

11.0 Technical Specifications

MARS HYBRID INTEGRATED AMPLIFIER WITH USB DAC and WIRELESS

- Power Output: Class A RMS 25W per channel
- Frequency Response: 20Hz-40kHz (+/-0.5dB 1W)
- S/N Ratio: 92dB
- Output Power Distortion: <1% (4W 1kHz)
- Input Sensitivity: 220mV
- Inputs: LINE, USB DAC, Wireless
- Max. Line Input: RMS 3.5V
- USB DAC Spec.: 24 Bit 96kHz (IC Parts No.: VT1620)
- Speaker Output Impedance: 4Ω or 8Ω
- Headphone Output Impedance: 32-600Ω
- Overall Negative Feedback: -39dB
- Overall S/N Ratio: 83dB
- Power Consumption: Max. 180W
- Operation Method: Class AB
- Output: Preamplifier
- Tubes Required: 6N3
- Dimensions: 190 x 128 x 40 mm (W x D x H)
7.5" x 5" x 1.5"
- Weight: 3.5kg / 7.8lbs

***Thank-you for selecting DARED
as your choice for your
audio entertainment system
and listening pleasure.***

Experience The Art of Tube

Dared

Tube The Purity of Sound

Dared

MARS

UNIVERSAL TUBE HYBRID INTEGRATED AMPLIFIER WITH USB DAC and WIRELESS with HEADPHONE OUTPUT



WARNING!

**Read the instruction manual
completely before use.**

**IT CONTAINS VITAL SAFETY, WARRANTY
AND LIABILITY INFORMATION.**

By using the product the user acknowledges their
responsibility and agrees to the warranty and liability
statements and safety notices.

Manual Rev 1.3 Nov 26 2014

DARED AUDIO INTERNATIONAL
www.dared.com.hk

© 2010-2014 DARED Due to constant improvements, specifications and functions subject to change without notice. Failure to read and follow the guidelines established in the manual may void warranty. Customer is solely responsible for use. Tampering or modifying the unit voids warranty. Consult Warranty Statement for all details.

Dear Valued Customer:

Thank-you for purchasing our revolutionary MARS tube based hybrid Class AB Integrated Amplifier for your home or office as part of your music entertainment system. This component has been designed to offer state-of-the-art high-end performance in an elegant package while retaining all the sonic hallmarks on which DARED has been recognized for since 1995. Our dedication to the "Purity of Sound" is an important reason why our products are sought after retain their value over time.

The performance of your MARS amplifier will continue to improve during the first 480 hours of listening. This is the result of a "break-in" period required for the numerous high quality electronic parts and ageing of the tube used in the preamplification stage. Before use we encourage you to please read this manual thoroughly to properly acquaint yourself with its features. We hope you enjoy listening to our Product as much as we have had the pride that we have taken in manufacturing this fine receiver for your listening pleasure. Thank-you for choosing DARED for your audio experience!

FCC NOTICE: This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful Interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment generates RF energy and if not installed or used in accordance with the instructions, may cause harmful interference to radio communications and other devices. There is no guarantee that interference will not occur. If this equipment does cause harmful interference which can be determined by turning the equipment on or off or transmitting momentarily, the user is encouraged to try to correct the interference by one or more of the following methods:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect equipment into an outlet on a circuit that is different from that to the receiver is connected to.
- Consult the dealer or an experienced radio/TV/ communications technician.

CE DECLARATION OF CONFORMITY

DARED AUDIO INTERNATIONAL,
Declares that this equipment complies with the essential requirements of the following application Council Directive: 1995/5/EC on Radio Equipment and Telecommunications Terminal Equipment R&TTE Registration Numbers: ATE20141517; ATE20141518; ATE20141519; ATS2014445

Model No. MARS

This compliance is based on conformity with the following harmonized standards or documents:

EN 301 489-1 V1.9.2: 2011 EN 62479:2010 EN301 489-17 V2.2.1:2012
EN 60065:2002 +A1:2006 + A11:2008 EN 300 328 V 1.7.1:2006
A2:2010 + A12:2011

Shenzhen, Feb 24 2014
Place and Date of Issue

10.0 MAINTENANCE:

10.1 Tube Replacement

When should I replace a tube? This is a hard one to answer as in this unit your tube should last depending on its use for a very long period of time. If you hear unusual sounds, squeals, or have low audio output, or distorted output, it is time to consider replacing the tube. Your DARED Dealer may assist. Replace tubes always with the same model number.

10.2 Regular Care

Keep the unit clean and free of dust.

Always turn of power and let the tube cool before cleaning the tube area and unit.

The vacuum tube may be removed easily with a gentle jiggle while lifting the tube upwards out of its socket. Use the same method when re-installing the tubes. Only touch when cool.

When cool the vacuum tubes may be cleaned with a soft and slightly dampened microfiber cloth.

The case may be cleaned with a slightly sampled microfiber cloth and then polished using a separate dry soft microfiber cloth.

9.0 Basic Troubleshooting

Symptom	Cause	Possible Solution
A. Unit does not power up when the Power Switch is Pressed	1) No Power to unit	1) Check that power supply and its AC line cord is plugged into both the AC power adapter as well as to a powered electrical outlet 2) Check if the power supply cable with 3.5 mm plug is secured to the amplifier's power input socket on the rear panel of the amplifier.
B. Unit powers up, Vacuum Tube does not light up or glow.	1) Tube not seated 2) Tube is defective	1) Check tube 2) Replace tube
C. No Sound from Speakers	1) Audio input not connected 2) Incorrect Input setting 3) Low volume 4) Speaker issue	1) Check input connections and make sure that the source is in play mode if applicable 2) Check input selector 3) Check volume control, check speaker connection, check tube 4) Check speaker connections 5) Check speakers
D. Poor sound stage, Poor audio presence, acoustic image is unstable characterized by an unnatural sound and insufficient low range tonal quality.	1) Speaker polarities are reversed and not un-matched to the polarity of the amplifier.	1) Check speaker connections: Right Speaker Output connection for Right Speaker, Left Output connection for Left Speaker 2) Check that speaker polarity connections are correct: Red of Amp to Red of Speaker (+); Black of Amp to Black of Speaker (-)

If you continue to experience difficulty and cannot solve your issue or have other problems or where the particular problem is not listed, disconnect the power cord and contact your Authorized DARED Dealer for assistance.

1.0 UNPACKING: The **DARED MARS Hybrid Integrated Amplifier** should be removed from its box with care. The following accessories should be found inside:

- AC power supply with cable
- Tube cover
- Wireless Antenna
- This Owner's Manual
- One set of lint free gloves
- Soft cloth bag for MARS
- USB Cable

As soon as the amplifier is safely removed from its packaging please perform a thorough physical inspection and report any physical damage to your dealer immediately. We suggest that you keep all of the original packaging, storing it in a safe, dry place in the event that you may need it later to transport or move this product.

At this time also please locate the Product Registration Card and write down the serial number of your new MARS Amplifier in the space provided on the card as well as below for future reference.

Serial No.: _____ **Date of Purchase:** _____

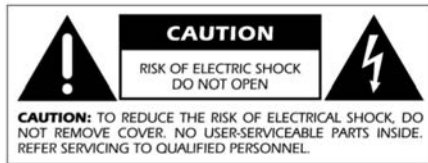
2.0 About your MARS Hybrid Amplifier: Dared enters a new area for both new and veteran audio enthusiast alike. Combined with the latest Class AB Texas Instruments Monoblock linear amplifier with the exceptional true to life characteristics of the 6N3 tube used in the pre-amp stage, DARED delivers an affordable yet performing amplifier with true to life imaging. Its Class AB bridge-tied load (BTL), transformerless output configuration provides exceptional impedance bridging even at a very low load of 2 ohms. For wireless a CSR 8645 2.4 GHz hi end audio chipset is used to reduce any digital noise and provide an outstanding performance. The aluminum chassis itself reduces resonance as well as dissipates heat. An overdesigned power stage prevents high frequency distortion as well as any crosstalk between the high and low voltage signal paths. With a preamp output, MARS can also be the bridge between vintage audio equipment with modern technology adding USB DAC and wireless connection to Smartphones etc.. Quality components are used throughout the assembly that should provide you with many years of listening pleasure. Included in your component selection, design and fabrication :

- All wiring used is made of Oxygen Free Copper (OFC) having enhanced conductivity advantageous to audio signal transmission.
- PCB using 2 oz copper layer to maintain extreme low resistance and noise
- Japanese Nichicon high quality Electrolytic Capacitors
- Gold plated connectors
- Select 6N3 Vacuum Tube
- For superior high frequency performance, Non-inductive resistors used
- Gold tube socket connections

3.0 SAFETY NOTICES:

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings and follow all instructions in this Manual.
4. Do not use this apparatus near water.
5. Clean only with a dry cloth.
6. Do not block ventilation openings. Install in accordance with instructions.
7. Do not install near any heat sources such as radiators, heat registers, stoves or another apparatus that produces heat.
8. Do not defeat the safety purpose of the polarized or grounding type plug. If the provided plug does not fit into the outlet, consult your Reseller.
9. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, etc.. Unplug the AC mains cord as well as all other connecting cables during transportation.
10. Only use attachments and accessories specified by DARED or your Authorized DARED Dealer.
11. Use a surge protector on the main AC-Line to this component as well as all other components connected to this product. Unplug this apparatus during lightning storms or when unused for long periods of time.
12. Refer all servicing to qualified service personnel. **NO USER SERVICEABLE PARTS INSIDE.** Owner may change tubes.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



OTHER SAFETY CONSIDERATIONS

1. **ALWAYS** disconnect your entire system from the AC mains before connecting or disconnecting any cables, or when cleaning any component. To completely disconnect this apparatus from the AC mains, disconnect the power supply cord plug from the AC receptacle.
2. **NEVER** use flammable or combustible chemicals for cleaning audio components.
3. **NEVER** wet the inside of this component with any liquid. If a liquid substance does enter your unit, immediately disconnect it from the AC mains and take it to your DARED Dealer for inspection.
4. **NEVER** spill or pour liquids directly onto this component.
5. **NEVER** block air flow through ventilation slots or heat sinks.

8.0 Notes

7.0 BASIC OPERATION

With all connections made and secured, and with all cables tucked away, you are now steps away from enjoying the sound quality of your MARS integrated amplifier.

To operate, turn on your MARS amplifier in the following manner:

A. Press in the main power switch in on the front panel. Immediately you will see the blue indicator light come on above the power on/off switch. There is a 20 second delay before the tube is operating normally, this is called a "Soft Start" to increase the longevity of the tube.

Allow the unit to warm up for another 1-2 minutes before using. Do not turn the amplifier on and off until you have warmed up the system for at least 3 minutes.

B. While the unit is heating up, make sure the Volume Control is turned counter-clockwise, to a lower level. This is good practice as not to damage your speakers accidentally should you have the volume turned up all the way and one of the selected inputs has an audio signal present.

C. Select the desired Source Input by using the Input Selector Switch on the front panel to the desired input setting.

D. Turn on the Input Device and, for an example a CD, press play on the CD player.

You are now ready to begin listening to music. Adjust the volume control to a comfortable and desired sound level. Your MARS comes with an elegant wooden wireless on/off Remote Control. Once you have established an acceptable volume level for your listening pleasure, you may then turn your MARS unit on and off using the Remote Control.

NOTE: It is good practice for the first 480 hours play your selected music at normal listening levels to further burn in the tubes and all components.

6. **NEVER** bypass any fuse or replace any fuse with a value or type other than those specified.
7. **NEVER** expose MARS to extremely high or low temperatures. If the amplifier has been taken out of storage from an unheated environment, let the unit acclimate to room temperature before making any connections and applying power to the unit.
8. **ALWAYS** keep electrical equipment out of reach of children. This unit has a Protective Cage / Tube Cover which guards against accidentally touching the glass tube which runs hot when the unit is in operation thus avoiding a potential injury and burn. Keep children away. Do not handle the tube when hot, or wet them. Only touch the tubes only when they are cold and the unit is unplugged from its source of AC Power.
9. **ALWAYS** unplug sensitive electronic equipment such as this unit during lightning storms.

**CONGRATULATIONS!
NOW YOU ARE READY TO START!**

4.0 Installation & Placement

Your MARS amplifier as is the case with any tube equipped device is more sensitive than most other types of audio components to EMI (electromagnetic interference) from power supplies and motors including vibration. Consequently, it should be placed at a minimum distance of 18 inches from power supplies, turntables, tape decks, AC line filters, etc..

One should never place another component directly on top of this integrated amplifier, and as good practice, it is not recommended to directly place this component on another audio component that generates heat.

NEVER PLACE THIS COMPONENT ON TOP OF A LOUDSPEAKER. Vibration picked up by the tubes will damage them and shorten their useful life.

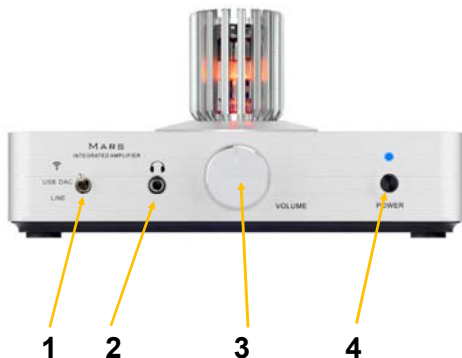
When dressing cables, take care as to tuck away loose cables so someone may not trip on them.

Allow also for ample air circulation around the MARS amplifier.

5.0 FAMILIARIZING YOURSELF WITH YOUR MARS AMP

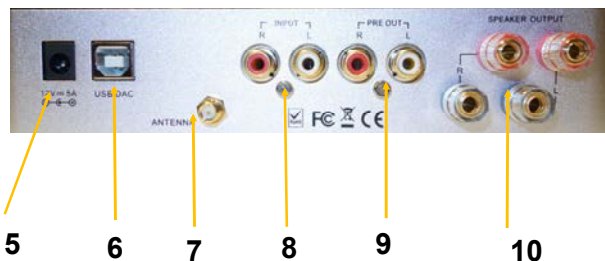
Front

Shown with protective tube cage removed.

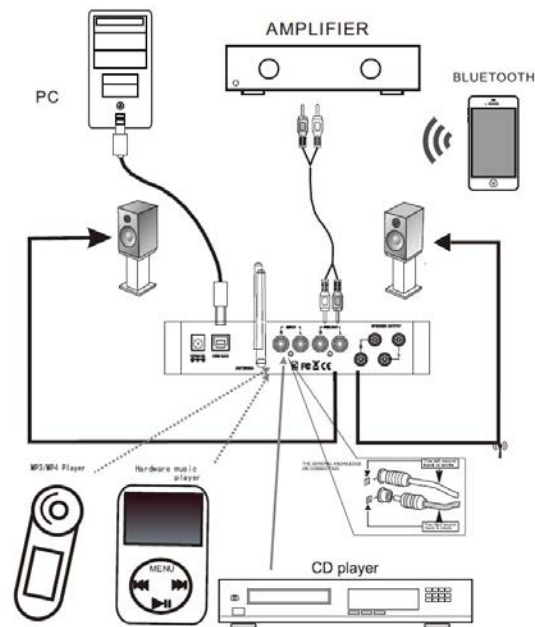


- (1) USB, LINE or Wireless input selector
- (2) Headphone Jack
- (3) Volume Control
- (4) Power On/Off Button
- (5) Power Input Jack: 12—14 VDC, 5A
- (6) USB DAC
- (7) Antenna for Wireless receiver
- (8) Line Input
- (9) Preamplifier output (L&R)
- (10) Right and Left Speaker Output; 4 or 8 Ohms

Rear Panel Connections



6.0 CONNECTIONS



6.1 Connect your MARS integrated amplifier to the various components that you wish to use. (Example: CD Player connected to Line Input via a pair of good quality RCA terminated shielded cables, and your PC to the DAC input via USB cable.) Check Channel designations (L + R, Red and Black).

6.2 Connect your MARS amplifier's speaker outputs using good quality designated audiophile speaker cable to your speakers. (Your Authorized DARED Dealer may be of assistance regarding cable selections.) Check channel designations, L & R (Left & Right) as well as Speaker Polarity Red & Black (+ and -).

6.3 With all input and output connections made, Use the supplied AC power adapter with its IEC power cord, connecting the 3.5 mm plug into the power jack on the rear panel. Ensure that the AC wall outlet you use has a functioning ground. Then, it is preferable that you plug your MARS amplifier into a surge suppressor or combination surge suppressor power bar used as well for your other audio components. Best is to connect the AC power cord, suppressor or power bar directly into a dedicated AC outlet. Best to avoid using an extension cord.

NOTE: In order to obtain the maximum performance from your audio system we strongly recommend that the detachable power cord does not come into physical contact with any of the interconnect cables running to and from your MARS amplifier. In the event that this can't be avoided, you should ensure that any cables coming into contact with each other are crossed at ninety degree angle to minimize the contact area.