

# **AEV OCTOPUS-ST**

# Professional Stereo Balanced Audio Switcher



#### Guarantee

The equipment is warranted for a period of 2 years from the date of invoice (ex-works). The warranty does not cover faults provoked by carelessness, natural causes and parts subject to wear. In addition, the cost of shipment is not covered. The warranty will be voided if the equipment is mishandled.

#### **Technical Support**

If you require technical support, contact AEV SERVICE giving a clear and concise account of your speciic problem. Quote the serial number of your equipment by referring to the AEV nameplate attached to the equipment itself as this is the most important piece of information to be provided.

Telephone: +39 051 6630904 Fax: +39 051 893605

#### **Factory Service and Repairs**

If problems arise while the equipment is being installed, consult this manual and check that the installation is being carried out properly. If the problems still cannot be solved, call the AEV SERVICE Department for further information. If the problem is a minor one we can a telephone call will probably sufice. If, on the other hand, the equipment is to be shipped to AEV for service or repairs.

#### **Shipping Instruction**

When shipping the equipment to AEV, use the original package in order to be certain that it will be fully protected during handling. If you need the original package, call us for a new one. If you ship the equipment in a different packing container, take care to provide a double package by interposing padding material between the two containers in order to fully protect the equipment during shipment. The package should be marked "FRAGILE" in red. Remember that the RMA number must be clearly visible on the package. If it is not, the equipment will not be accepted.

**IMPORTANT:** Carefully read this paragraph as it contains important instructions concerning operator safety and directions regarding the installation, operation and maintenance of the equipment.

Failure to observe the safety instructions and information given in this manual **constitutes an** infringement of the safety rules and design specifications provided for this piece of equipment.

**AEV Broadcast Srl declines all responsibility** if any one of the safety rules given here in is not observed.

**AEV Broadcast Srl declines all responsibility** if the end-user resells the product.

The equipment is to be used by people capable of operating it in a trouble-free manner and it is assumed that they are aware of the following safety rules.

- Keep this manual with the utmost care and close at hand so that it can be consulted whenever needed
- After unpacking the equipment, check it for condition.
- Avoid banging the equipment.
- The packing material (plastic bags, polystyrene, nails, etc.) must never be left within the reach of the children, as **these items are potential sources of danger**.
- Do not use the equipment in places where the temperature is not within the recommended range, as specified by the manufacturer.
- Before connecting the equipment, make sure the nameplate specifications correspond to the mains electricity supply (the nameplate is located on the equipment enclosure).
- Do not remove the sticker from the equipment as it contains important specifications and the relevant serial number.
- To join the equipment to the mains supply, use the power cord purchased with the equipment.
- The equipment must be used only for the purpose it was designed for.
- Abuse or misuse of the equipment is **extremely dangerous** for people, pets and property. The manufacturer declines all responsibility for damage and injury resulting from **improper use** and **mishandling**.
- Certain basic safety rules must be observed when using electrical equipment, in particular: Never touch the equipment with wet and/or damp hands or other parts of the body.

- Keep the equipment away from drops of water or sprinkling systems.
- Never use the equipment near high heat sources or explosive material.
- Do not introduce any extraneous matter into the equipment.
- Do not allow children or untrained people to use the equipment.
- Before cleaning or servicing the equipment outside, disconnect it from the supply and wait at least 2 seconds before working on it, as recommended by current safety regulations.
- In the event of faults and/or improper operation, turn off the equipment, shut off the electrical power and call your dealer.
- Do not attempt to make repairs and/or adjustments when covers/guards or circuit boards are to be removed.
- Blown fuses inside the power supply indicate that there may be a fault in the power supply itself. The fuses must be replaced by qualified and authorised persons. It is advisable to call your nearest dealer.
- Call your dealer for any repairs and be certain original spare parts are used.

#### Failure to observe this rule may adversely affect the safety level of your equipment.

- The equipment is to be connected to the mains supply and provided with adequate and efficient earth conductors.
- The electrical wiring must be done in compliance with current electrical codes CEI 64-8 "Electrical specification for domestic buildings".
- When installing, leave a clearance of at least 1 cm around the equipment to allow air to pass freely.

# NOTE. This piece of equipment has been manufactured to the highest standards of workmanship. It must be used properly and serviced as recommended to ensure long-term dependable operation.

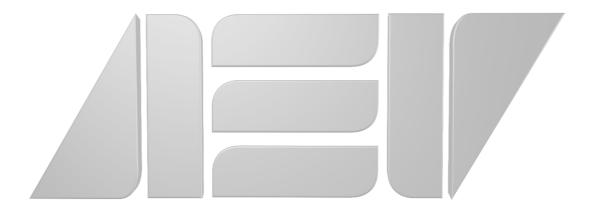
The installation must be done in order to be able to guarantee an easy access to the cable of feeding.

The device of dissection of the equipment is the cable of feeding, so it must be unconnected from the equipment every time it is necessary to do any type of maintenance.



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#### Introduction

**Octopus ST** is a balanced stereo audio switcher with:

- One input Main
- One input Main Expander
- Four inputs Sub (Split)
- Four outputs (Split/ST-4)
- Eight outputs (ST-8)

The fields of application of the Octopus can be: in the studio and in installations where it is necessary to distribute a balanced stereo audio signal on 4 outputs (version ST-4) or 8 outputs (version ST-8) or, in vestione Split, switching between the main signal, main, and four different audio sources on the four outputs

Octopus Split: Switching on the outputs of the inputs of each output is performed by logic commands via door contacts allogiata in DB 25 on the right part of the front panel.

#### Main Features

Octopus Split is extremely useful in the management of commutations for advertising splitting diversified for different coverage areas of the issuer.

Each output can be assigned only one entrance, between the Main and the respective Sub.

In the absence of the switching signal will be present on the outputs represented as four main signal which can be replicated on all the outputs or part of them, thus effecting the function of distributor of the audio signal.

At the close of each contact reported to the respective output, will be switching between the main signal and the corresponding signal Sub.

Octopus ST-4, the main signal is replicated on 4 + 1 outputs:

- Out Main, with 1: 1 ratio with the input Main
- OUT 1, ..., 4 with the possibility of setting different level on each output
- MUTE function OUT via logic control the port pin REMOTE

Octopus ST-8, the main signal is replicated on 8 + 1 outputs:

- Out Main, with 1: 1 ratio with the input Main
- OUT 1, ..., 8 with the possibility of setting different level on each output
- MUTE function OUT via logic control the port pin REMOTE

Octopus Split, the main signal is replicated on five outputs:

- Out Main, with 1: 1 ratio with the input Main
- OUT 1, .., 4 in switching the inputs Sub 1, .., 4 and adjustment possibilities of different level on each output

Their very small (1U,19") and the use of media rackmount reversible allow positioning of the apparatus simple and functional in all operating situations.

#### **Description**

#### Front panel

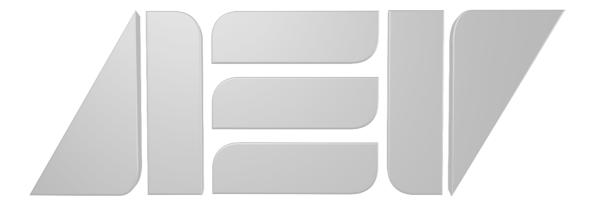


- 1 XLR input Main left channel
- 2 XLR input Main right channel
- 3 XLR main output expander left channel
- 4 XLR main output expander right channel
- 5 level control output 1
- 6 XLR output 1 left channel
- 7 XLR output 1 left channel
- 8 signaling LEDs for active switching of output 1
- 9 level control output 2
- 10 XLR output 2 left channel
- 11 XLR output 2 left channel
- 12 signaling LEDs for active switching of output 2
- 13 adjustable output level 3
- 14 XLR output 3 left channel
- 15 XLR output 3 left channel
- 16 signaling LEDs for active switching of output 3
- 17 adjustable output level 4
- 18 XLR output 4 left channel
- 19 XLR output 4 left channel
- 20 signaling LEDs for active switching of output 4
- 21 Signaling Power ON (Power ON)
- 22 DB25 port logic

# Rear panel (Spilt version)



- 23 switch I/O power
- 24 jack for the power supply VDE.
- 25 XLR input Sub 1 left channel
- 26 XLR input Sub 1 right channel
- 27 XLR input Sub 2 left channel
- 28 XLR input Sub 2 right channel
- 29 XLR input Sub 3 left channel
- 30 XLR input Sub 3 right channel
- 31 XLR input Sub 4 left channel
- 32 XLR input Sub 4 right channel

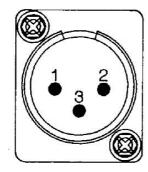


#### Rear panel ST-8 (8 output version)

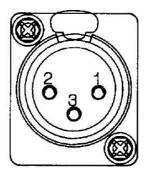


- 33 adjustable output level 5
- 34 XLR output 5 left channel
- 35 XLR output 5 right channel
- 36 signaling LEDs for active switching of output 5 (mute)
- 37 output level adjustment 6
- 38 XLR output 6 left channel
- 39 XLR output 6 right channel
- 40 signaling LEDs for active switching of output 6 (mute)
- 41 output level adjustment 7
- 42 XLR output 7 left channel
- 43 XLR output 7 right channel
- 44 signaling LEDs for active switching of output 7 (mute)
- 45 output level adjustment 8
- 46 XLR output 8 left channel
- 47 XLR output 8 right channel
- 48 signaling LEDs for active switching of output 8 (mute

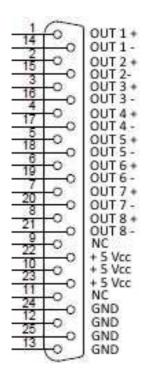
#### Pin out XLR audio connectors

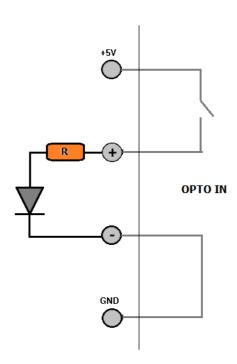


- 1 GND
- 2 audio signal +
- 3 audio signal -



# Logic I/O port





Pin 1-14: Opto 1 IN, command input switching on output 1

Pin 2-15: Opto 2 IN, command switching input to output 2

Pin 3-16: Opto 3 IN, command switching input to output 3

Pin 4-17: Opto 4 IN, command switching input to output 4

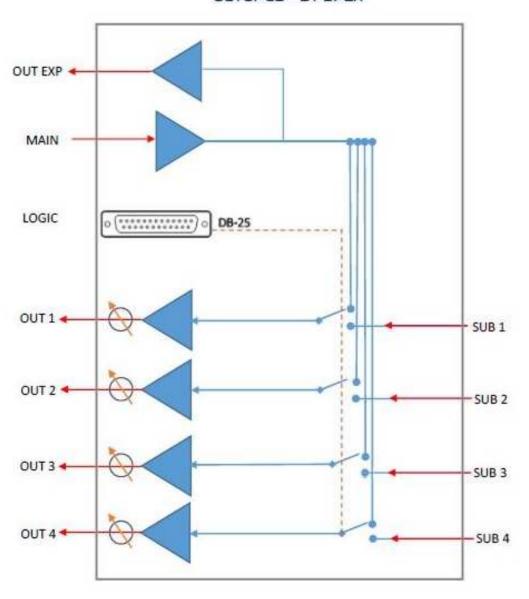
Pin 5-18: Opto 5 IN, command switching input to output 5

Pin 6-19: Opto 6 IN, command switching input to output 6

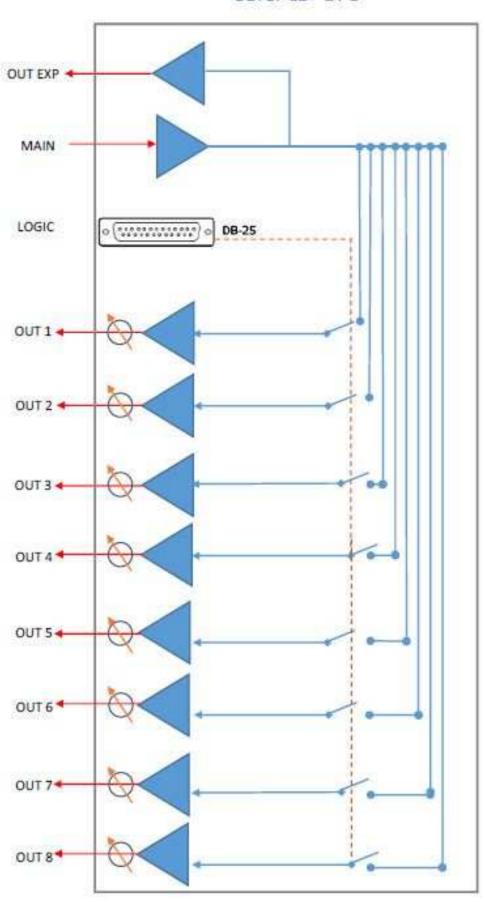
Pin 7-20: Opto 7 IN, command input switching of output 7

Pin 8-21: Opto 8 IN, command switching input to output 8

# OCTOPUS - ST SPLIT



# OCTOPUS - ST 8



#### **Technical details**

# Inputs

Input configuration Electronically balanced

Input Impedance 10 K  $\Omega$  (600  $\Omega$  wired selectable)

Input Max Level +10 dBm

Connector XLR

#### **Outputs**

Output configuration Electronically balanced

Output Impedance 50  $\Omega$ 

Output Level Range  $-6 \div +6 \text{ dBu}$ 

Connector XLR

#### **General details**

Stereo Separation degradation < 1 dB

Distortion @ 1 KHz < 0.01%

Signal to noise ratio < 85 dB (CCIR)

Power requirement  $90 - 264 \text{ V} \sim 50 - 60 \text{ Hz}$ 

Consumption 4 W

Power supply max power 8 W

Dimension (WxHxD)  $48,3 \times 19,4 \times 4,4 \text{ cm } 1 \text{ rack unit}$ 

Weight 2,5 Kg. (5.5 Lbs)

Operating Temp.  $0 \div 50^{\circ}$  C.

