

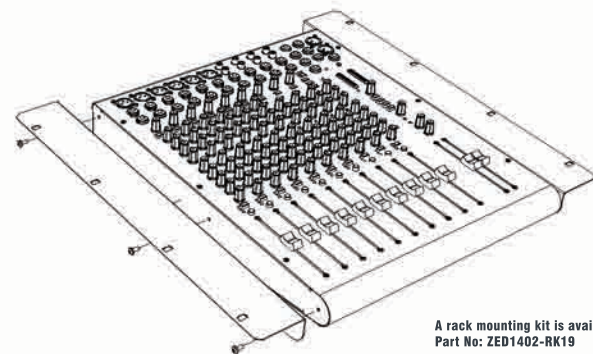
# Specifications:

# ALLEN & HEATH



# Radio Broadcast Mixer

Input	
Mono channel Mic input (XLR) Mono channel Line input (TRS Jack socket) Insert point (TRS Jack socket) Stereo input (TRS Jack sockets) Stereo input (RCA phono sockets) Telco channel input (XLR) External monitor inputs (RCA phono sockets)	+6 to -63dBu for nominal (+17dBu in max) +10 to -26dBu (+30dBu maximum) 0dBu nominal +21dBu maximum 0dBu nominal (control = Off to +10dB) 0dBu nominal (control = Off to +10dB) +10 to -26dBu (+30dBu maximum) 0dBu Nominal
Output	
PGM L & R outputs (XLR) PGM Mono output (RCA phono) PGM L & R inserts (TRS jack sockets) Aux output (Jack socket) Mix B outputs (RCA phono sockets) Rec outputs (RCA phono sockets) Telco output (XLR) CRM Speaker outputs (RCA phono sockets)	+4dBu nominal, +25dBu maximum. 0dBu nominal, +21dBu maximum. -2dBu nominal, +21dBu maximum 0dBu nominal, +21dBu maximum. 0dBu nominal, +21dBu maximum. 0dBu nominal, +21dBu maximum. 0dBu nominal, +21dBu maximum. 0dBu nominal, +21dBu maximum.
THD+n	
Mic in to PGM L/R Out, 0dB gain 1kHz +10dBu out Mic in to PGM Out, 30dB gain 1kHz Line in to PGM L/R out 0dB gain 0dBu 1kHz Stereo in to PGM out 0dB gain +10dBu 1kHz	0.003% 0.007% 0.004% 0.003%
USB Audio CODEC (Coder/Decoder)	
USB Audio In/Out Sample Rate	USB 1.1 compliant 16bit. 32, 44.1, or 48kHz
Noise	
Mic Pre EIN @ max gain 150R input Z 22-22kHz PGM out, PGM fader = 0, 22-22kHz Aux out, Mono out, Mix B out = 0, 22-22kHz	-127dBu -92dBu -90dBu
Headroom	
Analogue Headroom from nominal (0Vu) Outputs Analogue Headroom from nominal (0Vu) Mix point USB in & out headroom from nominal (0Vu)	21Db 24dB 14dB
Crosstalk & Attenuation (dB 22-22kHz)	
Mono fader attenuation (dB relative to +10dBu) 1kHz/10kHz Mono ON switch attenuation (dB relative to +10dBu) 1kHz/10kHz TELCO fader attenuation (dB relative to +10dBu) 1kHz/10kHz TELCO ON switch attenuation (dB relative to +10dBu) 1kHz/10kHz Stereo fader attenuation (dB relative to +10dBu) 1kHz/10kHz Stereo ON switch attenuation (dB relative to +10dBu) 1kHz/10kHz PGM fader attenuation (dB relative to +10dBu) 1kHz/10kHz TELCO clean-feed isolation from I/P (dB relative to +10dBu) 1kHz/10kHz Stereo separation, L in to PGM R out. dB 1kHz/10kHz	-100/-90 -100/-90 -99/-92 -100/-100 -99/-86 -100/-93 -102/-99 -57/-40 -77/-56
Frequency Response	
Mic in to PGM L/R Out, 30dB gain Line in to PGM L/R out 0dB gain Stereo in to PGM L/R out	+0.5/-1dB 20Hz to 20kHz. +0.5/-1dB 10Hz to 30kHz +0.5/-1dB 10Hz to 30kHz
Mechanical Specifications	
Dimensions: Length = 465mm (18.3 inches) Width = 585mm + 24mm with side trims (15.2 inches) Height = 92mm (3.6 inches)	Weight: Unpacked = 7.5Kg (16.5Lb) Packed = 11.5Kg (25.3Lb)



A rack mounting kit is available for XB-14.  
Part No: ZED1402-RK19



# XB-14 Radio Broadcast Mixer

Compact, cost effective and versatile... the XB-14 is designed for a broad range of applications from small radio or internet broadcast studios, to larger studios with multiple rooms, hospital radio, university radio and community radio. The XB-14 is equipped with a wealth of features specifically for broadcasters, including telephone communication modules for telephone callers, mic fader start sensing for external connection and internal automatic muting of the speaker outputs, stereo channel start/cue outputs for CD deck transport control, separate headphones mix & outputs for guests, an audition bus, and much more!



## Mic/Line Pre-amps

The XB-14's two stage pre-amp design, offers an expansive and controlled gain range (69dB). Most of the gain comes from the first stage, so unwanted noise is kept to a minimum, and the second stage is padless, with line level signals simply plugged in using the input jack socket, which means lower noise when using the line input.

## EQ

The XB-14 is equipped with a 3-band equaliser circuit on each mono input and a 2-band EQ on the Telco and stereo channels. The frequency and response of each has been carefully chosen to give the maximum performance when using the EQ on a variety of sources.



## AUX Bus and MIX B stereo Bus

XB-14 has a single Auxiliary bus that can be used for external processing, effects, recording or auditioning. A separate stereo mix bus is provided for recording an independent mix to the main program mix, or creating a clean feed source with selected channels.

## Remote Control

The mono mic/line channels have fader start logic switching, enabling them to control external equipment or automatically mute the speaker outputs to prevent acoustic feedback in localised or self-operated applications. The stereo channels have 'start & cue' logic outputs to connect to external equipment such as CD players. There are also options to mute the mono inputs remotely using an external "cough" switch or similar.

## USB

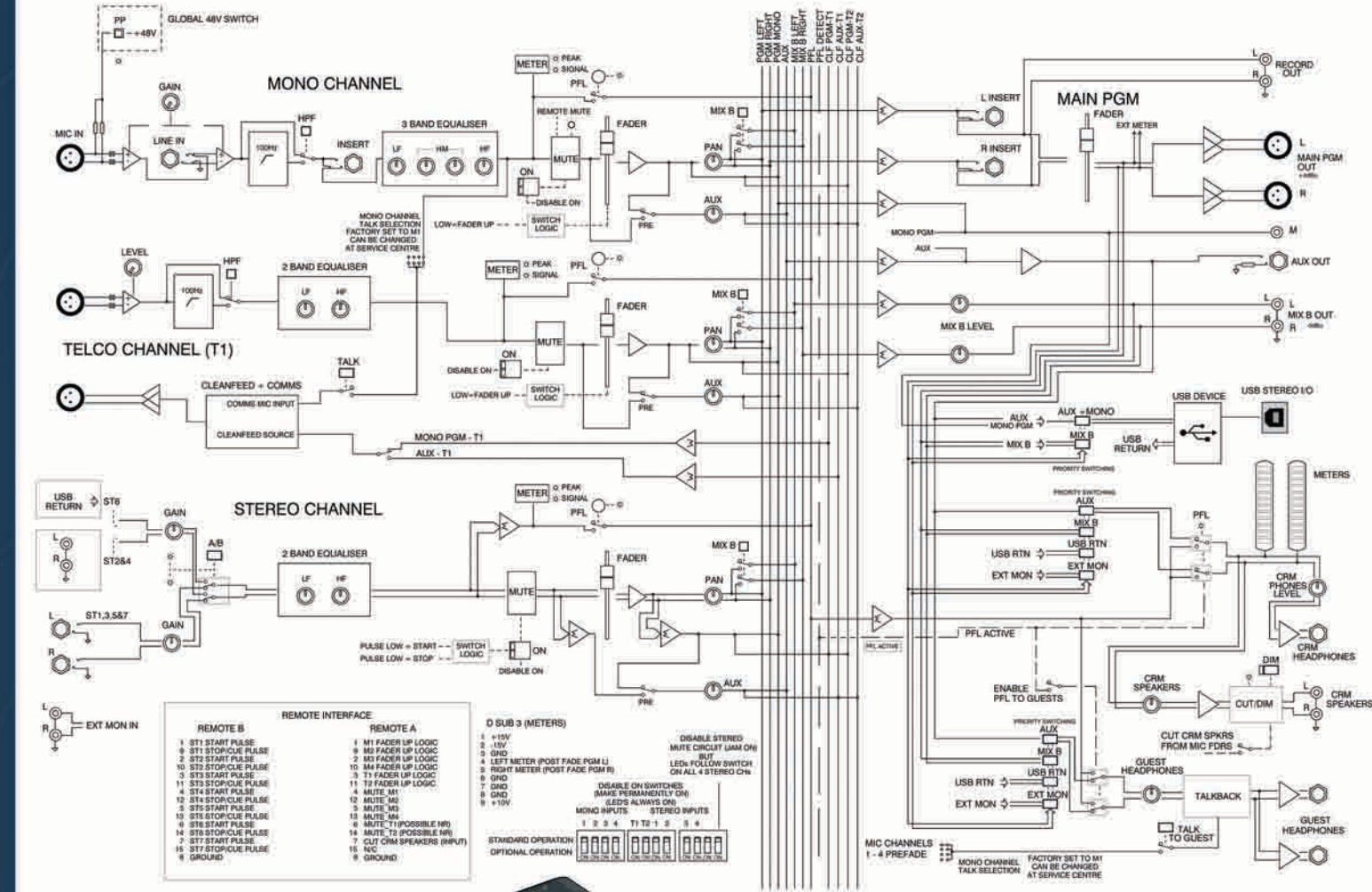
Getting audio to and from a computer easily is essential for music and broadcast production, so the XB-14 is super-flexible and super-easy! Just plug in a USB lead and select the USB routing to enable quality audio to and from your PC or Mac.

## Self or Producer Operated

Separate monitor mixes can be created for operator, guests or presenter so the engineer can check levels and cue sources while the presenter or guest can listen to a different source. The engineer/producer can communicate to the studio using the 'Talk' feature, or off-air to telephone callers.



XB-14 BLOCK DIAGRAM



- Audition/clean feed bus
- 3-band EQ on mono channels
- 4 mic/line and 4 stereo channels
- 2-band EQ on Telco/stereo channels
- 2 stage, padless pre-amp design
- Fader start sensing on mono channels
- Start/cue logic on stereo channel switches
- 2 Telco telephone communication channels
- USB connectivity to interface with PC/MAC
- Separate headphones mix for engineer/producer and 2 guests
- Vertically-mounted PCB construction with nipped rotary pots
- Aux and separate stereo busses for processing/recording
- Control room outputs with auto and remote mutes
- Remote mute facility on mic channels
- Balanced main outputs with inserts
- Input signal and peak metering