

## KESTREL SERIES BROADCAST ON AIR MIXER, DUAL OUTPUT



The Kestrel is designed and built in Western Australia by Elan Audio, a wholly Australian owned company and is the culmination of more than 35 years of experience in the design and manufacture of Professional Radio Broadcast Equipment.

The Kestrel is of modular design available in two sizes, the Kestrel 12 (12 input channel) and the Kestrel 16 (16 input channel). All modules in the Kestrel mixer including the Input Channels, Monitoring and Ancillary functions are constructed as individual modules interconnected by Ribbon Cable and Header Connectors to allow easy access for servicing and adjustments.

The general philosophy behind the Kestrel mixer is the same as for all other Professional Elan Audio products. Modern and Attractive Design, High Quality Construction, Suitable for Continuous Operation, Logical and Easy Operation, Reliability and Long Service Life.

Components and materials are Professional Grade where appropriate, or High Quality Commercial, chosen to be readily available from normal electronics parts suppliers. All connections in and out of the Kestrel Mixer are provided on High Quality Screw Terminals, all readily accessible and located in the base section with below desk, cable entry cut-out's provided.

Overall technical performance, like all Professional Elan Audio Broadcast Equipment, will satisfy the most stringent broadcast requirements with all inputs and outputs electronically balanced.

Kestrel features include:

- Modular input and control channels
- Dual Stereo bus output
- 2x Stereo Mix Minus Bus
- 2x Mono Mix Minus Bus
- 2x Mono Telephone Mix Minus
- 2 Banks of 5 way Interlocking High Level Selector Push Button Switches
- Inbuilt cue speaker and cue VU Meter
- 6 Indicator Switches
- Left and Right Channel VU Meter
- Overload Phase Reversal Indicator
- Monitor Selector, 1 bank of 5 way Interlocking Push Button Selector Switch
- On Air, Delay, Dump Switches and LED Indicators
- Talkback Facilities

## Technical Specifications

Line Inputs	Differential Balanced Z In appx 50 K Ohms
Mic Inputs	Differential Balanced Z In Greater than 1 K Ohms
Line Outputs	Differential Balanced Z Out appx 50 Ohms
Line Input Level	Factory adjusted to + 4 dBu Adjustable (300 mV) –10 dBu to +10 dBu
Line Output Level	Factory adjusted to + 4 dBu, or +4 dBmw into 600 Ohms Adjustable 0 dBu to + 10 dBu
Output Clip Level	+24 dBmw into 600 Ohms

## Performance: High Level Channel in, Program Line Out

Mixer Gain Unity	Input level +12 dBu, Output Level +12 dBmw into 600 Ohms
Frequency Response	+0 –0.2 dB 20 Hz to 20 KHz
Harmonic Distortion	100 Hz 0.02% 1 KHz 0.02% 10 KHz 0.04%
S/N Ratio	20 Hz to 20 KHz 88 dB or Better
Crosstalk	80 dB at 1 KHz

## Performance: Microphone Channel in, Program Line Out.

Mixer Gain	64 dB
Input Level	– 52 dBV
Output Level	+12 dBmw into 600 Ohms
Frequency Response	+0 –0.2 dB 20 Hz to 20 KHz
Harmonic Distortion	100 Hz 0.05% 1 KHz 0.025% 10 KHz 0.06%
S/N Ratio	20 Hz to 20 KHz 74 dB or Better

Equivalent Input Noise (EIN) varies with Microphone Pre-Amp gain setting, normally expect an EIN of –120 dBV in low gain setting, EIN of –126 dBV in mid gain setting and EIN of –129 dBV in high gain setting with input terminated in a low noise 200 Ohm Resistor.

## Ratings and Voltages

Input	250V AC + and – 10% Max 80 VA
Output	+ 15V DC 1.5 A Regulated - 15V DC 1.5 A Regulated + 12V DC 2.5 A Regulated

## Power Consumption

Kestrel 12	Approx. 25 VA
Kestrel 16	Approx. 30 VA

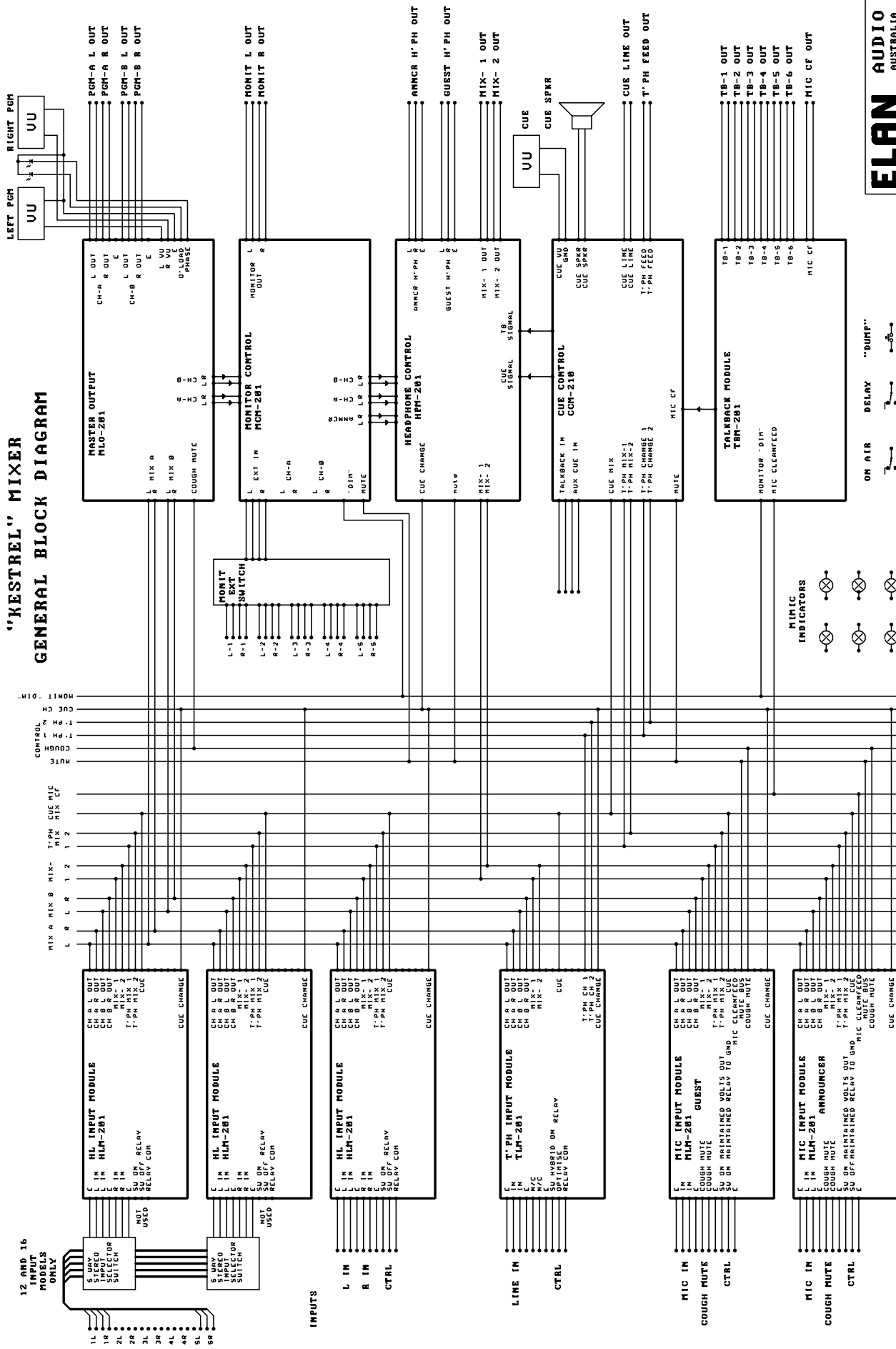
## Compliance

Complies with Radiocommunications Act 1992 for radio telecommunications equipment.

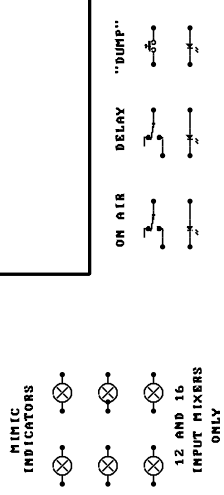


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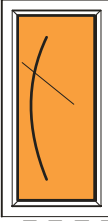
# "KESTREL" MIXER GENERAL BLOCK DIAGRAM



**ELAN AUSTRALIA**  
 BLOCK DIAGRAM "KESTREL" MIXER  
 Size Number KEST001  
 DATE 15 NOV 1978 SERIAL  
 FILE 4410017 12 PAGE 01

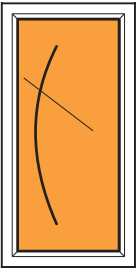


ON AIR  
 ON DELAY  
 DUMP



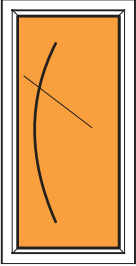
CUE

EXT MONITOR  
 SELECT



RIGHT

OLOAD  
 PHASE



LEFT



KESTREL-12

HL SEL 1  
 HL SEL 2

ELAN

ELAN TBM-201

TB-1  
 TB-2  
 TB-3  
 TB-4  
 TB-5  
 TB-6

ELAN CDM-201

AUX CUE  
 TALKBACK  
 CUE SPEAKER

ELAN HPM-201

GUEST HEADPHONE SELECT  
 CH-A  
 CH-B  
 GUEST HEADPHONE  
 CUE  
 PBM ANNCR HPONES

ELAN MCM-201

MONITOR SELECT  
 EXT  
 CH-A  
 CH-B  
 MONO CHECK  
 MONITOR "DIM"

ELAN MLC-201

LEFT METER CAL  
 RIGHT METER SELECT  
 CH-A  
 CH-B  
 COUGH MUTE

ELAN MLM-201

GAIN SELECT  
 CH-A  
 CH-B  
 CUE  
 OFF  
 ON

ELAN MLM-201

GAIN SELECT  
 CH-A  
 CH-B  
 CUE  
 OFF  
 ON

ELAN MLM-201

GAIN SELECT  
 CH-A  
 CH-B  
 CUE  
 OFF  
 ON

ELAN TLM-201

GAIN SELECT  
 CH-A  
 CH-B  
 CUE  
 OFF  
 ON

ELAN HLM-201

LEFT GAIN  
 RIGHT GAIN  
 SELECT  
 CH-A  
 CH-B  
 CUE  
 OFF  
 ON

ELAN HLM-201

LEFT GAIN  
 RIGHT GAIN  
 SELECT  
 CH-A  
 CH-B  
 CUE  
 OFF  
 ON

ELAN HLM-201

LEFT GAIN  
 RIGHT GAIN  
 SELECT  
 CH-A  
 CH-B  
 CUE  
 OFF  
 ON

ELAN HLM-201

LEFT GAIN  
 RIGHT GAIN  
 SELECT  
 CH-A  
 CH-B  
 CUE  
 OFF  
 ON

ELAN HLM-201

LEFT GAIN  
 RIGHT GAIN  
 SELECT  
 CH-A  
 CH-B  
 CUE  
 OFF  
 ON

ELAN HLM-201

LEFT GAIN  
 RIGHT GAIN  
 SELECT  
 CH-A  
 CH-B  
 CUE  
 OFF  
 ON

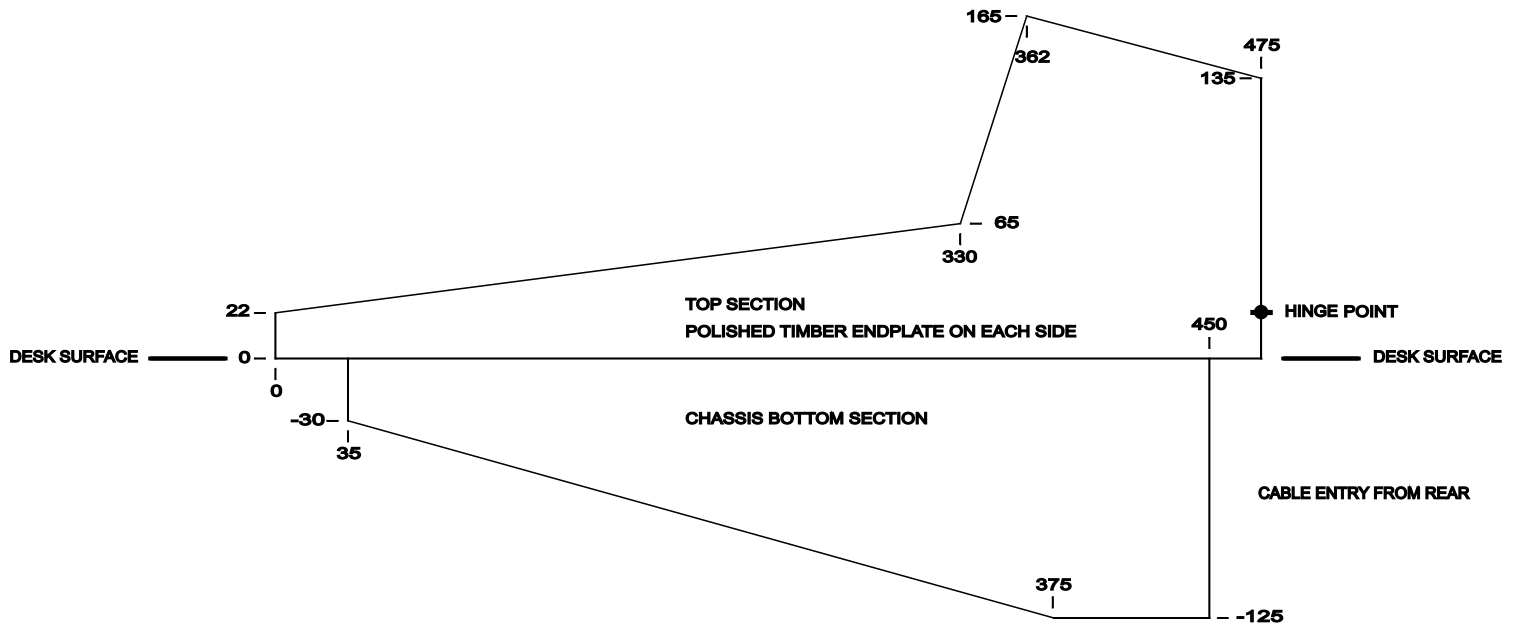
ELAN HLM-201

LEFT GAIN  
 RIGHT GAIN  
 SELECT  
 CH-A  
 CH-B  
 CUE  
 OFF  
 ON

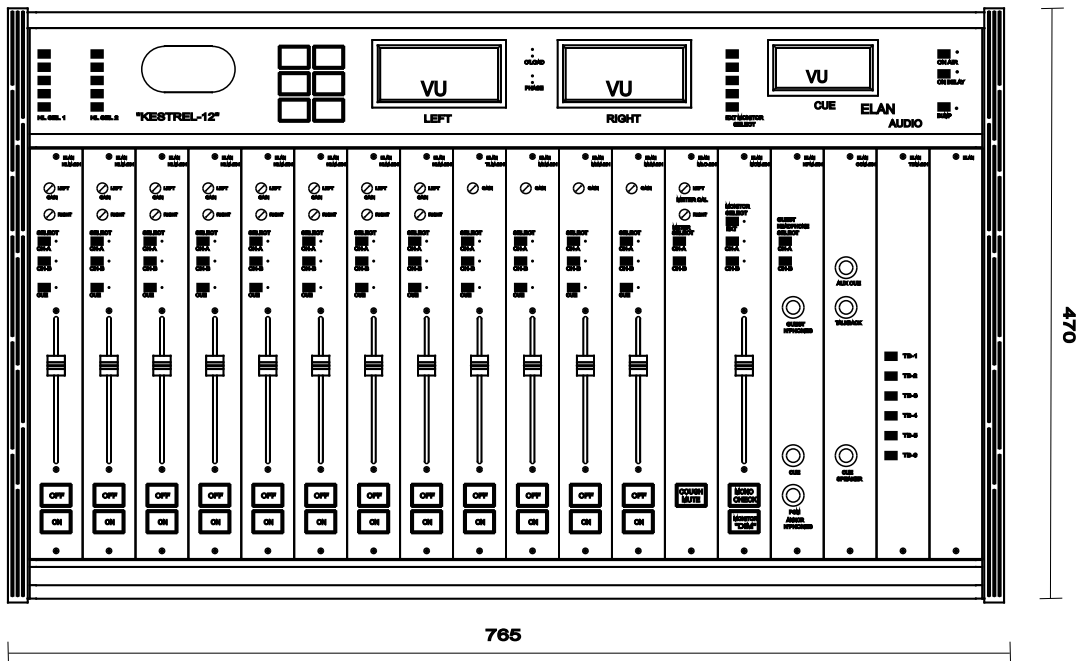
ELAN HLM-201

LEFT GAIN  
 RIGHT GAIN  
 SELECT  
 CH-A  
 CH-B  
 CUE  
 OFF  
 ON

# KESTREL12 DIMENSIONS



SIDE VIEW



TOP VIEW

OVERALL DIMENSIONS 470 mm x 765 mm

HEIGHT ABOVE DESK 165 mm

HEIGHT BELOW DESK 125 mm

DESK CUTOUT REQUIRED 425 mm x 730 mm

DRAWING NOT TO SCALE