

Basic usages setup (First time installation and setup instruction)

1. OSD setup menu language selections: English/Chinese.

Main menu – Setup – Option – Language/语言.

2. Select relative signal source input:

Main menu – Source – Move up and down the cursor to select the input.

3. Subwoofer selection:

Main menu – Setup – Speaker setup – Subwoofer – No/One/Two/Three.

(Note: "No" mode only available when left and right speaker frequency response is set as full frequency).

4. Speaker configurations:

Main menu – Setup – Speaker setup – Speaker layout.

Choose speaker layout according to your speaker quantity.

(1) subwoofer "No", you can choose 9 different configurations of 3.0/5.0/7.0/5.0.2/5.0.4/7.0.2/7.0.4/7.0.6/9.0.4. (Note: "No" mode only available when left and right speaker frequency response is set as full frequency).

(2) subwoofer "One", you can choose 9 different configurations of 3.1/5.1/7.1/5.1.2/5.1.4/7.1.2/7.1.4/7.1.6/9.1.4.

(3) subwoofer "Two", you can choose 9 different configurations of 3.2/5.2/7.2/5.2.2/5.2.4/7.2.2/7.2.4/7.2.6/9.2.4.

(4) subwoofer "Three", you can choose 9 different configurations of 3.3/5.3/7.3/5.3.2/5.3.4/7.3.2/7.3.4/7.3.6/9.3.4.

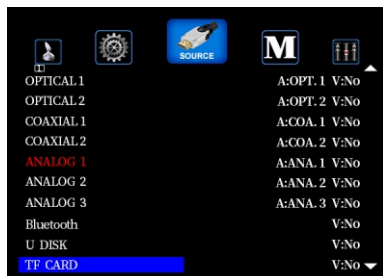
5. Speaker distance (latency):

Main menu – Setup – Speaker setup – Speaker distance.

You can set the distance from every speaker to your seat.

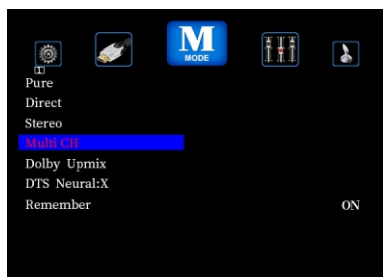
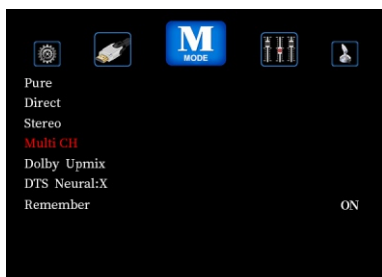
Function and Settings

1. Signal source



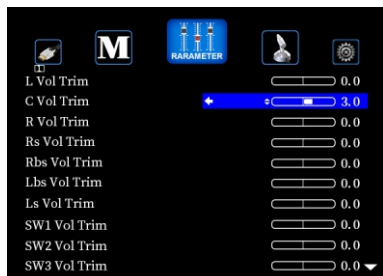
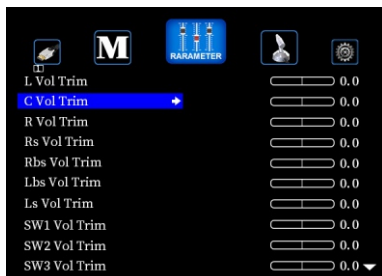
It offers all the signal inputs for selection, and display the input ports for both video and audio.

2. Mode selection



It only applies relative DSP processing to the current input source instead of all input signal sources. It offers 6 modes for option: Pure, Direct, Stereo, Multi CH, Dolby Upmix and DTS Neural:X. (when you choose mode and the memory option is "OFF", then unit will be defaulted when reboot. When the memory option is "ON", it will remember the mode you choose and will not change when reboot.)

3. Parameters



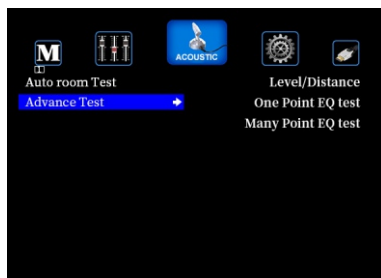
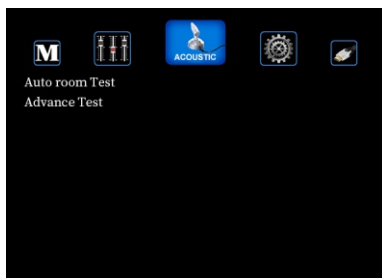
Independent output level/gain adjustment for each channel. The display differs based on different speaker configurations. Non-existent channels will be in grey color and can't be adjusted.

Remember channel volume : ON/OFF.

DRC Dynamic Range Control: ON/OFF/Auto.

Lipsync: Auto/0-1000ms.

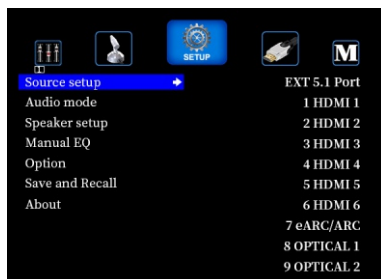
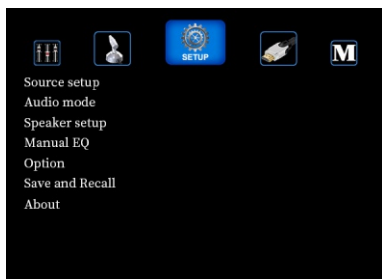
4. Acoustic test



Auto Room Test: to auto-test the speaker EQ, distance and frequency response.

Advance Test: to set the speaker EQ, distance and frequency response at your will.

5. System setup



It has 7 settings of input source setup, audio mode, speaker setup, manual EQ , option, save and recall, and about.

A. Source setup: can set for 8 functions of enable, remote keys, video source, audio source, EQ selection, volume mode, trigger out, default.(Note, Bluetooth can set Bluetooth name).

(1) Enable: to set ON/OFF for each audio input port. If this is set as OFF, then display will be invalid and can not do any setting.

(2) Remote keys: can set for key S1, S2, S3. After set up S1, S2, S3, you can switch to the set channel directly by remote.

- (3) Video source: No Video, HDMI1, HDMI2, HDMI3, HDMI4, HDMI5, HDMI6.
(suggest the default selection)
- (4) Audio source: Sync HDMI, Optical1, Optical2, Coaxial1, Coaxial2, Analog1, Analog2, Analog3.(suggest the default selection)
- (5) Volume mode: Independent,Unified, Additional $\pm 20\text{dB}$.(suggest the default selection)
- (6) EQ selections: Direct, Cinema, Music, Karaoke, Auto EQ and System synchronization.
- (7) Trigger out: ON/OFF (suggest to use the default mode)
- (8) Default: press to default all the parameters of the current working channel.(only current working channel change, other channel will not change)

B. Audio modes: can set 6 different modes of Analog/PCM 2CH, Multi CH PCM, Dolby 2CH, Dolby Multi CH, DTS 2CH, DTS Multi CH. And each model can set 6 different effects of Pure, Direct, Stereo, Multi-channel, Dolby upmix and DTS Neural: X.

C.Speaker setup:

- (1) Speaker layout: Choose speaker configuration according to your speaker and subwoofer quantity.
 - a. subwoofer "No sub", you can choose 9 different configurations of 3.0/5.0/7.0/5.0.2/5.0.4/7.0.2/7.0.4/7.0.6/9.0.4.(Note: "none" mode only available when left and right speaker frequency response is set as full frequency)
 - b. subwoofer "one sub", you can choose 9 different configurations of 3.1/5.1/7.1/5.1.2/5.1.4/7.1.2/7.1.4/7.1.6/9.1.4.
 - c. subwoofer "two subs", you can choose 9 different configurations of 3.2/5.2/7.2/5.2.2/5.2.4/7.2.2/7.2.4/7.2.6/9.2.4.
 - d. subwoofer "three subs", you can choose 9 different configurations of 3.3/5.3/7.3/5.3.2/5.3.4/7.3.2/7.3.4/7.3.6/9.3.4.
- (2) Center speaker: Choose ON or OFF base on your needs.
- (3) Top speaker type: Choose suitable top high speaker and reflective speaker bases on your speaker types.
- (4) Level test/adjust: Test the position of each speaker to see if it is correct, and adjust volume gain of different channels to create correct sound field, balance sound effects. System will close the unnecessary channel adjustments base on your speaker configuration.
- (5) Speaker distance (Latency): In order to achieve the best sound effects, you only need to input the distances between each speaker to the listener's position, system will auto adjust speaker latency.
- (6) Subwoofer: there are four modes of subwoofer: No sub/ one sub /two subs /three subs, choose the one base on your needs.
- (7) Speaker crossover: It's for frequency range of each speaker.
- (8) Filter slope: Set the best filter crossing point slope of high pass and low pass, to create best sound effect.
- (9) Subwoofer Enhance: If bass is not enough, turn on Subwoofer Enhance to create more impressive bass sound effects.(note:L and R need to set into full frequency, or Enhance key can not turn on)

D. EQ Settings: There are 6 different modes of Cinema, Music, Karaoke, auto EQ, auto EQ2 and Direct. And Cinema mode, Music mode and Karaoke modes support EQ parameter adjustment for each channel. 11 bands for L, R and center channels. 7 bands for surround, top height channels. 5 bands for subwoofer. Group for LR channels, group for surround channels, group for top height channel and group for subwoofer.

E. Option: Provide 11 different settings of Language, Startup settings, Volume options, HDMI option, Information display, No signal standby, Trigger out, Unit, Network Settings, Remote pair and U Driver Log.

(1) Language: Chinese/English.

(2) Startup settings:

- a. Turn on: power up to turn on automatically.
- b. Standby: if unit is in standby when power on, then you need to turn it on manually.
- c. Status before turn off: remember the status of last turn off. If unit is turn off when it is standby status, it will be in standby when reboot. If unit is turn off when it is in ON status, it will turn on automatically when reboot.

(3) Volume options:

- a. Turn on volume: to set turn on volume.
- b. Max volume (IMPORTANT): Set the max volume limit, this can avoid turning the volume into max by misoperation during use.
- c. Volume step: means how much volume will be changed when you press remote volume + or -.

(4) HDMI option:

- a. HDMI output: the amplifier has two HDMI outputs, you can set HDMI 1, HDMI 2, or HDMI 1 & 2 output synchronously (When only connect one HDMI out, suggest to use HDMI 1.)
 - b. Synchronize TV power: ON and OFF switch are available. For ON status, the amplifier can be turned on and off when TV is turned on and off. For OFF status, you need to turn on amplifier manually.
 - c. Standby pass through: turn on this function, when unit is in standby status, audio and video signal from player equipment will output to display equipment directly (such as TV or projector). If set it OFF, this function will not be available.
 - d. CEC signal sources auto control: turn on this function, when unit is ON and when the connected HDMI CEC equipment (such as DVD) is turned on or is playing, the unit will switch to its HDMI channel automatically, no need to switch signal source manually again, but need to make sure it is connected correctly. (This function only support HDMI1 output port, suggest to set it OFF to avoid any mis-operation.
 - e. CEC control: Turn on this function, the remote of this unit can control the connected HDMI CEC equipment.
 - f. HDMI signal formats. There are 4 options available: Auto, Standard, Enhance and Enhance+.
- Enhance display high quality HDMI signal.
 - Auto: Auto adjustment to adapt connected equipment's resolution. (Support 3D, HDR and Dolby Vision).
 - Standard: support HDMI 1.4a format.
 - Enhance: support HDMI 2.1 format.
 - Enhance+: support not only auto adjustment to adapt connected equipment's resolution (Support 3D, HDR and Dolby Vision), but also support HDMI 2.1 format.

(5) Information display:

- a. Display DIM: display window dim level, can adjust from 1 to 10 level.
- b. OSD information: to display content that are playing on the screen, (Off, only display volume, all display.)
- c. OSD info position: can be on top or on bottom.
- d. OSD transparency: can adjust from 0 to 7 level.
- e. Cursor loop: turn on this function, when you select the last item, press again it will go to the first item.
- f. Lighting effect: 5 choices of OFF, Blue, Yellow, Purple and Follow music.

(6) No signal standby:

- a. Turn off, this function does not work.
- b. 5 to 60 minutes adjustable: when there is no input signal, or signal is off, to set the waiting time before the unit go into standby.

(7) Trigger output: always ON, always OFF, follow by signal.

(8) Unit: metric unit/English unit (For speaker distance only).

(9) Remote pair: support bluetooth remote, need to pair with the unit.

(10) U Driver Log: ON/OFF (default OFF. When unit is fail, plug in U disk to record the failure information. There is a file create in the U disk, send it to factory for analysis).

F. save and recall:

- (1) Save to back up: back up all the current parameter.
- (2) Load from backup: recall the parameter saved last time.
- (3) Load from default: reset the parameter to factory default.

G. About:

Provide: firmware upgrade, MCU version, DSP version, OSD version, control board version, Bluetooth name, TV connection1, TV connection2, More etc.

Mobile Phone APP

For better user experience, Tonewinner develop its own App control to match its products, user can finish all below operations and switches on phone. If you are the first time to use Tonewinner App, follow below step1, step2, step3, step4, step5. if you are not the first time use Tonewinner App, follow step5.



- (1) Keep your phone on normal working status.
- (2) Keep your phone with internet access, scan the QR cord here, download the App and install it.
- (3) Amplifier source choose Bluetooth.
- (4) Turn on the Bluetooth on phone and search for AVR-BT, pair it when it appear.
- (5) Turn on the Tonewinner App, and find AVR-BT to pair it. Then the phone will switch to same source as amplifier automatically, and you can conrol the amplifier on phone.
- (6) For more App control, please check product details on Tonwinner's website www.tonewinner.com

Product specifications are subject to change without prior notice.

Specification

S/N: $\geq 110\text{dB}$ (A-weighted, 1KHz/1Vrms, analog in, pure mode)

Distortion: $\text{THD} \leq 0.004\%$ (A-weighted, pure mode, 1kHz, analog in)

Frequency response: 10Hz-65kHz (+1/-3dB, analog in, pure mode)

Output level: $4\text{Vrms} \pm 1\text{dB}$ ($\text{THD} = 1\%$, analog in, analog pure)

Separation: $\geq 90\text{dB}$ (analog in, analog pure)

Max power consumption: 30W

Net weight: 4.3kg

Gross weight: 6.3kg

Unit dimensions: $431 \times 304 \times 80\text{mm}$ (W×D×H)

Packing dimensions: $560 \times 392 \times 165\text{mm}$ (W×D×H)

Execution standards: GB/T9254.1, GB4943.1, GB17625.1

Equipment Safety Standard: Class II

1. Please read the manual and safety precautions carefully before using.
2. The product should be mounted somewhere ventilated and dry for the convenience of heat dissipation to avoid moisture and lampblack.
3. The safety standard of the machine is II; upon installation, the power plug should be connected to 100-240V~50Hz/60Hz grid.
4. Do not remove the cover during using to prevent electrocution.
5. Do not frequently turn it on or off. Wait a few minutes before turning it on again.
6. When the equipment fails, contact with the product managers where you buy this machine for internal maintenance. To avoid accident, do not open the rear cover for inspection or repair.
7. The plugs, power lines, fuses, power switch, and transformer used on the equipment are all safety parts. Upon change of safety parts, the maintenance department should replace them in accordance with the model and specification specified by our company.

Problem Shooting

If a problem should arise, first check the following:

- Are the connections correct?
- Is the unit being operated as described in the user manual?
- Are the other devices operating properly?

If this unit does not operate properly, check the corresponding symptoms in this section. If the symptoms do not match, disconnect the power immediately and contact the dealer or store where you purchased this unit.

Problem	Solution
Display screen does not bright with AC power.	1 Disconnect the unit immediately; 2 Check if power socket has electricity; 3 After above two steps, turn it on again.
Remote control is insensitive or does not work.	1 Check if IR remote control sensor is blocked; 2 Change weak batteries.
The unit, display screen & inputs work normally, but there is no output.	1 Check if all cables are connected well; 2 Check if amplifier works normally; 3 Check if volume is too low;
ARC or eARC doesn't work.	1 Make sure the TV supports ARC or eARC. 2 Make sure it's connected to HDMI ARC/eARC ports properly. 3 Make sure the TV turns on the CEC function.

