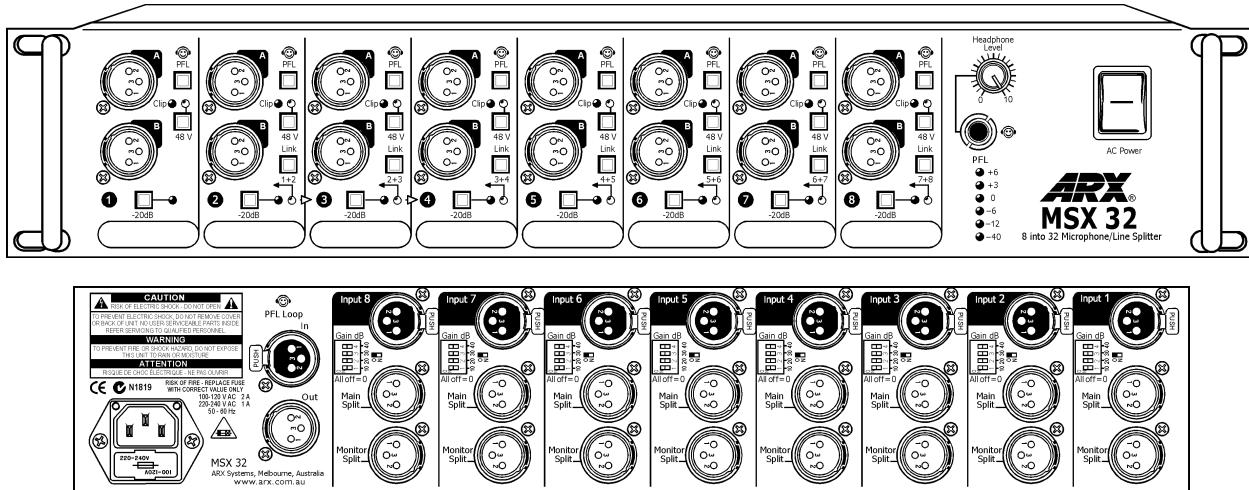


# MSX 32

**ARX**  
www.arx.com.au®

8 IN, 32 OUT ACTIVE MICROPHONE/LINE SPLITTER



Active microphone and line signal splitting has a number of benefits over using passive splitters: primarily these are improved sound quality, noise figures comparable to the best microphone inputs, and increased resistance to RFI.

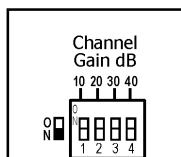
## ABOUT THE MSX 32

With these benefits in mind, the ARX MSX 32 Active Microphone/Line Splitter has been developed to deliver the performance required by the increasing complexity of today's standards of audio production.

The MSX 32 consists of eight channels of actively buffered ultra low noise Microphone/Line Splitter. Each of these channels has four electronically Balanced splits – two outputs on the rear panel for Main and Monitor, plus two more output splits on the front panel. All splits have the option of transformer balancing if so specified.

Each channel has a -20 dB pad switch plus silently switchable 48V Phantom power with indicator LED. A PFL switch and 6 LED metering enables each channel to be easily checked with headphones for signal monitoring, and also for line tracing when troubleshooting.

Gain through the MSX 32 can be set individually by the small DIP switches on the rear of each channel, from 0dB through to +40 dB in 10 dB steps



Channel Gain setting with DIP switches

A 'Link' switch links each channel to the one on its left, providing an ultimate maximum of 32 Outputs from a single input. An indicator LED shows when this is active. A Clip LED indicates imminent signal overload through the channel.

A numbered marker panel on the front provides a space where individual channel connections can be noted.

Internally, powerful RF input filtering removes both common mode and differential interference at ultrasonic frequencies and above. High CMRR is achieved by the use of precision components throughout.

Advanced user options include internally jumper linking Inputs to Main outputs, and Ground lifting Output Pins 1as required.

## INTERNAL POWER SUPPLY

The MSX 32's internal toroidal transformer based power supply is triple shielded to get the maximum benefit from the ultra low noise design of the splitter circuitry.

An illuminated power switch on the front panel provides visual confirmation of AC power connection to the unit.

The headphone output and the 6 LED PFL metering are both mounted on the right hand side of the front panel. Rear panel connectors enable this function to be linked when using multiple MSX 32 units.

To sum up, this feature packed two RU device is the answer wherever transparent signal buffering and routing is required.

## Features

- ⇒ Eight channel / four way split
- ⇒ Channels linkable up to 1 in, 32 out
- ⇒ Ultra low noise design
- ⇒ 'SilentSwitch' Phantom Power switching
- ⇒ -20 dB pad switch
- ⇒ 0 to +40 dB Gain available via rear switches
- ⇒ Headphone monitoring and PFL metering
- ⇒ Electronically Balanced Inputs and Outputs (standard)
- ⇒ Transformer balanced Outputs option
- ⇒ Intuitive, 'user friendly' layout
- ⇒ Flawless audio performance

## Specifications

**Signal / Noise Ratio**  
-94dB

**Distortion**  
.008% 20Hz - 20KHz

**Gain through unit**  
Switchable 0, +10,  
+20, +30, +40 dB

**Maximum Output**  
+24dB

**Pad Switch**  
-20dB attenuation

**Phantom Power**  
+48VDC slow turn on/  
turn off

**Output Impedance**  
100 Ohms Electronically  
Balanced  
(Optional Transformer  
balancing available)

**Clip LED**  
1dB before clipping

**Headphone Output**  
2 watts/8 ohms

**AC Mains Input**  
Fused IEC socket

**AC Power**  
100-120V AC 2 amp  
220-240V AC 1 amp

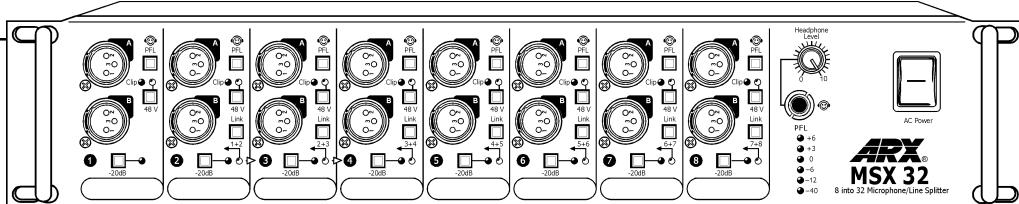
**Transformer Type**  
Low noise shielded  
toroidal

**Size**  
19"W x 3 1/2"H x 8"D  
482 x 89 x 200 mm

**Weight**  
15 lbs (7 Kg)



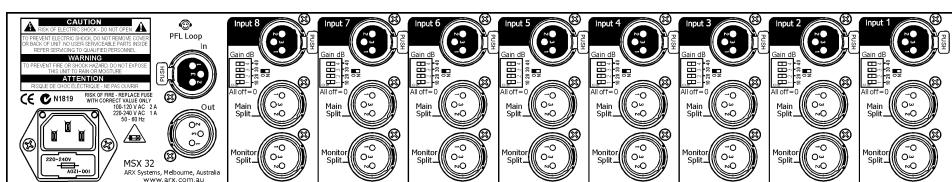
Our policy is one of continuous improvement, and therefore designs may change without notice. However, unless otherwise stated, specifications will always equal or exceed those previously given.



## Front Panel

- A and B balanced XLR Output splits Channels 1 through 8. Pin 3-, Pin 2 +, Pin 1 Ground
- PFL (Pre Fade Listening) switch
- 48V Phantom Power switch and LED
- Channel link switch and LED
- 20dB pad switch and LED
- Numbered marker panel for labelling individual channel assigns

- Headphone level control
- Headphone socket
- 6 LED PFL metering: -40, -12, -6, 0, +3 and +6dB
- Illuminated AC power switch
- Rack handles



## Rear Panel

- Balanced XLR Input Channels 1 through 8. Pin 3 -, Pin 2 +, Pin 1 Ground
- Gain DIP switches: 0dB, +10, +20, +30, +40
- Balanced XLR Main (FOH) Output (same wiring as Input) Channels 1 through 8
- Balanced XLR Monitor Output (same wiring as Input) Channels 1 through 8

- PFL Input and Output loop XLR connectors.
- IEC 3 pin AC connector and integral fuseholder. Replace fuse with correct value only: 100-120 V AC 5 amp, 220-240 V AC 3 amp.

*Note: No connection to Audio ground on transformer balanced models (T/S and T/ALL)*

## Ordering Options

MSX 32

Electronically Balanced All Outputs

MSX 32 T/S

Electronically Balanced Main and Monitor Outputs,  
Transformer Balanced Outputs Splits 1 and 2

MSX 32 T/ALL

Transformer Balanced All Outputs

## Architectural Specifications

The Active Microphone/Line Splitter shall be an eight channel unit in a steel chassis eight inches (200mm) deep and two rack units high.

Each channel shall have its input and two outputs on the rear panel plus two outputs on the front panel. Each channel shall also have a 48V Phantom power switch on the front panel with an indicator LED, a headphone monitoring switch, and a -20 dB pad switch with an indicator LED.

There shall also be front panel switches with indicator LEDs to link each channel, thereby providing a potential maximum of 32 outputs from one input.

The Input headroom shall be +21dB, with a CMRR of better than 70dB, and the frequency response shall be 10 Hz to 20 KHz, ± 0.5dB.

The Output impedance shall be 100 ohms electronically balanced on all four outputs per channel. Additionally all out-

puts shall have the option of being transformer balanced. The maximum Output level shall be +24dB, with a Signal to Noise ratio of -94dB unweighted. Total Harmonic Distortion shall be 0.008% @ 0dB, 20 Hz to 20 KHz.

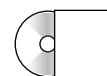
Gain through the unit shall be switchable to 0, +10, +20, +30, +40dB via rear panel switches.

There shall also be one male and one female XLR connector on the rear panel to allow multiple units to loop the headphone monitoring signal.

AC power shall be supplied by a removable 3 pin mains cable, connecting to an IEC connector with integral fuse and voltage change switch on the unit's rear panel.

The Active Microphone Splitter shall be the ARX MSX 32.

Specifications available on CD ROM.  
Latest updates available at:  
[www.arx.com.au](http://www.arx.com.au)



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