Ocean Digital

Internet Radio Tuner
WR-50

Contents

Introduction to the WR-50 Internet Radio Tuner

The WR-50 Internet Radio Tuner is an audio component for integration into your home HiFi System as an added source of audio entertainment.
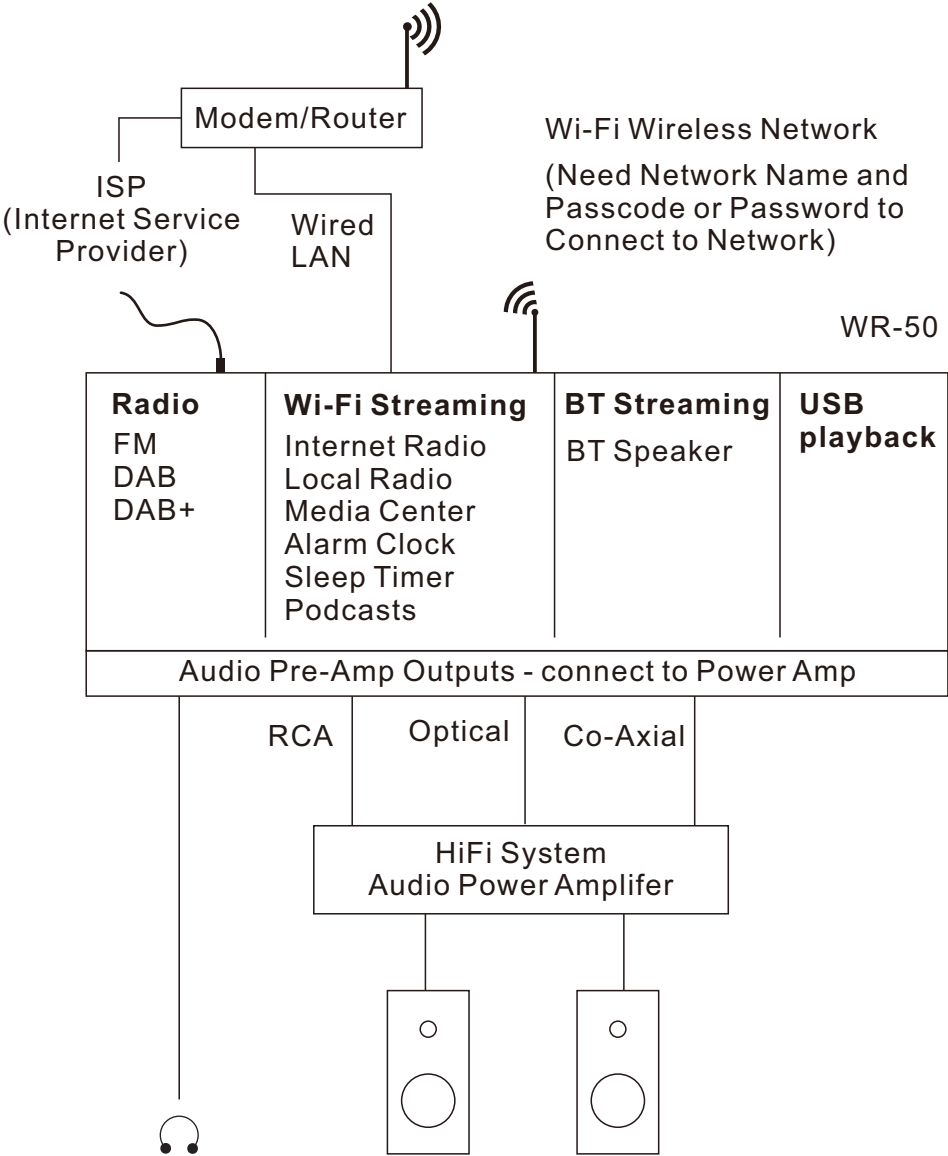
The radio provides a comprehensive set of enhancements to audio entertainment and a gateway into the world of digital audio.

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 DC 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.

Internet Radio Tuner Connections

The illustration shows the WR-50 integrated into a HiFi system ready to play in all modes.

Modem/Router

Wi-Fi Wireless Network

(Need Network Name and Passcode or Password to Connect to Network)

ISP
(Internet Service Provider)

Wired LAN

WR-50

Radio
FM
DAB
DAB+

Wi-Fi Streaming
Internet Radio
Local Radio
Media Center
Alarm Clock
Sleep Timer
Podcasts

BT Streaming
BT Speaker

USB playback

Audio Pre-Amp Outputs - connect to Power Amp

RCA   Optical   Co-Axial

HiFi System
Audio Power Amplifer

Location of Controls

1. ⏻

Press to enter/exit from Standby mode

2. Power LED

Lit when DC-in has valid power

3. TUNE/SELECT

Rotate to navigate menu

Rotate to adjust volume of headphone

Press to select an item

4. Dedicated Preset button No.1-4

Press and hold to preset 4 dedicated stations. Press briefly to recall to play. These are independent presets and will not appear on the "My Favorite" list.

5. FAV

Press and hold to preset the favorite stations up to 150. Press it briefly to recall the list.

6. ►(FORWARD)

Press to cycle through the display option in radio playing mode / Enter edit menu in Favourite list / cursor right

7. ◄• BACK

Press to exit to previous menu / delete entry of character's input/ cursor left

8. INFO

Toggle to cycle through the station's info, the big clock display or return to now playing screen

9. HOME

Press to display Home screen to view different radio modes / setting options

10. 2.4"TFT color display

11. IR sensor

Receives Infra red signal from remote control

12. USB Playback

Play audios from USB thumb drive

13. Headphone jack

3.5 mm Headphone output

Location of Controls


```
23  22  21 20    19    18  17 16   15   14
```
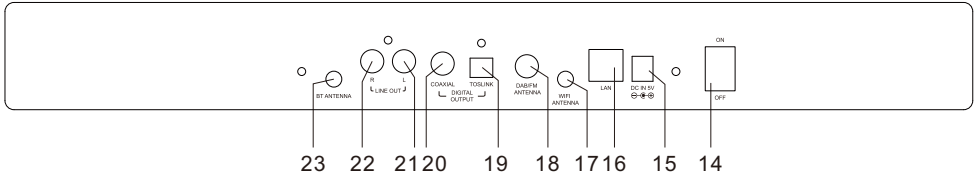
14. Power On/Off switch

15. DC-IN Jack

16. Ethernet (LAN) connector

17. WiFi antenna connector

Connect the WiFi antenna before setting up the Tuner

18. DAB/FM antenna

19. Digital out – Optical

20. Digital out - Co-axial
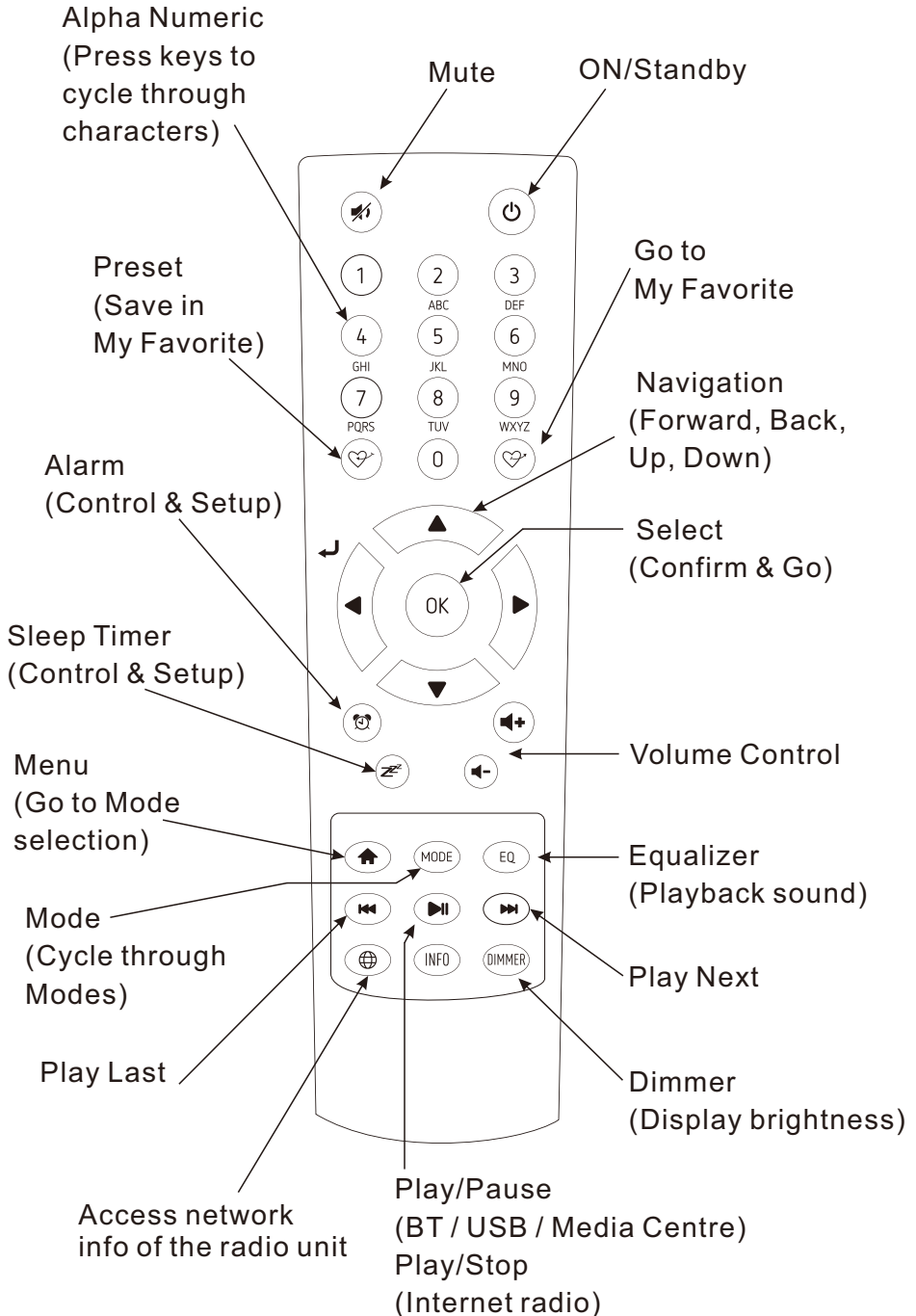
21. Line out - L

22. Line out - R

The volume of the Line/Digital out is controlled by the external amplifier/powered speaker. To control the volume through our device, change the setting in Configuration > Line/Digital out > choose "Follow headphone".

23. BT Antenna connector

Connect the BT antenna before pairing with your BT device

Alpha Numeric
(Press keys to
cycle through
characters)

Mute

ON/Standby

Preset
(Save in
My Favorite)

Go to
My Favorite

Navigation
(Forward, Back,
Up, Down)

Alarm
(Control & Setup)

Select
(Confirm & Go)

Sleep Timer
(Control & Setup)

Menu
(Go to Mode
selection)

Volume Control

Equalizer
(Playback sound)

Mode
(Cycle through
Modes)

Play Next

Play Last

Dimmer
(Display brightness)

Access network
info of the radio unit

Play/Pause
(BT / USB / Media Centre)
Play/Stop
(Internet radio)

Choosing options and functions

All user input is information that the Radio Tuner uses to provide the desired audio entertainment with select (enter) a confirmation and go command.

The **[TUNE/SELECT]** control knob is used for navigating LCD displays and lists by rotating clockwise (CW) or counter clockwise (CCW) to change or highlight information displayed on the LCD screen and confirms a selection when it is pressed and released.

The **Forward [▶]** and **Back [◀]** buttons can also be used to move to the next or back to the last display or position in lists but all inputs must be confirmed by pressing and releasing the **[TUNE/SELECT]** knob.

Throughout this manual "Select" will mean navigating through option lists or display screens to highlight desired selection and confirming it by pressing and releasing the **[TUNE/SELECT]** knob.

The remote controller can also be used to control the Radio Tuner with the center navigation buttons **[◀ ▼ ▶ ▲]** and OK button to confirm selections.

Many other controls are available on the remote controller with discrete buttons for many functions e.g. volume up or down.

Entering security code for your wireless network

Using remote control

On the alpha-numerical keypad, press buttons 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: 2ABCabc
Button 3: 3DEFdef
Button 4: 4GHIghi
Button 5: 5JKLjkl
Button 6: 6MNOmno
Button 7: 7PQRSpqrs
Button 8: 8TUVtuv
Button 9: 9WXYZwxyz
Button 0: 0

Using control button on the Tuner

Use the **[TUNE/SELECT]** knob to scroll through the characters, when the correct one is highlighted, press **[►]** button to input the next character. When it comes to the last character of the password and it is highlighted, press **[TUNE/SELECT]** to confirm.

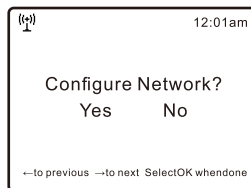Note: The security code is case sensitive.

Network Setup

Internet connection can be setup via Wireless LAN (WiFi).

Your Tuner requires a broadband Internet connection through wired Ethernet or WiFi. The easiest way is use a CAT 5 or CAT 6 cable to connect through wired Ethernet to a Wifi router, which connects to an Adsl modem or a cable modem provided by your ISP.
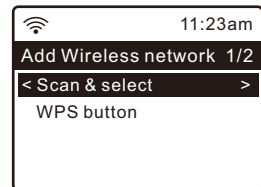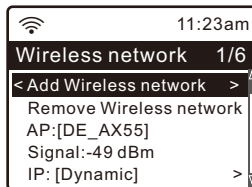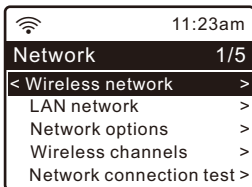
Wired LAN (Ethernet)

For Wired Ethernet connection to a router with DHCP enabled, the network configuration for Internet connection is automatically done and the radio can be used for Internet radio and UPnP sharing without user interaction. When the network is connected, the Ethernet icon ⊹ will appear on the top left corner.

Wireless LAN (Wi-Fi)

Connect the Wi-Fi antenna to the connector at the back side of the tuner. If this is first time use, the Configure Network wizard will be displayed. Choose Yes to start configuring network. Rotate the **[TUNE/SELECT]** knob to highlight Yes and press **[TUNE/SELECT]** to confirm.

```
((•))                          12:01am
  T

            Configure Network?
               Yes      No


←to previous  →to next  SelectOK whendone
```

Select Network and choose Add wireless network from the list, use the **[TUNE/SELECT]** knob to scroll and press it to confirm, then choose Scan & select:

```
📶              11:23am
Network              1/5
< Wireless network    >
  LAN network         >
  Network options     >
  Wireless channels   >
  Network connection test >
```

```
📶              11:23am
Wireless network     1/6
< Add Wireless network  >    ▲
  Remove Wireless network
  AP:[DE_AX55]
  Signal:-49 dBm
  IP: [Dynamic]        >    ▼
```

```
📶              11:23am
Add Wireless network  1/2
< Scan & select        >
  WPS button
```

• It will start scanning the available wireless networks around. Scroll to your network and confirm the selection. If your wireless network has a security code protected, it will ask you to enter the

passphrase/password. Please refer to the above section 'Entering security code for your wireless network' on P.10.

Note: The password is case sensitive. Please consult with the one who setup your network if you don't know the password.

Alternatively, WPS connection is available if your router has a WPS button (Configuration > Network > Wireless Network > Add wireless network > WPS button).

• 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:

Wi-Fi signal bar

My Favourite

< 30 Sept, 2020 >

12:09
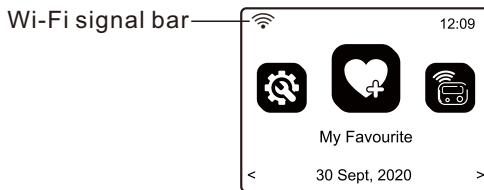
Overview of features and functions

Press **[HOME]** to enter the Home screen or the ⌂ on the remote control. Scroll by rotating the **[TUNE/SELECT]** knob or the **[◄ / ►]** button on remote:

My Favorite — To show the list of favorite stations which have been assigned to the presets. There are up to 150 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.

USB — USB playback, to play audio from USB thumb drive.

DAB+/DAB Radio — Pick up DAB+ and DAB radio signal if available in your local area (no internet connection required).

FM Radio — Receive ordinary FM radio stations in your local area (no internet connection required).

BT streaming — BT playback, to play audio stream (receive) from another BT enabled device after pairing/connected each other.

Alarm — Alarm clock. Two alarm settings available.

Timer — To count down from a specified time with alarm.

Sleep Timer — Enable the timer to turn the radio in standby after the selected time elapsed.

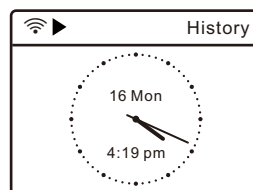**Configuration** — More options/settings available to personalize as you desire.

Podcasts — A wide range of digital audio programs consisted of a series of audio episodes.

Clock style

Set the clock display in Digital or Analog as you like. Under Configuration> Date & Time > Set clock style.
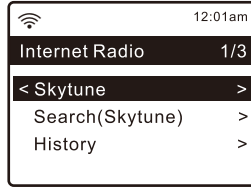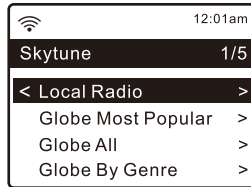
Digital style

Analog style

Internet Radio

On the Home screen, choose Internet Radio and you will find the options below:

```
                              12:01am
Internet Radio          1/3
< Skytune                    >
  Search(Skytune)            >
  History                    >
```

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.

```
                              12:01am
Skytune                 1/5
< Local Radio                >
  Globe Most Popular         >
  Globe All                  >
  Globe By Genre             >
```

Note — You can change the Local Radio area under **Configuration> Local radio** setup. Please refer to section 19 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.
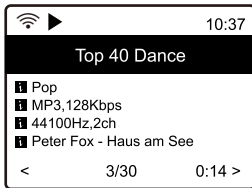
Start playing internet radio
When a radio station starts playing, more station information can be displayed. Press the **[INFO]** button in the state of the playback

screen below:

```
 📶 ▶                    12:09
    Top 40 Dance
┌──────┐
│TOP40 │   IMANY - Don't
│Dance │   Be So Shy
└──────┘

<          3/30        0:06 >
```

Every time you press the **[INFO]** button, it will cycle through information at a time such as the streaming bit rate, name of the song, artist name (if available), the big time clock and the radio's station logo (if available) or return to now playing screen:
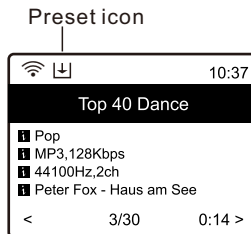
```
 📶 ▶            10:37
    Top 40 Dance
ℹ Pop
ℹ MP3,128Kbps
ℹ 44100Hz,2ch
ℹ Peter Fox - Haus am See
<       3/30      0:14 >
```

```
 📶 ▶            10:37
    Top 40 Dance

    10:37

<   2 May,2018 Wed    >
```

```
 📶 ▶            10:38
    Top 40 Dance

    TOP40
    Dance

<                    >
```

Press **[HOME]** to return home screen. To go back to the playback screen, press the **[HOME]** button again.

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

Preset a station
When a radio station is playing, press the ♡ button on the remote control, you will see the ⊎ icon appears as below. It means the station is added to the Favorite list. Alternatively, you can press and hold the **[FAV]** button on the Tuner to save to Favorite.

Preset icon

```
 📶 ⊎            10:37
    Top 40 Dance
ℹ Pop
ℹ MP3,128Kbps
ℹ 44100Hz,2ch
ℹ Peter Fox - Haus am See
<       3/30      0:14 >
```

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

Internet Radio

You can store up to 150 presets.

Recall a station
Press the ♡ button on the remote control to recall the list of My favorite, or navigate to My Favourite on the Home screen and select it to confirm. On the Tuner, press the **[FAV]** button to recall the favorite list.

Dedicated Preset button #1-4
Program the 4 preset button to access the stations you play it most of time. Press and hold the 1-4 button on the Tuner to preset, press it briefly to recall.

Note: The 4 dedicated preset stations do not appear on the "My Favorite" list. To replace it with another station, play the station you want to replace with, then press and hold the preset number button on the Tuner.
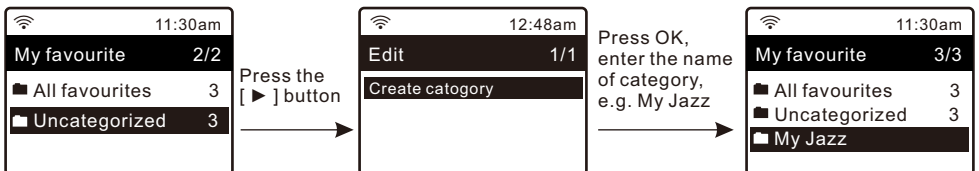
Create new categories - make your own favorite list
There are two items in the My Favorite list as below, "All Favorites" and "Uncategorized":

```
                        11:30am
My favourite        2/2
■ All favourites       3
■ Uncategorized        3
```
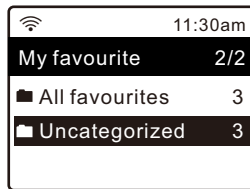
You can create new categories of your favorites and name it as you like, e.g., "Morning mix", "My Jazz", "After work"…etc to manage your favorites.

In the page of "My Favorite", press the **[►]** button, it will enter the edit menu with "Create Category" as below:

```
                        11:30am
My favourite        2/2
■ All favourites       3
■ Uncategorized        3
```
Press the [►] button →
```
                        12:48am
Edit                1/1
Create catogory
```
Press OK, enter the name of category, e.g. My Jazz →
```
                        11:30am
My favourite        3/3
■ All favourites       3
■ Uncategorized        3
■ My Jazz
```

When a category is created (can create more categories as you like), you can now assign the stations to the category as desired.
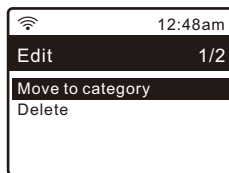
Internet Radio

The "Uncategorized" means the stations which are not assigned to any categories yet.

To move the stations to the respective category, enter either the "All Favorites" or "Uncategorized" folder, choose the station from the list and select "move to category", then highlight the category to move it to and press OK to confirm.

You can always move the station from one category to the other.

📶	12:48am
My favourite	1/3
< ♪ 101 SMOOTH JAZZ	
FM 106.30 MHZ	
FM 98.90 MHz	

Highlight the station
to move category
press OK to confrim

→

📶	12:48am
Edit	1/2
Move to category	
Delete	

Choose "Move to category",
it will display the list and
select the one you want to
move it to. e.g., "My Jazz",
then press OK.

→

📶	11:30am
My favourite	3/3
■ All favourites	3
■ Uncategorized	2
■ My Jazz	1
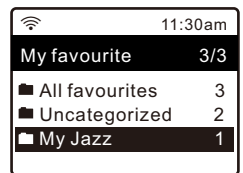
The station is now
moved to
"My Jazz" folder.

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 configure 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
[FAV] button or press the ♥ 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.

USB Playback

Another option to listen to your favorite music is via the USB thumb drive. Insert the USB drive to the USB port on the Tuner. Press the Home button and navigate to "USB" and confirm the selection. It will take a moment to read the USB drive before it starts playing the music. To skip the next or previous track by remote control, press the [◄/►] buttons. On the Tuner, press the **[HOME]** button will pop up the Hotkey menu to choose more control options.

To pause/play the music, press in the **[TUNE/SELECT]** knob on the Tuner or ▶❚❚ on the remote control.

Note:
If a USB thumb drive is not recognized, the list of files on the drive is corrupted or a file in the list is not played, please connect the USB drive to a PC, format the device and try again. The supported file system is FAT16 and FAT32.

A USB drive requires high power (more than 500mA or 5V) is not supported.
Compatible audio format: MP3, AAC, AAC+

Note:
NTFS and logical drive partitioning are NOT supported.
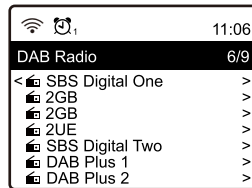**USB hard drive, HDD or similar are NOT supported.**

DAB+/DAB Radio(Digital Audio Broadcasting)

If there is Digital Audio Broadcasting (DAB) in your area, the Tuner can pick up the DAB stations as well (no internet connection is required). The Tuner supports both DAB and DAB+.

Connect the wire antenna (supplied in the box) to the antenna jack on the rear cabinet. Place the Tuner close to the window and extend the antenna as far as it can go to get the best reception.

On the Home screen (main menu), scroll to **DAB Radio** or use the **[MODE]** button on the remote to switch to DAB Radio and confirm the selection.

Choose **DAB full scan** to confirm scanning if this is the first time using the DAB radio. Confirm to start scanning and it will show the progress on the number of channels received. When it is done, a preset page will be displayed for your action.

```
🛜 🕐₁                          11:06
DAB Radio                        6/9
< 🔊 SBS Digital One              >
  🔊 2GB                          >
  🔊 2GB                          >
  🔊 2UE                          >
  🔊 SBS Digital Two              >
  🔊 DAB Plus 1                   >
  🔊 DAB Plus 2                   >
```

You can select the channel and start listening to it. Whenever you want to add to My Favourite, press the ♡ button on the remote or press and hold the **[FAV]** button on the Tuner, it will add to the favourite list.

Always press the **[⏮ / ⏭]** button on the remote to skip to previous or next preset. Press the **[◀]** button (or use the **[TUNE/SELECT]** knob on the Tuner) to return to the Preset list.

Note — When a DAB radio is playing, press the **[INFO]** button to view more radio information, each time you press the **[INFO]** button, it will display various information at a time such as radio frequency, rolling texts (if available) and big time clock.

New digital radio stations should be picked up automatically by the Tuner if they are part of a multiplex you already received. Otherwise you need to do the DAB full scan again.

FM Radio

To receive the ordinary FM stations (no internet connection is required), connect the wire antenna (supplied in the box) to the antenna jack on the rear cabinet first.

Place the Tuner close to the window and extend the antenna as far as it can go to get the best reception.

On the Home screen (main menu), scroll to FM Radio or use the **[MODE]** button on remote to switch to FM Radio. Press **[OK]** to start.

Choose **FM full scan** to confirm scanning if this is the first time using the FM radio. When it is done, it will automatically save the found channels on presets and display the list for your action.
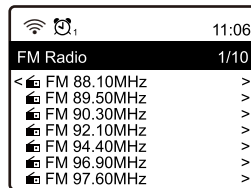

You can select the channel and start listening to it. Whenever you want to add to **My Favourite**, press the ♡ button and it will add to the favourite list (or press and hold the FAV button on device).

Always press the **[◄◄ / ►►]** button on the remote to skip to previous or next preset. Press the **[◄]** button (or the **[TUNE/SELECT]** knob on the Tuner unit) to return to preset list.

Note ─ When it is playing FM radio, press the **[INFO]** button to view more radio information, each time you press the **[INFO]** button, it will display various information at a time such as radio frequency and big clock display.

Manual Tune

To manual tune the frequency, long press the **[OK]** on remote or long press **[TUNE/SELECT]** on the unit, until you see the "Tuning" appeared on the display at the bottom right corner. Use the **[◄/►]** button on remote to tune the frequency. When done, long press the **[OK]** button to exit manual tune.
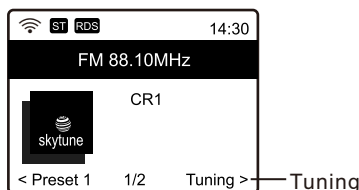
BT playback

Before transmission between your BT 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. Check the BT antenna already installed.

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

• Push the **[HOME]** button to display the selection menu for the different operating modes.

• Use the up / down button to select the operating mode BT and push the dial switch.

• Switch your BT device to which you want to connect the radio on and activate the pairing mode here. The device scans for BT devices in the reception range.

• When the radio is found, your BT device shows its name WR-50-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.

Alarm Setting

• Choose **Alarm** from the main menu or press the ☏ 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 Tone, My Favourite, Wake to FM Radio or Wake to DAB Radio** as the alarm source.

Note — Wake to FM or Wake to DAB Radio - only the preset stations can be used for the radio alarm (if the preset scan has been completed).

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

⚠ The Presets in Preset button 1-4 cannot be selected direct as the alarm source. If you want those 4 presets to become one of the alarm sounds, add these stations to the "My Favorite" list by press and hold the **[FAV]** button or the **[♡]** button on remote.

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 or **[▲/▼]** button on remote.

Alarm duration — Set the duration of the alarm from the preset options ranging from 30 to 180 minutes. The radio will be turned to standby when the selected duration of time is due.

• 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.
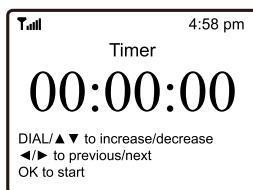
Timer Setting

Setting the Timer
The device offers the Timer function as a kitchen timer. The time will count down from a specified time and ends with a beeping sound. Timer settings is up to 99 hours, 59 minutes, 59 seconds.
The beeping sound volume and sound duration is adjustable from the Timer settings in Configuration menu.

Switching off the timer
When the alarm sounds, you can turn it off by pressing the **[TUNE/SELECT]** knob on the radio device or **[OK]** button on the remote control.

```
Tᵧₐₗₗ                        4:58 pm
                 Timer
    00:00:00
DIAL/▲ ▼ to increase/decrease
◄/► to previous/next
OK to start
```
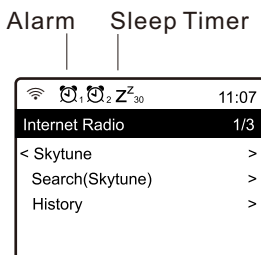
Sleep Timer Setting

You can set the timer to let the radio goes to sleep after the selected timer elapsed. There are number of preset timer options from 15 minutes to 180 minutes.

Press **[ᴢᶻ]** button on the remote control to set the timer.

You will see the icon appeared on the display if the timer is set.

Alarm   Sleep Timer

```
🛜  ⏰₁⏰₂ Zᶻ₃₀        11:07
Internet Radio              1/3
< Skytune                    >
  Search(Skytune)            >
  History                    >
```

Podcasts operation

On the Home screen, select "Podcasts" and press OK to confirm. You will find the following options:

Listen again ─ You can always add a particular episode to "Listen again" to repeat on listening or continue the unfinished part.

To save the episode to "Listen again", press the Preset button ♡ on the remote when it's playing. It will be added to the list. To remove it from Listen again, highlight the episode and press the right arrow button ► to edit.

Note: The episode will resume to play from where it left off.

Subscribed ─ Subscribe your favourite Podcast for easy access to listen to the latest episode.

To subscribe a Podcast, highlight the Podcast and press the right arrow button ► , then select Subscribe.

To remove the subscription, highlight the podcast and press the right arrow button ► to edit.

History ─ the previous listened episode of the podcasts.

Browse ─ To browse the list of Podcasts available

Search ─ Search the Podcast by keywords

Search history ─ the list of previous search records.

When an episode is playing, you can always skip forward / backward by "press and hold" the ◄◄ ►► buttons, press these buttons briefly ◄◄ ►► will skip to next / previous episode.

Press the ►❙❙ to pause the playback.

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.

Network
 • **Wireless Network**
  » **Add wireless network**
   Scan & select — It will scan out a list of wireless networks around.
   WPS button— Choose this option to connect your Wi-Fi router via WPS if the router has a WPS button.

  » **Remove wireless network**
   If you have already set up a network and want to remove it, choose this option.
   Note — Always bring the Tuner within 2 meters of the Wi-Fi router for setup.

  » **AP: [ ]**
   If you have added more than one network on the radio and want to switch to another one, select this option to change.

  » **Signal**
   This is to show the strength of the wifi Signal of the wifi 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.

Configuration

- **LAN network**

  WiFi router using CAT 5 or CAT 6 cable. If your Router or Wi-Fi router is DHCP-enabled (recommended), you don't have anything to setup and the radio will connect to Internet with the parameters automatically assigned by the Router/Wi-Fi router. Use the remote control for configuration if you want to use a fixed IP, scroll to IP:[Dynamic] and press OK. Choose Fixed. Press the ▲ button, you can then enter the IP, press ▲, ▼ to tune to the required numbers: xxx.xxx.xxx.xxx. Switch among the 4 groups by pressing ◄/► . When done, press OK. Scroll to GW and NM to do the same.

  You can also choose to use a DNS server other than the one from the DHCP server. Scroll to DNS and do the same.

  Note – Use DHCP to get the network parameters unless you are familiar with network setup.

- **Network Options**

  Always on: The WLAN function remains switched on (faster access when switching from DAB or FM mode to Internet radio). Auto off in 15s/30s: The WLAN function shuts down after 15s/30 seconds when not in use (to save energy).

- **Wireless Channels**

  Not all of the Wireless channels are available in every country. There may be variation between different countries. Therefore it is necessary to choose the Wireless 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.

- **Network connection test**

  In case there are any issues in connecting Skytune, select this option to check out any failed items of the network parameters for further diagnosis.

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 clock style**
  You can choose the clock display in digital form or Analog style. The selected style will apply in Standby as well as the big clock display in radio playback.

- **Set Date Format**

- **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 protocal) 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
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 select your choice of language by a press of OK button. Multipe languages are available.

DAB set up
• DAB full scan
You can always carry out a new scanning of DAB channels by selecting this option. All current presets and channels will be erased.

• DAB station status
This is to show the number of stations and signal received of each DAB frequency.

• DAB station list
The scanned DAB stations will be listed here for management. You can move the position or even delete any station. Scroll to the station and press **[►]** button. A pop up window will be presented: Move up, Move down and Delete.

FM Setup
• Scan setting
Either "All stations" or "strong stations" (with stronger signal) can be selected for the scan.

• Audio setting
If the signal is weak and stable stereo reception is not possible, select "Forced Mono" to get better reception.

• FM full scan
You can always carry out a new scanning of FM channels by selecting this option. All current presets and channels will be

Configuration

erased. The radio at the lowest frequency of the scanned values will be highlighted. The preset list will be saved unless a new preset scan is carried out.

• FM station list
You can adjust the preset ranking by Move down, Move up or Delete it. Highlight one of the preset and press the **[▶]** button (or **[▶]** on the unit), it will enter into the Edit menu.
Always press the **[◀]** button (or **[◀•BACK]** on the unit) to return to the Preset list.

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 in the "Local Radio" under Skytune menu. 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.

Power-On Options
This is to select the state of the radio after a power reset / power cut, or the next power up from Standby. There are 3 options available:
— Go to Standby
— Resume once ready: the radio will resume playing the last listened station.
— Ready to use: the radio will stay in Home screen without action.

Auto Power Save
If the radio is not playing, it will turn off automatically after 30 minutes to save power. You can also choose to turn off after 15 minutes (if the radio is powered by battery, it will automatically power off, if it is powered by mains adapter, it will automatically stand by).

Configuration

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

The highest backlight level in standby is set by system default. To further reduce the backlight or turn it completely off, adjust it by turning **[TUNE/SELECT]** knob anti-clockwise on the tuner or press the ▼ button on remote. Increasing the backlight beyond the system level will illuminate for 20 seconds and then dim to default setting automatically.

EQ(Equaliser)

Various music genres can be set.

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.

Line/Digital out

The volume control on the Tuner can only adjust the volume from the headphone. If you would like to control the volume over the external speakers as well, choose this option and select "Follow headphone". The volume adjustment will apply on both the headphone and the

external speakers the same time.

Timer
This is to set the alarm sound volume and the duration for the Timer function.

Network information
View the network signal and other parameters.To access quickly to this information, press the **[⊕]** button on the remote control.
When you use your 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 (Configuration > Network Information > IP) to your PC's browser input window.

System information
The model number, system MID and software version (App version) can be found here.

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.

Web browser control via PC / Smart phone
─ Tuning internet radio & manage favourite

Experience an easy way to control tuning internet radio channels and manage your favourite list via PC or Smart phone's web browser.

The supported browsers are Internet Explorer and Chrome. Have the radio stayed on Internet radio mode when using this feature.
- Connect your PC or Smart phone to the same Wi-Fi network as your radio.
- Visit www.skytune.net
- On the home page, click "Browse/Search"
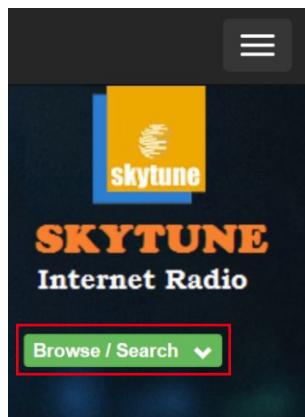
- Browse or enter the name to search the radio channel, a list of internet radio channels will be displayed.
- Click the " ♥ "symbol

Result for Searching 'dance'

| 1.fm 90's Dance | 1.fm Dance One | 101.RU - Club Dance | 101.RU - Russian Dance |

- It will prompt you whether to "Add Favourite" or "Listen to Station". Enter the IP address of your radio (e.g. 192.168.1.11):

Add Favourite / Listen to Station ✕

Which operation do you want to apply to the station ?

1.fm Dance One

◉ Add station to my radio device favourite

◯ Listen to station on my radio device

Please enter your radio device's IP below.
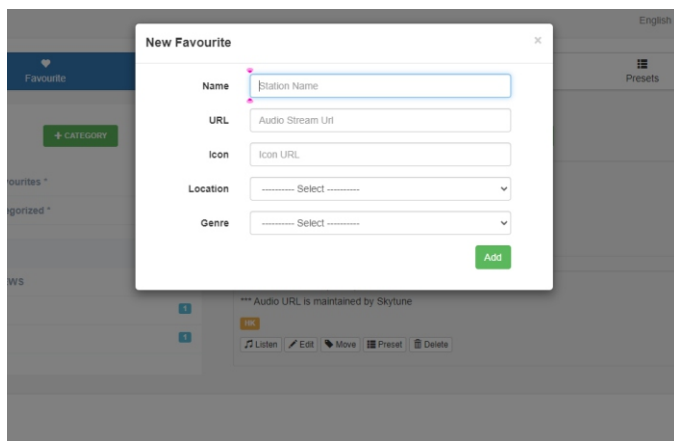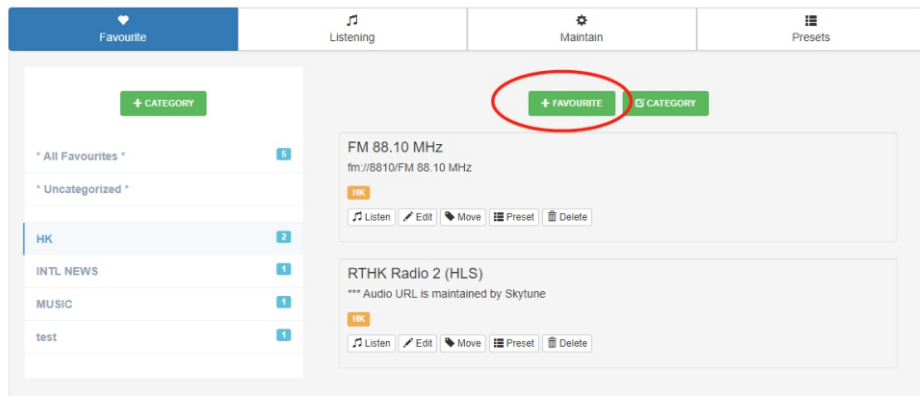
192 . 168 . 1 . 11

Send   Close

The IP address can be located on the radio unit as follow:
* On the remote control, press the [⊕] button, scroll to IP to view the IP address
* On the radio, return to the Home menu. Navigate to **Configuration > Network Information > IP**

- Select "Listen to Station", click "Send" and the radio unit will switch playing the channel and the "My Favourite" page will pop up on the web browser.

You can then choose to add the playing station to favourite or manage your list by other edit options. Any changes will synchronize to the radio unit immediately.

You can also add the radio channel if you know the published audio stream URL with the streaming format as follow:
1. Audio formats: MP3, AAC, AAC+
2. Stream formats: Shoutcast, Icecast (HTTP, HTTPS) and HLS
3. Playlist formats: PLS, M3U
4. Sampling frequency: 44.1 KHz and 48 KHz

Trouble Shooting

Problem	Cause	Solutions
Cannot connect to Wi-Fi network	Network down	• 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 you 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 > 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	• Check distance to router; see if a computer can connect to the network in this location • Optimize the distance of the router's location
	Unknown encryption method	Change encryption method on router. The radio supports WEP, WPA, WPA2
	Firewall preventing access	• Disable the fire wall to see if radio can connect to the network. • Windows Media Player: varies non Microsoft firewalls may require configuration for UPnP.

Trouble Shooting

Problem	Cause	Solutions
If your radio can connect to the network successfully, but is unable to play particular stations		• 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 update of the link is done regularly. To get the updated list of stations, please access from Internet radio > Skytune. If case a particular stream is still not working, please contact us or Skytune to report the case.
If your radio can connect to the network successfully, but is unable to play particular stations		• 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 update of the link is done regularly. To get the updated list of stations, please access from Internet radio > Skytune. If case a particular stream is still not working, please contact us or Skytune to report the case.
No DAB/FM reception		• Please carry out "Factory Reset" on the radio and extend the antenna. • Move the radio close to the window.

Trouble Shooting

Problem	Cause	Solutions
DAB/FM Radio reception is poor		• Please check that the aerial is extended for the maximum signal strength and improved reception. • Check that you do not have other electrical equipment too close to your radio, causing interference.
No sound		• Please check if the playback is stopped. Press the OK button on the remote to resume playback. • Adjust the volume • Check if other radio stations have the same problem or just happened on a particular station. If external speaker is connected to the line out jack: • Adjust the volume level of the external powered speaker. • Please check if the power of the external powered speaker is switched on.

Helpful Tips

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 Tuner 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.

Technical Specification

Model	WR-50
Power input	5V⎓1A
Power voltage	100-240V~50/60Hz
Wireless Network	IEEE802.11b/g/n
Wireless network frequency	2.4 GHz
Security Protocol	WEP/WPA/WPA2
Ethernet connection (LAN)	10 Mbps RJ45
BT version	V5.0
BT frequency	2.4 GHz
BT range	10 meters (line of sight)
DAB frequency range	174.928MHz (5A) - 239.200MHz (13F) Support DAB and DAB+
FM frequency range	87.5-108MHz
Audio input	USB thumb drive
Audio output	Stereo earphone jack 3.5 mm Stereo line out Optical (Toslink) and co-axial digital out (SPDIF)
Wire antenna jack	
External antenna x 2	5dBi
Unit Dimension	430 x 48 x 243mm(L x H x D)

Remark: Specification may vary without notice

In the box

- Internet Radio Tuner
- Power adaptor
- Wire antenna
- External antenna x 2 pcs
- RCA cable
- Remote control (without batteries)
- User manual

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.

FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Information
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.