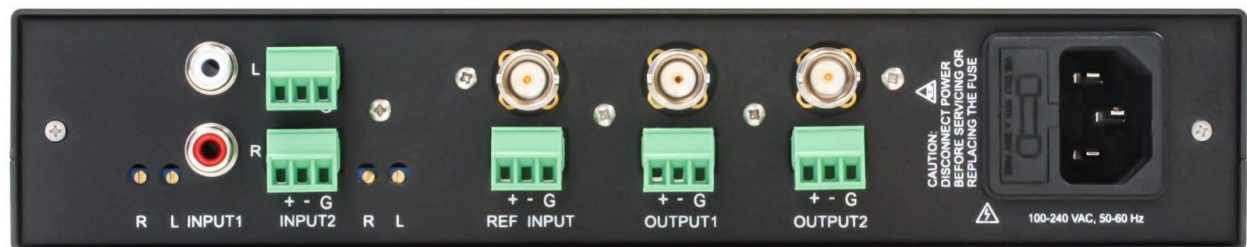


POD14B

DUAL ANALOG TO DIGITAL CONVERTER



by Ward-Beck Systems

Rev:Nov.12 2014

POD14B

DUAL ANALOG TO DIGITAL AUDIO CONVERTER

Just one of many in our line of top quality, low-cost broadcast problem solvers. PODs are compact, rugged and affordable. For table top or rack mount use. PODs can be rack mounted singly or in pairs.

POD14B is a dual AES/EBU analog to digital audio converter. This unit comes ready for use in 75 Ω or 110 Ω installations. POD14B can generate digital audio signals at sampling rates of 32, 44.1, 48, 96 and 192 kHz using its internal oscillator. Alternatively the sampling rate of the digital output signals may be referenced to an external source.

FRONT PANEL

Front panel controls and tallies include a power switch with LED tally, a momentary step switch and LED indicators to cycle through the internally generated sample rates from 32 to 192 kHz. Two LEDs indicate whether the external or internal reference is used. The external reference signal has precedence over the internally generated reference signal. As soon as an external reference signal is detected POD14B will automatically switch to it. Coarse gain controls for input 1 are also available on the front panel.

REAR PANEL

Connections to the POD14B are made on the rear panel. Input 1 accepts unbalanced analog signals via standard RCA connectors. Input 2 accepts balanced analog signals via 3-pin Phoenix® pluggable connectors. Connections to the digital reference may be made by either 75 Ω BNC or 110 Ω Phoenix® 3-pin pluggable connectors. Both the 75 Ω and 110 Ω connections of each output may be used in parallel. Fine level trim controls for the analog input signal are located adjacent to the corresponding input connectors. The AC power receptacle and fuse are also located on the rear panel.

SETUP

There are no special setup procedures necessary prior to using POD14B. Simply plug the unit into an AC power outlet and connect input and output cables. POD14B is factory calibrated to output a nominal -20dBFS AES/EBU signal. Apply a -10dBu signal to input 1 or a +4dBu signal to input 2. Both converters may be used in tandem. One or both output connections of each converter may be used in tandem. The input trim controls may be used to set POD14B up for a different nominal digital output signal.

SPECIFICATIONS

DIGITAL REFERENCE INPUT

Input Impedance	75 Ohm or 110 Ohm
Input Level	0.2-7V p-p
Sampling Frequency Range	32kHz to 192kHz

ANALOG AUDIO INPUT

Converter 1:	
Input Impedance	47 kOhm unbalanced
Maximum Input	+14dBu
Frequency Response	+0.01/-0.26dB, 20Hz to 20kHz
Converter 2:	
Input 2 Impedance	24 kOhms balanced
Maximum Input	+24dBu
Frequency Response	± 0.1dB, 20Hz to 20kHz

DIGITAL AUDIO OUTPUT

Resolution	24 bits
Output Standard	AES/EBU 75 Ohm unbalanced and 110 Ohm balanced
External Sampling Frequency	32kHz to 192kHz
Internal Sampling Frequency	Selectable 32, 44.1, 48, 96 and 192kHz
Jitter	less than 5ns
Level (75 Ohm)	1 V p-p terminated
Level (110 Ohm)	3 V p-p terminated
Noise	better than -110 dBFS, 20Hz to 20kHz Typical unweighted
Total Harmonic Distortion + Noise	better than 0.02%

All the preceding specifications were taken with a 48 kHz external reference.

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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