

# SONIFEX

## CM-AESX3

Single 3 Way AES/EBU Passive Splitter With XLR Connectors

## CM-AESB3

Single 3 Way Passive AES3ID Splitter With BNC Connectors

## CM-MS3

Single 3 Way Passive Microphone Splitter

# Catalogue



## CM-AESX3 Single 3 Way AES/EBU Passive Splitter With XLR Connectors



**Category:** Audio Distribution Amplifiers.  
**Product Function:** 1 input, 3 output AES3 distribution amplifier.  
**Typical Applications:** Distribution of AES3 source to 3 mixing consoles.  
**Features:** No power needed, can apply 110Ω termination to unconnected outputs, transformer based solution provides reliability.



CM-AESX3 Front & Rear View.

The CM-AESX3 is a passive “one-to-three” splitter housed in a small but robust aluminium box. It splits a single AES3 digital audio source to up to three destinations, using Neutrik XLR connectors.

The CM-AESX3 solves a range of digital signal distribution problems, where correct termination is essential to maintain signal integrity. The input signal is split through high quality transformers and 110Ω termination can be applied, to unconnected outputs.

The CM-AESX3 requires no power to operate, ensuring your audio remains connected from source to destination(s) without interruption from power failures.

### Specification For CM-AESX3

#### CM-AESX3 Technical Specification

##### CM-AESX3: Cable Drive Capability

The table below sets out the minimum signal amplitude required to drive 100m (cumulative) of 110Ω twisted pair cable, based on the sample rate of the digital audio:

Sample Rate	Minimum Signal Amplitude
32kHz	*2Vpk-pk
44.1kHz	*2Vpk-pk
48kHz	*2Vpk-pk
88.2kHz	5Vpk-pk
96kHz	5Vpk-pk

\* Minimum of 2Vpk-pk is defined by the AES3 format specification.

The table below sets out the minimum signal amplitude required to drive 30m (cumulative) of 110Ω twisted pair cable, based on the sample rate of the digital audio:

Sample Rate	Minimum Signal Amplitude
176.4kHz	3Vpk-pk
192kHz	3Vpk-pk

#### Connections

Inputs: 1 x XLR 3 pin female  
 Outputs: 3 x XLR 3 pin male

#### Equipment Type

CM-AESX3 Single 3 way AES/EBU passive splitter with XLR connectors

#### Physical Specification

Dimensions (Raw): 7.7cm (W) x 8.3cm (D) x 4.2cm (H)  
 3.0" (W) x 3.3" (D) x 1.7" (H)  
 Dimensions (Boxed): 22.9cm (W) x 12.7cm (D) x 7.6cm (H)  
 9.0" (W) x 5.0" (D) x 3.0" (H)  
 Weight: Nett: 0.22kg Gross: 0.33kg  
 Nett: 0.49lbs Gross: 0.73lbs

## CM-AESB3 Single 3 Way Passive AES3ID Splitter With BNC Connectors



**Category:** Audio Distribution Amplifiers.

**Product Function:** 1 input, 3 output AES3 distribution amplifier.

**Typical Applications:** Distribution of AES3 source to 3 mixing consoles.

**Features:** No power needed, can apply 110Ω termination to unconnected outputs, transformer based solution provides reliability.

The CM-AESB3 is a passive “one-to-three” splitter housed in a small but robust aluminium box. It is designed to split a single AES3ID digital audio source up to three destinations, using female BNC connectors.

Particularly useful in a video production and broadcast environment, the CM-AESB3 splits the input signal through high quality transformers. 75Ω termination can be applied, if desired, to unconnected outputs to maintain optimum carrier parameters.

The CM-AESB3 requires no power to operate, ensuring your audio remains connected from source to destination(s) without interruption from power failures.

### Specification For CM-AESB3

#### CM-AESB3: Cable Drive Capability

Cumulative cable drive capability of 100m of 75Ω coaxial cable at sample rates up to and including 96kHz.

#### Connections

Inputs: 1 x BNC female

Outputs: 3 x BNC female

#### Equipment Type

CM-AESB3 3 Way passive AES3ID splitter with BNC connectors.

#### Physical Specification

Dimensions 7.7cm (W) x 8.3cm (D) x 4.2cm (H)

(Raw): 3.0" (W) x 3.3" (D) x 1.7" (H)

Dimensions 22.9cm (W) x 12.7cm (D) x 7.6cm (H)

(Boxed): 9.0" (W) x 5.0" (D) x 3.0" (H)

Weight: Nett: 0.22kg Gross: 0.33kg

Nett: 0.49lbs Gross: 0.73lbs



CM-AESB3 Front & Rear View.

## CM-MS3 Single 3 Way Passive Microphone Splitter



**Category:** Audio Distribution Amplifiers.  
**Product Function:** To split a microphone or line level signal to 3 independent outputs.

**Typical Applications:**

To share microphones between radio/TV/production studios.

**Features:**

- Passive transformer design.
- Ground lift switch.
- External or looped phantom power inputs.
- External +48V phantom power input.

The CM-MS3 is a passive “one-to-three” splitter housed in a small but robust aluminium box. It is designed to split a single microphone or line source to up to three destinations, using Neutrik XLR connectors.

**Wide Signal Range Capability**

The CM-MS3 uses high quality audio transformers that are capable of accepting input levels up to +18dBu, making the splitter useful in both microphone and line level splitting applications.

**Versatile Phantom Powering Options**

The CM-MS3 offers three methods of providing phantom power to a microphone connected to its input:

- From the external +48VDC power connector.
- From a microphone amplifier connected to output 1 (direct)

- From a microphone amplifier connected to output 2 (phantom loopback)

Controlling which method is used to provide phantom power is achieved with simple push switches. It is possible to concurrently power a microphone using any two of the above methods without degrading audio performance, thus providing power supply redundancy.

**Ground Loop Hum Elimination**

Ground loop hum problems can be quickly eliminated using the push switches to lift pin 1 of the output connectors (output 2 and 3 only).



**Specification For CM-MS3**

Test	Conditions	Results
Frequency Response:	Ref. -6dBu, 1kHz Source impedance = 150? Load impedance = 10k?	10Hz - 30kHz ±0.5dB
Total Harmonic Distortion:	Ref. +3dBu, 50Hz Source impedance = 150? Load impedance = 10k?	0.02%
Total Harmonic Distortion 0.1%:	Ref. 0.1%THD+N, 50Hz Source impedance = 150? Load impedance = 10k?	+13dBu
Total Harmonic Distortion 1%:	Ref. 1%THD+N, 50Hz Source impedance = 150? Load impedance = 10k?	+18dBu
Common Mode Rejection Ratio:	Ref. 20kHz Source impedance = 600? Load impedance = 10k?	>60dB

**Connections**

Inputs:	1 x XLR 3 pin female (balanced, can be unbalanced)
Outputs:	3 x XLR 3 pin male (balanced, can be unbalanced)
DC Phantom Power Input:	+48V DC, 2.5mm socket

**Equipment Type**

RB-MS3	Single 3 way passive microphone splitter
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**Physical Specification**

Dimensions (Raw):	7.7cm (W) x 8.3cm (D) x 4.2cm (H) 3.0" (W) x 3.3" (D) x 1.7" (H)
Dimensions (Boxed):	22.9cm (W) x 12.7cm (D) x 7.6cm (H) 9.0" (W) x 5.0" (D) x 3.0" (H)
Weight:	Nett: 0.30kg    Gross: 0.40kg Nett: 0.66lbs    Gross: 0.88lbs

# **SONIFEX**

[www.sonifex.co.uk](http://www.sonifex.co.uk)

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