Marconi Mixer Processing Amplifiers B 3712 Series

The Mixer Processing Amplifier has been introduced for use in situations where all the facilities provided by a conventional Line Clamp Amplifier (see page 123) would not be required.

An example of this concerns the processing electronics associated with studio vision mixers. In many studios it is unnecessary to have stripping and regeneration of syncs. and blanking, facilities which are normally provided by Line Clamp Amplifiers.

Two basic Mixer Processing Amplifiers are available, designed especially, for use with studio and station output vision mixers.

Studio Mixer Processing Amplifier Type B 3712-01

Simple form of mixer electronics for coupling to a vision switching matrix. Suitable where the studio output will eventually be fed to a central master switching area where a more complex processing amplifier is employed.

FEATURES

The Unit provides:

Clamping of input signal.

Fading of remote and local signals to black.

Three outputs with by-pass facilities provided on one of the outputs.

3 dB gain.

Peak white clipping facilities.

Sync. amplitude limiting.

This equipment is suitable for monochrome or colour, but when used for colour transmissions the peak white clipping and sync. amplitude limiting facilities are disconnected.

Station Output Mixer Processing Amplifier Type B 3712-03

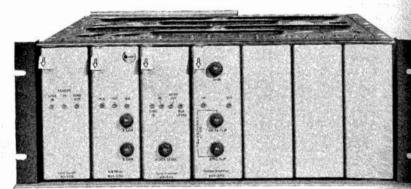
This unit will process signals as in the simpler version, and in addition includes sync. regeneration, sync. amplitude stabilization, and sync. interlock facilities.

FEATURES

The Unit provides:

Clamping of input signal.

Fading of remote and local signals to black. Sync. interlock facilities.



B 3712 Edition 03

X108

Sync. regeneration facilities.

3 outputs with by-pass provided on one output.

3 dB's gain.

Inputs

Peak white clipping facilities.

Sync. amplitude limiting.

This version of Mixer Processing Amplifier is not suitable for colour.

DATA SUMMARY

B 3712-01 B 3712-03 Number of modules : 3 4

(a) -24 V d.c	Yes	Yes
(b) Vision input,		
composite 1 V		
pk-to-pk	Yes	Yes
(c) Sync. bridging,		
1-5 V to 6 V	No	Yes
(d) Remote fader		

A separate 24 V silicon power supply module is available. This fits in the same frame alongside the processing amplifier modules.

Yes

Outputs

Three at 1 V pk-to-pk composite into 75 ohms.

Performance (common to both editions of amplifier unless indicated otherwise.)

H.F. response: ±0.2 dB to 6 MHz, not greater than -1 dB at 10 MHz.

L.F Response: Tilt on 50 Hz square wave not greater than 2%.

Isolation between outputs: Not less than 30 dB at 5 MHz.

Output return loss: Not less than 30 dB to 2 T sin² pulse and bar.

Input return loss: Not less than 24 dB to 2 T sin²pulse and bar.

Gain range: -1 to +3 dB.

Differential Gain: B 3712-01: colour connected—less than 1% at 4:43 MHz monochrome connected—less than 5% at 4:43 MHz, (with peak white clipper set at 105% of standard level). B 3712-03—less than 5% at 4:43 MHz (with peak white clipper set at 105% of standard level).

Differential phase: B 3712-01: colour connected only—less than 0.5° at 4.43 MHz.

Dimensions and Weight:

Height 7 in. (17-8 cm) Width 19 in. (48-3 cm) Depth 16 in. (40-5 cm)

B 3712-01 3 modules occupy 7-2 in (1st cm) of rack-mounting frame width. Weight 13 lb (5-9 kg) including blank panels for to unused width.

B 3712-03 4 modules occupy 96 in (8) cm) of rack-mounting frame width. Whigh 15 lb (6-8 kg) including frame and black panels fitted to unused width.

THE MARCONI COMPANY LIMITE
Broadcasting Division

Marconi House, Chelmsford, Essex Telephone: Chelmsford 53221, Teles Telegrams: Expanse Chelmsford Teles