

11.0 Technical Specifications

I-30HD INTEGRATED CLASS A AMPLIFIER WITH USB DAC

- . Power Output: Class A RMS 30 W per channel. Push-Pull
- . Frequency Response: 20Hz-30 kHz (+/-0.5dB 1W)
- . Output Power Distortion: <1% (10W 1kHz)
- . Input Sensitivity: 220mV
- . Input Impedance: 100 kOhms
- . Inputs: LINE 1, LINE 2, LINE 3, AUX, USB DAC
- . Max. Line Input: RMS 3.5V
- . USB DAC Spec: 32 Bit 384kHz (Option)
- . Speaker Output Impedance: 4Ω or 8Ω
- . Headphone Output Impedance: 32-600Ω
- . Overall Negative Feedback: -40dB
- . Overall S/N Ratio: 86dB
- . Power Consumption: Max. 180W
- . Operation Method: Single End Class A
- . Power Tubes Required: Matched pair 6L6G/5881/EL-34
- . Preamp & Driver Tubes Required: 12AX7 x2, 12AU7 x 2
- . Tube Bias: Automatic
- . Dimensions: 380 x 295 x 160mm (W x D x H)
15" x 11 3/4" x 6 1/3"
- . Weight: 17kg, 37.5 lbs.

*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

Model I-30HD CLASS A Push-Pull INTEGRATED AMPLIFIER WITH USB DAC

OWNER'S MANUAL



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 3.3 Sept 17 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 and classic Class A 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 I-30HD 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 throughout this integrated amplifier. 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

Accurate Technology Co., Ltd,
Declares that this equipment complies with the essential requirements of the following application directive: 2004/108/EC Electromagnetic Compatibility: Model No. I30 Vacuum Tube Amplifier. This compliance is based on conformity with the following harmonized standards or documents:

EN 55013:2001 + A1: 2003 + A2: 2006
EN 6100-3-2:2006
EN 6100-3-3:1995 + A1:2001+ A2:2005
EN 55020: 2007

Shenzhen China April 24 2009
Place and Date of Issue
Certificate on File

Per ATC Labs
Sean Liu

11.0 MAINTENANCE:

10.1 Tube Replacement

When should I replace tubes? This is a hard one to answer as in this unit your tubes should last depending on use for a 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 tubes. Your DARED Dealer may assist. Replace tubes always with the same model number and place them in the same location.

10.2 Regular Care

Keep the unit clean and free of dust.

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

Vacuum tubes 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.

10.0 Basic Troubleshooting

Symptom	Cause	Possible Solution
A. Unit does not power up when the Power Switch is Pressed	1) No Power to unit 2) Blown Fuse	1) Check that amplifier is plugged into a powered electrical outlet 2) Check if the power cable is plugged into the power socket on the rear panel of the amplifier. 3) Check the fuse.
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 unmatched to the polarity of the amplifier. 2) Output tubes may need to be changed.	3) Check speaker connections: Right Speaker Output connection for Right Speaker, Left Output connection for Left Speaker 4) Check that speaker polarity connections are correct: Red of Amp to Red of Speaker (+); Black of Amp to Black of Speaker (-) 5) Change both output tubes with new unused ones of the same type.

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 **I-30HD Tube Class A Integrated Amplifier with USB/DAC** should be removed from its box with care. The following accessories should be found inside:

- AC power cable
- USB Cable
- This Owner's Manual
- One set of lint free gloves
- Warranty Information and Product Registration Card

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 I-30HD Amplifier in the space provided on the card as well as below for future reference.

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

2.0 About your I-30HD Tube Integrated Class A Amplifier: A “Must Have” for Music lovers and audiophiles who want warm, detailed and true analog-like sound from highly compressed over-the-air digital sources in addition to MP3/MP4 players, iPods, computers or CD players when connected to the USB DAC or Line input connection. Enjoy audiophile quality music like you've never experienced it before.

The I-30HD has a very good transient response offering you with every precise detail and note along with an incredible soundstage and very high resolution due to our unique design.

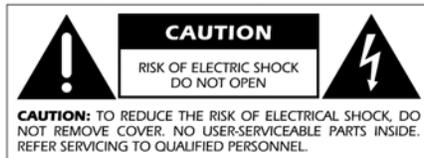
Notably, careful selection of components are used throughout the assembly that should provide you with many years of listening pleasure. Included in your component's design and fabrication :

- Custom made OFC winding toroidal audio output transformer for perfect sound reproduction
- Nichicon high quality electrolytic capacitors
- Custom made OFC winding power transformer
- PCB using 2 oz copper layer to maintain extreme low resistance and noise
- ALPS brand high fidelity grade potentiometers
- Custom made High Quality Audio Coupling Capacitors
- Custom made 5881 Vacuum Tubes by Shuguang
- Custom made 12AX7 superior grade high end audio vacuum tubes
- Ceramic tube sockets

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.

9.0 More information about your I-30HD integrated amplifier.

This is a Class A push pull integrated amplifier where two vacuum tubes are used. One tube “pushes” current out into the loudspeaker while the other “pulls” current from when necessary and as a result the signal pushed into a speaker is therefore amplified.

One benefit of a push-pull design where this leads to higher power output over a Single Ended Tube (triode amplifier). Another is where there is less current drawn when there is no sound. Both are inherent benefits of a push pull amplifier. Unlike a SET amplifier, additional circuitry inside generates an output of the wanted audio signals and removing unwanted ones that add to distortion.

This amplifier may use either 6L6G, 5881, or EL-34 power amp tubes. It is supplied with “Dared” 6L6G tubes which we feel provide you with the best, natural sound. Your amplifier has an automatic internal bias system that adjusts over the life of the tube for best performance. This feature also allows you to experiment and change out the same model tube with tubes manufactured by different manufacturers. Many audiophiles like this where they can fine tune the “sound” or “color” of the amplifier by changing out tubes to accommodate the types of music styles listened to. While tubes from varying manufacturers have the same model number, Tubes “do have” a “sound”. For those so musically inclined, gut and metal strings sound different on the violin, and violinists select strings to define their sound, and likewise guitarists select their tubes for sound.

Having said this, you will most certainly enjoy more “tube” sonic characteristic from this amplifier than others on the market today. You will also appreciate this amplifier’s soundstage presence and its dynamics and high resolution sound with a very low noise level with musical balance.



Time for you to enjoy your I-30HD!

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 I-30HD. *Also it is a good idea to remove the tube cage and ensure that the tubes are seated well before connecting to AC power, just in case they became loose in shipping.*

Then turn on your I-30HD in the following manner:

A. Press in the main power switch on the front panel. Immediately you will see the front panel VU Meter's backlight illuminate and where you will also see the tubes start to glow. There is a 20 second delay before all the tubes are operating normally, this is called a "Soft Start" to increase the longevity of the tubes.

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 rotating 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.

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.

8.0 Removing the Protective Tube Cage: To enhance your visual enjoyment of your I-30HD Integrated Amplifier you may use a long shaft, magnetized, Philips/Star-head screwdriver to access the mounting screws accessible through the holes on the top cage (cover).

WARNING!
Take care in not touching or handling or cleaning HOT tubes as they may cause a serious burn or they may shatter cutting you. Keep Children Away.



6. **NEVER** bypass any fuse or replace any fuse with a value or type other than those specified.
7. **NEVER** expose the I-30HD to extremely high or low temperatures. If the integrated 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 tubes that are used for either power conditioning, amplification, or serving as a VU Meter when the product is in use, thus avoiding a potential injury and burn. Keep children away. Do not handle the tubes 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

The I-30HD as is the case with any tube equipped device is more sensitive than most other types of audio components to EMI (electro-magnetic 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.

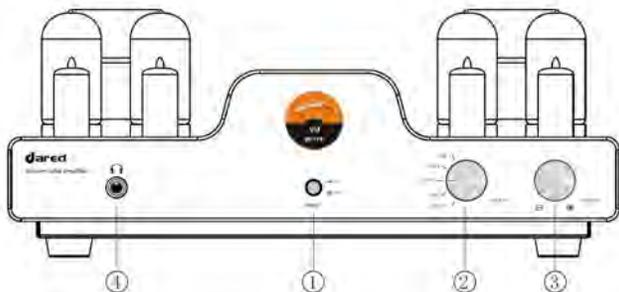
When dressing cables, take care as to tuck away loose cables so someone may not trip on them.

Allow also for ample air circulation around the I-30HD.

5.0 FAMILIARIZING YOURSELF WITH YOUR I-30HD

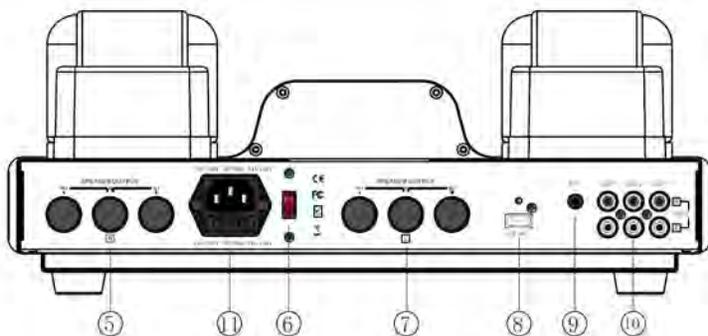
Front Panel Layout

Shown with protective tube cage removed.



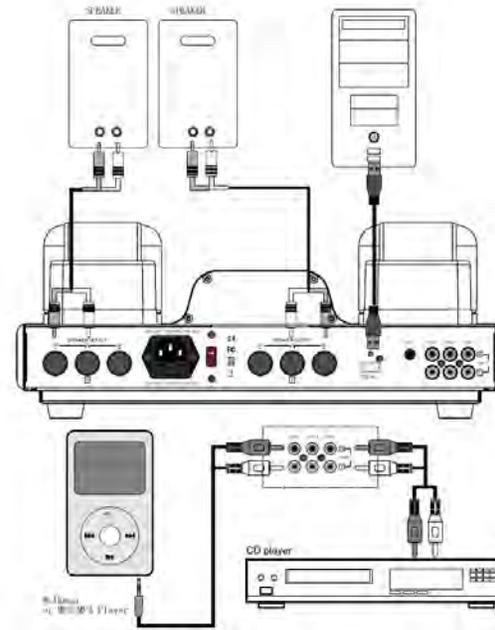
- (1) Power On/Off Switch
- (2) Input Selector (Line 1,2,3; AUX; USB DAC)
- (3) Volume Control
- (4) Headphone Output

Rear Panel Layout



- (5) Speaker Output (Right, 4 or 8 Ohms)
- (6) Voltage Selector Switch (115 V or 230 V)
- (7) Speaker Output (Left, 4 or 8 Ohms)
- (8) USB DAC Input
- (9) AUX Input
- (10) LINE 1,2,3 Inputs
- (11) AC Power Input

6.0 CONNECTIONS



6.0 SYSTEM CONNECTIONS

6.1 Connect your I-30HD 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 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, select the proper input AC mains Voltage by sliding the voltage selector to the proper AC Voltage setting.

6.4 Use the supplied AC power cable connecting it to the IEC receptacle located on the rear panel of the integrated amplifier's chassis. Ensure that the AC wall outlet you use has a functioning ground. Then, it is preferable that you plug your I30-HD into a surge suppressor power bar used as well for your other audio components, then best is to connect this 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 I-30HD. 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.