bypass them completely. Each loop has it's own level control with +/- 6 dB of gain control. What's more, you can use the LS10 as an input master switch or as an output master switch by simply varying your patch connections.



There are several factors that musicians must consider when developing "their sound". The most obvious is personal technique, but other things must be considered too, such as the instrument itself, amplifier(s) and of course signal processing or effects. Compact effects have taken root in the modern music scene adding color and new dimension to today's music. The POWER Series of compact effects, brand new from Ibanez, were tailor-made for the needs of today's musician. The POWER Series effects blend variety (there are seventeen different types of effects), quality and superb specifications in low cost, compact effects.

QUALITY SOUND BEGINS AT YOUR FEET



AC109 AC ADAPTER

The AC109 AC adapter is the optional power supply available for all "Power Series" 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" effect.



CN104

Color connection cable set for Power Series
4 inch (10 cm) x 4 pcs.

CN404

Color connection cable set for Power Series
1-1/4 feet (40 cm) x 4 pcs.



DC4 DC CORD

The DC4 operates as an extension cord to power up to 4 "Power Series" effects from one AC109. Please note that the AC109 and DC4 combination are rated at 200 mA current capacity and exceeding this may damage the effects, or effect their performance.



DAT6 DIGITAL AUTO TUNER

Simplicity, convenience and most of all, accuracy. This was the foundation for the Ibanez DAT6 Digital Auto Tuner. With operation for guitar and bass equally simple, just plug in your instrument (or use the built-in microphone for acoustics) and pick a string. The DAT6 digitally samples the signal, identifies the string and key and displays it on an easy to read, specially designed meter. The DAT6 is illuminated so tuning on a dark stage will never be a problem.

SPECIFICATIONS

DIGITAL EFFECTS

| ITEM | DDL10 | DML10 | DCF10 |
|---------------------------|---|--|---|
| MAXIMUM INPUT LEVEL | +5 dBv | | |
| MAXIMUM OUTPUT LEVEL | +5 dBv | | |
| DELAY TIME | 19ms — 113ms 38ms — 225ms 75ms — 450ms 150ms — 900ms | 0.9ms — 7ms 3.5ms — 28ms 14ms — 112ms 112ms — 900ms | 0.25ms — 2ms 1ms — 8ms 4ms — 32ms 16ms — 128ms |
| SWEEP RATIO | — | 1 : 8 | |
| SPEED RANGE | — | 0.06 Hz — 13 Hz | |
| BANDWIDTH | 7 kHz (+0.5, -3 dB) | | |
| TOTAL HARMONIC DISTORTION | 0.5% (400 Hz, -20 dBv) | | |
| EQUIVALENT INPUT NOISE | -90 dBv (IHF-A) | | |
| POWER REQUIREMENT | 58.5 mA (DC 9V) | 68 mA (DC 9V) | 64.5 mA (DC 9V) |
| WEIGHT | 440 g | 460 g | 480 g |

IBANEZ ELECTRONIC ACCESSORIES SOLD AND SERVICED BY

STEP INTO THE FUTURE
Ibanez

ANALOG DELAY/CHORUS/FLANGER/PHASER

| ITEM | CD10 | SC10 | TC10 | PC10 | SF10 | PH10 |
|------------------------|------------------|---------------|--------------------------------------|--|-----------------|-----------------|
| MAXIMUM INPUT LEVEL | +7 dBv | +4 dBv | | | +7 dBv | +8 dBv |
| DELAY TIME | 20ms — 300ms | 1.0ms — 7.2ms | 4ms — 9.3ms | A: 3.2ms — 8.5ms B: 1.3ms — 6.4ms | 1.0ms — 12.8ms | — |
| SPEED RANGE | — | 0.6 Hz — 6 Hz | A: 0.8 Hz — 8 Hz B: 0.3 Hz — 3 Hz | A: 0.6 Hz — 6 Hz B: 0.035 Hz — 2.4 Hz | 0.04 Hz — 10 Hz | |
| EQUIVALENT INPUT NOISE | -100 dBv (IHF-A) | | | | | -90 dBv (IHF-A) |
| POWER REQUIREMENT | 24 mA (DC 9V) | 21 mA (DC 9V) | 20 mA (DC 9V) | 28 mA (DC 9V) | 18 mA (DC 9V) | 22 mA (DC 9V) |
| WEIGHT | 400g | 410 g | | | | |

DISTORTIONS

| ITEM | TS10 | DS10 | MS10 |
|------------------------|------------------|--------------|---------------|
| MAXIMUM GAIN | +40 dB | +56 dB | +62 dB |
| EQUIVALENT INPUT NOISE | -110 dBv (IHF-A) | | |
| POWER REQUIREMENT | 7 mA (DC 9V) | 9 mA (DC 9V) | 12 mA (DC 9V) |
| WEIGHT | 400 g | 410 g | 410 g |

COMPRESSORS

| ITEM | EM | CP10 | BP10 |
|------------------------|------------------|------------------|-------------|
| MAXIMUM INPUT LEVEL | -10 dBv | | -12 dBv |
| MAXIMUM OUTPUT LEVEL | -10 dBv | | |
| ATTACK TIME | 5ms — 22ms | | 2ms — 9.6ms |
| COMPRESSION RATIO | 35 dB | | |
| EQUIVALENT INPUT NOISE | -107 dBv (IHF-A) | -105 dBv (IHF-A) | |
| POWER REQUIREMENT | 6 mA (DC 9V) | | |
| WEIGHT | 400 g | | |

EQ.S

| ITEM | GE10 | BE10 |
|------------------------|--|--------------------------------------|
| MAXIMUM INPUT LEVEL | +4 dB | |
| MAXIMUM OUTPUT LEVEL | +3 dB | |
| FILTER FREQUENCY | 100, 200, 400, 800, 1.6K, 3.2K, 6.4K, (Hz) | 63, 125, 250, 500, 1K, 2.2K, 5K (Hz) |
| FILTER CONTROL RANGE | ±15 dB | |
| LEVEL CONTROL RANGE | ±15 dB | |
| EQUIVALENT INPUT NOISE | -107 dBv (IHF-A) | |
| POWER REQUIREMENT | 17 mA (DC 9V) | |
| WEIGHT | 420 g | 400 g |

LOOP SELECTOR

| ITEM | LS10 |
|------------------------|-----------------|
| SEND IMPEDANCE | < 1kΩ |
| RETURN IMPEDANCE | 500 kΩ |
| MAXIMUM INPUT LEVEL | +10 dBv |
| MAXIMUM OUTPUT LEVEL | +10 dBv |
| LOOP CONTROL GAIN | ±6 dB |
| EQUIVALENT INPUT LEVEL | -95 dBv (IHF-A) |
| POWER REQUIREMENT | 10 mA (DC 9V) |
| WEIGHT | 420 g |

VERALL

| | |
|------------------|---|
| INPUT IMPEDANCE | 500 kΩ (exception MS10: 1MΩ) |
| OUTPUT IMPEDANCE | < 1kΩ |
| POWER SUPPLY | ONE 9V BATTERY (5-006P/ALKALINE) OR AC109 9V AC ADAPTER |
| SIZE | 125(D) x 70(W) x 54(H) mm |
| OPTION | AC109 9V AC ADAPTER |

All specifications subject to change without notice or obligation