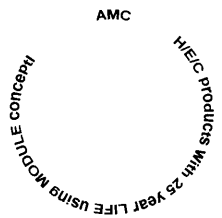
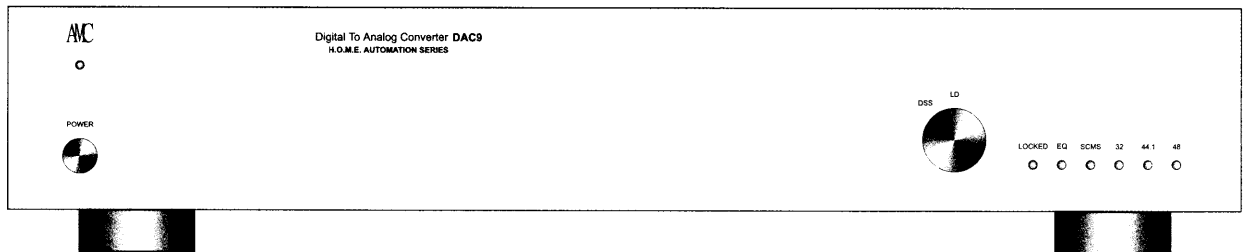


# AMC DAC9

## DIGITAL TO ANALOG CONVERTER



### INSTRUCTIONS FOR INSTALLATION AND OPERATION



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



AFIN DE VITER UN CHOC ELECTRIQUE ET LES CONSEQUENCES GRAVES QUI POURRAIENT EN RESULTER, TENEZ PAS D'OUVRIR L'APPAREIL ET DE TOUCHER AUX COMPOSANTS INTERNES SANS LA PRESENCE D'UNE PERSONNE QUALIFIEE.



PARA REDUCIR EL RIESGO DE SACUDIDAS ELECTRICAS, NO DEBERA QUITARSE LA TAPA (NI PARTE POSTERIOR). CONSULTESE AL PERSONAL CAPACITADO PARA LAS REPARACIONES INTERNAS.

**WARNING:** TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

**ADVERTENCIA:** PARA EVITAR EL RIESGO DE INCENDIO O SACUDIDA ELECTRICA, NO DEBERA EXPONERSE ESTE APARATO A LA LLUVIA O HUMEDAD.

**CAUTION:** TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARISED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

**ATTENTION:** POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR. UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

**PRECAUCION:** PARA EVITAR SACUDIDAS ELECTRICAS, NO DEBERA UTILIZARSE ESTA CLAVIJA POLARIZADA CON UN CORDON DE PROLONGACION, RECEPTACULO U OTRO TIPO DE SALIDA A MENOS QUE SE HAYAN INSERTASO COMPLETAMENTE LAS LENGÜETAS PARA EVITAR SU EXPOSICION.

**NOTE:** Some AMC products are equipped with dual or multi-voltage transformers (which is indicated on the back panel). If you wish to change the voltage, please bring your unit to an authorised AMC service technician for internal conversion.

**ATTENTION:** Quelques pièces AMC sont munies de transformateurs à double ou à multi-voltage (indiqué au panneau arrière). Si vous voulez changer le voltage, veuillez apporter votre appareil au fournisseur de AMC pour le transformer.

**ZUR BEACHTUNG:** Einige AMC Geräte sind mit Umschaltern für unterschiedliche Netzspannungen ausgerüstet (Ein Vermerk auf der Rückseite weist darauf hin).

Die Anpassung, wenn notwendig, muß von einem qualifizieren Techniker in einer AMC Servicestation vorgenommen werden.

**NOTA:** Ciertos componentes de AMC están dotados de transformadores de doble tensión o de varias tensiones (lo que se indica en el panel posterior). Si se desea cambiar la tensión, sírvanse llevar el aparato a un técnico autorizado por AMC para su conversión interna.

**NOTE TO CATV systems installer:** This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

**NOTA PARA EL INSTALADOR DE ANTENAS DE TELEVISION COLECTIVAS:** La presente advertencia se provee para llamar la atención del instalador al Artículo 820-22 de NEC (Código Eléctrico Nacional) donde se facilitan las directrices para la pertinente puesta a tierra y que especifica en particular que el conductor a tierra del cable debe conectarse al sistema de conexión a tierra del edificio, lo más proximo posible al punto de entrada del cable.



The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of "uninsulated" dangerous voltage" within the product's enclosure; that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

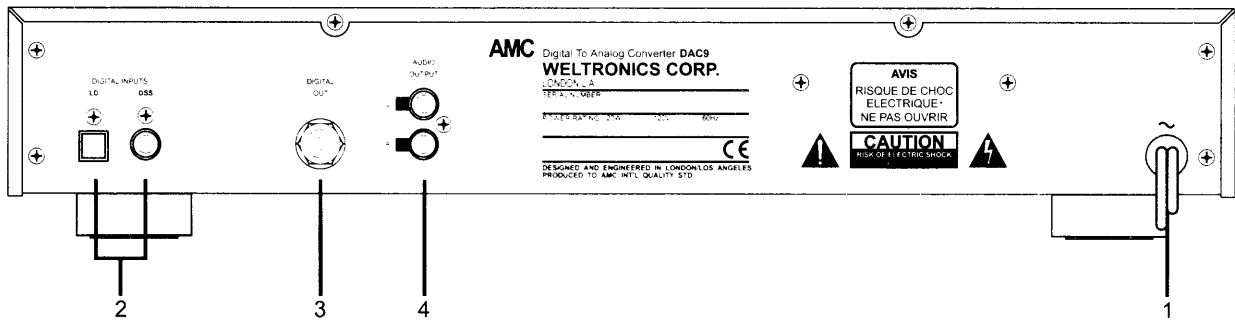
# APPLICATION AND FEATURE LIST

## Features of AMC model DAC9

- \*The AMC model DAC9 was designed to meet professional quality standards for Digital to Analog signal conversion.
- \*The highest grade of components are used throughout with critical components selected for their sonic performance.
- \*Double sided, through hole plated, Printed Circuit Board for DAC sections.
- \*The AMC model DAC9 provides 2 selectable S/PDIF input, one coaxial and one fiber optic.
- \*The DAC9 can automatically lock to either 32 KHz, 44.1 KHz or 48 KHz digital sampling rates for use with laser disc players, CD's or DAT machines.
- \*The AMC model DAC9 uses the latest generation of bit stream continuous calibration ultra-linear Digital To Analog Converter, with inherently low jitters.
- \*For those users with digital recording capabilities, the DAC9 has a digital output for connection to DAT, MD or DCC type machines, thus maintaining the ultimate in recording quality.
- \*The AMC DAC9 provides an accurately calibrated output level in accordance with the EIA (Electronic Industries Association) recommended standard of 2 volts. This output level provides the best possible performance particularly for home theater users.
- \*The fiber optic input provides electrical isolation from Laser Disc players, thereby avoiding conducted interference from Video sources into the Audio chain.
- \*The superior performance of the DAC9 will provide not only improved technical specifications to your system, it will also significantly upgrade its sonic qualities.
- \*The DAC9 can be easily upgraded with MD5404u1 that provides your system with soft and smooth vacuum tube sound. (To upgrade with MD5404u1, please contact with AMC distributor/dealers in your country for more information.)

# REAR PANEL CONNECTIONS/FRONT PANEL CONTROLS

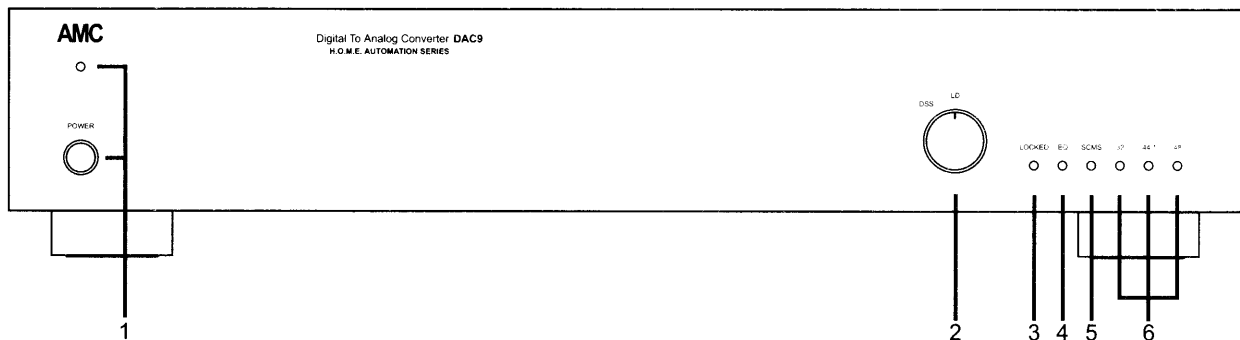
## REAR PANEL



- 1. AC LINE CORD
- 2. DIGITAL INPUTS: LD, DSS

- 3. DIGITAL OUT
- 4. AUDIO OUTPUT

## FRONT PANEL



- 1. POWER SWITCH AND POWER INDICATOR
- 2. INPUT SELECTOR SWITCH
- 3. 'LOCKED' INDICATOR

- 4. 'EQ' INDICATOR
- 5. 'SCMS' INDICATOR
- 6. '32', '44.1', '48' INDICATOR

# REAR PANEL CONNECTIONS

## 1. AC LINE CORD

Plug the AC line cord into a nearby wall outlet that provides the correct AC power line voltage, or into an un-switched convenience outlet on any AMC product.

## 2. DIGITAL INPUTS: LD, DSS

These inputs are for connection to Digital signal sources via one Toslink fiber optical jack for LD and one RCA jack for DSS. All these inputs will accept any digital signal between 32 and 48 kHz

## 3. DIGITAL OUTPUT: DIGITAL OUT

This digital output is for digital recording via BNC terminal, to allow onward connection to another digital component (Such as a DAT, DCC, Mini Disc or other digital recorder).

## 4. AUDIO OUTPUT

These L & R stereo audio outputs are the outputs of the Digital to Analog Converter. Connect these outputs to any input on your amplifier except "phone" or "turntable", using a high quality interconnection cable.

# FRONT PANEL CONTROLS

## 1. POWER SWITCH

The DAC9 is turned on by depressing the power switch. The small indicator above the switch will glow green.

## 2. INPUT SELECTOR SWITCH

The rotary switch selects which digital input source (LD, DSS) is fed to the input of the DAC.

## 3. 'LOCKED' INDICATOR

When illuminated this indicates that the selected digital input is being processed in the Digital to Analog Converter and is 'locked' in. If the 'locked' light does not illuminate then there is no digital information being received. Check your source and connectors to trace the fault. Please note, on certain source components it is necessary to switch on the digital output.

## 4. 'EQ' INDICATOR

The 'EQ' light is illuminated when the Digital Output signal requires analog de-emphasis. This function is automatically handled by the advanced digital processing circuitry. EQ is a form of noise reduction used in the early days of digital recording, but rarely used today.

## 5. 'SCMS' INDICATOR

Stands for 'Serial Copy Management System', a device that is built into all pre-recorded digital software (CDs, DCCs ect.) to allow only one digital copy of the original recording to be made. The SCMS indicator will illuminate if the software source is 'copy protected'.

## 6. '32', '44.1', '48' INDICATOR

When in operation one of these LEDs will illuminate indicating the frequency in kilohertz of your selected digital input. CD Transports operate at 44.1 kHz and DCC/DAT player at anything between 32 and 48 kHz (depending on tape speed and machine). NICAM and Digital Audio Broadcasting (from satellite) commonly operate at 32 kHz, although this can vary.

**NOTE: Before making copies of any pre-recorded material ensure you comply with all copyright restrictions that may apply.**

## SPECIFICATIONS

THD and SMPTE IMD @1 kHz/0dB.....	0.005% "A"-wtd
Signal to Noise Ratio .....	104dB "A"-wtd
Output Level .....	2V rms
Frequency Response 20 Hz - 20 kHz .....	<+/-0.5dB
Channel Separation ref. 1 kHz .....	>90dB
Channel Unbalance .....	±0.3dB
Resolution .....	18 bits
Output Impedance .....	220 ohm
Linearity up to -90 dB .....	±0.5 dB
Wow and flutter .....	Quartz control precision
Input automatically locked to 32k, 44.1k and 48kHz SPDIF digital signals.	
Dimensions (W x H x D) .....	430 x 82 x 300 mm

Weltronics Corp. reserved the right to improve its products at any time. Specifications are subject to change without notice.

# SAFETY INSTRUCTION

## 1. READ INSTRUCTIONS

All the safety and operating instructions should be read before the appliance is operated.

## 2. RETAIN INSTRUCTIONS

The safety and operating instructions should be retained for future reference.

## 3. HEED WARNINGS

All warnings on the appliance and in the operating instructions should be adhered to.

## 4. FOLLOW INSTRUCTIONS

All operating and use instructions should be followed.

## 5. WATER AND MOISTURE

The appliance should not be used near water—for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

## 6. CARTS AND STANDS

The appliance should be used only with a cart or stand that is recommended by the manufacturer.

### 6A.

An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



## 7. WALL OR CEILING MOUNTING

This equipment is not designed for use mounted on a wall or a ceiling.

## 8. VENTILATION

The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as bookcase or cabinet that may impede the flow of air through the ventilation openings.

## 9. HEAT

The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

## 10. POWER SOURCES

The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

## 11. POWER-CORD PROTECTION

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

## 12. CLEANING

The appliance should be cleaned only as recommended by the manufacturer.

## 13. NON USE PERIODS

The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

## 14. OBJECT AND LIQUID ENTRY

Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

## 15. SERVICING

The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

## 16. DAMAGE REQUIRING SERVICE

The appliance should be serviced by qualified service personnel when:

- The power-supply cord or the plug has been damaged; or
- Objects have fallen, or liquid has been spilled into the appliance; or
- The appliance has been exposed to rain; or
- The appliance does not appear to operate normally or exhibits a marked change in performance; or
- The appliance has been dropped, or the enclosure damaged.

## 17. POWER LINES

### (APPLIES TO TUNER AND RECEIVERS ONLY)

An outdoor antenna should be located away from power lines.

## 18. OUTDOOR ANTENNA GROUNDING

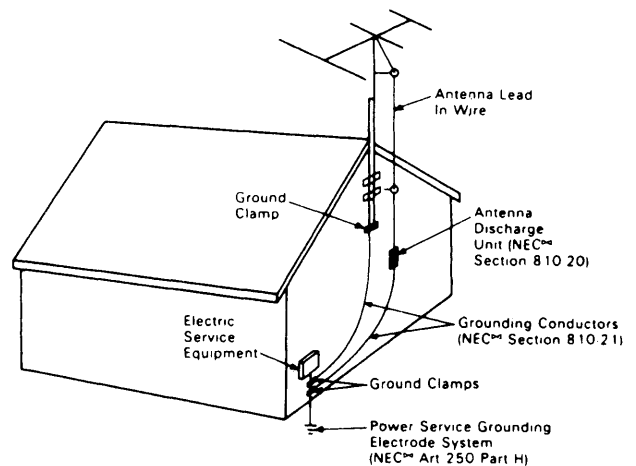
### (APPLIES TO TUNER AND RECEIVERS ONLY)

If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.

Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure.

- Use No. 10 AWG (5.3 mm<sup>2</sup>) copper, No. 8 AWG (8.4mm<sup>2</sup>) aluminum, No. 17 AWG (1.0mm<sup>2</sup>) copper-clad steel or bronze wire, or larger, as a ground wire.
- Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4–6 feet (1.22–1.83 m) apart.
- Mount antenna discharge unit as close as possible to where lead-in enters house.
- Use jumper wire not smaller than No. 6 AWG (13.3 mm<sup>2</sup>) copper, or the equivalent, when a separate antenna-grounding electrode is used. See NEC Section 810-21 (j).

Antenna Grounding According to the National Electrical Code



<sup>®</sup>National Electrical Code  
Available from Library, book  
stores, or National Fire Protection  
Association (Batterymarch Park,  
Quincy, MA 02269)

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