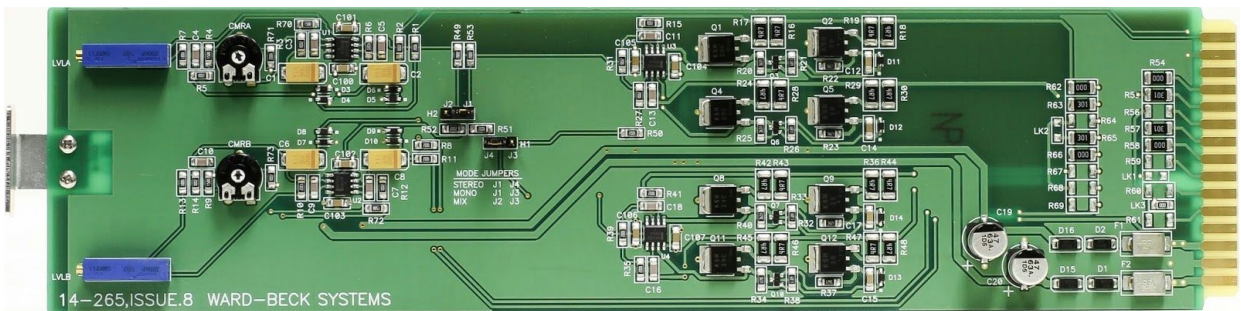


# M8204 / M8204A

8200 SERIES DISTRIBUTION SYSTEM  
DUAL CHANNEL ANALOG AUDIO DISTRIBUTION AMPLIFIER



by Ward-Beck Systems

Rev. Jan. 01 2015

# M8204, M8204A

## Dual Channel Analog Audio Distribution Amplifier

### General

The M8204 consists of two discrete low noise distribution amplifiers each designed to deliver four balanced outputs for each balanced input. Each amplifier section is equipped with a multi-turn potentiometer providing continuously variable gain adjustment over a range from -14dB to +18dB. The unit is available in two versions. The M8204 has an output impedance of 60Ω balanced, while the M8204A has an output impedance of 600Ω balanced.

The M8204 or M8204A mounts in any standard Ward-Beck MF82 rack-mounting frame, is fully compatible with other products in the 8200 Distribution Series, and can be installed in any position within the frame. To install the card in an MF82 frame, orient the card with pins 1 and A positioned at the top and the letters (M8204 or M8204A) on the handle reading from the top down.

Pluggable screw terminal assemblies TB8204P and TB8204P/600 are available for connection to the M8204 or M8204A distribution amplifiers. The M8204 can use the TB8204P termination, while the M8204A can use the TB8204P/600 termination. The terminal assembly mounts on the rear of the MF82 frame directly behind the card.

Both the M8204 and M8204A provide on-board mode jumpers, enabling a stereo, mono or mix mode of operation. For jumpers settings, see the "Mode Jumpers" table on the circuit board.

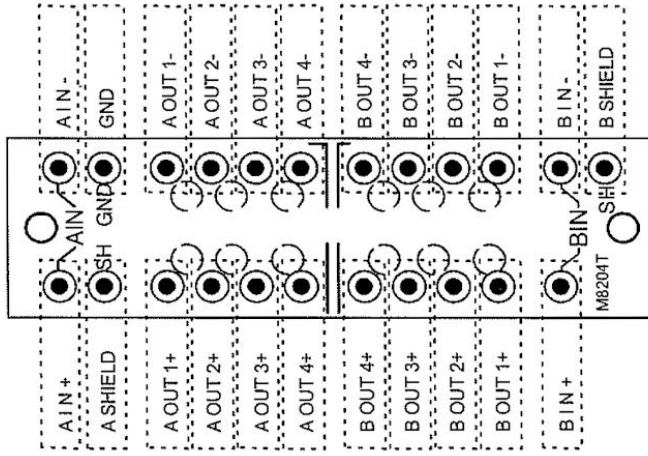
When the M8204 or M8204A is set to mono mode, only the "A" input on the termination is used. When the M8204 or M8204A is set to stereo or mix mode, both the "A" and "B" inputs on the termination are used.

### Specifications

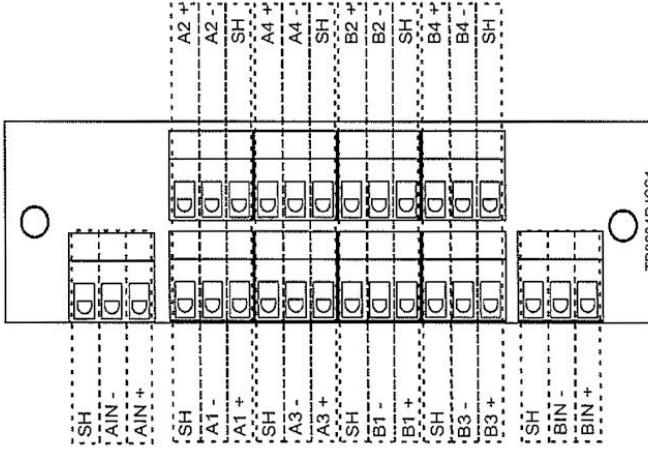
Input Impedance	Greater than 30,000 Ohm balanced
Common Mode Rejection	Greater than 80dB, 20Hz to 20kHz
Gain (M8204)	-14dB to +18dB continuously variable
Gain (M8204A)	-20dB to +12dB continuously variable
Frequency Response	± 0.1dB from 20Hz to 20kHz
Noise	Better than -95 dBu, 20Hz to 20kHz at unity gain
Harmonic Distortion	Less than 0.01%
Maximum Output Level (M8204)	+30 dBm
Maximum Output Level (M8204A)	+24 dBm
Output Impedance (M8204)	60 Ohm balanced
Output Impedance (M8204A)	600 Ohm balanced
Output Isolation	Greater than 60dB, 20Hz to 20kHz
Power Requirements	± 20V DC, 80 mA idling
Dimensions	1.00" wide x 2.75" high x 10.60" deep (25.4 mm x 70.0 mm x 270.0 mm)
Weight	0.682 lbs (310 grams)

# M8204 & M8204A TERMINAL OPTIONS

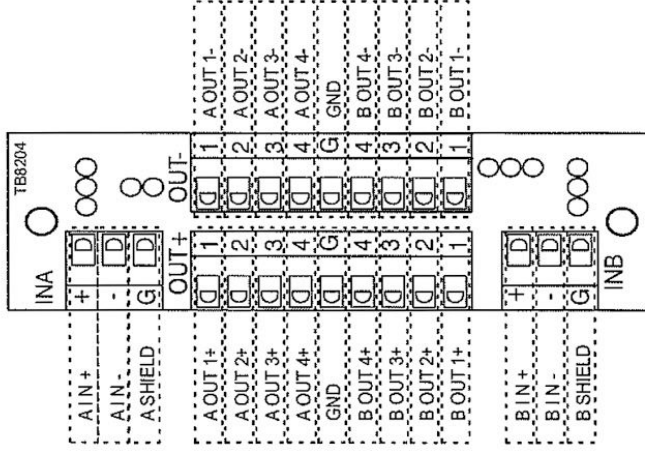
ST8204 & ST8204/600  
SOLDER TERMINAL



TB8204P & TB8204P/600  
PLUGGABLE  
SCREW TERMINAL



TB204 & TB8204/600  
SCREW TERMINAL



DISCONTINUED MODEL  
FOR REFERENCE ONLY

DISCONTINUED MODEL  
FOR REFERENCE ONLY

## **WARRANTY**

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

Ward-Beck Systems Ltd. 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 Ltd. only after obtaining prior authorization and shipping instructions from the factory. (Ward-Beck Systems Ltd. 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 Ltd. be liable for consequential damages. Ward-Beck Systems Ltd. shall have the rights to final determination as to the application of this warranty.

Ward-Beck Systems Ltd. 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 Ltd. 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.

**WARD-BECK SYSTEMS LTD.**  
**945 Middlefield Road, Unit 9, Toronto, Ontario M1V 5E1**  
**V 416 335 5999 F 416 335 5202 Toll-Free 800 771 2556**  
**Website: [www.ward-beck.com](http://www.ward-beck.com)**  
**E-Mail: [sales@ward-beck.com](mailto:sales@ward-beck.com)**