

Internet Radio

WR-210N

User Manual



Please read this user manual carefully before using the receiver

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Introduction to the WR-210N Internet Radio

The WR-210N Internet Radio is a compact, multi-purpose and attractive portable radio with an internal 2000 mAh Lilon rechargeable battery for many hours of audio entertainment and a gateway into the world of internet radio

There are seven different operating modes requiring different wireless connections as listed below:

- 1) My Favorite (No Wi-Fi or Internet)
 - List of previously Preset favorite listening choices
- 2) Wireless Wi-Fi (Internet connected)
 - Internet Radio with more than 30 thousand radio stations worldwide
- 3) Media Center (No Internet connected)
 - Play music streamed over the Wi-Fi network by UPnP or DLNA server e.g. smart phone, laptop.
- 4) Wireless (Bluetooth no Internet or Wi-Fi)
 - Play audio transmitted from a Bluetooth source e.g. smart phone, Laptop.
- 5) Alarm (USB Power; Optional Wi-Fi and Internet)
 - Wake up alarm Clock with option to automatically set the Time of Day to Internet time standard
- 6) Timer (no Wi-Fi or Internet)
 - Adjustable timer to delay putting the Radio Tuner into Standby mode
- 7) Configuration (no Wi-Fi or Internet)
 - · Set up, options and information center

Introduction to the WR-210N Internet Radio

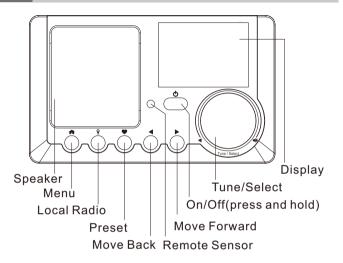
Precautions

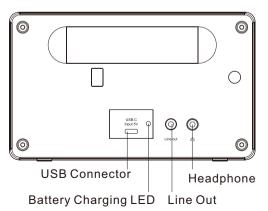
Charge the battery with a USB-C type charger – do not apply any other power source or permanent damage to the radio will occur and may be hazardous.

To clean use only a damp cloth and dry with a clean towel-keep away from all liquids.

To avoid loss of warranty do not attempt to repair or remove the cover for any reason.

Location of Controls





Location of Controls

Control Functions

Many of the controls have multiple functions depending on the Radio mode:

a) Radio Front

Speaker - Audio off when headphone plugged in

Home - Go to the My Favorite main mode

Local Radio - Go to Local Internet Radio station list

Preset – Press and Hold to add current audio source to My Favorite list

Press and Release to display My Favorite list

Move Forward – Go to next display or item in list

Remote Sensor – Infrared sensor for Remote Controller input

Move Back – Go back to previous display or item in list

Power On/Off – Press and Hold (On/Standby with USB-C power connected)

Tune/Select – Press and release to Select; Rotate to navigate and adjust volume

Display - 2.4" color TFT LCD

b) Radio Back

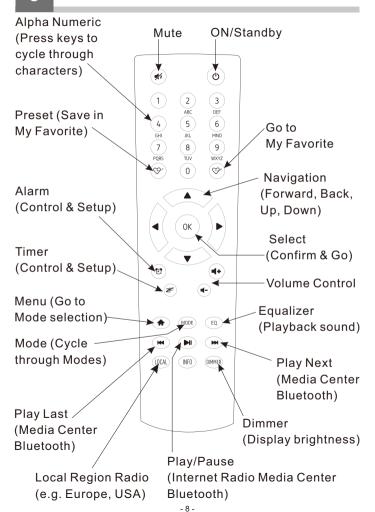
USB Connector – 5 Volt input from USB to power radio and charge battery

Battery Charging LED – Red battery charging; Green fully charged

Line Out – standard 3.5 mm (pre-amp level audio output)

Headphone - standard 3.5 mm stereo audio

Remote Controller



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Choosing functions and options

All user input is information the Radio uses to provide the desired audio entertainment and pressing the **Tune/Select** knob is a confirmation and go command.

Once a desired selection is displayed or highlighted the selection is confirmed by pressing and releasing the **Tune/Select** knob.

The **Tune/Select** control knob is also 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.

The front panel **Move Forward (▶)** and **Move Back (◀)** buttons can also be used to move to the next or back to the previous display but all Selections must be confirmed by pressing and releasing the **Tune/Select** knob.

Alternatively navigate to functions (i.e. My Favorite, Internet Radio, Media Center, Bluetooth, Alarm, Sleep Timer and Configuration) or a position in a list by using the Move Forward, Move Back, Move Up and Move Down controls on the Remote Controller with the OK button confirming the selection.

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

Throughout this manual "Select" will mean navigating through display screens or option lists to display or highlight desired selection and confirming it by pressing and releasing the **Tune/Select** knob or OK button on the remote controller.

The Internet Radio must have a high bandwidth internet connection and a wireless (Wi-Fi) home network connected to it to be fully functional.

To configure the Wi-Fi network connection turn on the radio by pressing and holding the power On/Off button until the display illuminates - this normally takes a few seconds.

The first time the Radio is turned on after leaving the factory a Configure Network wizard is automatically started: Highlight and Select Yes to connect to the Wi-Fi network

- 1) The display will change and display a list of options Select Add AP (Scan)
- 2) The display will show a list of available networks Select your network
- 3) The display will ask for your passcode/password
 - highlight the first digit by rotating the **Tune/Select** knob and press Tune/Select knob to move forward.
 - highlight the next digit and press Tune/Select knob to confirm and move forward
 - Repeat highlighting digits and pressing Tune/Select knob until the last digit is highlighted.
 - While the last digit is highlighted Select it by pressing and holding the Tune/Select knob until the display changes.
- 4) If the connection is successful "Association Complete" will be displayed briefly.

Note: the remote controller keypad and OK buttons can be used to input the passcode / password directly.

To repeat the above procedure, or if Configure Network wizard does not automatically start, the network can be connected by using the Configuration mode.

Network Setup

- Press the HOME () button to go to the mode selection options
- 2) Select Configuration
- 3) Select Network

There are two different options to connect to the network from the Configuration mode:

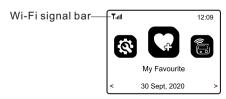
- 1) Repeat steps 1) through 5) above.
- 2) Select Add AP (WPS button) Press WPS button on your router within 2 minutes to complete the connection.

Connection status is displayed in the top left hand corner of the LCD with the Wi-Fi symbol and signal strength bars (Till).

For best Wi-Fi performance, limit "drop outs" (interruptions) the Wi-Fi Channels should be set according to the location of the Radio Tuner e.g. China, USA, Europe. The factory default is China.

To set the correct location, select Configuration > Network> Wi-Fi Channels and select the correct option.

Overview of Radio modes and functions



Network Setup

Navigate through the modes to find and Select any of these functions:

- My Favorite A maximum of 150 previously saved (Preset) favorite listening sources are listed for Selection.
- 2) Internet Radio Select online radio station from the thousands available on Skytune or by using the History list of previously selected radio stations or use Search to find a preferred radio station.
- Media Center Browse and Select music streaming on your home Wi-Fi network by any UPnP or DLNA compatible server e.g. Smart phone, Tablet, PC, Laptop.
- 4) Bluetooth When "Paired" (connected) to another Bluetooth device use the Radio Tuner as a powered speaker. Maximum range of the Bluetooth wireless signal is 10 meters (32 feet) but may be reduced by the presence of walls or other obstructions.
- Alarm two separate alarm clocks with the time of day automatically synchronized to the internet time standard. Only available if the radio is connected to a USB charger.
- 6) Sleep Timer Select a time delay before the Radio Tuner goes to Standby mode while playing your selected audio entertainment source. Only available if the radio is connected to a USB charger.
- Configuration This mode lists all available options and settings to personalize your Radio Tuner.

6 My Favorite

This mode displays a list of up to a maximum of 150 audio sources that have been Preset (stored) using the Preset button on the remote controller (>>) while an audio source is playing.

Press and hold button until the Preset symbol ($\ensuremath{\,ullet\,}$) is displayed in the top left corner of the LCD.

After the first 150 presets have been stored the next Preset will be stored in the first location, the next in the second location; continuing to overwrite each list location until it loops back to the first location again.

To Edit the list highlight a list item then press the Move Forward button (▶) to move to the Edit list function where the item can be moved Up, Down or Deleted from the list.

To play an audio source in the list highlight the item, Select it by pressing the **Tune/Select** knob or the OK button on the remote controller and the radio will automatically go to the correct mode and start playing.

7 Internet Radio

Select Internet Radio mode (Home>My Favorite>Internet Radio) and navigate the extensive list of worldwide radio stations using these options:

- 1) Skytune Select a radio station using the structured lists that aid and reduce the task of finding the right station.
- 2) Use Search instead of browsing the extensive radio station list by using the initial letters of the desired station name, creating a shorter list of stations the more characters used in the search.
- 3) The History option will show a list of the radios stations recently selected. Every station selected is added to the list automatically until a maximum of 99 is reached when the next station selected will replace the first station in the list.

When playing Internet stations information about the station and what is playing will be displayed on the LCD screen. Pressing the Move Forward (►) button once will display more information and pressing Move Forward (►) again will display the time of day in 12 or 24 hour format depending on the time setup in Configuration.







Radio Stations can be added to the My Favorite list at anytime a station is playing by pressing and holding Preset () button until the Preset symbol is displayed in the top left hand corner of the LCD as shown below.

Internet Radio



A maximum of 150 Presets can be stored in the list before the next Preset will overwrite the first item in the list.

To edit My Favorite list highlight a Preset location and press Move Forward to display edit options; Move Up, Move Down and Delete.

8 Media Center

The Radio Tuner supports the industry standard Universal Plug and Play (UPnP) and Digital Living Network Alliance (DLNA) standards.

This enables the Radio Tuner to browse and play music files located on UPnP or DLNA server provided the server has been setup to allow sharing of files on the network.

Set up Media Center playback options in Configuration and Select the Media Center to display a list of options:

- UPnP A scan is made to find UPnP and DLNA devices that are streaming on the Wi-Fi network (this can take a few seconds) and when complete options are listed to select music or playlists files. If no UPnP or DLNA servers are found "Empty List" is displayed.
- My Playlist Your own play list may be created by playing selected music and while it is playing pressing and holding a Preset button until the Preset symbol (<u>↓</u>) is displayed.
- Clear My Playlist Select to delete all music files from My Playlist.

9 Bluetooth Speaker

After selecting Bluetooth the display will show the Radio's Bluetooth identifier code and connection status. If it is not connected "pairing" must take place with the audio source Bluetooth device.

When the Radio's identification code appears in the list of local Bluetooth devices on the audio source Bluetooth device pair the two devices so that they can recognize each other and will automatically connect whenever the Radio Tuner is in Bluetooth mode and in range.

Once pairing is complete the audio file being transmitted by the Bluetooth device will be received by the Radio Tuner and played the same as any other audio source.

10 Alarm

To save battery power the Alarm function is not available unless the radio is connected to the USB charging power source via the USB-C cable.

There are two separate wake up alarms that can be set up independently to start at a given time, with selectable sounds, at adjustable volume and with repeat options, on their own or at the same time e.g. set Alarm 1 for normal wake time and Alarm 2 to wake in case of falling asleep again.

Select Alarm 1 or 2 and a setup wizard will start to guide selecting options.

The wake sounds selected can be a tone or a source in the My Favorites list.

After selecting the final option or adjustment exit the set up wizard by using the Move Back button (\triangleleft).

Set the wake sound volume before sleeping using volume control knob on the front panel or the volume Up / Down controls on the remote.

After setting up the Alarm check to confirm it is set by the presence of the alarm icon (📆) at the top, left side of the display.

The Alarm will function while the radio is On or in Standby mode if USB power is connected.

Stopping the Alarm/Activate the Snooze function

When the alarm goes off, press the (\odot) to stop the alarm or press the **Tune/Select** knob to activate the Snooze feature.

When the Snooze is activated, the alarm is muted for 9 minutes and sounds again when the time is due. You can repeat the process multiple times.

To stop the "Snooze" function, press the (ϕ).

11 Sleep Timer

Set a time delay before the Radio automatically goes to Standby mode allowing the listening of audio entertainment while falling asleep.

After selecting the Sleep Timer a list of delay times will be displayed – select the appropriate time and use Move Back (\blacktriangleleft) to exit setup.

12 Configuration

Select Configuration for a list of adjustments and options to be displayed, navigate the list and select the desired function, use the **Move Forward / Back** (◀/▶) controls to go forward or backwards in the decision tree to make selection

Network

Wi-Fi Network

- Network Options Select if the Radio Tuner should be permanently connected or to disconnect if the connection is not active for more than 30 seconds.
- Wi-Fi Channels Select your location to minimize interruption (drop outs) of the audio stream e.g. music.
- ➤ Wi-Fi Network
 - Add/Remove AP Scan local area to find and list available Wi-Fi networks
 - AP:[] If there is more than one router on the network select the one for the Radio Tuner to use.
 - · Signal Display Wi-Fi signal strength
 - IP [current setting] Factory Reset default is Dynamic
 - DNS [current setting] Factory Reset default is Dynamic

Date & Time – Set up and select options for time zone, clock and date formats, adjust for day light saving time, network time, NTP server address.

Language – Select language

Local Radio (United States) – Option to automatically set local stations or set manually

Configuration

Playback Setup – Options to repeat all, repeat one, shuffle or normal

Resume play options – play when ready or do not start playing

Dimmer – options to set LCD brightness levels in play and Standby – set Dim and Bright light levels independently from dark to full brightness

EQ [current setting] – options for playback sound e.g. Flat, Rock, Classical

Buffer Time [current setting] – select either a 2 or 5 second minimum amount of audio streaming data in the buffer (storage) when recovering from breaks in the Internet data stream before playing resumes

Information – Network and System information

Software Update – There may be software release to upgrade features of the radio from time to time. Do not turn off the radio until the update has completed. If an error occurs or radio hangs up (i.e. becomes unresponsive) press and hold both the power On/Off and Mode buttons until the radio turns off

Reset to default – reset all the Radio Tuner settings and options back to the exit factory condition



Skytune Web Application for Internet Radio www.skytune.net

Browse / Search

On the opening page click Browse / Search at the lower right side of the page.



Enter the name of a Radio Station or Browse the structured list of stations available, select the one of interest and click on the heart symbol () - the station logo is displayed.



The Radio Tuner connection page will ask if the station is to be played or saved in My Favorite list in your Radio Tuner.

Skytune Web Application for Internet Radio www.skytune.net

To make an Internet connection to the Radio Tuner it's IP address must be entered in the space provided on the web page – the Radio Tuner IP can be found at Configuration>Information>Network Information.



Once the IP address has been entered select Save or Listen, click Send and My Favorite web page will be displayed i.e. a duplicate of your Radio Tuner My Favorite list.

The list can be edited using the tools provided on the web page and any changes sent to the Radio Tuner My Favorite list automatically.

Request to add Radio Station

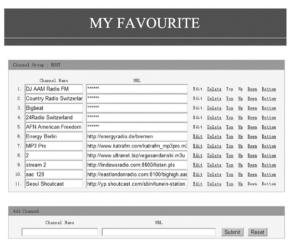
If you know the name of a Radio Station but it is not in the list a request can be made to have it added.

On the opening page select the Suggest Station tab and fill in the application.

Skytune Web Application for Internet Radio www.skytune.net

Adding a Radio Station

To add a Radio Station its name and URL can be entered in the Add Channel section along with selecting the Country where it is located and Genre of audio entertainment it provides.



Smart Phone, Tablet or Computer Control

With device connected to the same Wi-Fi network as the Radio Tuner use web browser to edit lists and add radio stations.

Enter the Radio Tuners IP address (Configuration > Information > Network to find IP address) as web address and a window will open to edit lists e.g. add your favorite radio station URL if it is not in the list.

14 Problems and Solutions

Cannot connect to the Wi-Fi Network

a) Common Causes

- Incorrect passcode / password for the selected Network.
- Location of the Radio Tuner has a weak Wi-Fi signal if possible check with another Wi-Fi connected device in the same location or move to a location closer to the router.

b) Unusual Causes

 Incorrect Network security encryption – Radio Tuner supports WEP, WPA and WPA 2

Cannot play UPnP or DLNA Files

- There is no UPnP or DLNA server.
- The UPnP server is not streaming flies over the Wi-Fi Network.
- The server is not correctly configured to allow sharing of files over the network

Internet Radio has interruptions (drop outs)

- Wi-Fi Channel interference incorrect region selected Configuration>Network>Wi-Fi Channels.
- Weak Wi-Fi signal check the Wi-Fi symbol (top left hand side of LCD display) for a minimum of two "Bars" - add a Wi-Fi Extender to the Network if necessary.
- Radio Station has interrupted streaming check by trying a stations in the Skytune > Globe Most Popular list.
- The Internet connection does not have sufficient bandwidth (capacity) to support all the devices connected to the Network when operating at the same time or is

Problems and Solutions

experiencing excessive error rates – have the Internet connection checked by the ISP (Internet Service Provider).

Internet Radio cannot play some stations

- The station may not be streaming not all stations stream for 24 hours a day.
- There are too many users at this time some stations have a limited number of users they can support at any given time.
- The station link is out of date it is updated daily and should be correct the next day.
- The station link is no longer active the station is no longer available.

15 Technical Specifications

Model: WR-210N

DC Power Input: 5 Volts 1 Amp. (USB)
Battery: Li-Ion 2000 mAh

Wi-Fi Wireless Network: IEEE 802.11b/g/n (5 GHz only

version ac - not supported)

Frequency: 2.4 GHz

Security: WEP, WPA, WPA2

Bluetooth Version: V4.2 BR, EDR Compliant

Frequency: 2.4 GHz

Range: 32 Feet (10 meters) Line of sight

Transmit Power: 0 dBm Receive only (not for

headphones)

Audio File Streaming Formats

UPnP: MP3, AAC, AAC+, WAV, FLAC

DLNA: MP3, AAC, AAC+

Audio Output: 2 Watts

Analogue: 3.5 mm Stereo Headphone

3.5 mm Stereo Line Out

Dimension: 7.5" x 5" x 4.5"

Weight: 1.6 Lbs

IN THE BOX

- Internet Radio Tuner
- User Manual
- Remote Controller (2 x AAA battery not included)
- USB Cable

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.

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