

Digital Audio Driver

DAD-M100dc+

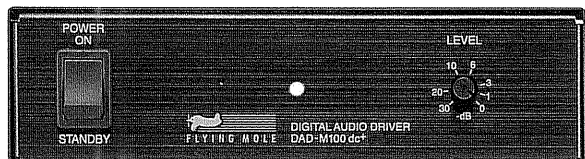
Owner's Manual

Thank you for purchasing the DAD-M100dc+. In order to use the product in a safe manner, please read this Owner's Manual thoroughly before using. Also, keep this manual for future reference.

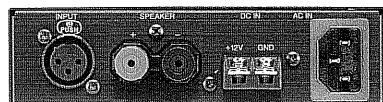
DAD-M100dc+ BI



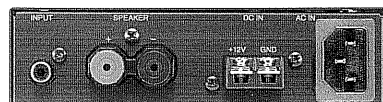
DAD-M100dc+ BI/BB/HT



DAD-M100dc+ BB

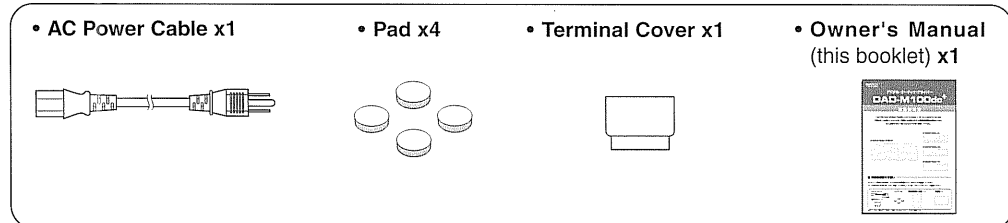


DAD-M100dc+ HT



Accessory Checklist

Before proceeding with the setup, make sure that the following accessories are included in the package. If anything is missing, please contact the dealer whom you purchased the amplifier from, or Flying Mole Corp.



* The DC power cable is not provided as the accessory. Use 12 AWG or larger gauge cable.

Safety Instructions

THE APPARATUS IS NOT WATERPROOF, TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE AND DO NOT PUT ANY WATER SOURCE NEAR THIS APPARATUS, SUCH AS VASE, FLOWER POT, COSMETICS CONTAINER AND MEDICINE BOTTLE ETC.

IMPORTANT NOTICE

If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "NO", please try to eliminate the problem by using one of the following measures: Relocate either this product or the device that is being affected by the interference. Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s.

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to coaxial type cable. If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Flying Mole Corporation.

2 Features

Applications

- Power amplification for emergency announcement systems used in disasters, etc.
- Power amplification for outdoor sound systems used at events, etc.
- Power amplification for portable sound systems used in parades, etc.

- **Operates on 12V DC** The DAD-M100dc+ utilizes a highly efficient DC/DC power converter, which achieves an amazing total efficiency of 95%. This enables the unit to supply amplified power in emergencies such as power outages, or outdoor use, etc.
- **Large Power Output** 100W/8Ω Monaural, 160W/4Ω Monaural
- **Compact Size** BI: 157(W) x 43(H) x 229(D) mm
6-3/16"(W) x 1-11/16"(H) x 9"(D)
BB, HT: 157(W) x 43(H) x 238(D) mm
6-3/16"(W) x 1-11/16"(H) x 9-3/8"(D)
- **Lightweight** Weight: Approximately 920g (2.02lbs)
- **Highly Efficient** Total efficiency of 85% (AC Input to SP Output).
Low heat generation-case temperature is approximately Tc43°C (room temperature Ta=25°C) ΔT=approximately 18°C, temperature under controlled test conditions: 1/8th rated output.
- **Sealed Enclosure** Sealed case without ventilation offers natural cooling. This highly reliable design prevents dust from entering the amplifier.
- **Total Harmonic Distortion** Low distortion rate 0.03% (8Ω/1kHz 50W output).

1 Safety Instructions



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



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.



THIS SYMBOL INDICATES THAT DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT.



THIS SYMBOL INDICATES THAT THERE ARE IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS IN THE OWNER'S MANUAL WITH THIS UNIT.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

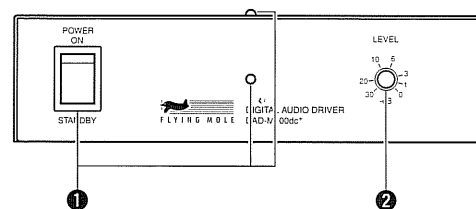
The important safety instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operated normally, or has been dropped.



3 Component Names

Front Panel



1 Power Switch/Indicator

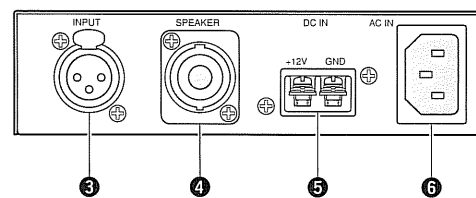
Used to turn the amplifier's power ON or STANDBY. Two (2) indicators light when the power is turned ON.

2 INPUT LEVEL controller

Controls the input signal level. The level can be adjusted from 0dB to -30dB. (This level should normally be set to "0dB" and the volume control on the preamplifier, etc. that is connected to the amplifier should be used to control volume.)

Rear Panel

BI Type



3 INPUT Jack

Used to connect the input signal to the amplifier. Connect the jack to the PRE OUT jack on the preamplifier, etc. BI, BB type XLR (balanced) input wiring: 1: GND, 2: HOT, and 3: COLD

4 SPEAKER Connector

Used to connect the amplifier to the speaker. Make sure that the speaker's impedance is 4ohms or higher. 1+/2+ and 1-/2- pins are wired in parallel in the Speakon connector used on the BI type. The Binding Post type terminals are used for HT/BB type.

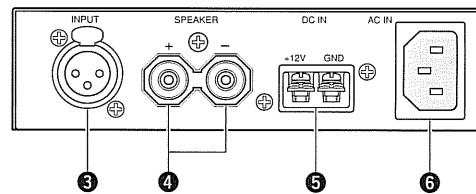
5 DC IN Terminals

These are used to connect the DC power cable to the amplifier.

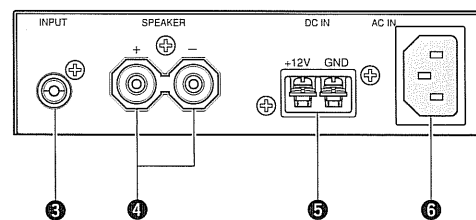
6 AC IN Jack

Used to connect the AC power cable to the amplifier. On HT and BI type, use the supplied AC power cable and connect this jack to an AC power outlet.

BB Type

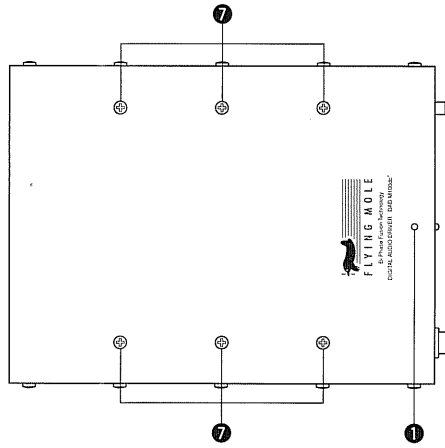


HT Type

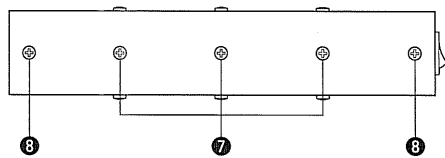


Enclosure

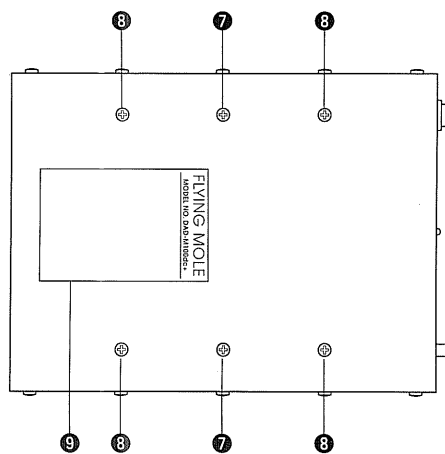
Top



Side (Left and right sides are the same)



Bottom

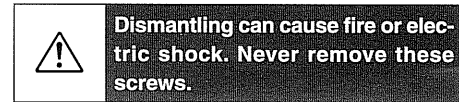


Optional Plate Attachment Screws

Use these screws to attach the optional (*) mounting plate.

Enclosure Attachment Screws

These screws are used to hold chassis together.



Product Label

(*) DAD-M100dc+ Optional Mounts

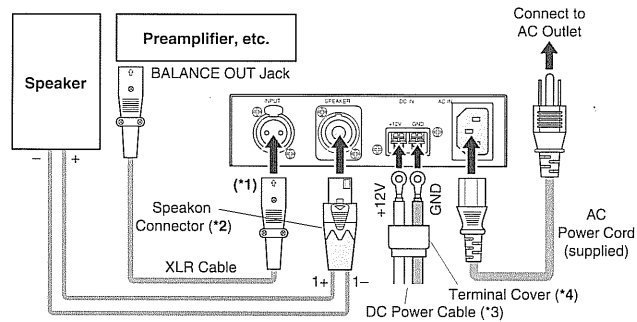
- M100-1L** [Example]
- M100-6M** [Example]
- M100-1u** [Example]

• The DAD-M100dc+ can be mounted side by side in pairs.
• Two to eight DAD-M100dc+s can be stood on their sides and mounted.

4 Connections

- Make sure the power of all related equipments is turned off, when wiring and checking their polarity.
- When connecting the speaker cable, make sure that the cable is not shorted.
- Only connect the power cable after all connections are complete.
- Jack names may be differ from this manual.

BI Type



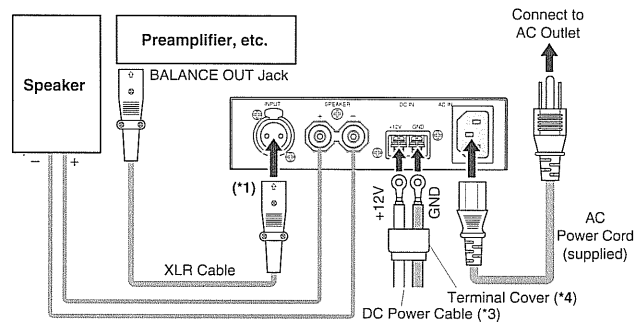
*1 BI, BB Type XLR (balanced) input wiring : 1: GND, 2: HOT, and 3: COLD.

Recommended connector : Neutrik NC3MX or similar

*2 1+/2+ and 1-/2- pins are wired in parallel in the Speakon output jack used on the BI type.

Recommended connector : Neutrik NL4FX or similar

BB Type

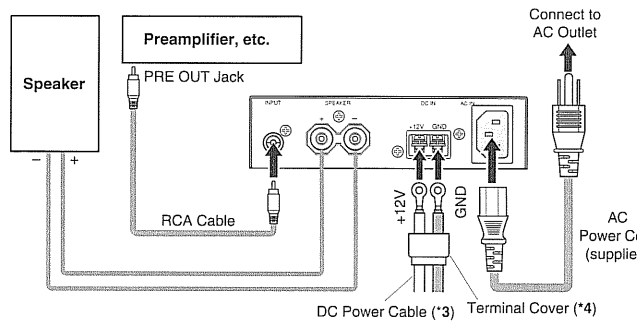


*3 Take Care When Wiring the DC IN

- Make sure that the cable is fitted with round terminals to ensure safety and provide a secure connection.
- Use a 12 AWG or larger gauge cable.
- After wiring is complete, use a clamp or insulated tape to secure the wires, etc.
- Only use a DC power source that matches the unit's power input capacity.

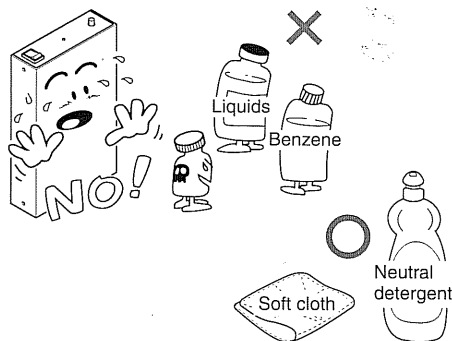
*4 After wiring is complete, attach the supplied terminal cover to prevent short circuits.

HT Type



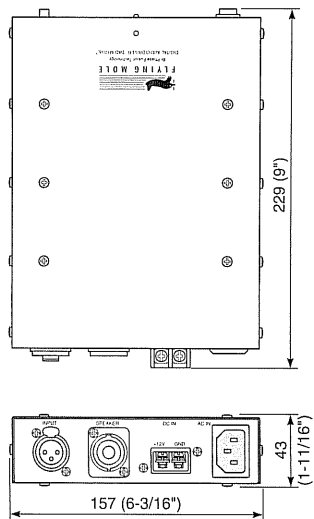
5 Maintenance

Never use liquids such as benzene, thinners, etc., chemically treated cloths, and do not spray any aerosol type insecticides on the amplifier. Clean the case using only a soft, dry cloth. If the amplifier becomes soiled, mix a solution of water and a neutral detergent then dampen a soft cloth in the solution, wring out as much of the solution as possible, and clean the amplifier. Then use a soft, dry cloth to wipe the surface dry.

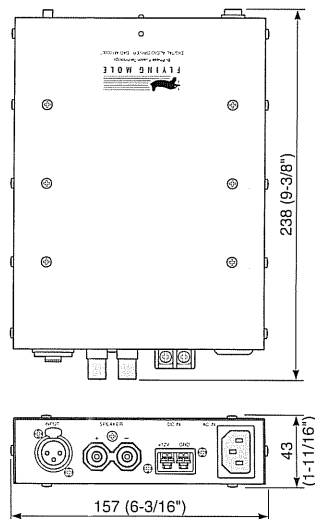


6 Dimensions

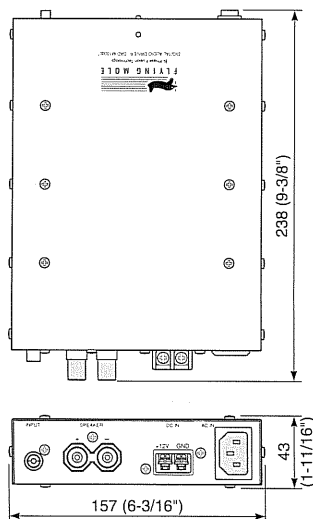
BI Type



BB Type



HT Type



Unit: mm (")

7 Specifications

	BI Type	BB Type	HT Type
Rated Output		100W (8Ω) 160W (4Ω)	
Frequency Response	5Hz~50kHz (8Ω / +0, -3dB)	5Hz~25kHz (4Ω / +0, -3dB)	
Total Harmonic Distortion	0.03% (8Ω / 1kHz, 50W output)	0.05% (4Ω / 1kHz, 50W output)	
S/N Ratio	120dB (400Hz~30kHz BPF)		
Residual Noise	25μV (400Hz~30kHz BPF)		
Input Sensitivity	2Vrms		1Vrms
Input Impedance	47kΩ		10kΩ (VR max)
Input Jack	XLR (Balanced)		RCA (Unbalanced)
SP Output Terminal	Speakon	Binding Post	
AC Power Connector	AC: 3 pole detachable		DC: 2 pole terminal
Volume Control Range	0 ~ -30dB		
Power Consumption (AC Operation)	22W / 8Ω		20W / 8Ω
Input Current (DC Operation)	5A (4Ω 1/3 output)		
Power Supply	AC120V 60Hz (U.S.A. & Canadian model) / AC230V 50Hz (European model) Other areas : mentioned on the sheet attached on the bottom cover. /DC+12V ~ +14V		
Temperature Range	0°C ~ 40°C		32°F ~ 104°F
Dimensions inch / mm	6-3/16"(W) x 1-11/16"(H) x 9"(D) 157(W) x 43(H) x 229(D)		6-3/16"(W) x 1-11/16"(H) x 9-3/8"(D) 157(W) x 43(H) x 238(D)
Weight	920g (2.02 lbs)		

* Due to product improvement, specifications and/or product design are subject to change without notice.

8 Limited Warranty

Warranty period is shown by the distributor in your market. In case defects occur during this period not due to mishandling or modification, please send the product together with proof of purchase to the dealer where you had purchased or to the following address if it is shown.

This document is printed with soy ink (an organic ink made from soy oil) on recycled paper. Environmentally friendly printed matter.



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