



User Manual

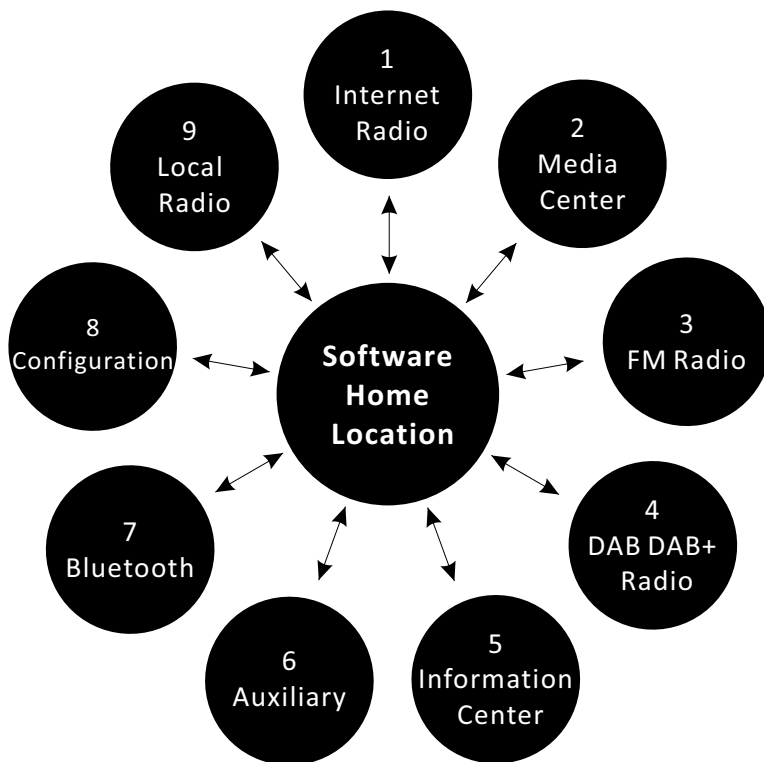
Internet Radio with DAB/DAB+/Bluetooth



WR-238CD

Please read this user manual carefully before using the receiver.

The Internet Radio is a multi-function digital radio:



1. **Internet Radio** - Plays radio stations from around the world streamed over the Internet
2. **Media Center** - Plays audio streamed over the local Wi-Fi network by any other UPnP (Universal Plug and Play) device
3. **FM Radio** - Plays locally broadcast FM radio stations
4. **DAB & DAB+ Radio** - Plays locally broadcast DAB & DAB+ radio stations
5. **Information Center** - Provide worldwide weather and financial information along with the Internet Radio software version and wireless network information
6. **Auxiliary** - Plays music connected to the Aux Input
7. **Bluetooth** - Plays music files streamed by another Bluetooth device
8. **Configuration** - Set up options regarding the way the radio plays music and displays information
9. **LocalRadio** - Plays local radio stations streamed over the internet

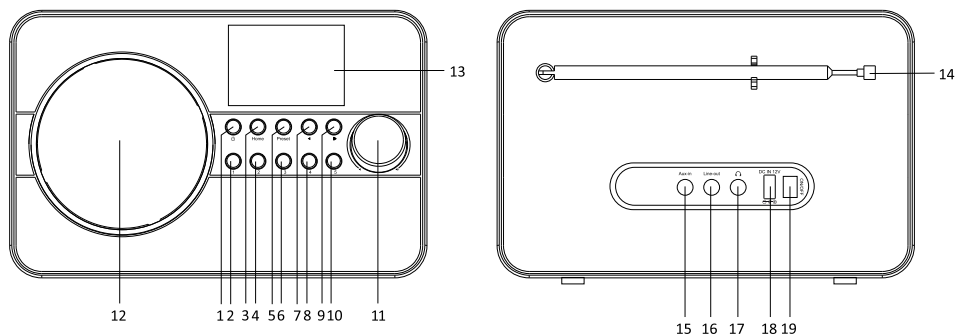
The software Home location can be reached at any time by pressing the Home button on the front of the radio. When at the Home location the functions are shown on the color display screen with picture and text message in the selected language.

Rotating the Dial/Select knob clockwise causes the display to move forward to the next function and anticlockwise to go back to the previous function.

When a desired function is displayed press the Dial/Select knob to confirm the selection of the function.

The Internet Radio, Media Center, Information Center and Local Radio functions require connection to a Wi-Fi network that has broadband connection to the Internet.

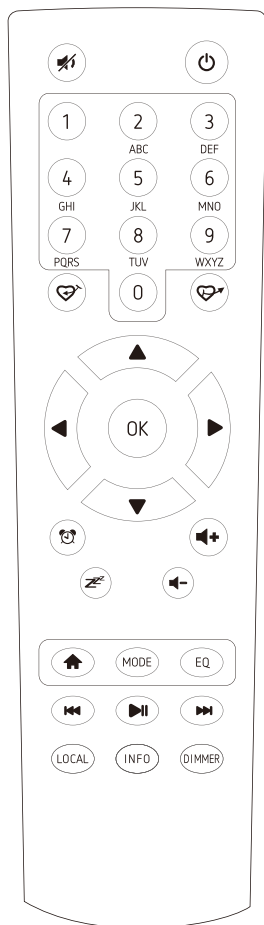
Location of Controls



1. **Standby** - Turns off all functions except the clock and alarm features
2. **Preselect1** - Used to select previously stored favorite radio station
3. **Home** - Press to return to the central location of the software for selection of functions while continuing to play the currently selected function
4. **Preselect 2** - Used to select previously stored favorite radio station
5. **Preset** - Used to save and access favorite radio stations while using several different functions
6. **Preselect 3** - Used to select previously stored favorite radio station
7. **Display Previous** - Back cursor used to change the displayed information back to an earlier display
8. **Preselect 4** - Used to select previously stored favorite radio station
9. **Display Next** - Forward cursor used to change the displayed information to the next display
10. **Preselect 5** - Used to select previously stored favorite radio station
11. **Dial/Select** - Multifunction knob used for making selections by browsing the information displayed and pressing to confirm a selection. Controls music volume when playing music. Character/symbol selection in Wifi connection.
12. **Speaker** - Loud speaker
13. **Colored Display** - 61mm color display used to display function symbols and information to enable the selection of desired features and functions
14. **Telescopic Antenna** - Extend to receive local radio signals broadcast over the air

15. **Auxiliary Input** -3.5mm connector for music signal from another music player’s “Line Output” or “Headphone Output”
16. **Line Output** - For connecting the radio music signal to another music player’s “Auxiliary Input / Line Input”
17. **Headphone** - 3.5mm connector for “Headphones” or “Ear Buds”
18. **DC Power Input** - Power connector for the AC / Mains power supply adaptor
Use only the supplied power supply to prevent damage to the radio or possible injury
19. **On/Off Switch** - Turns on / off power to all functions of the radio

Remote Control



1. : Mute
2. : Standby button
3. **0-9**: Favorite station key / input letters and numbers for WiFi Encryption code
4. : Preset the current playing station to Favorite
5. : Recall the favorite list
6. : Cursor up
7. : Cursor left / back to previous menu
8. : Cursor right
9. : Cursor down
10. **OK**: confirm button
11. : Alarm button
12. : Sleep Timer
13. **Vol+**: Volume up
14. **Vol-**: Volume down
15. : Main Menu
16. **Mode**: Switch between the functions of radio
17. **EQ**: Equalizer
18. : Previous station on the list/previous track on UPnP
19. : Play/pause for music player
20. : Next station on the list/next track on UPnP
21. **Local**: Access the local station list (Local area set up in Configuration)
22. **Info**: View the detailed info of the radio channel or the music info under UPnP.
23. **Dimmer**: Dim down the backlight of display

The remote controller numeric keypad (buttons labeled 0 – 9) transmit to the radio different numbers and letters depending on the number of times the key is pressed as shown in the table below.

When entering information into the radio (e.g. entering the Wi-Fi password) press the keypad button a number of times until the character required is displayed on the radio. Use the cursor control keys (forward or reverse arrows) to move to the next character or previous character position until all the characters have been entered then press the OK key to confirm the entry.

Key#	0	1	2	3	4	5	6	7	8	9
Press 1	0	1	2	3	4	5	6	7	8	9
Press 2	Delete	@	A	D	G	J	M	P	T	W
Press 3		Space	B	E	H	K	N	Q	U	X
Press 4		!	C	F	I	L	O	R	V	Y
Press 5		“	a	d	g	j	m	s	t	Z
Press 6		#	b	e	h	k	n	p	u	w
Press 7		\$	c	f	i	l	o	q	v	x
Press 8		%						r		y
Press 9		&						s		z
Press 10		'								
Press 11		(
Press 12)								
Press 13		*								
Press 14		+								
Press 15		,								
Press 16		-								
Press 17		.								
Press 18		/								
Press 19		:								
Press 20		<								
Press 21		=								
Press 22		>								
Press 23		?								
Press 24		[
Press 25		\								
Press 26]								
Press 27		^								
Press 28		_								
Press 29		'								
Press 30		{								
Press 31										
Press 32		}								
Press 33		~								

The descriptions in this manual always refer to using the buttons or knob on the front of the radio for clarity but each button or knob has an equivalent button on the remote controller that may also be used.

Getting Started

Connect the power cable to the radio and turn on the main power switch located on the back of the radio.

CAUTION: Use only the mains AC adaptor supplied with the radio to prevent permanent damage to the radio or potential hazard to the user.

The display will light up with a “Welcome” message followed by options for the language to use in future messages. Using the Dial/Select knob highlight the preferred language and then press to confirm selection.

It is recommended to Enable the “Check Network when Power On” option so that the radio will automatically connect to the Wi-Fi network when it is turned on.

Connecting to a Wi-Fi network

Music and information for several of the radio functions is streamed over the internet with connection to the radio by wireless Wi-Fi network.

If the router has WPS it can be used to setup the connection with the radio or use manual setup.

From the list of available networks on the display highlight the network to be connected and confirm the selection by pressing the Dial/Select knob.

Enter the WEP (Wired Equivalent Privacy) or WPA (Wi-Fi Protected Access) code or if one of these is not available enter the Password or Passphrase.

To enter the information rotate the Dial/Select knob to display characters until the correct one is shown then use the forward cursor (arrow) button to move to the next character position. To correct a previous entry use the back cursor button. After the final character is shown on the display do not press the forward cursor button to move to the next character position and press the Dial/Select knob to confirm that the information entry is complete.

The radio will automatically connect to the network and when successful display the Internet Radio function symbol. The radio will automatically update the local time when it connects to WiFi network.

Rotate the Dial/Select knob to change the function symbol displayed until it shows the desired function and press to confirm the selection.

Internet Radio

After selecting Internet Radio function from the Home location a list of options will be displayed:

- 1) **My Favorite** – Select to play a station from a previously stored list of favorite radio stations
- 2) **Radio Station / Music** – Use this option to search for any radio station worldwide by Category, Genre or Location.
- 3) **Local Radio** – The display will show a list of all the local radio station available.
- 4) **History** – Displays a list of the last 10 radio stations selected and played.
- 5) **Service** – after entering a radio station name a search is made over the internet to find the station.

After the selected radio station has started playing the color logo for the station is displayed.

Use the Dial/Select knob or the remote controller to adjust the volume.

Adding a radio station to the Preset List

Start playing any radio station and “Long Press” the Preset button on the front of the radio until the “Add to My Favorite” list is displayed.

Press the Dial/Select knob to add the currently playing radio station in the next empty entry in the list. When 250 entries have been added to the list it is overwritten starting back at the first entry or the list can be edited and entries removed at any time.

To edit the list press the Preset button on the front of the radio or select Internet Radio and My Favorite to display the list of favorite radio stations. Using the Dial/Select knob highlight the desired entry to be edited and press the forward cursor button on the front of the radio to display the edit options:

- 1) **Delete** – Removes the radio station from the list
- 2) **Shift Up** – Move the radio station up the list by one entry position
- 3) **Shift Down** – Move the radio station down the list by one entry position
- 4) **Rename** – Change the name of the radio station in list
- 5) **Play** – Play the radio station

Entries 1 – 5 are reserved for use with the ‘Preset’ buttons on the front of the radio but can also be selected in the same way as any other entry in the list.

Media Center

Any UPnP (Universal Plug and Play) enabled device (e.g. PC/Laptop with Windows Media Player) can stream music over the same Wi-Fi network used by the radio to be played.

Start the music stream over the network by the UPnP enabled device and go to the Home location on the radio by pressing the Home button on the front of the radio.

Use the Dial/Select knob to select the Media Center function and the display will show a list of options:

- 1) **UPnP** – The radio will play the music being streamed over the network
- 2) **My Playlist** – Music to be played can be selected from a playlist
- 3) **Clear Playlist** – The entries in the playlist will be removed

There can be more than one UPnP server streaming music over the network at the same time and after selecting UPnP a list of available servers will be displayed. If there are no UPnP servers found on the network Empty List will be displayed.

FM Radio

Extend the telescopic antenna to ensure good reception and go to the Home location by pressing the Home button on the front of the radio.

Use the Dial/Selection knob to select the FM radio function and follow the general directions displayed to tune into a preferred station.

When a station is playing the volume can be adjusted by the Dial/Select knob.

To automatically store all the local FM radio stations that can be received as presets press the Dial/Select knob. The radio will cycle through all the stations giving a very brief sound as it detects each station. Once all the stations have been discovered and stored as presets the radio will start playing the first station found.

At anytime a different preset can be selected by pressing the Preset button and using the Dial/Select knob to increase or decrease the preset number until the desired station is displayed.

The radio will remember the station playing when the FM function is changed to another function or the radio is turned off so that the same station will start playing when the function is next selected.

DAB & DAB+ Radio

Extend the telescopic antenna to ensure good reception, go to the home location by pressing the Home button on the front of the radio and use the Dial/Select knob to select the function.

If the list of locally available stations is empty the radio will automatically scan for available stations and create a list. Using the Dial/Select knob highlight and select a station to start playing.

While a station is playing a different station can be selected by pressing the Back Cursor button to display the available station list.

Pressing the Back Cursor button a second time will display an option to delete the available station list, retain the current station list or escape back to the current station list. Use the Dial/Select knob to highlight the desired option and press to confirm the selection.

If the station selected to be played supports DAB “Slide Show” and transmits images they will be displayed as full screen images when the option is enabled by pressing the Forward Cursor button.

Pressing the Forward Cursor button a second time will change the display to station information as scrolling text or a blank screen if the station is not transmitting text information. Pressing the Forward Cursor button again will return back to the original function display.

The radio will remember the station playing when the DAB & DAB+ function is changed to another function or the radio is turned off so that the same station will start playing when the function is next selected.

Information Center

Go to the home location by pressing the Home button, use the Dial/Select knob to select the function and three options will be displayed:

- 1) **Weather** – Displays weather information from the region selected from the list provided using the Dial/Select knob. After a few seconds the display will automatically return to the previous list of cities.
- 2) **Financial** – Displays a list of stock markets from around the world including the current main index value and session change. After a few seconds the display will automatically return to the previous list of stock markets.
- 3) **System Information** – Displays information for support or function setup e.g. Radio software version number and wireless information including status, MAC address, SSID, IP address, Subnet, Gateway, DNS1 and DNS2.

The weather information can be displayed when the radio is in Standby by pressing the Dial/Select knob while the desired region weather information is being displayed. Confirm the selection by pressing the Dial/Select knob or use the Back Cursor button to decline the option and return to the weather information.

Auxiliary

Music can be played from any other device by connecting its “Line Output” or “Headphone Output” to the 3.5mm Aux connector on the back of the radio.

After making the connection go to the home location by pressing the Home button and use the Dial/Select knob to select the function.

The music will start playing with the volume controlled by rotating the Dial/Select knob.

Bluetooth

The radio can receive and play music streamed wirelessly by any Bluetooth device located nearby after the two devices have been connected to each other by the pairing process.

Go to the home location by pressing the Home button and use the Dial/Select knob to select the function. BLUETOOTH will be displayed indicating that the radio is “discoverable” by other Bluetooth devices as “WR-238CD”.

After pairing is successful the radio will play streamed music files at a volume controlled by the Dial/Select knob.

Once the radio has been paired with a particular Bluetooth device it will be remembered by that device with no further pairing being necessary when the function is next selected.

Configuration

Go to the home location by pressing the Home button, use the Dial/Select knob to select the function and a list of twenty one options will be displayed:

- 1) **Time Display** – Change the clock display from analogue to digital
- 2) **Manage my mediaU** – Sets up a link to your MediaU account
- 3) **Network** – Change network set up options e.g. enable auto network connect on power up
- 4) **Date & Time** – Change date and time display format e.g. 12 or 24 hour. The default time setting is local time with automatic adjustment for “Daylight Saving Time”. Alternatively manual set up allows for setting any time desired with an adjustment setting for “Daylight Saving Time”.
- 5) **Alarm** – A “Main” and “Nap” alarm are provided with independent setup along with setup for the “Main” alarm sound and volume. In the event there is no music available from the function selected the radio will start beeping after one minute of silence. To use the snooze feature press any button on the radio except Standby to silence the alarm and set a five minute Nap alarm. To silence and turn off the Alarm press the Standby button
- 6) **Timer** – A time interval can be set in 1 second increment up to 99:59 seconds with a loud beeping sound alarm when the time interval has expired. Press any button to stop the beeping sound.
- 7) **Language** – Seventeen different languages are available for the display messages
- 8) **Dimmer** – The display brightness can be adjusted to save power
- 9) **Display** – Select color or monochrome for the display
- 10) **Power Management** – To save power when the internet connection is lost the Radio will go to Standby with a selectable delay between 0 and 30 minutes
- 11) **Sleep Timer** – A delay can be setup from 15 to 180 minutes before the radio goes into Standby when the Standby button is pressed
- 12) **Buffer** – The music storage buffer used to remove short interruptions in the internet music stream can be adjusted from the default value of 2 seconds to 4 or 8 seconds
- 13) **Weather** – Option to select region, temperature units (C or F) and to display this weather information along with the time when in Standby
- 14) **FM Setup** – Optional “Stereo” reception with minimum signal strength level adjustment for detecting the stereo signal
- 15) **Local Radio Setup** – Option to automatically detect the physical location of the radio or manual setup to any location in the world

- 16) **Playback Setup** – UPnP playback options: Repeat One, Repeat All , Shuffle or Turn Off the feature
- 17) **Device** – Option to change the radio device name (default is AirMusic) when using DLNA and Android App or Apple Control App
- 18) **Equalizer** – Option to choose from eight different sound effects
- 19) **Resume When Power On** – Enable to start playing the same function playing when the radio turned off
- 20) **Software Update** – Display will provide information when a software update is available
- 21) **Reset to Default** – Use this option to reset all optional setting back to the factory default value

Local Radio

Go to the home location by pressing the Home button and use the Dial/Select knob to select this function. A complete list of the available local radio stations being streamed over the internet will be displayed.

Select the desired station using the Dial/Select knob or press the Forward Cursor button to display a list of options:

- 1) **Add to My Favorites** – Press the Dial/Select knob to add the currently playing station to the next empty entry in the preset list as described under **Adding a radio station to the Preset List**
- 2) **Auto Scan** – Use this option to scan slowly through the list of available stations. To select a station while it is playing press the Dial/Select knob.
- 3) **Play** – Play the station highlighted in the list.

Solutions for some Common Problems

1) Trouble connecting the radio to a Wi-Fi network:

- A) Make sure that a Wi-Fi network or hard wired Ethernet connected PC / Laptop can access the internet and is connected to the same Wi-Fi network as the radio
- B) A DHCP (Dynamic Host Configuration Protocol) server must be available on the PC/Laptop or a Static IP (Internet Protocol) address must be assigned to the radio by using the following procedure:
 - Search the internet for instructions on “how to get an IP address”
 - From the Home location on the radio select the Configuration function, Network, Manual Configuration, Wireless and DCHP to turn it off. A display will appear so that the static IP address can be assigned to the radio.
- C) Make sure the PC/Laptop firewall is not blocking the port used by the radio.
- D) Sometime access points (ports) are configured such that to connect to it devices must have their MAC address assigned to it. If this is the case the display will show a message of “Bad ESSID or Key”. To resolve this problem obtain the radio’s MAC address using the Information Center function and enter it into the Access Point allowed devices list.
- E) If the Wi-Fi network is using “Encryption” make sure that the correct “Key” or “Passphrase” have been entered into the radio. To re-enter from Home location go to Configuration function, Network, Wireless Configuration and select the correct Wi-Fi network.

2) Successfully connected to the internet but unable to play particular stations:

- A) The station may be in a different time zone and not streaming at this time.
- B) The station server is overloaded (too many listeners) or reached the maximum allowable listeners and cannot accept new listeners at this time.

C) The station is no longer streaming or its URL (internet address) is out of date. For these problems contact MediaU (the service provider) at mediayou.net/web/index.php.

3) Trying to use the UPnP Function:

If a PC is not shown on the list of available servers on the Radio make sure that the radio is connected to the Wi-Fi network and there are no password or other access point problems.

4) The radio stops playing for short periods intermittently and then continues playing:

The radio uses a data "Buffer" that is filled with streaming music data before the radio starts playing to remove short term interruptions in the data stream. If the broadband internet connection is too slow or suffering from excessive error rates the buffer will become empty causing the music to stop playing until it is refilled. To overcome this problem increase the size of the buffer using the Configuration function.

Technical Specification

Model: WR-238CD

Wireless Network: IEEE802.11b/g/n

Security Protocol: WEP/WPA/WPA2

FM frequency range: 87.5-108MHz

DAB frequency range: 174.928MHz (5A) - 239.200MHz (13F), support DAB and DAB+

Bluetooth: 2.1 + EDR

Power input: 12V  1A

Power voltage: 100-240V~50/60Hz

Audio output power: 5W (RMS) x 1

Audio sockets: 3.5mm earphone jack, 3.5mm Aux-in jack, 3.5mm Line out jack.

Unit Dimension: 194 x 126 x 122 mm (L x D x H)

Remark: Specification may vary without notice

What is included in the box

- * Internet Radio
- * Power adaptor
- * Remote control
- * 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 the ensures environmentally responsible disposal and the recycling of valuable raw materials.

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