



User Manual

Internet Radio Amplifier WS161

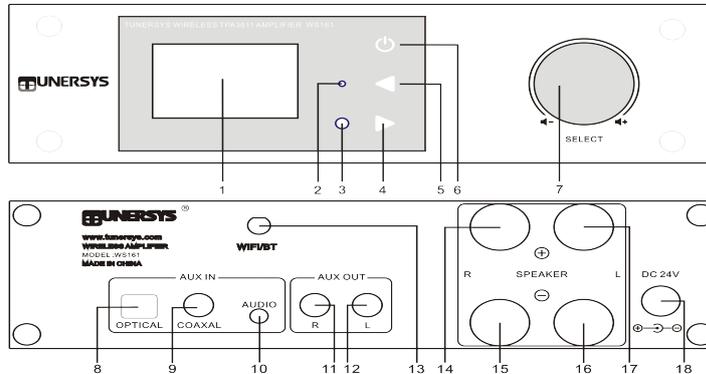


Please read this user manual carefully
before using the internet radio amplifier

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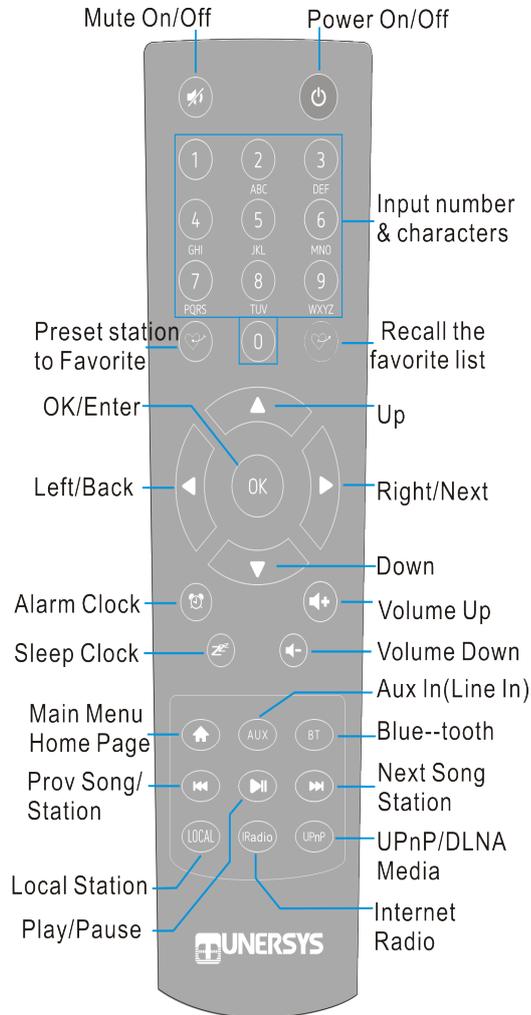
Location of interfaces and controls on the host



	Name	Operation
1	LCD	2.0" LCD Display
2	Indicator LED Light	Sound Source Indicator LED Light: Red on Internet radio, Blue on UPnP, Purple on BT Mode
3	IR sensor Receives	Infra red signal from remote control
4	▶ Right—Touch button	Press to cycle through the display option in radio playing mode / Enter edit menu in Favourite list / cursor right
5	◀ Back/Left -Touch button	Press to exit to previous menu / delete entry of character's input/ cursor left
6	⏻ Power Off/Menu - Touch button	Press to display main menu to view different modes or setting options, Press and hold for more than 1 second to enter/exit from Standby mode
7	Tune/Select (ok,Enter) Knob	Rotate Knob to navigate menu on mian unit, Rotate to adjust volume of amplifier, Press to select (ok,Enter) an item
8	Optical Digital in	Optical digital input, with volume control in AUX mode
9	Coaxial Digital in	Coaxial digital input, with volume control in AUX mode
10	Audio in	3.5mm headphone Jack audio input, with volume control in AUX mode
11	AUX out - R	AUX/ Line Audio out-put Right channel
12	AUX out - L	AUX/ Line Audio out-put Left channel
13	Wi-Fi/BT Antenna Jack	External Wi-Fi/BT antenna
14	Terminal for Speaker +R	Amplifier output (right channel positive) connects speaker
15	Terminal for Speaker -R	Amplifier output (right channel negative) to speaker
16	Terminal for Speaker -L	Amplifier output (left channel negative) to speaker
17	Terminal for Speaker +L	Amplifier output (left channel positive) to the speaker
18	DC-IN Jack	Power Supply DC 12-24V/3-5A

Remote Control function description

1. : Mute button
2. **0-9** : Enter numbers in the list / Enter characters for the WiFi password
3. : Preset station button, Preset the current playing station to Favorite
4. : Cursor up button
5. : Cursor left / back to previous menu
6. : Alarm button
7. : Sleep Timer button
8. **AUX**: AUX in button for Audio Line in-3.5 mm Jack/Digital in-put – Optical /Co-axial
9. : Main Menu button
10. : Previous station / previous track
11. **Local**: Access the local station list (Local area set up in Configuration)
12. : Press to toggle between Standby and On Operation
13. : Recall station from favorite list
14. **OK**: ok,Enter confirm button
15. : Cursor right button
16. : Cursor down button
17. **Vol+**: Volume up button
18. **Vol-**: Volume down button
19. **BT**: to play audio from a mobile phone or another Bluetooth enabled device
20. : Next station / next track
21. : Play/pause button
22. **UPnP**: UPnP Media Centre button
23. **IRadio**: Internet radio button



Before you start

Please ensure the following is ready:

You have a broadband internet connection.

A wireless broadband router is connected to the internet successfully. The radio supports Wireless B, G and N connection (Wireless N router can also be used with the setting on B or G).

You know the Wired Equivalent Privacy (WEP) or Wi-Fi Protected Access (WPA) data encryption code/password. You need to key in the correct code when the radio is connected to the wireless router for network connection. If you do not know the code/password, please contact the person /technician who set up the router/network for you.

The radio can work via Wireless network connection (Wi-Fi connection) .

Precautions

The radio should not be used in a high temperature or high humidity environment over prolonged periods of time as this may damage the unit.

Keep the radio away from liquids as it may get damaged. Please switch off the radio immediately if water or liquids is spilled into the radio. Consult with the shop you bought this radio for any question.

Avoid using or storing the unit in dusty or sandy environment.

Do not open and repair the radio by yourself.

Use only the AC adaptor supplied with the radio. Connecting a power supply with a different rating will cause permanent damage to the radio and may be hazardous.

Clean only with dry cloth.

**WARNING:TO PREVENT FIRE OR ELECTRIC SHOK HAZARD,
DO NOT WXPOSE THIS PRODUCT TO RAIN OR MOISTURE.**



**CAUTION:TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT RO-
MOVE THE RADIO BACK.NO USER SERVICEABLE PARTS IN-
SIDE.REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**



THE LIGHTING FLASH AND ARROWHEAD WITHIN THE TRIANGLE IS A WARNING SIGN ALERTING YOU OF "DANGEROUS VOLT-AGE" INSIDE THE RADIO.



THE EXCLAMATION POINT WITHIN THE TRIANGLE IS A WARN-ING SIGN ALERTING YOU OF IMPORTANT INSTRUCTIONS AC-COMPANYING THIS RADIO.

1. To start up

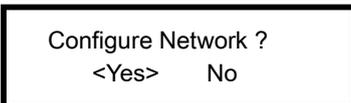
- Remove internet radio amplifier(called Amplifier hereafter) from the package box.
 - Install the Wi-Fi/Bluetooth external antenna (rotate clockwise to install into the thread of antenna jack)
 - Connect the speaker, and distinguish the positive and negative poles
 - Plug in the DC adapter (Indicator LED Light will be lit).
 - Caution: Use only the adaptor supplied with the Amplifier . Connecting a power supply with a different rating will cause permanent damage to the radio and may be hazardous.
- The Amplifier is intended to connect with external speaker. Can connect your stereo line/aux out through the RCA Jack Analogue output and connect your stereo line/aux in through the 3.5mm Jack Analogue input or Digital input located on the rear panel of the Amplifier for listening.

2. Network setup using remote control

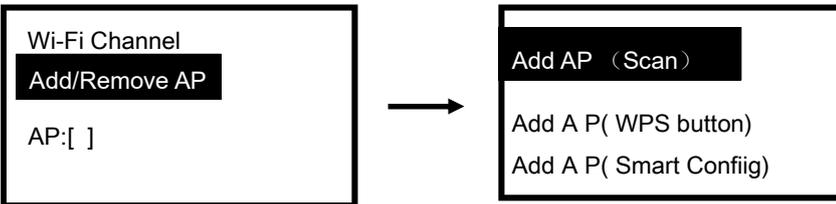
Internet connection can be setup via wireless LAN (WiFi).your amplifier requires a broadband Internet connection through WiFi. The easiest way to connect is through a Wifi router.

Wireless LAN (Wi-Fi)

- If this is first time use, the Configure Network wizard will be displayed. Use knob on amplifier or left and right right arrows on remote to Choose Yes to start configuring network. Press the **[Back/◀]** button to highlight Yes and press **[OK]** on remote to confirm.



- Select Add/Remove AP from the list, use the **[OK]** knob on amplifier or down and up arrows on remote to scroll and press knob to confirm, then highlight Add AP (Scan) press **[OK]** to confirm.



- It will start scanning the available Wi-Fi routers around. Scroll to your network and press **[OK]** on remote to confirm.

- If your wifi network has a security code protected, it will ask you to enter the passphrase/password.

How to input security code for your wireless network using remote control

On the alpha-numerical keypad, press each button repeatedly to cycle through the letters, numbers and symbols as listed below.

To input a character, scroll to the correct one and when it is highlighted, press the **▶** button to input the next character. When it comes to the last character of the password and it is highlighted, press **[OK]** to confirm.

Button 1: 1 and different kind of symbols ! @ # \$ % ^ & * () _ + [] { } ; : ' " \ | , . / < > ?

Button 2: 2 A B C a b c

Button 3: 3 D E F d e f

Button 4: 4 G H I g h i

Button 5: 5 J K L j k l

Button 6: 6 M N O m n o

Button 7: 7 P Q R S p q r s

Button 8: 8 T U V t u v

Button 9: 9 W X Y Z w x y z

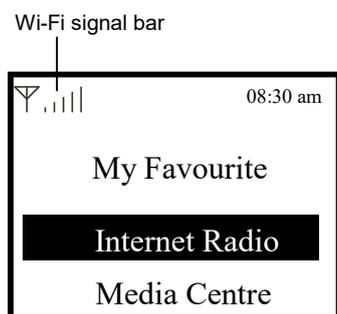
Button 0: 0

How to input security code for your wireless network Using control button on the Amplifier

Use the knob on the amplifier to scroll through the characters, when the correct one is highlighted, press **[Forward/▶]** button on either the remote or the console to input the next character. When it comes to the last character of the password and it is highlighted, press **[Select]** on main unit to confirm.

Note: The password is case sensitive.

When the Wi-Fi connection is successful, the Association Complete will be shown briefly. The wifi signal bar will appear on the top left corner of the display:



3. Overview of features and functions

Press the **[Power/Menu]** button on main unit or on the remote control to enter the main menu . Scroll by rotating the knob on main unit or by using the **[◀ / ▶]** buttons on remote:

My Favorite - To show the list of favorite stations which have been assigned to the presets. There are up to 99 presets available.

Internet Radio - Start exploring the worldwide radio stations and music here.

Media Centre - You can browse and stream music from your network via UPnP or DLNA Compatible devices.

Bluetooth - Bluetooth playback, to play audio stream (receive) from a mobile phone or another Bluetooth enabled device after pairing/connected each other.

AUX- AUX IN /LINE IN input , to play audio from another source, such as televisions and computer connected by Optical, Coaxial or 3.5mm audio Cable.

Alarm - Alarm clock. Two music alarm settings available. Enable and set the timer to turn a radio station of your favorites in on two Groups of music Alarm fo Monday to Sunday or Different week Days.

Sleep Timer - Set the amplifier to go to sleep after a set amount of time

Configuration - More options/settings available to personalize as you desire.

Use shortcut keys to quickly One-button playback by remote control

♥ **[My Favorite]** : Start Listen to the stations that you heard before the last time form favorite

[IRadio] :Start Listen to the stations that you heard before the last time form Internet Radio

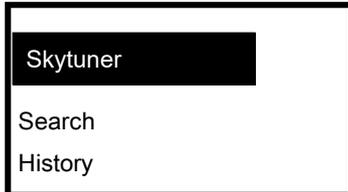
[UPnP] :Play music that you heard before the last time from your network via UPnP or DLNA

[BT] : Play music that you heard before the last time from your mobile phone or BT device

[AUX] : play audio from another source

4. Internet Radio

On the main menu, choose **Internet Radio** and you will find the options below:



Skytune

Select Skytune to start enjoying thousands of radio stations over the world. You can filter your search by Region, Music genre and talks.

The **Local Radio** let you access quickly the stations available in your local area through internet connection.



Note - You can change the Local Radio area under **Configuration> Local radio setup**. Please refer to section 11 for the details.

Note - When you scroll along the list of **Globe All** and want to quickly reach to a certain point of the long list, input the index number on the remote control to quickly jump to that point. For example, on the remote control, input 2 8 and press OK, it will highlight the station no. 28.

Search

Instead of browsing the radio station list, you can input a few characters of the desired station to filter out / short list the stations.

History

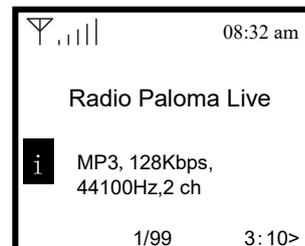
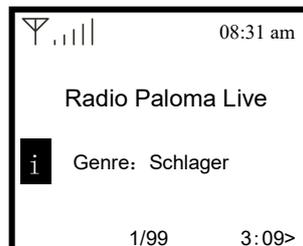
The radio memorizes the stations you have listened up to 99 stations.

If you have listened more than 99 stations, it will supersede the first station that you have listened.

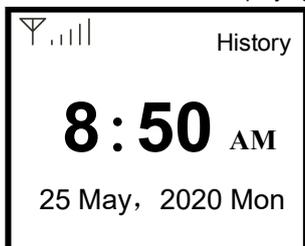
Start playing internet radio

When a radio station starts playing, more radio information can be displayed.

such as the streaming bit rate, name of the song, artist name (if available) and the radio's station name (if available):



Every time you press the ► button on the remote or the console, it will show the the big time clock at a time when the radio is playing



My Favorite

This is to show the list of your favorite stations which have been assigned to the presets.

Preset a station

You need a remote control to preset the station.

When a radio station is playing, press the  button on the remote control to add the radio station to your favorite list, you will see the  icon appear as below. It means the station is added to the Favorite list.

Preset icon



The new added station will always show in the last item on the Favorite list.

You can store up to 99 presets

Recall a radio station

Press  the button on the remote control to recall the list of presets, or navigate to **My Favourite** on the main menu and select it to confirm.

Edit your favorite list

On the Favorite list, choose the radio station you want to edit then press the [►] button on the remote control (or press **[Forward/►]** on main unit). It will enter the Edit menu with the following options:

Move down - To move down the ranking of a station

Move up - To move up the ranking of a station

Delete - To delete a particular station

Preset icon

5. Media Centre

The device supports UPnP and is DLNA-compatible.

This provides the opportunity to stream music from your network. However, this requires you to have a compatible device in your network that can function as a server. This can be e.g., a network hard drive or a conventional PC with e.g., Windows 8 via which access to the shared folder or media sharing is permitted. The folders can then be browsed and played on the Tuner.

Note - Please make sure your computer laptop is on the same Wi-Fi network as the Radio before you start using this function.

Music streaming

- Once the UPnP/DLNA compatible server is configured to share media files with your radio, you can start music streaming.
- On the main menu, select **Media Centre** and choose **UPnP**.
- It may take a few seconds for the radio to complete the scan for available UPnP servers. If no UPnP servers are found, it will show **Empty List**.
- After a successful scan is done, select your UPnP server.
- The radio will show the media categories available from the UPnP server, e.g. 'Music', 'Playlists' etc.
- Choose the media files that you wish to play.

You can set the mode of playback under **Configuration > Playback setup**.

My Playlist

You can make your own playlist for the UPnP music files. Choose and highlight the song you want to add to playlist, press and hold the **[Tune/Select]** knob on main unit or press and hold the **[OK]** button on remote, until the sign appears. The song will be added to **My playlist**.

Clear My Playlist

Remove all songs in "My Playlist" to allow a new playlist to be prepared.

Note - If you have DLNA compatible servers available, follow the steps described above to browse the audio files from DLNA compatible device on the Tuner to play.

6. Bluetooth playback

Before transmission between your Bluetooth device and the radio is possible, both devices must be coupled. This process is called "pairing". The Tuner is served as a receiver, to receive music stream to play on the Tuner.

If you have already paired a Bluetooth device before, this connection will be restored automatically when both devices are in range and Bluetooth operation has been selected on the radio. "Pairing" does not have to be repeated. This function may need to be activated in your Bluetooth device, however.

- Push the Menu button to display the selection menu for the different playback modes.
- Use the up / down button to select the playback mode Bluetooth and push the dial switch.
- Switch your Bluetooth device to which you want to connect the radio on and activate the pairing mode here. The device scans for Bluetooth devices in the reception range.
- When the radio is found, your bluetooth device shows its name TUN01-L-XXXX (the XXXX is an identification code for your radio unit).
- Select the radio at your BT device.
- Start playback on your BT device.
- Playback now takes place using the radio.

7. Alarm Setting

- Choose **Alarm** from the main menu or press the  **[Alarm]** button on the remote control.
- Select either Alarm 1 or Alarm 2, choose **Turn on** to activate the Alarm.
- Follow the alarm wizard instructions to set the alarm.
- The wizard will guide you through the settings below:

Time - Set the time for the alarm

Sound - You can choose **Wake to My Favourite, Tone** as the alarm source.

Wake to My Favourite - Please preset your favorite station before setting this as the alarm source.

Repeat - You can schedule the alarm as you desire —Everyday, Once or multiple days.

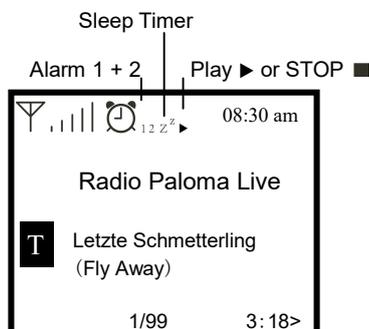
Alarm Volume - Adjust the volume of the alarm as you like by rotating the **[Tune/Select]** knob on main unit or **[▲/▼]** button on remote.

- After the above settings are completed, press the **[◀]** button to exit and make sure the Alarm is turned on. You will see the Alarm icon appeared on the display if it is activated.

8. Sleep Timer Setting

You can set the timer to let the radio goes standby after the selected time elapsed in the range of 15 minutes to 180 minutes.

Press  **[Sleep]** button on the remote control to set the timer.
You will see the icon appeared on the display if the timer is set.



9. Configuration

Here you will find the complete settings / options available to configure your own tuner. On the main menu, navigate to Configuration setting. Press OK and you will see a list of options available.

Wi-Fi Network

• Add / Remove AP

Add AP - It will scan for a list of routers around.

Remove AP - If you have already added a router and want to remove it, choose this option.

Note - Always bring the Amplifier within 2 meters of the Wi-Fi router for best results.

• AP: []

If you have added more than one routers on the radio and want to switch to another one, select this option to change.

• Signal

This is to show the strength of the Wi-Fi Signal of the Wi-Fi router as received by the radio. Usually signal levels lower than -70dBm is at weaker level and if it affects the reception of your radio, you may need to optimize the router location or check any problem of the router itself.

• IP

The IP is set **Dynamic** by default. Select to change **Fixed** IP according to your network condition.

• DNS

The DNS is set **Dynamic** by default. Select to change **<Fixed>** DNS according to your network condition.

Wi-Fi Channels

Not all of the Wi-Fi channels are available in every country. There may be variation between different countries. Therefore it is necessary to choose the Wi-Fi channels to ensure the Wi-Fi performs satisfactory.

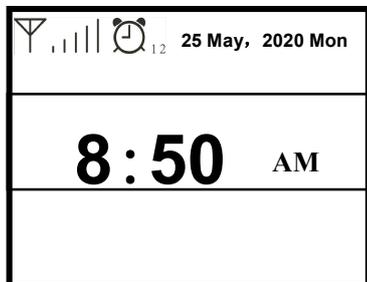
We have already set the channels according to the requirement in different countries. Choose the country you are staying from the list to get the correct channel.

The **Europe/United Kingdom** is set by default, press **[OK]** on the Remote control or push the **[Tune/Select]** knob on main unit to edit the country selection.

Adjust backlight level when power off and Under night or dark environment

When Power off, You can off or Adjust the Indicator LED Light and backlight level for the display as you prefer.

press and hold the \odot **[Power/Menu]** knob on main unit or press the \odot **[Power/Menu]** button on remote to turn off the main unit , then adjust the backlight level as you like by rotating the **[Tune/Select]** knob on main unit or **[▲/▼]** button on remote.



There are 24 settings : Level 0 to 24. Can Keep Date and time display and The Indicator LED light and backlight is off when Level set to 0

Date and Time

The radio will set your local time automatically after the internet connection is completed. If you want to do manual setting, change it by the following options:

• Time zone

Auto-set Time Zone: This option is set by default.

Manual-set Time Zone: Choose this option if you want to set the time in another region.

Choose and highlight the region/city you prefer and press OK to confirm.

Coupled with NTP (use network time) and DST (Daylight time saving) will be adjusted automatically if you choose to use network time (NTP).

• Set Time Format

Choose either 12-hour or 24-hour notation you prefer.

Set Date Format

Allows you to set the date format to either MM/DD/YYYY or DD/MM/YYYY

• DST (Day Light Saving)

Enable on/off

NTP (Use network time)

NTP is designed to synchronize a device's clock with a time server. Your Tuner will synchronize the time server by default every time it powers up and connects to Internet. This ensures a very high degree of accuracy in the Tuner's clock. You can change to use other time server by inputting the URL address (see below NTP server). You can choose "**Do not use network time**" if you don't want it to.

If you choose not to use NTP for clock synchronization, highlight the NTP (Network time protocol) and press **OK** to make the change. You will see the Set Date & Time appeared on the menu. Select it and adjust the date and time as you desire.

• NTP Server

NTP is designed to synchronize a device's clock with a time server. Here it shows the server being used for the tuner.

Language

The default language is English, you can choose other languages as preferred. Scroll with the

▲▼ buttons on remote or **[Tune/Select]** knob to the item with and press **OK**. Scroll to highlight and press **OK** to select your language of choice. English, French, Spanish, Italian, German, Dutch, Polish, Russian and Simplified Chinese are available.

Local Radio

The radio is set by default to detect the radio stations in your local area automatically through internet connection and these stations can be accessed by a press of **[Local]** button on Remote control. You can also set **Local** in another region if you want. Highlight the **Local Radio** and press **OK**. Choose **Manual-set Local radio** to change the region setting.

Playback Setup

This is to set the mode of playback under UPnP/DLNA compatible streaming: Repeat All, Repeat Once or Shuffle.

Resume when Power on

This function is ON by default. The amplifier will resume to the last state of mode when the radio is power on next time, e.g. if it was playing radio station before power off, it will resume playing the last listened station when it is power on the next time.

Dimmer

You can set the backlight level for the display as you prefer. There are two settings: Mode and Level

• Mode - Normal or Power Saving

Normal - the display will stay with the same level of brightness all the time without dim down.
Dim - the display will dim down after 20 seconds if no operation is made on the radio.

• Level - Bright and Dim

Bright - This is to adjust the level of brightness in Normal mode.
Dim - This is to adjust the level of brightness in Dim mode.

• Dimmer in Standby

When the radio is in Standby, rotate the **[Tune/Select]** knob to adjust the backlight level at your preference which you feel comfortable especially during night time.

• Contrast

LCD Display Contrast ,This Contrast is 36 by default, Can Set Between 30 to 63

• EQ(Equaliser)

Various music genres can be set for Speaker out and Line out.

• Buffer Time

Sometimes you may experience uneven playback of the internet radio. This can happen if the internet connection is slow or network congestion occurs. To help improving the situation, you can choose longer buffer time to get a few seconds of radio stream before beginning to play. The default value is 2 seconds. You can choose 5 seconds if you prefer to have a longer buffering time.

• AUXIN (Gain for AUX in)

This AUX in Gain is +6dB by default, Can set +6dB or 0dB

• Information

View the Network and System Information of your amplifier.

To access quickly to this information, press the button **[Main Menu]**  **>** **[Main Menu]**  **>** **Configuration** **>** **OK** **>** **[Main Menu]**  **>** **INetwork** Information on the remote control. *When you use your Mobile Phone or PC to manage the My favorite stations, you have to use the IP address and you can view this info from here. Then type in the IP address to your Mobile Phone's or PC's browser input window*

• Software Update

There may be software release to upgrade features of the radio from time to time. Check the update regularly to keep your radio up to date with the latest software.

• Reset to Default

You can do the reset to clear all the settings and return to default settings.

* * Please note all the Station presets, Settings and configuration will be erased after you have performed the Reset.

10. Add your favourite URL/ Manage favourite by Mobile Phone or PC

You can add your favorite radio station if you know the published audio stream URL of the radio.

We provide an embedded server for your radio and you can manage your favorite stations anytime to add or edit the list. Follow the steps below to access the embedded server:

- Connect your Mobile Phone or PC to the same Wi-Fi network as your radio.

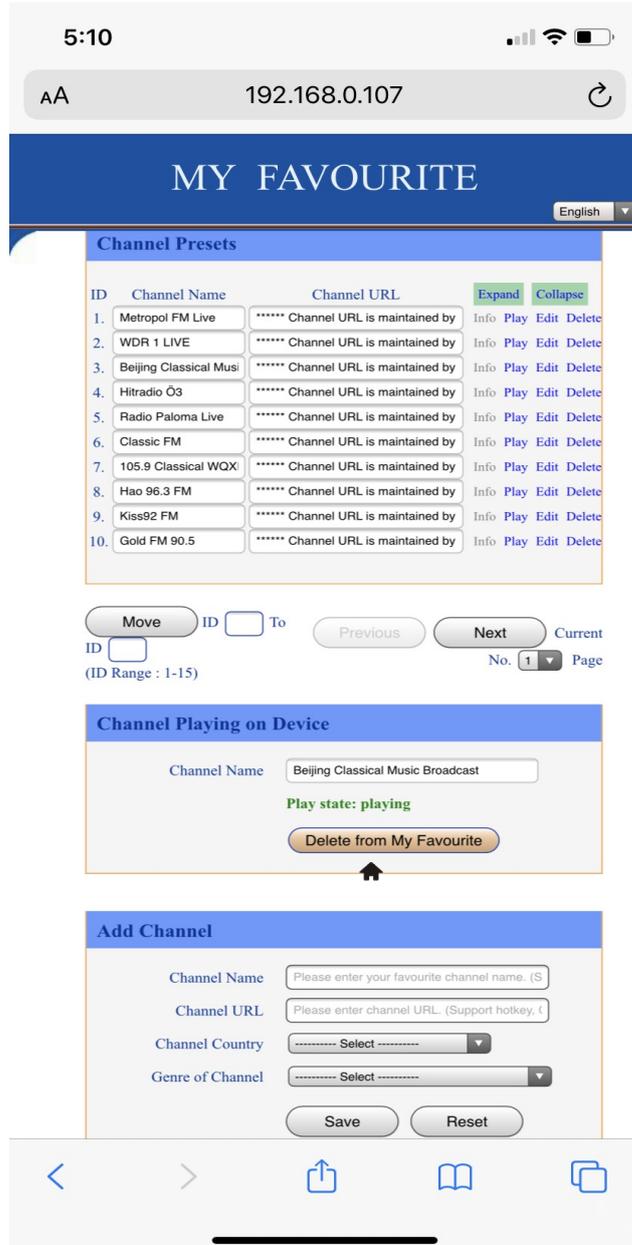
- Locate the IP address in either way as follow:

Press the the button 
 [Main Menu] > ▲ > Configuration
 > OK > ▲ > then "Network Information", > scroll down unit you find the IP.

- Open the web browser (we support safari, Internet Explorer and Chrome) in your Mobile Phone or PC and type the IP address of the Amplifier (e.g. 192.168.0.107).

- The screen will pop up as Screenshot on the right —>

- You can input the name and URL of a new radio station under the **Add channel** section, then click **Save**. The new station will sync to the Favorite list of your radio immediately. You can add up to 99 radio stations. and you can control by button play, edit or delete from my favourite list too.



11. Trouble Shooting

Problem	Cause	Solutions
Cannot connect to Wi-Fi network	Network down	<ul style="list-style-type: none"> • Confirm that a Wi-Fi or Ethernet Wired connected PC can access the internet (i.e. can browse the web) using the same network • Check that a DHCP server is available, or that you have configured a static IP address on the radio. • Check that your firewall is not blocking any outgoing ports. As a minimum the radio needs access to UDP and TCP ports 80,443 and 8008, DNS port 53
	Router restricts access to listed MAC addresses	Obtain the MAC address from Configuration > Information > Network Information > Wi-Fi MAC and add to the allowed equipment list on your access point. Note: The radio has separate MAC addresses for wired and wireless networks
	Insufficient Wi-Fi Signal strength	<ul style="list-style-type: none"> • Check distance to router; see if a computer can connect to the network in this location • Optimize the distance of the router's location • Check
	Unknown encryption method	Change encryption method on router. The radio supports WEP, WPA, WPA2
	Firewall preventing access	Windows Media Player: varies —non- Microsoft firewalls may require configuration for UPnP.
If your radio can connect to the network		<ul style="list-style-type: none"> • The station is not broadcasting at this time of the day (remember it may be located in a different time zone). • The station has too many people trying to attach to the radio station server and the server capacity is not large enough. • The station has reached the maximum allowed number of simultaneous listeners. • The link on the radio is out of date. This is updated automatically every day, so the next time you turn on the link will be recognised.
No Display and no light		<ul style="list-style-type: none"> • Please check if the power of the amplifier is switched on.
No sound		<ul style="list-style-type: none"> • Check speaker and cable • Adjust the volume level of the amplifier.

1. If the Internet Radio keeps re-buffering radio station:

The Internet Radio is streaming the data from the radio station via your broadband connection, if there is a high error rate on your broadband connection, or the connection is intermittent, then it will cause the Internet Radio to pause until the connection is re-established and it has received enough data to start playing again.

If your Internet Radio keeps stopping, please check the DSL modem to ensure that the Broadband line is not suffering a high error rate or disconnections. If you are experiencing these problems, you will need to contact your broadband supplier.

2. What is Buffering?

When playing a stream, the Internet Radio/Media player, downloads a small amount of the stream before it starts playing. This is used to fill in any gaps in the stream that may occur if the internet or the wireless network is busy.

The Internet Radio streams music data from the PC while you are listening. If a stream gets blocked or experiences Internet congestion while transferring it may stop/interfere with the quality of play. If this happens, check your internet connection speed- it must be faster than the speed of the streams.

3. My Amplifier is working but some stations cannot be played.

The problem may be due to one or more of the followings:

- a. The radio station is no longer broadcasting.
- b. The radio station has reached the maximum allowed number of simultaneous listeners.
- c. The radio station has changed the stream arrangement and the link is no longer valid.
- d. The radio station is not broadcasting at the time of the day (not all stations are broadcasting 24 hours throughout the day).
- e. The Internet connection between your Tuner and the radio station server is too slow or unstable to support the data rate of the broadcast.

Connection diagram



Technical Specification

Model: WS161
Amplifier Power:RMS 50W X 2 Channel
Power input: 24V
Wireless Network: IEEE802.11b/g/n
Wireless network frequency: 2.4 GHz
Security Protocol: WEP/WPA/WPA2
Bluetooth version: V4.2 BR/EDR compliant
Bluetooth frequency: 2.4 GHz
Bluetooth range: 10 meters (line of sight)
Bluetooth transmission power: 0 dBm
Audio input: Stereo earphone jack 3.5 mm
RCA Stereo line out(AUX output)
Optical (Toslink) and co-axial digital input (SPDIF)
2.4G Antenna jack for External wifi/BT antenna
Unit Dimension: 218 x 70 x 246 mm (L x H x D)
Remark: Specification may vary without notice

What's included in the box

- * Internet Radio Amplifier WS161
- * Power adaptor: Output :DC 24V 3.5A 84W (Input: AC100-240V~50/60Hz)
- * Wi-Fi/BT 2.4G Antenna
- * Remote control (without batteries)
- * English User manual
- * Audio cable for 3.5mm Jack AUX in

WEEE and Recycling



The European laws do not allow any more the disposal of old or defective electric or electronic devices with the household waste. Return your product to a municipal collection point for recycling to dispose of it. This system is financed by the industry and ensures environmentally responsible disposal and the recycling of valuable raw materials.

ZHUHAI TUNERSYS ELECTRONIC TECHNOLOGY CO.,LTD.

Address: ROOM 317,BUILDING D2,NO.1 SOFTWARE PARK ROAD,TANGJIA BAY,HIGH-TECH ZONE,ZHUHAI,CHINA

<https://www.tunersys.com/>
Email: marketing@tunersys.com
Twitter: @tunersys_com
facebook: Tunersys.com
Tel: +(86)756-362 6622

What's included in the box

- 1x Internet Radio Amplifier
- 1x Power adaptor
- 1x WiFi/BT antenna
- 1x Remote control
- 1x English User manual
- 1x Stereo 3.5mm jack to 3.5mm jack cable



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Address : ROOM 317,BUILDING D2,NO.1 SOFTWARE PARK ROAD,TANGJIA BAY,HIGH-TECH ZONE,ZHUHAI,CHINA

Email: marketing@tunersys.com

Tel: +86-756-362 6622

<https://www.tunersys.com>

Twitter: @tunersys_com

Facebook: Tunersys.com