10 OUTLET DISTRIBUTION AMPLIFIER 4

- BROADCASTING AND STUDIO WORK
- FEEDING MULTIPLE SLAVE PA AMPLIFIERS
- AUDIO FEEDS FOR THE PRESS AT CONFERENCES



This is a mains powered unit with one floating input and a low distortion line driving arrangment providing ten floating 600 Ohm outputs.

The unit is unusual in the use of a specially designed massive output transformer with a separate secondary winding for each output, giving dc and ac isolation as well as excellent low frequency distortion performance. Rejection of breakthrough from strong radio frequency signals is exemplary and ensures trouble-free operation in close proximity to radio telephones and links. The unit will normally be used at unity gain but an internal preset allows a gain or loss of up to 6dB when feeding 600 Ohms, or unity to +12dB when feeding a bridging load. On request any desired number of outlets may be fitted with attenuation to provide microphone level outputs, useful for those video and audio recorders which have no line input facility.

The diecast case is finished in attractive blue epoxy and the front panel carries a white area to allow markings identifying the signal being handled by the amplifier along with a pilot light and fuse holder. For permanent fixing the feet may be removed and protruding bolts secured onto suitable panels or struts. The unit meets the IBA specification for equipment in the signal path and complies with IEC65-2, BS415 safety.



SPECIFICATION

Input type

Electronic balanced input withstands static voltages on the signal

lines. XLR 3 pole female.

Input impedance

20k Ohms. Either leg may be commoned for unbalanced use; 10k Ohms.

3.18kHz square wave (single pole -3dB @ 100kHz) +15kHz sine wave.

Output +12dBV.7

-60dB, 0.1%

600 Ohms loading on request.

Output source impedance and polarity

600 Ohms. All outputs same polarity as input. Either leg may be

commoned for unbalanced use.

Gain set to unity. All outputs feeding 600 Ohms loads. These figures apply at levels 6dB higher if the output concerned is not loaded.

Output +16dBV.7

-80dB, 0.01%

-66dB, 0.05%

50Hz +7kHz, 4:1

-86dB, 0.005%

-66dB, 0.05%

Within 0.2dB

Within 0.7dB

-54dB, 0.2%

Total harmonic distortion

1kHz

60Hz-20kHz

30Hz

Static intermodulation distortion Output +12dBV.7

Dynamic intermodulation distortion

Output pk-pk amplitude equivalent to that of a +14dBV.7 RMS sine wave

Gain, output 1. 600 Ohms load

Levels at outputs 2-10 relative to output

1. 600 Ohms load

Change in level of any output when all other

outputs loaded

Change in level of any output when any

one other output short circuited

Noise

Within 0.2dB

-90dBV.7, 20Hz-20kHz, mean reading meter -83dBV.7, CCIR468-2 weighting and peak meter

Set at unity. Internal 20 turn preset -6 to +6dB

4:1. Relative to 15kHz component.

Radio frequency breakthrough Output level in a carrier field strength of +120dBµV/m, 84MHz, 100% amplitude modulated with 1kHz sine wave.

1m input lead with source 1H +1k Ohms Less than -80dBV.7

Frequency response

20Hz-1kHz ±0.3dB:

1 output loaded ±0.3dB

1kHz-20kHz

10 outputs loaded +0.3dB, -1.5dB

XM connector. 90-120V or 200-250V 50-60Hz 6VA

Safety Complies with IEC 65-2, BS415

Dimensions and weight

187 x 117 x 77mm; 2.4kg

2.5 metres supply lead to BS6500 with connector supplied along with servicing details.

Supply input

Available as: COMPLETE BOXED UNIT, as photographs.

SET OF PARTS less the case and all XLR connectors.

SET OF PARTS with SINGLE OUTLET transformer. Gives one floating output of 50 Ohms source impedance and the above distortion figures at levels 6dB higher (loaded 600 Ohms).

SURREY **ELECTRONICS**

