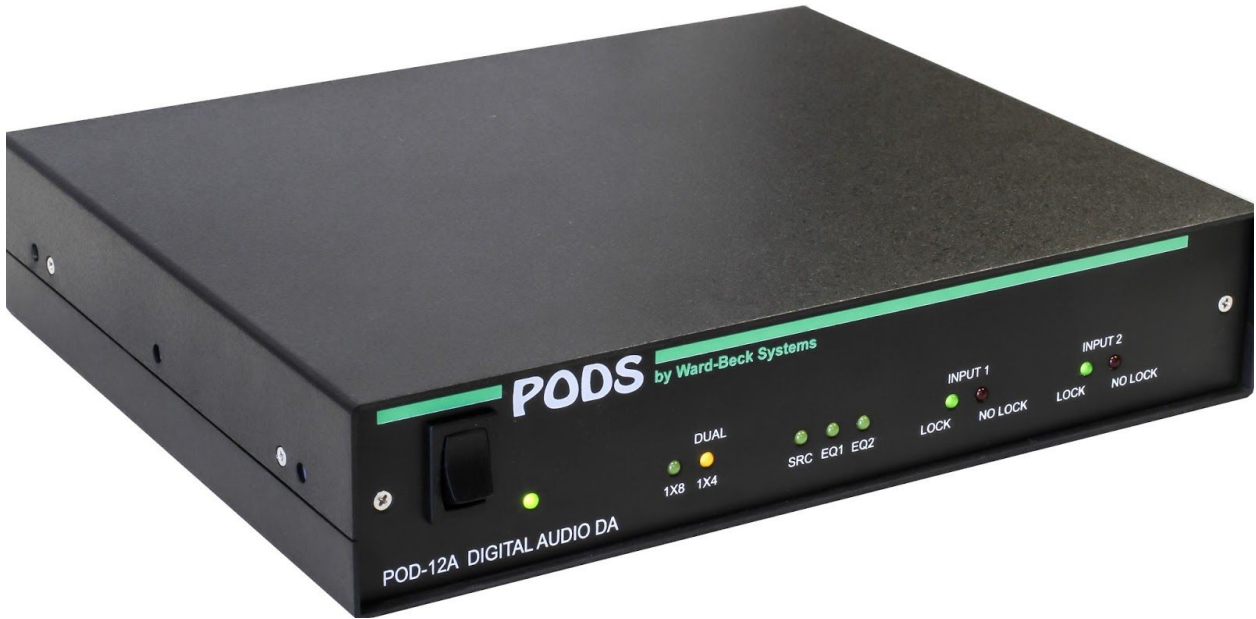


POD12A

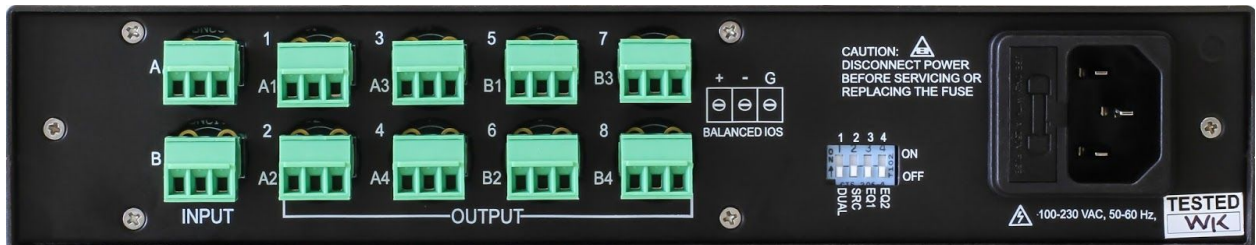
DIGITAL AUDIO DA



POD12A/75 REAR



POD12A/110 REAR



by Ward-Beck Systems

POD12A

DIGITAL AUDIO DISTRIBUTION AMPLIFIER

This is one of many in our line of top quality, low-cost broadcast problem solvers. PODS are compact, rugged and affordable. They are suited for tabletop use, or rack-mountable singly or in pairs, in any combination.

POD12A is an AES/EBU digital audio distribution amplifier which supports sampling frequencies from 30kHz to 192kHz. This unit is available in both 75Ω unbalanced and 110Ω balanced configurations. It features cable length equalization and re-clocking techniques which enable the unit to reliably recover the incoming digital audio signal. For increased versatility, the POD12A features a selector switch on the rear panel which allows for single 1x8 or dual 1x4 operation. Note that enabling the SRC limits the POD12A to 1x8 mode.

The front panel of the POD12A features several LED tallies which, when lit, indicate the following:

- 1 in x 8 out mode
- Dual 1 in x 4 out mode
- SRC enabled
- Cable length EQ1 enabled
- Cable length EQ2 enabled
- Lock and No Lock for each input

All input and output connections to POD12A/75 are made via BNC connectors located on the rear panel with a transformer balanced input. For POD12A/110, all inputs and outputs are transformer balanced and connections made via terminal blocks located on the rear panel.

User Controls

This chapter contains descriptions of the POD12A user controls:

- Cable Equalization
- Status LEDs
- DIP Switch Setting

Cable Equalization

POD12A can receive and distribute digital audio signals conforming to AES/EBU specifications transmitted over 75Ω coaxial cable (BELDEN 8281 or equivalent) or 110Ω shielded twisted pair cable (Delco 009035 or equivalent).

Signals transmitted over cable runs up to 300 metres (1000 ft.) in 75Ω installations, or 150 metres (450 ft.) in 110Ω installations can be reliably recovered without the need to activate cable equalization. In instances where the length of these cable runs are exceeded, we recommend that the cable equalizer be enabled.

To enable cable equalization, simply toggle the desired EQ switch on the rear panel. In 1x8 mode only EQ1 is available. In dual 1x4 mode both EQ1 and EQ2 are available, provided SRC is disabled. With the equalizer enabled, 75Ω cable runs can be increased to 750 metres (2250 ft.) and 110Ω cable runs can be increased to 250 metres (750 ft.)

Status LEDs

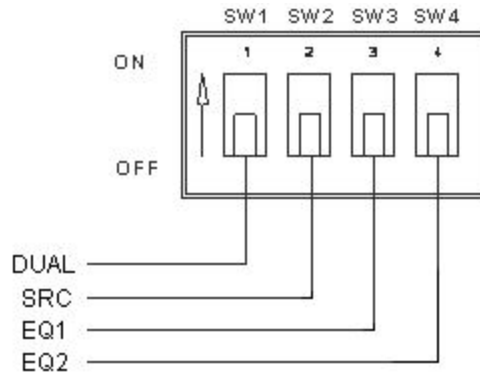
The status indicators of the POD12A all reside on the front panel. Descriptions of each LED are provided in Table 1, below:

LED	Colour	Description
Power	Green	When illuminated, power is on.
1x8	Yellow	When illuminated, 1x8 mode is selected.
Dual 1x4	Yellow	When illuminated, Dual 1x4 mode is selected.
SRC	Yellow	When illuminated, SRC is enabled.
EQ1	Yellow	When illuminated, EQ1 is enabled.
EQ2	Yellow	When illuminated, EQ2 is enabled.
Input 1 Lock	Green	When illuminated, a valid AES/EBU signal is detected on Input 1.
Input 1 No Lock	Red	When illuminated, no valid AES/EBU signal is detected on Input 1.
Input 2 Lock	Green	When illuminated, a valid AES/EBU signal is detected on Input 2.
Input 2 No Lock	Red	When illuminated, no valid AES/EBU signal is detected on Input 2.

Table 1 - Status LED Descriptions

DIP Switch Settings

The POD12A DIP switches are on the rear of the unit. A description of their functionality is below in Table 2.



Switch	Description
Dual	Off: 1x8 mode selected On: Dual 1x4 mode selected
SRC	Off: Sample Rate Converter disabled On: Sample Rate Converter enabled Note: Enabling the Sample Rate Converter restricts operation to 1x8 mode and will override the setting of the DUAL switch.
EQ1	Off: Cable Length Equalizer for Input 1 disabled On: Cable Length Equalizer for Input 1 enabled
EQ2	Off: Cable Length Equalizer for Input 2 disabled On: Cable Length Equalizer for Input 2 enabled

Table 2 - DIP Switch Functions

Specifications

Input Impedance	(POD12A/110) 110 Ω transformer balanced (POD12A/75) 75 Ω unbalanced
Input Level	0.2-7 V p-p
Output Level	(POD12A/110) 3.0 V p-p terminated (POD12A/75) 2.7 V p-p terminated
Sampling Frequency Range	30 kHz to 192 kHz
Jitter (average 1-100 kHz)	Better than 5 ns
Output Impedance	(POD12A/110) 110 Ω transformer balanced (POD12A/75) 75 Ω unbalanced
Power Requirements	100-240 VAC, 50-60Hz
Dimensions	8.69" wide x 1.73" high x 7.0" deep (221mm x 44mm x 178mm)
Weight	1.37 kg (3.01 lbs)

Ward-Beck Systems Inc. reserves the right to change performance specifications without prior notice.

WARRANTY

All Ward-Beck Systems Inc. products are warranted against defective materials and workmanship for a period of one year from the date of shipment.

Ward-Beck Systems Inc. will repair or replace, at its option and without charge, all said products or parts thereof which upon factory inspection prove to be defective during the warranty period, provided that:

1. The original serial numbers are intact and have not been tampered with.
2. The purchaser shall return any equipment or parts thereof to Ward-Beck Systems Inc. only after obtaining prior authorization and shipping instructions from the factory. (Ward-Beck Systems Inc. reserves the right to inspect or repair equipment on the purchaser's premises).
3. The purchaser assumes the obligation for all expenses in connection with the shipping and return of such goods, once authorization has been obtained.

This warranty does not cover items normally considered expendable, such as fuses and lamps.

This warranty does not cover damages caused by misuse, accident, neglect, unauthorized alteration, repair by unauthorized personnel, or damage caused by an act of God, war, or civil insurrection.

In no event shall Ward-Beck Systems Inc. be liable for consequential damages. Ward-Beck Systems Inc. shall have the rights to final determination as to the application of this warranty.

Ward-Beck Systems Inc. reserves the right, at any time and without notice, to make changes in its equipment, components, specifications or designs, as may be warranted by progress in state-of-the-art technology.

Ward-Beck Systems Inc. reserves the right to make design changes, additions to, and improvements in its products, without obligation to install such revisions in products previously manufactured.

The warranty set forth herein is in lieu of all other warranties expressed or implied, including the warranties of merchantability and fitness.

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