

***Ibanez***

**SERVICE MANUAL**

*NO. 012*

**MULTI-EFFECTS  
UE300**

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★ SPECIFICATIONS

1) COMPRESSOR/LIMITER

- Maximum Input Level ..... +6.5dBm at 400Hz
- Maximum Output Level ..... -10dBm at 400Hz
- Output Level Range ..... -50dBm to -10dBm
- Maximum Compression Ratio ..... 40dB
- Equivalent Input Noise ..... -100dBm (IHF-A Input Shorted)
- Attack Time ..... 6mSec to 20mSec
- Frequency Response ..... 30Hz to 20KHz (+5dB, -2dB)

2) TUBE SCREAMER

- Maximum Output Level ..... 0dBm
- Maximum Amplitude ..... 40dB
- Equivalent Input Noise ..... -110dBm (IHF-A Input Shorted)

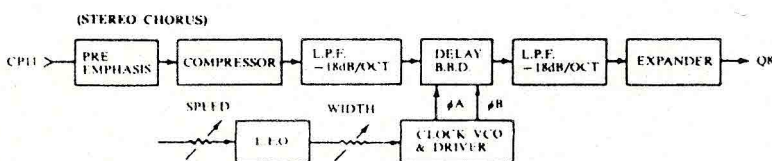
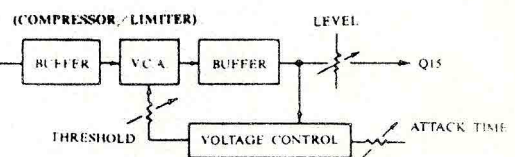
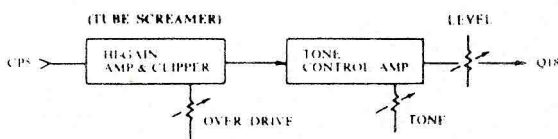
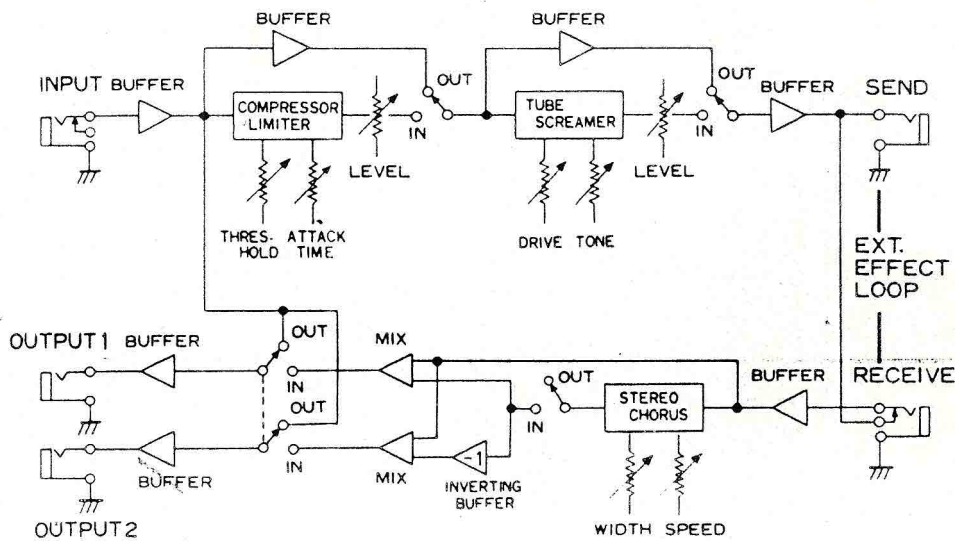
3) STEREO CHORUS

- Maximum Input Level ..... +5.6dBm at 400Hz
- Delay Time ..... 3.2mSec to 8.6mSec
- Sweep Speed ..... 0.3Hz to 3.0Hz
- Input/Output level Ratio ..... 1 : 1
- Equivalent Input Noise ..... -98dBm (IHF-A Input Shorted)

4) OVERALL

- Input Impedance ..... 500Kohms
- Output 1 Impedance ..... less than 10Kohms
- Output 2 Impedance ..... less than 10Kohms
- Ext. Effect Loop Send Impedance ..... less than 10Kohms
- Ext. Effect Loop Receive Impedance ..... 500Kohms
- Dimensions ..... 310(W) × 190(D) × 70(H)mm (12.2 × 7.5 × 2.8 in.)
- Weight ..... 1.9kg (4.2 lbs.)
- Power Requirement ..... 117V AC 60Hz 3.7W  
220VAC to 240VAC 50Hz 5.2W

★ BLOCK DIAGRAM



## ★ NORMAL CHECK LIST & ADJUSTMENT PROCEDURES

### ( I ) D.C. VOLTAGE

- 1) Check  $15V \pm 1V$  at marked [8]. (GND.= [9])
- 2) Check ripple noise less than 4mV at the same point above.

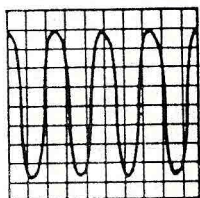
### ( II ) COMPRESSOR/LIMITER

- 1) Set knobs as follows.  
ATTACK TIME=SHORT  
THRESHOLD=LOW  
LEVEL=MAX
- 2) Adjust VR1 for just zero voltage at R9 terminals.

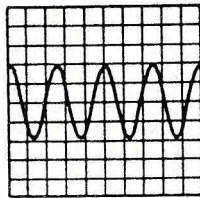
### ( III ) TUBE SCREAMER

- 1) Put 30mV 1kHz sinewave into INPUT.
- 2) Check each wave form as follows.

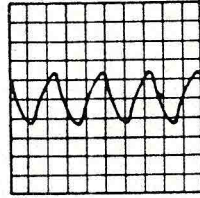
- DRIVE - MAX
- TONE - +5
- LEVEL - MAX



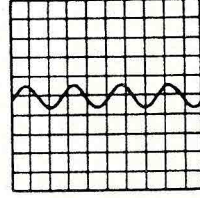
- DRIVE - MIN
- TONE - +5
- LEVEL - MAX



- DRIVE - MAX
- TONE - -5
- LEVEL - MAX



- DRIVE - MIN
- TONE - -5
- LEVEL - MAX



### ( IV ) STEREO CHORUS

- 1) Connect the FREQUENCY COUNTER and the SYNCHROSCOPE at marked CPI.
- 2) Set knobs as follows.  
SPEED=FAST  
WIDTH=MIN
- 3) Adjust VR3 for a frequency of 80kHz.
- 4) Set knobs as follows.  
SPEED=SLOW  
WIDTH=MAX
- 5) Check clock periodic time  $9.6 \mu\text{sec.}$  to  $14.4 \mu\text{sec.}$  (104kHz to 69kHz), also sweeping frequency 0.3Hz.
- 6) Set knobs as follows.  
SPEED=SLOW  
WIDTH=MIN
- 7) Put 0dBm (0.775mV) 400Hz sinewave into INPUT.
- 8) Adjust VR2 for a symmetrical clipped wave form at C23.

### ( V ) OUTPUT

- 1) Check no switching shock noise.
- 2) Check each phase of OUTPUT. The phase of OUTPUT 2 is inverted against the phase of OUTPUT 1.

