

MANLEY

LABORATORIES, INC.

OWNER'S MANUAL

**MANLEY LAB SERIES
DELTA SIGMA DIGITAL
TO ANALOGUE CONVERTER**

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INTRODUCTION

THANK YOU!...

for choosing the Manley LAB SERIES DELTA SIGMA DIGITAL TO ANALOGUE CONVERTER. Designed by David Manley, the CONVERTERS use only the best available components, with the shortest and cleanest signal path possible. The circuit and the components used have been chosen carefully after years of development and refinement for reliability, constancy and most importantly, musical, accurate, and emotional delivery of the sound. The circuit topology is similar to other designs in the MANLEY range. The CONVERTER features SPDIF inputs followed by an anti-jitter digital conditioning circuit. The CONVERTER chip is a recent 18 bit DELTA SIGMA design used mostly in professional applications. The ANALOGUE LINE STAGE is true cathode follower TUBE design to render the most musical and truest presentation to the listener.

GENERAL NOTES

LOCATION & VENTILATION

The Manley must be installed in a stable location with ample ventilation. Allow a minimum of 1 inch of clearance over the top of the converter such that a constant flow of air can flow.

WATER & MOISTURE

As with any electrical equipment, these converters should not be used near water or moisture. If liquid enters the converter, it must be immediately returned to your dealer for servicing.

SERVICING

The user should not attempt to service the converter beyond that described in the owner's manual. Refer all servicing other than tube replacement to Manley Laboratories

SPECIAL NOTES

Tubes may become loose during transit. Straighten and press down each tube before plugging the converter into the mains socket. Furthermore, do not touch the tubes after the converter has been switched on, as the tubes become very hot during operation and should only be handled after the power has been turned off and the tubes have cooled.

Your converter has been factory set to the correct mains voltage for your country. The voltage setting is marked on the serial badge, located on the rear panel. Check that this complies with your local supply.

Thank you again, and please enjoy!

MAINS CONNECTIONS

Export units for certain markets have a moulded mains plug fitted to comply with local requirements. If your unit does not have a plug fitted the coloured wires should be connected to the appropriate plug terminals in accordance with the following code.

GREEN/YELLOW	EARTH	terminal
BLUE	NEUTRAL	terminal
BROWN	LIVE	terminal

As the colours of the wires in the mains lead may not correspond with the coloured marking identifying the terminals in your plug proceed as follows;

The wire which is coloured GREEN/YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol or coloured GREEN or GREEN and YELLOW.

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked by the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked by the letter L or coloured RED.

DO NOT CONNECT/SWITCH ON THE MAINS SUPPLY UNTIL ALL OTHER CONNECTIONS HAVE BEEN MADE.



WARNING!



**TO PREVENT THE RISK OF ELECTRIC SHOCK
DO NOT OPEN THE CABINET
REFER SERVICING TO
QUALIFIED PERSONEL**

CONNECTING YOUR CONVERTER

Setting up your converter is rather easy.

1. Connect all source components (turntable, CD, Tuner, Tape DAT, etc.) to your preamplifier as normal, reserving one pair of inputs for the converter. The usual choice is the CD inputs and not using the CD's internal (infernal) converters and audio outputs.
2. Connect the RCA SPDIF interconnects from the output of the CD or DAT to the RCA SPDIF input on the back of the converter. Use digital interconnects for best performance. Video interconnects are a second choice but audio interconnects will generally not be acceptable due to the fact that the digital signal extends to several megahertz.
3. Ensure that the "mains" switch on the front panel is in the "off" or "0" position and that the front panel gain controls are counterclockwise.
4. Connect the RCA audio interconnects from the left and right outputs of the converter to the preamp inputs.
5. Turn on converter and CD or DAT you plan to use.
6. Verify that the LOCK LED lights at this time or when you start the CD or DAT. If the LOCK LED is not lit turn the power switch off for 5 seconds and turn it back on to reset the converter. If you ever have to do this make sure the preamp is turned down to prevent potentially damaging thumps.
7. Wait 30 seconds to let the converter to warm up and reach stability. Turn the converter gain controls clockwise. On the preamp select the converter and turn up the volume and enjoy.
8. The GAIN CONTROLS on the converter enable this unit to be optimized to your system. You can use them to match the volumes with your turntable, tuner and other inputs so that selecting the converter will not cause a drastic change in volume. They also provide a way to interface direct to the power amps if no other source is needed the power amp has no gain controls or the controls are not practical to use. Of course, these are separate controls to allow use as balance adjustments and maintain absolute minimum crosstalk. The "purist" approach is to leave the gain controls fully clockwise so that the pots are virtually bypassed.

OPERATIONAL NOTES

TUBE LIFE

You should expect extended life from the tubes in your MANLEY CONVERTER and we expect the tubes to not need replacement for many many years. We stock the tubes in these converters should you ever need replacements (and at very reasonable prices too!). Replace only with good quality 12AU7WA or ECC82 types.

FUSES

The fuses used in your amplifier are standard 1 amp SLO-BLO types. The correctly rated fuse has been installed at the factory for your country's voltage. If replacing a fuse, always unplug the amplifier's power cord from the wall outlet and always use the exact same type and ampere rating fuse as the one you are replacing. Failure to do so will void your warranty and can be a dangerous fire hazard. NEVER replace a fuse with thick wire, tin foil, gum wrappers, or anything else other than the correct fuse!

LEDS

The LEDS provide indication relevant digital conditions. The LOCK LED will light when the phase lock loop of the anti-jitter clock has locked onto the incoming data. The EMPH LED will light when the source data has been pre-emphasized and the audio will be de-emphasized. This means that in mastering the CD was boosted in the high frequencies and that removing the same amount of high frequencies is part of the conversion process. The CONVERTER does this all automatically but there are so few disks with pre-emphasis that you may never see this LED lit unless the converter needs to be reset. The remaining leds indicate sample frequency. All CDs are mastered at 44.1 so if you only use the converter for CD reproduction the 48 and 32 LEDs should never be lit. DAT machines give the choice of sample frequencies. Digital broadcast is generally 32 Khz. The system used for displaying the sample frequencies requires that proper status byte data is on the data stream. Several DAT machines do not provide stanard status bytes. This will not affect in any way the integrity of the audio conversion but may cause the wrong LED to be lit.

SPECIFICATIONS

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WARRANTY

All Manley Laboratories equipment is covered by a limited warranty against defects in materials and workmanship for a period of 90 days from date of purchase to the original purchaser only. A further optional limited 5 year warranty is available to the original purchaser upon proper registration of ownership within 30 days of date of first purchase.

Proper registration is made by filling out and returning to the factory the warranty card attached to this general warranty statement, along with a copy of the original sales receipt as proof of the original date of purchase. Only 1 card is issued with each unit, and the serial number is already recorded on it.

If the warranty registration card has already been removed then this is not a new unit, and is therefore not warranted by the factory. If you believe this to be a new unit then please contact the factory with the details of purchase.

This warranty is provided by the dealer where the unit was purchased, and by Manley Laboratories, Inc. Under the terms of the warranty defective parts will be repaired or replaced without charge, excepting the cost of tubes. No warranty is offered on tubes, unless:

1. a Manley Laboratories preamplifier is used with a Manley Laboratories amplifier, and
2. the warranty registration card is filled out.

In such a case a 6 month warranty on tubes is available with the correct recording of the serial number of the preamplifier on your warranty registration card.

If a Manley Laboratories product fails to meet the above warranty, then the purchaser's sole remedy shall be to return the product to Manley Laboratories, where the defect will be repaired without charge for parts and labour. The product will then be returned via prepaid, insured freight, method and carrier to be determined solely by Manley Laboratories. All returns to the factory must be in the original packing, (new packing will be supplied for no charge if needed), accompanied by a written description of the defect, and must be shipped to Manley Laboratories via insured freight at the customer's own expense. Charges for unauthorized service and transportation costs are not reimbursable under this warranty, and all warranties, express or implied, become null and void where the product has been damaged by misuse, accident, neglect, modification, tampering or unauthorized alteration by anyone other than Manley Laboratories.

The warrantor assumes no liability for property damage or any other incidental or consequential damage whatsoever which may result from failure of this product. Any and all warranties of merchantability and fitness implied by law are limited to the duration of the expressed warranty. All warranties apply only to Manley Laboratories products purchased and used in the USA.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

WARRANTY REGISTRATION

We ask that you please fill out this registration form and send the bottom half to:

MANLEY LABORATORIES
REGISTRATION DEPARTMENT
13880 MAGNOLIA AVE.
CHINO CA, 91710

Registration entitles you to product support, full warranty benefits, and notice of product enhancements and upgrades. You MUST complete and return the following to validate your warranty and registration. Thank you again for choosing to use Manley Laboratories.

MODEL _____ SERIAL No. _____

PURCHASE DATE _____ SUPPLIER _____

PLEASE DETACH THIS PORTION AND SEND IT TO MANLEY LABORATORIES

MODEL: MANLEY LAB SERIES DELTA SIGMA DIGITAL CONVERTER

SERIAL No. _____

PURCHASE DATE _____ SUPPLIER _____

NAME OF OWNER _____

ADDRESS _____

CITY, STATE, ZIP _____

TELEPHONE NUMBER _____

Serial #'s of Associated Manley Laboratories Equipment _____
