



# WF900i

## DAB+ Internet Radio with Docking for iPod/ iPhone

### User Manual





Should you encounter any problems, please contact the help line before you return this product back to the place of purchase.

**Contact our Toll Free Warranty Support  
Help Line**

**1300 366 144**

Email: [warrantyhelp@awa.com.au](mailto:warrantyhelp@awa.com.au)



Visit our web site for FAQ's or request for service


[www.awa.com.au](http://www.awa.com.au)




### Attention:

- Avoid installing this unit in places exposed to direct sunlight or close to heat radiating appliances such as electric heaters, on top of other stereo equipment that radiates heat, places lacking ventilation or dusty areas, places subject or constant vibration and/or humid or moist areas.
- Do not attempt to clean this unit with chemical solvents as this might damage the finish. Use a clean dry cloth.
- Before turning on the power, make certain that the connecting cords and power cord are properly installed.
- When moving the set, be sure to first disconnect the power cord and remove cords connected to other equipment.

|  |   |  |
|--|---|--|
|   | <b>CAUTION</b><br>RISK OF ELECTRIC SHOCK<br>DO NOT OPEN |  |
| <p><b>CAUTION:</b> TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL</p> <p><b>WARNING:</b> TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE..</p> |   |  |

|   |  |
|---|--|
|  | <p>The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated `dangerous voltage` within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to the unit.</p> |
|---|--|

|   |   |
|---|---|
|  | <p>The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.</p> |
|---|---|

The symbols above are located at the bottom of the cabinet.

|  |
|--|
| <p><b>CAUTION:</b> TO PREVENT FIRE OR SHOCK HAZARD, DO NOT USE THIS PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE</p> |
|--|

Note: The manufacturer is not responsible for any radio or TV interference cause by unauthorized modifications to this equipment. Such modification could void the user`s authority to operate the equipment.

**TABLE OF CONTENTS**

|     |  |    |
|-----|--|----|
| 1   | Introduction.....                            | 3  |
| 1.1 | Conventions used in this guide.....          | 3  |
| 1.2 | Infrastructure requirements.....             | 3  |
| 1.3 | Part List.....                               | 4  |
| 2   | Menu structure.....                          | 5  |
| 2.1 | Menu names .....                             | 5  |
| 2.2 | Key Functions .....                          | 5  |
| 2.3 | Menus .....                                  | 8  |
| 2.4 | Screens.....                                 | 9  |
| 3   | Getting Started/ Setup.....                  | 10 |
| 3.1 | Setting up winard .....                      | 10 |
| 3.2 | Setting 12/24 hour display .....             | 11 |
| 3.3 | Setting the time and date.....               | 11 |
| 3.4 | Setting Net Work.....                        | 11 |
| 3.5 | Other Setting.....                           | 13 |
| 3.6 | Internet radio portal registration.....      | 13 |
| 3.7 | Setting up a music server .....              | 14 |
| 3.8 | Sharing media with Window Media Player ..... | 14 |
| 4   | Internet Radio Mode .....                    | 16 |
| 4.1 | Last Listened .....                          | 16 |
| 4.2 | Preset.....                                  | 16 |
| 4.3 | Favourites .....                             | 16 |
| 4.4 | Browse .....                                 | 17 |
| 4.5 | Search.....                                  | 17 |
| 4.6 | My added stations.....                       | 18 |
| 4.5 | Now Playing Infomration.....                 | 18 |
| 5   | Shared media (Network and USB).....          | 19 |
| 5.1 | Shared media (from UPnP media server) .....  | 19 |
| 5.2 | USB Playback.....                            | 20 |
| 5.3 | Playlists.....                               | 20 |
| 5.4 | Repeat/ Shuffle.....                         | 20 |
| 5.5 | Now playing information .....                | 20 |
| 6   | DAB Mode .....                               | 21 |
| 6.1 | Shared media (from UPnP media server) .....  | 21 |
| 6.2 | USB Playback.....                            | 21 |
| 6.3 | Playlists.....                               | 21 |
| 6.4 | Repeat/ Shuffle.....                         | 21 |
| 6.5 | Setting.....                                 | 21 |



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|      |  |    |
|------|--|----|
| 7    | FM Mode .....                            | 22 |
| 7.1  | Selecting Stations .....                 | 22 |
| 7.2  | Now playing information.....             | 22 |
| 7.3  | Setting.....                             | 22 |
| 8    | iPod Mode .....                          | 23 |
| 8.1  | Now playing information .....            | 23 |
| 9    | Aux-in Mode .....                        | 24 |
| 10   | Alarm and Sleep .....                    | 25 |
| 10.1 | Alarm .....                              | 25 |
| 10.2 | Aleep .....                              | 25 |
| 11   | Software upgrade and factory reset ..... | 26 |
| 11.1 | Software upgrade .....                   | 26 |
| 11.2 | Factory reset .....                      | 26 |
| 12   | Troubleshooting and error messages.....  | 27 |
| 12.1 | Error messages .....                     | 27 |
| 12.2 | Troubleshooting .....                    | 28 |
| 13   | Service Information.....                 | 31 |
| 14   | Product Warranty.....                    | 32 |



# 1 Introduction

This manual describes how to use the WF900i - Internet radio, an advanced but easy-to-use Wi-Fi connected audio system with the following modes:

Its main functions are to:

- **Internet Radio** with access to over 20,000 stations, "Listen again" broadcasts and podcasts,
- **Music player** allowing easy navigation and playback through a USB or network-stored library of music files including AAC+, Real audio\*, MP3 and WMA,
- **DAB/DAB+** digital radio with a wide choice of channels and digital quality sound broadcast free-to-air,
- **FM** with RDS (Radio Data System),
- **iPod** dock with iPod control/recharge and video output (with authentication coprocessor for maximum compatibility),
- **Aux in** for external music sources such as MP3 players.

\* Real audio with COOK codec support in internet radio.

WF900i also provides the following features:

- large **2.5 inch display** for easy control and clear information display, with up to six lines of text plus status icons,
- **Clock** with auto-update capability and **dual independent alarms**,
- **Sleep/snooze**,
- **Scrobbling** to *UPnP Music player* modes.
- **Multiple network profiles** for easy setup and portability,
- **Multiple languages**

## 1.1 Conventions used in this guide

The following conventions are used in this guide:

- Button (press)                      Physical button on the keypad
- Option (select)                      Menu option shown on the display
- Name                                      Menu, screen or other name

## 1.2 Infrastructure requirements

The following infrastructure must be ready to fully utilise the functionality available on WF-900i (as shown in

Figure 1).

- a power source (100-240 V mains supply),
- a wireless (Wi-Fi) network (provided through a router) with appropriate permissions and password if necessary (for *Internet radio* and *Network Music player* modes),
- broadband Internet access (for *Internet radio mode* and Internet Software Update),
- a music library stored on the network or on a USB mass storage device (for *Music player* modes),
- an Apple iPod (for *iPod mode*, any model),
- an external audio source (for *Aux in* mode).

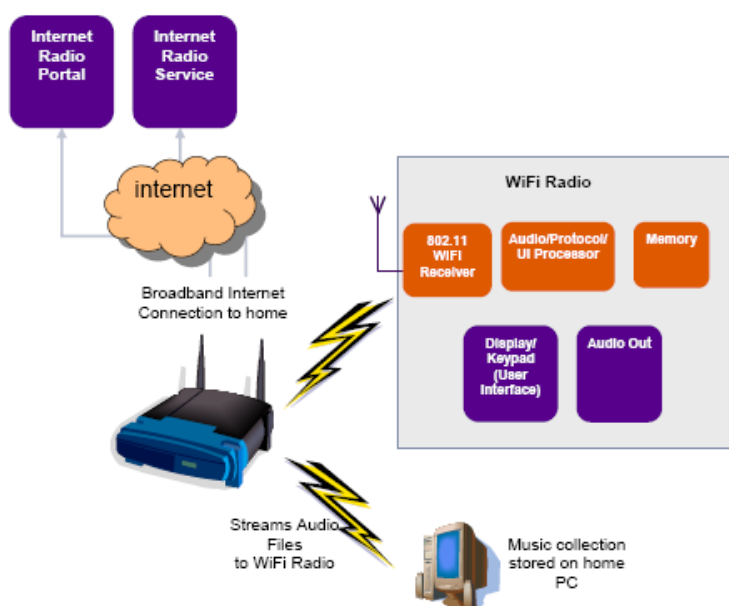


Figure 1: Wi-Fi radio infrastructure

### 1.3 Part List

| No. | Item               | Qty. |
|-----|--------------------|------|
| 1.  | Main Unit          | 1pc  |
| 2.  | Audio Cable        | 1pc  |
| 3.  | iPod/ iPhone Stand | 1pc  |
| 4.  | AC Adaptor         | 1pc  |
| 5.  | Instruction Manual | 1pc  |



## 2 Menu structure

### 2.1 Menu names

The Wi-Fi radio features three types of menu. These are:

- The **Main menu**

This is the menu which allows users to enter into different modes, setup the radio, and check the information in the radio (for example software version, product ID).

- The **Internet Radio Station List menu**

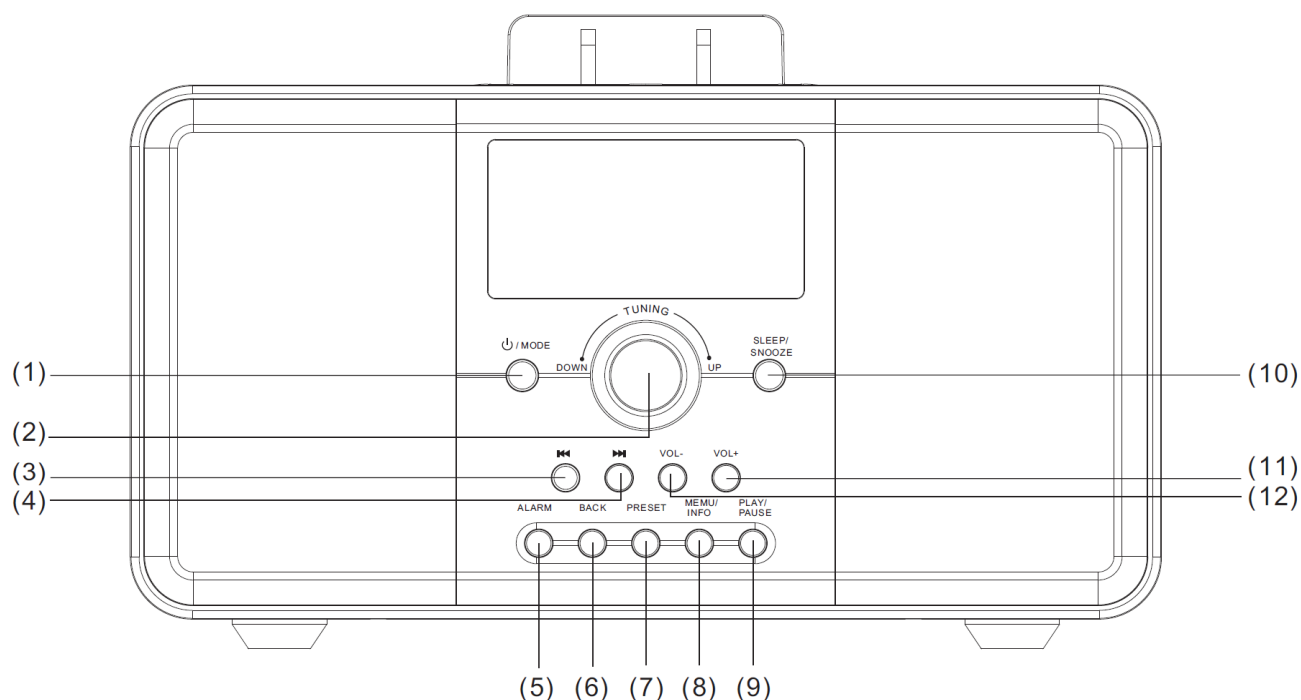
This is the sub-menu in the "Internet Radio" option in the main menu that allows users to access the different internet radio services. This menu comes direct from the Internet Radio portal.

- The **Mode menus** for the various modes

The *mode* menus are so called because they show the functions available within the context of each of the modes. Pressing the <menu> button anytime will take you the *mode* menu of the relevant mode the radio is currently in. Each context menu provides an entry called *main* menu which takes you back to the MAIN menu.

### 2.2 Key functions

Figure 2 shows a typical configuration of keys available on the WF-900i.



**Figure 2: Control Panel**

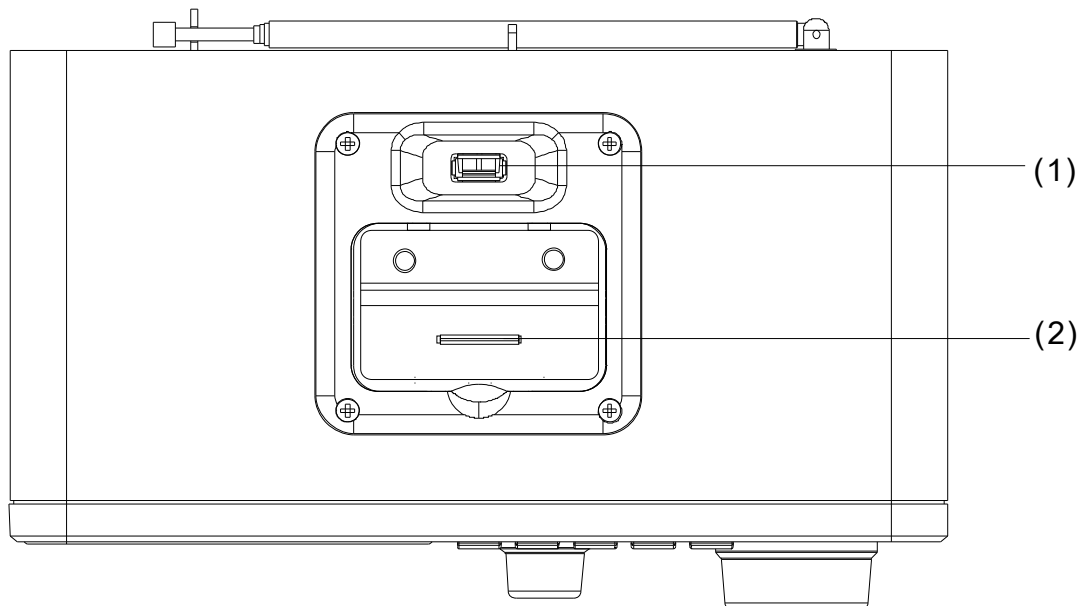
The keys shown in Figure 2 have the following functions:

|     |             |  |
|-----|-------------|--|
| (1) | Power/ Mode | Standby: Turn on or back to standby mode (showing clock and date). Cancels sleep function.<br>Mode: Cycle through the modes: <i>Internet Radio</i> , <i>Music player</i> , <i>DAB+</i> , <i>FM</i> , <i>iPod</i> , <i>Aux in</i> |
|-----|-------------|--|

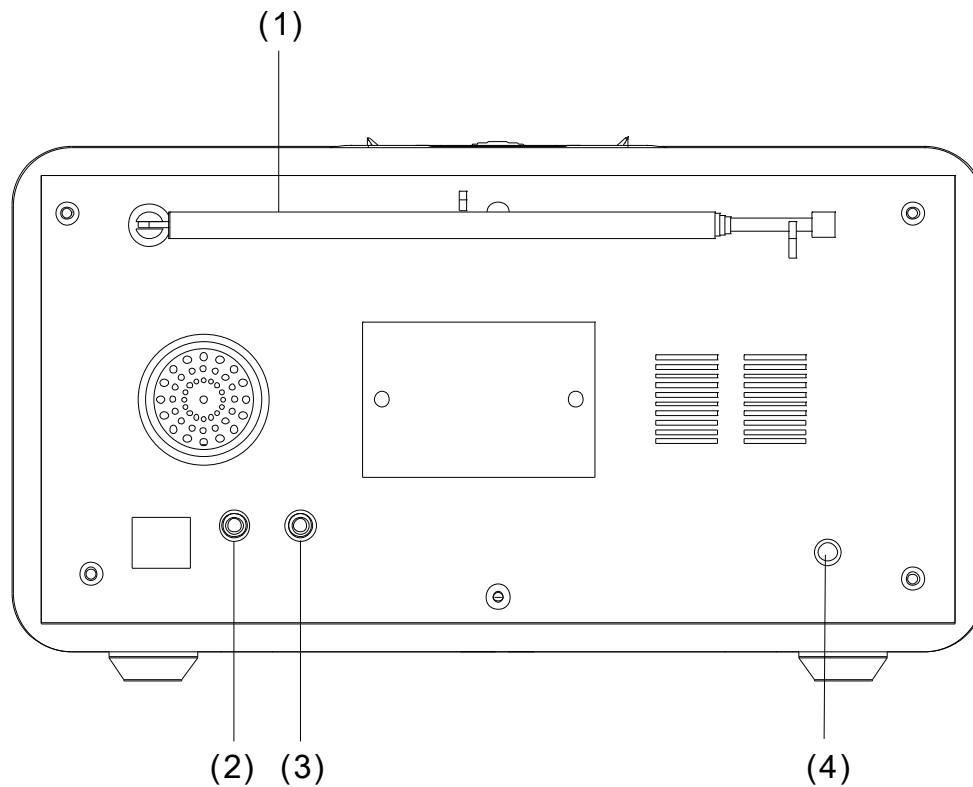




|      |                        |   |
|------|------------------------|---|
| (2)  | Rotary Tuning Controls | Turn to scroll through a menu or station list. The chosen option is highlighted in reverse text (dark characters on a white background). Press to select.   |
| (3)  | Previous Button        | Previous: Select start of track, previous track or hold to scan down/rewind   |
| (4)  | Next Button            | Next: Select next track or hold to scan up/fast forward   |
| (5)  | Alarm Button           | Enters alarm wizard, turns off alarm (when alarm is sounding) and toggles between alarms in standby.  |
| (6)  | Back Button            | Back: Return to previous screen. In play mode, this button may be used to return to the last track list or station list.  |
| (7)  | Preset Button          | Preset: Press for the Preset recall/Save menu; Scroll up/down to select the preset number then press 'Select' to confirm. There are 10 presets each for Internet radio, DAB and FM modes.   |
| (8)  | Menu/ Info Button      | Menu: Show menu for the current mode. Press again to show <i>Now playing</i> screen.<br>Info: View more information about the station or track playing. Press again to cycle through further information screens then return to the normal <i>Now playing</i> screen. |
| (9)  | Play/pause Button      | Play/pause  |
| (10) | Sleep/ Snooze Button   | Sleep/snooze: When playing, standby after a set time.<br>When alarm is sounding, snooze for a set time.   |
| (11) | Vol - Button           | Decrease Volume   |
| (12) | Vol + Button           | Increase Volume   |



|     |                |                          |
|-----|----------------|--------------------------|
| (1) | USB Port       | For insert the USB stick |
| (2) | iPod Connector | For insert the iPod      |



|     |                                     |   |
|-----|-------------------------------------|---|
| (1) | <b>"ANTENNA"</b>                    | Set the antenna to a vertical position to ensure best reception of wireless signal.                         |
| (2) | <b>"AUX IN"<br/>(MUSIC PORT)</b>    | For connecting an MP3 player, portable CD player, or other audio device with a 3.5mm line level output.     |
| (3) | <b>"HEADPHONE"</b>                  | Connect headphones for private listening.   |
| (4) | <b>"DC POWER<br/>JACK (DC 9V) "</b> | Connect the supplied power cord to this jack. Be sure to use only the power supply provided with the radio. |



## 2.3 Menus

Figure 3 shows the site-map of all the menu and sub-menu in the WF-900i.

### Menus

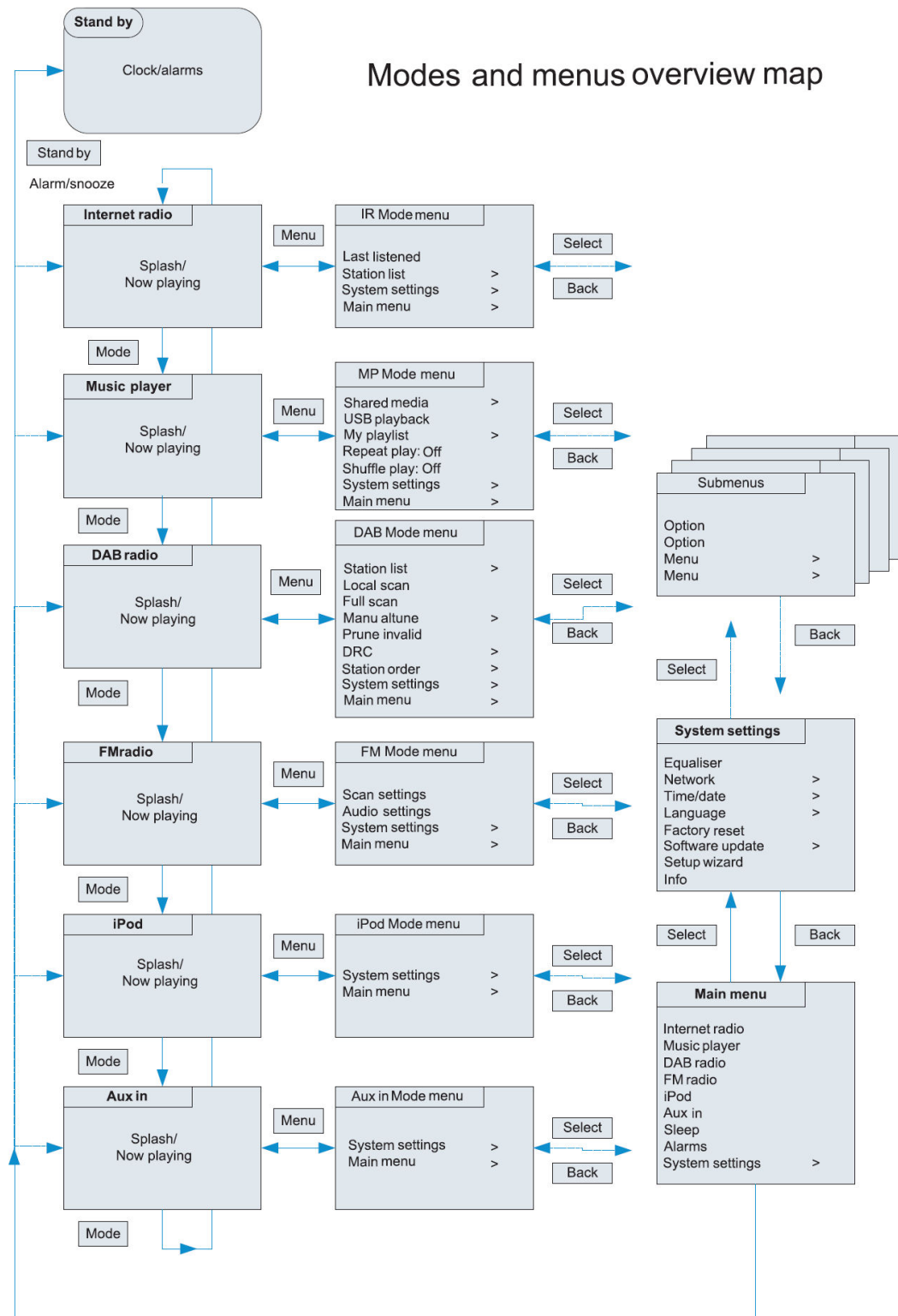


Figure 3: Menu Structure of the WF-900i



## 2.4 Screens

The screen shows various menus, dialogues and displays, as described below.

There are basically six types of screen:

- Standby (clock)
- Splash (mode)
- Now playing
- Dialogue
- Error/Information
- Menu

When text is too long to fit on the screen, it is first shown truncated, then, after a few seconds, slowly scrolls so that you can read it all.

The **Standby screen** shows the time, date and any active alarm times.



As you cycle through the play modes using Mode, WF900i shows a **splash screen** for each mode. After one second, WF900i enters the selected mode and tries to start playing the last station or track that was playing in that mode. If this is not possible, WF900i tries to connect to the selected source by scanning for stations, networks, or prompting for user input as appropriate.

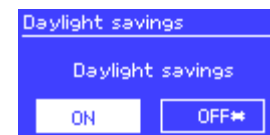


**Now playing screens** show information about the audio source and track now playing, where available.



**Dialogue screens** are shown to allow the user to change settings. They vary in complexity from simple Yes/No options up to the scrollable network password input screen.

As with menus, the selected item is shown with a white background. Dialogue screens mark the current setting with an asterisk (\*).

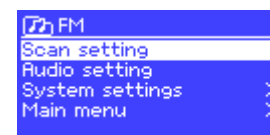


**Error/Information screens** give specific messages for a few seconds, then change automatically to another screen.



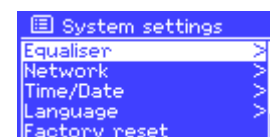
WF900i has basically three types of menu. Use the Select control to step through and select options. A scroll bar on the right of the screen shows if there are further options above or below those visible.

Each mode has a **Mode menu**, with options specific to that mode. For example, the FM mode menu has just two options: Scan setting and Audio setting.



In addition, each mode menu has two final options: **System settings >** and **Main menu >**. The „>“ indicates options leading to further menus.

The **System settings menu** allows access to system settings and information such as network, time, language and software update.



Menus with more options than will fit on one screen have a scroll bar to the right.

The **Main menu** allows access to all modes plus sleep and timer functions.





### 3 Getting started/ setup

Although the WF900i is sophisticated, getting started is simple. To play DAB or FM radio, all you need is a power source (a 100-240 V mains supply).

For Music Player mode, you need either a USB stick with music files or a wired/ wireless Ethernet network and a UPnP music server (e.g. a PC).

For Internet-connected modes such as Internet radio, you also need a broadband Internet connection.

1. Place WF900i on a suitable shelf or table
2. Connect the power adaptor between WF900i and the mains supply.
3. To receive broadcast radio (DAB and FM), extend the telescopic antenna.
4. Press Standby.

#### 3.1 Setting up wizard

When WF900i is started for the first time, it runs through a setup wizard to configure settings for date/time and network. Once this has finished, the system is ready to use in most modes.

*Note: To change these settings later, select Menu > **System settings** >. To run the setup wizard again, select Menu > **System settings** > **Setup wizard**.*

Select **Yes** to start the setup wizard.

*Note: If you want to use a wired network, bypass the setup wizard.*

If you choose **No**, the next screen asks if you would like to run the wizard next time WF900i is started. The system then starts without configuring time/date and network settings and enters the Main Menu.

*Note: If power is removed while the wizard is in progress, the wizard will run again next time WF900i is started.*





### 3.2 12/24 hour display

To change between 12 and 24 hour display, select **Set 12/24 hour** and then select your preference.

### 3.3 Setting the time and date

The time and date can be updated manually or automatically. With auto-update, the time and date are automatically synchronised with external clocks. Auto-update is generally more accurate.

#### Auto-update

Auto-update works with data sent over DAB, FM or the Internet. The clock is only updated when in a corresponding mode, so it is best to select a mode you use regularly.

**DAB** and **FM** use time signals broadcast with radio transmissions.

**Network** uses a time signal sent from the Frontier Silicon Internet radio portal when in any network-connected mode.



1. Select **Update from DAB**, **Update from FM**, **Update from Network** or **No update**.

2. Set your time zone.

3. If your country uses daylight saving, the automatically updated time may be wrong by one hour. When daylight savings are in effect (during the summer), turn on the Daylight savings option.

WF900i will auto-update from the selected source when time information is available.

#### Manual set

If you set No update, the wizard now prompts you to set the time and date manually.

The date and time are displayed as dd-mm-yyyy and hh:mm AM/PM with the first value, dd, active (flashing).

Adjust each value with the Select control. As each value is set, the next value becomes active and flashes.



### 3.4 Network

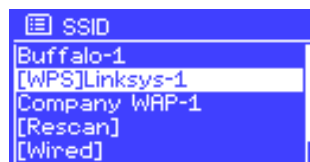
WF900i is compatible with all common network protocols and encryption methods, including *Wi-Fi Protected Setup* (WPS).

To connect WF900i to your network, you need either

- a Wi-Fi wireless router, together with password key if set.

Select

- WLAN region/ country,
- Wi-Fi network (SSID).



If the network is open (non-encrypted), WF900i connects without any further ado; see *Completion* below.

#### Standard encrypted network

To enter the network's key (password), use the Select control to move the cursor through the characters and select. As each character is selected, the key is built up near the top of the display. There are three options accessible by turning Select back before the first characters (0123...) – **Backspace**, **OK** and **Cancel**.





## WPS encrypted network

WPS encrypted networks are identified by “[WPS]” at the start of the network name, and have three methods of connection. Select one and follow the prompts:

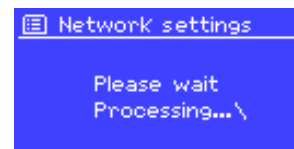
- **Push Button >**  
WF900i prompts you to press the connect button on the router. It then scans for a ready Push Button Connect network and connects.
- **Pin > (code number)**  
WF900i generates an 8-digit code number which you enter into the wireless router, access point, or an external registrar (e.g. advanced versions of Windows Vista).
- **Skip WPS >**  
Enter key as for a standard encrypted network, above.

For more information on setting up a WPS encrypted network, see your WPS router’s instructions.

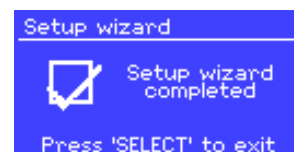
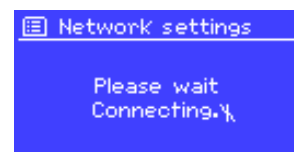


## Completion

WF900i tries to connect to the selected network.



If connecting fails, WF900i returns to a previous screen to try again.



If the network connection is lost, WF900i automatically tries to reconnect.



### 3.5 Other Setting

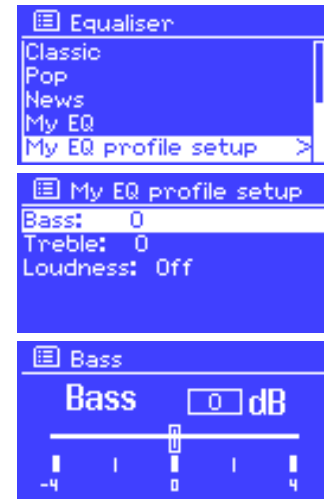
Common settings are covered below.

#### Equaliser

Several preset EQ modes are available; also a user-defined setting.

To adjust the EQ, select **Menu > System settings > Equaliser**.

You can then choose from a variety of preset modes or create your own, with custom bass, treble and loudness settings.



#### Network

WF900i remembers the last four wireless networks it has connected to, and automatically tries to connect to whichever one of them it can find.

You can see the list of registered networks through **Menu > System settings > Network > Network profile >**. From here you can delete unwanted networks by turning and pressing Select then confirming delete **Yes**.


There are also other options for viewing and manually altering network settings from **Menu > System settings > Network >** (for example setting up a wired network). Users experienced with networking may find these options useful for diagnosing and fixing network problems.

#### Language

The default language is English. To change, select **Menu > System settings > Language >** then select your language.

### 3.6 Internet radio portal registration

The Frontier Silicon Internet radio portal website allows you to organise your favourites lists and also listen to Internet radio on a computer.



Search

☐ Stations ☐ Podcasts

Browse Stations

- By location
- By genre
- By language
- New stations
- Most popular

Browse Podcasts

- By location
- By genre

My account

- My favourites
- My added stations
- My preferences

English Dansk Português  
Español Norsk Italiano  
Français Svensk Nederlands  
Deutsch Suomi

About us Contact us Logout


© Frontier Silicon 2008 | Legal

Access global stations  
Personalise favourites

Search. Browse. Find.

Mark's radio

| Station name                   | Location               | Genre             | Stream         |
|--------------------------------|------------------------|-------------------|----------------|
| 2 Ten FM                       | Reading United Kingdom | Electronica       | WMA 128K       |
| BBC Radio 2                    | London United Kingdom  | Variety           | RealPlayer 44K |
| Capital Radio                  | London United Kingdom  | Top 40            | WMA 128K       |
| Virgin Radio                   | London United Kingdom  | Pop               | MP3 128K       |
| On Air Power                   | Internet Only          | World Asia        | MP3 128K       |
| Antenna Uno                    | Catania Italy          | Dance             | MP3 96K        |
| BBC Radio 1                    | London United Kingdom  | Top 40/Dance/Rock | RealPlayer 16K |
| Radio Ozair                    | Internet Only          | World Middle East | MP3 128K       |
| 108 Xtra                       | United Kingdom         | Electronica       | MP3 256K       |
| Capital FM 98.4                | Nairobi Kenya          | Pop               | WMA 20K        |
| BBC RSLiveSportX International | London United Kingdom  | Sports            | WMA 48K        |
| Classic FM                     | London United Kingdom  | Classical         | WMA 128K       |

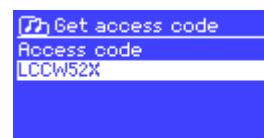






To register your WF900i with the portal, first get your radio's unique portal access code by selecting **Menu > Station list > Help > Get access code >**.

Write down the access code.



*Note: Do not confuse the portal access code with the Radio ID (from Menu > System settings > Info.)*

Visit the portal website at [www.wifiradio-frontier.com](http://www.wifiradio-frontier.com).

If this is your first visit to the portal, register for a new account, entering the following information:

- access code,
- your e-mail address,
- password,
- radio model (WF900i).

If you already have an account and wish to add an additional radio, log in to your account and select **My preferences > Add another Wi-Fi radio**.

Once your radio is registered with the portal, you can immediately use the Internet radio favourites and added stations features.

**REMARKS:** It is optional for user to register the Frontier Silicon Internet Radio portal. User should undertake the responsibility of any problem occurred by such operations.

### 3.7 Setting up a music server

In order for WF900i to play music files from a computer, the computer must be set up to share files or media.

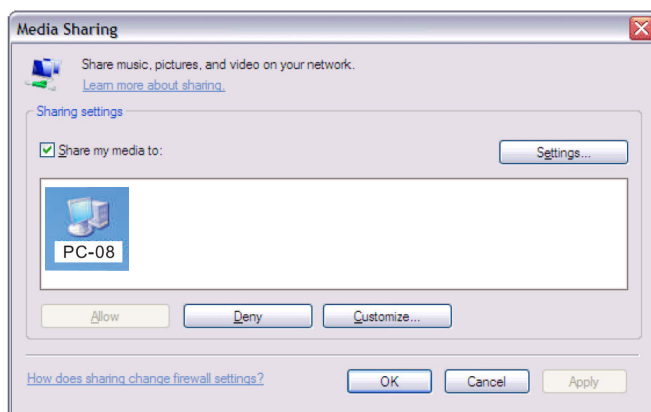
**UPnP media sharing** allows devices like WF900i to play music from a shared media library, navigating through tag menus such as Artist, Album or Genre. If you are running a suitable server system such as a PC with Windows Media Player 10 or later (WMP), and your music library is well-tagged, then it is recommended to use media sharing. Only the UPnP server needs to be set up.

Note: iTunes does not currently work as a UPnP media server, but there are add-ons available to work with an iTunes library.

### 3.8 Sharing media with Windows Media Player

The most common UPnP server is Windows Media Player (10 or later). Alternatively, other UPnP platforms and servers may be used. To set up WMP for media sharing, perform the following steps:

1. Ensure that the PC is connected to the network.
2. Ensure that the radio is powered on and connected to the same network.
3. In WMP, add to the media library the audio files and folders you want to share with WF900i (**Library > Add to Library...**).
4. In WMP, enable media sharing (**Library > Media sharing...**).





Make sure that the radio has access to the shared media by selecting it and clicking **Allow**. You can also set a name for the shared media in **Settings...** Click **OK** to close the dialogue boxes.

The PC is now ready to stream the music to the radio. The WMP UPnP service runs in the background; there is no need to start WMP explicitly.



## 4 Internet Radio Mode

WF900i can play thousands of radio stations and podcasts from around the world through a broadband Internet connection.

When you select Internet radio mode, WF900i contacts the Frontier Silicon Internet radio portal to get a list of stations, organised into different categories like Country, Most popular and Genre. Once you select a station, WF900i connects directly to that station.



The portal also enables multiple lists of favourite stations that you can personalise, for example *Andy's stations*, *Jo's favourites*, *Talkshows*. To use the favourites feature, register your radio with the portal website as described on page 14. If you have several Frontier Silicon radios, you can register them all on the same account so that each radio has access to your favourites lists. It is possible to add favourites either directly through WF900i or through any computer with a web browser.

To enter Internet Radio mode, either press Mode until the display shows *Internet Radio* or select Menu > **Main menu** > **Internet Radio**.

*Note: The station list menu is provided from the Internet radio portal, so it is only accessible when WF900i is connected to the Internet. Station lists and submenus may change from time to time.*

There are several ways of selecting stations.

Directly from the radio:

- Last listened,
- Presets.

From the portal through the Menu > **Station list** > menu:

- Favourites lists,
- Browse by Country, Genre, Most popular, Newest,
- Search by keyword,
- My added stations.



If you are already listening to an Internet radio station, you can press Back rather than Menu to quickly return to the last visited branch of the menu tree. For example, suppose you were listening to *New Orleans Radio* through the browse facility as described in section 4.4 below. Pressing Back would return you to the *Highlighted Blues stations* menu. Pressing Back again would return you to the *Blues* menu, and so on.

### 4.1 Last Listened

When Internet radio mode restarts, the last-listened station is selected. To select another recently used station, select Menu > **Last listened** then one of the stations listed. Most recent stations appear at the top of the list.

### 4.2 Preset

Presets are stored in the radio and cannot be accessed from other radios.

To store an Internet radio preset, press and hold Preset until the display shows the *Save preset* screen. Select one of the 10 presets by turning the Tuning Knob and press the knob in order to save the currently playing station to the preset list.

To select a preset, press Preset briefly, then select one of the listed preset stations. When a preset station is playing, it shows Pn (P1, P2 etc) in the bottom of the screen.

*Note: Operation of presets is identical for Internet radio, DAB and FM.*

### 4.3 Favourites

Favourites are stored with the Internet radio portal, and are available through all Internet radios registered on the same account. Before favourites can be used, the radio has to be registered with the Internet radio portal (see page 14).

To store a playing station as a favourite, press and hold Select until the display shows 'Favourite added'. The station appears in the default favourites list Stations.

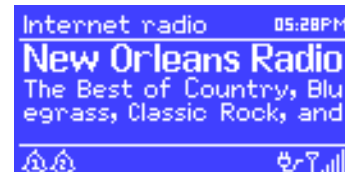
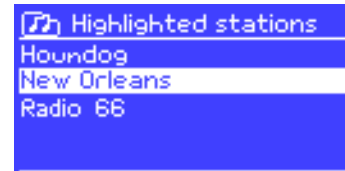
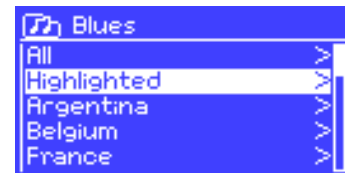
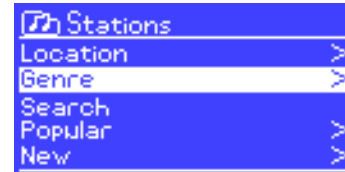
To select a favourite, select Menu > **Station list** > **My favourites** > [**Favourites list**] > [**Station**].



#### 4.4 Browse

To browse Internet broadcasts, select Menu > **Station list** > then either **Stations** > or **Podcasts** >.

Browse through the menus to find broadcasts.



*Note: ABC Brisbane radio 'Listen Again' programmes are accessible through the Podcast menu, for example Menu > **Podcasts** > **Location** > **Oceania** > **Australia** > **All shows** > **ABC Brisbane**.*

#### 4.5 Search

You can also search through Internet broadcasts for stations or podcasts with particular keywords in their title. To search, select Menu > **Station list** > then either **Stations** > or **Podcasts** >



Enter a keyword by selecting characters then **OK**. The search entry screens are similar in operation to the Wi-Fi password entry screen.



Select a broadcast from the list.





For podcasts, you may be able to select a particular episode.



#### 4.6 *My added stations*

Even though the Internet radio portal contains thousands of stations, you may want to listen to stations not listed. You can add your own stations via the portal. These added stations are accessible from WF900i by selecting Menu > **Station list** > **My added stations** > **[Station]**.

#### 4.7 *Now Playing Information*

While the stream is playing, the screen shows its name and description. To view further information, press Info.

Each time you press Info, another set of information is displayed, cycling through name/description, genre/location, reliability, codec/sampling rate, playback buffer and today's date.



## 5 Music player mode (network and USB)

Music player mode plays audio files such as MP3s, AACs or WMAs from a computer on the local network or from a USB Flash stick/hard drive.



To enter Music player mode, either press Mode until the display shows *Music player* or select Menu > **Main menu** > **Music player**.

Once in music player mode, press Menu, then select either **Shared media** or **USB playback**.



If you are already playing a music file, you can press Back rather than Menu to quickly return to the last visited branch of the menu tree. For example, suppose you were listening to the track *Heat* by the artist *50 Cent* through browsing shared media as described in section 5.1 below. Pressing Back would return you to the track listing for the album *Get Rich or Die Tryin'*. Pressing Back again would list all *50 Cent* albums. Pressing Back again would list all album artists, and so on.

You can use << and >> to move through tracks. Press and hold to rewind or fast forward and press quickly to select previous or next track.

### 5.1 Shared media (from UPnP media server)

Select Menu > **Shared media** >

If you have set up shared media (as described on page 13), you should see an entry consisting of <computer name>: <Shared media name>, for example *JB-Laptop: Audio*. If you have more than one computer sharing media, the alternatives are listed. Select the shared media you want to play.

From this point on, the menus are generated from the shared media server (typically Windows Media Player). The first menu shows a list of media types, for example Music, Video, Pictures and Playlists. WF900i can only play music and playlists.



There is also a search function, which finds tracks in a similar way to Internet radio search, as described on page 16.

From Music, there are numerous ways of selecting tracks, including:

- Genre,
- Artist,
- Album,
- Composer,
- Rating.



Once you have found a track you want to play, press Select. A short press plays the track immediately and a long press adds the track to the playlist. You can also add entire albums to the playlist. WF900i plays either the selected track or the playlist.

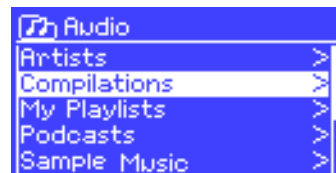


## 5.2 USB Playback

To play audio from a USB mass-storage device such as a USB Flash stick or USB hard drive, Select Menu > **USB playback**.

### Browsing folders

From this point on, menus are generated from the folders on the USB device. Browse folders with the Select control and Back button. The display shows folder and file names (not necessarily track names).



Once you have found a track you want to play, press Select. A short press plays the track immediately and a long press adds the track to the playlist. You can also add entire folders to the playlist. WF900i plays either the selected track or the playlist.



## 5.3 Playlists

WF900i holds a queue of up to 500 tracks in the playlist. Playlist tracks can be mixed from multiple UPnP servers and USB. To manage the playlist, select Menu > **My playlist**.

- To view the playlist, scroll through it by turning Select. UPnP tracks show their track name; USB tracks show their file name.
- To play the playlist from a certain track, quick Select.
- To erase a track from the playlist, long Select. then confirm YES.

If you select a track/album/folder for instant playback (without using the playlist), the playlist is preserved. The playlist is also preserved during standby.



## 5.4 Repeat/shuffle

You can repeat tracks or play them in random order by selecting Menu > **Repeat play** or Menu > **Shuffle play**.

## 5.5 Now playing information

While a track is playing, the screen shows its track and artist (UPnP) or file name (USB). There is also a progress bar with figures for elapsed and total track time. At the bottom of the screen, an icon indicates *UPnP* or *USB* depending on the source. To view further information, press Info.

Each time you press Info, another set of information is displayed, cycling through:

- UPnP: track/artist/progress bar/track times, album, codec/sampling rate, playback buffer and today's date,
- USB: file name, folder, path, codec/sampling rate, playback buffer and today's date.



## 6 DAB Mode

DAB radio mode receives DAB/DAB+ digital radio and displays information about the station, stream and track playing.

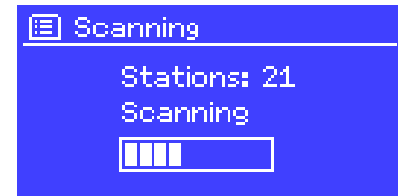
To enter DAB mode, either press Mode until the display shows *DAB Radio* or select Menu > **Main menu** > **DAB**.



### 6.1 Scanning for stations

The first time you select DAB radio mode, or if the station list is empty, WF900i automatically performs a full scan to see what stations are available. You may also need to start a scan manually to update the list of stations for one of the following reasons:

- Available stations change from time to time.
- If reception was not good for the original scan (for example the antenna was not up), this may result in an empty or incomplete list of available stations.
- If you have poor reception of some stations (bubbling), you may wish to list only stations with good signal strength.



To start a scan manually, select Menu > **Full scan**. To scan only stations with good signal strength, select Menu > **Local scan**.

Once the scan is complete, the radio shows a list of available stations.

To remove stations that are listed but unavailable, select Menu > **Prune invalid**.

### 6.2 Selecting Stations

To listen to or change a station, turn the Select control to view a list of stations and press to select. Once selected, the station plays and the screen shows information about the station, track or show as broadcast

#### Presets

To store a DAB preset, press and hold Preset until the display shows the *Save preset* screen. Select one of the 10 presets by turning the Tuning Knob and press the knob in order to save the currently playing station to the preset list.

To select a preset, press Preset briefly, then select one of the listed preset stations. When a preset station is playing, it shows Pn (P1, P2 etc) in the bottom right of the screen.

### 6.3 Now playing information

While the stream is playing, the screen shows its name and DLS (*Dynamic Label Segment*) information broadcast by the station giving real-time information such as programme name, track title and contact details. Stereo broadcasts are indicated with an icon at the top of the screen. To view further information, press Info . Each time you press Info , another set of information is displayed, cycling through DLS text, programme type, ensemble name/frequency, signal strength/error rate, bit rate/codecs/channels and today's date.

### 6.4 Setting

#### Dynamic range compression (DRC)

If you are listening to music with a high dynamic range in a noisy environment (for example classical music while cooking), you may wish to compress the audio dynamic range. This makes quiet sounds louder, and loud sounds quieter. To change DRC, select Menu > **DRC** > then **DRC off**, **low** or **high**.

#### Station order

You can choose the order of the DAB station list to be either *Alphanumeric*, *Ensemble* or *Valid*. *Ensemble* lists groups of stations that are broadcast together on the same ensemble, for example *ABC* or *SBS*. *Valid* lists valid stations first, alphabetically, then off-air stations.

To change station order, select Menu > **Station order** > then **Alphanumeric**, **Ensemble** or **Valid**.





## 7 FM Mode

FM radio mode receives analogue radio from the FM band and displays RDS (Radio Data System) information about the station and show (where broadcast).

To enter FM mode, either press Mode until the display shows *FM Radio* or select Menu > **Main menu** > **FM**.



### 7.1 Selecting stations

To find a station, press Select . The frequency display starts to run up as WF900i scans the FM band.

Alternatively, you can scan up or down by pressing and holding the ◀◀ or ▶▶ buttons or tune manually with quick presses, or by turning the Select control.

#### Presets

To store an FM preset, press and hold Preset until the display shows the *Save preset* screen. Select one of the 10 presets by turning the Tuning Knob and press the knob in order to save the currently playing station to the preset list.

To select a preset, press Preset briefly, then select one of the listed preset stations. When a preset station is playing, it shows Pn (P1, P2 etc) in the bottom right of the screen.

### 7.2 Now playing information

While the stream is playing, the screen shows its frequency, or if RDS information is available, station name and any further RDS information such as programme name, track title and contact details. If no information is available, just the frequency is shown. Stereo broadcasts are indicated with an icon at the top of the screen. To view further information about the broadcast, press Info .

Each time you press Info , another set of information is displayed, cycling through RDS text, further RDS text (station/programme type), frequency and today's date.

### 7.3 Settings

#### Scan settings

By default, FM scans stop at any available station. This may result in a poor signal-to-noise ratio (hiss) from weak stations. To change the scan settings to stop only at stations with good signal strength, select Menu > **Scan setting** > **Strong stations only?** > **Yes**.

#### Audio settings

By default, all stereo stations are reproduced in stereo. For weak stations, this may result in a poor signal-to-noise ratio (hiss). To play weak stations in mono, select Menu > **Audio setting** > **FM weak reception: Listen in mono only** > **Yes**.



## 8 iPhone/ iPod Mode

WF900i has an iPod dock, which is compatible with all Apple iPods. Once an iPod is docked, WF900i can recharge the iPod, control it through the keypad or remote control, and play the iPod's music and video library through the speakers and a compatible video monitor.

WF900i includes the Apple coprocessor so that it can play video from latest iPod models.



To enter iPod mode,

1. Place the iPod on the docking station. WF900i asks if you want to switch to iPod mode. Select YES.
2. If you already had the iPod connected to WF900i, either press Mode until the display shows *iPod* or select Menu > **Main menu** > **iPod**. When iPod mode is selected, WF900i switches on the iPod.
3. Press 'Play/ Pause' button to play or pause.
4. The track now playing is displayed on the iPod if connected, then press the ◀◀ or ▶▶ buttons to select previous or next track.
5. For the iPods, press "Back" button back to the iPod menus, and tune the 'Rotary Tuning Controls' to select the album/ track you want, and press 'Rotary Tuning Control' to confirm. For the iPhone, you should enter the iPod mode in the iPhone first, then follow the above steps to control and select the desired file/ track.

### 8.1 Now playing information

When in iPod mode, the screen shows docked status ("Docked" or "Insert iPod") and, if docked, the iPod type, for example "iPod classic". Once the iPod is authenticated, the display shows the track name.

*Note: if authentication is taking longer than 30s, try removing the iPod and reinsert.*

To view further information, press Info.

Each time you press Info, another set of information is displayed, cycling through track, authentication status ("Processing...", "Success" or "Failed"), progress bar, artist, album, and today's date.



## 9 Aux in mode

Aux in mode plays audio from an external source such as an MP3 player.

To play audio with Aux in mode,

1. Turn the volume low on both WF900i and, if adjustable, the audio source device.
2. Connect the external audio source to the Aux In 3.5 mm stereo socket.
3. Either press Mode until the display shows *AUX in* or select Menu > **Main menu > AUX in.**
4. Adjust the volume of WF900i (and, if necessary, the audio source device) as required.





## 10 Alarms and sleep

As well as a clock/calendar, there are two versatile wake-up alarms with snooze facility, and a sleep function to turn the system off after a set period. Each alarm can be set to start in a particular mode.

To set the clock/calendar, see *Getting started/setup* on page 8.



### 10.1 Alarm

To set or change an alarm, either press Alarm or select Menu > **Main menu** > **Alarms**.

Select the alarm number (1 or 2) then configure the following parameters:

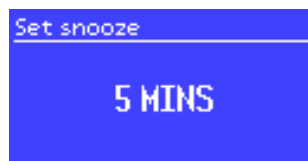
- **Enable:** Off, Daily, Once, Weekends or Weekdays,
- **Time:** 00:00 – 23:59
- **Mode:** Buzzer, Internet radio, DAB, FM or iPod,
- **Preset:** Last listened or 1-10, (for Internet Radio, DAB and FM)
- **Volume:** 0 – 32.



To activate the new settings, scroll down and select **Save**.

The screen shows active alarms with an icon at the bottom left.

At the set time, the alarm will sound. To temporarily silence it, press Snooze. You can change the snooze period with the Select control if you like. The radio returns to standby for the set period, with the silenced alarm icon flashing.



To stop the alarms, press the Alarm button once.

When the unit is in off mode, press the Alarm button once to activate the alarm 1, press again to activate the alarm 2, press again to activate both of alarm 1 and 2, then press again to deactivate the alarm function.

### 10.2 Sleep

To set the sleep timer, select Menu > **Main menu** > **Sleep** then choose from **Sleep OFF**, **15 MINS**, **30 MINS**, **45 MINS** or **60 MINS**.

Once you select a sleep period, the system returns to the main menu. Press Menu to return to the Now playing screen.



## 11 Software upgrade and factory reset

### 11.1 Software upgrade

From time to time, Frontier Silicon may make software upgrades available with bug fixes and/or additional features. You can either check manually, or set WF900i to check periodically automatically (this is the default). If WF900i detects that newer software is available, it asks if you want to go ahead with an update. If you agree, the new software is then downloaded and installed. After a software upgrade, all user settings are maintained.

**CAUTION:**

- ***Before starting a software upgrade, ensure that WF900i is plugged into a stable mains power connection.***
- ***Never interrupt the firmware upgrading before its completion.***
- ***Never operate other functions before finishing the installation.***
- ***Disconnecting power during a software update may permanently damage the unit.***

To turn automatic checking on or off, select Menu > **System settings** > **Software update** > **Auto-check setting**.

**REMARKS:** It is optional for user to upgrade the software provided by Frontier Silicon through internet. User should undertake the responsibility of any problem occurred by such operations.

### 11.2 Factory reset

A factory reset resets all user settings to default values, so time/date, network configuration and presets are lost. However, the radio's current software version is maintained, as is registration with the Internet radio portal. Internet radio favourites therefore remain unless you re-register your radio with another account on the portal website.

To perform a factory reset, select Menu > **System settings** > **Factory reset Proceed** > **Yes**.



## 12 Troubleshooting and error messages

**Attention!**

- *Never try to repair the system yourself as this will invalidate the warranty. Do not open the system as there is a risk of electric shock.*
- *If a fault occurs, first check the points listed below before taking the system for repair. If you are unable to resolve a problem by following these hints, consult your dealer or AWA for help.*

### 12.1 Error messages

| Message                     | Description  | Example   |
|-----------------------------|--|---|
| Failed to connect           | Correct key entered, but router rejects request                  | MAC filtering enabled on router   |
| Format error                | Cannot recognise file format - independent of network            | Received .wma, but found that the stream wasn't WMA when trying to decode |
| Network error               | Problem past router - incorrect data being received from network | Data obtained from server is unreadable.                                  |
| Network not ready           | Problem with connection to router                                | Router switched off   |
| Network timeout             | Problem past router - no response being received from network    | Streaming IR station and suddenly station becomes unavailable             |
| No UPnP media found         | No UPnP servers found  | Trying to access UPnP, but cannot connect the PC                          |
| No USB device found         | No USB   | Trying to access USB menu, but no USB plugged in                          |
| Service not available (DAB) | No DAB reception   | Trying to scan the DAB station, but no DAB station can be scanned         |
| Unauthorised                | Access not granted by UPnP server                                | Allow access for WF900i in UPnP server settings                           |
| Update failed               | Software upgrade failed  | Power shot down accidentally cause the failure of software upgrading.     |
| USB device unsupported      | Unsupported USB device plugged in.                               | Use wrong capacity USB device   |
| USB error                   | General USB problems   | USB device destroyed.   |
| USB read error              | Unable to read particular data from memory                       | Bad memory sector found on USB device                                     |
| USB underpowered            | Power failure to USB device                                      | user have to remove the device  |



## 12.2 Troubleshooting

| Problem  | Cause   | Solutions   |
|--|---|---|
| FM: Hiss<br>DAB: burbling/<br>intermittent cut-out | Low signal strength                             | <ul style="list-style-type: none"> <li>- If the signal is too weak, adjust the antenna or connect an external antenna for better reception.</li> <li>- Increase the distance between the set and your TV or VCR.</li> <li>- Keep or at least 1 meter away from your PC.</li> <li>- For DAB, Rescan local (high-strength) stations only</li> <li>- For DAB, check local coverage at <a href="http://www.acma.gov.au/WEB/STANDARD/pc=PC_310504">http://www.acma.gov.au/WEB/STANDARD/pc=PC_310504</a></li> </ul> |
| DAB: 'No stations available' message               | Low signal strength                             | As above then rescan stations.  |
| Cannot connect to network                          | Network down                                    | Check the network whether is working between the computer and the router or not.  |
|  | Router restricts access to listed MAC addresses | <p>Obtain the WF900i MAC address from Menu &gt; <b>System settings</b> &gt; <b>Network</b> &gt; <b>View settings</b> and add to router list.</p> <p><i>Note: WF900i has separate MAC addresses for wireless networks; only the current network adaptor method address is displayed, but the other address can be obtained by changing the first pair of digits '00' (wireless)</i></p>  |
|  | Insufficient Wi-Fi signal strength              | Check the distance of router and computer; and make sure the computer can connect to the network in this location   |
|  | Unknown encryption method                       | Change encryption method on router. WF900i supports WEP, WPA and WPA2   |
|  | Unusual network configuration                   | Setup network manually through Menu > <b>System settings</b> > <b>Network</b> > <b>Manual settings</b>  |



|   |  |   |
|---|--|---|
|   | Firewall preventing access   | Check the following ports are open on the router: UDP and TCP ports 80 and 123; DNS port 53. Windows shares: ports 135 – 139 and 445. Windows Media Player: varies – non-Microsoft firewalls may require configuration for UPnP.          |
| Cannot connect to Internet                    | Internet connection down<br><br>Firewall preventing access   | Check that Internet is working for a computer connected to the same network<br><br>Check the following ports are open: UDP and TCP ports 80 and 123; DNS port 53. Some Internet radio stations may require additional ports to be opened. |
| Cannot play particular Internet radio station | Station not broadcasting, overloaded or insufficient bandwidth.<br><br>Station broadcasting using unknown codec. Link out of date. | Try other stations; try listening on computer via Internet radio portal website; try later.   |
| Malfunction                                   | May caused under the influence of electrostatic phenomenon   | Just power reset to restart the Internet Radio to resume normal operation.  |





## Glossary

- DAB - Digital Audio Broadcasting
- DLS - Dynamic Label Segment – short text information broadcast with DAB audio
- FM - Frequency Modulation
- MSC - (USB) Mass Storage Class (device)
- RDS - Radio Data System
- UPnP - Universal Plug and Play
- USB - Universal Serial Bus
- WLAN - Wireless Local Area Network



## 13 Service Information

### Specifications:

|                            |   |
|----------------------------|---|
| <b>Model</b>               | <b>: WF900i</b>   |
| <b>Type</b>                | <b>: Wi-Fi Internet Radio with Docking for iPhone</b>                       |
| <b>Dimension</b>           | <b>: 250 x 130 x 135 mm</b>   |
| <b>Weight (Net)</b>        | <b>: 1.8 KG (approx.)</b>   |
| <b>FM Frequency</b>        | <b>: 88 – 108 KHz</b>   |
| <b>DAB/ DAB+ Frequency</b> | <b>: Band 3 (174.928 - 239.20 MHz)</b>                                      |
| <b>Number of presets</b>   | <b>: 30 presets (10 for Internet Radio, 10 for FM and 10 for DAB/ DAB+)</b> |
| <b>WiFi Connectivity</b>   | <b>: 802.11g/b</b>  |
| <b>USB</b>                 | <b>: 12Mb/s, V1.1 (support MP3, WMA files)</b>                              |
| <b>Output power</b>        | <b>: 2 x 2W (RMS)</b>   |
| <b>Power Source</b>        | <b>: AC Adaptor 9V 1.5A</b>   |



## 14 Product Warranty

# Product Warranty



**Subject to the warranty repair conditions below, in addition to any applicable statutory warranties this product is warranted for 12 months from the original date of purchase covering both parts and labour.**

The benefits conferred by this warranty are in addition to and not in derogation of all rights and remedies in respect of this product which the consumer has under the Trade Practices Act and other State and Territory laws.

### Warranty Repair Conditions

- A. This Product Warranty only applies provided the product:-
- Has been purchased in Australia and sold by Authorised Distributors or Dealers and only where the products are used and serviced within Australia
  - Is taken for service when required to an Authorised Service Agent, together with written instructions indicating specific problem or function requiring investigation.
  - Has valid proof of purchase and presented when warranty service is requested.
  - Has only been used in a domestic application.
  - Has been installed and operated in accordance as noted in the operating instructions under normal use and reasonable care (in the opinion of the Service Centre).
  - Has not been damaged by the use of accessories which in the opinion of the Service Centre are defective or incompatible with the product.
  - Has not been tampered with or repaired (including unauthorised alterations) by anyone other than the AWA Service Centre or an Authorised Service Centre.
- B. This Product Warranty does not cover:-
- Damage, malfunction or failure resulting from use of incorrect voltages, incorrect installation, accidental damage, misuse, neglect, build-up of dirt or dust abuse, wear and tear, maladjustment of customer controls, mains supply problems, thunderstorm activity or Acts of God, pixel error, infestation by insects or vermin, exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.
  - Mileage or travelling time in respect of service outside the authorised AWA Service Centre nor pick up and delivery cost incurred.
  - Service calls arising from failure to correctly operate the product or to observe noted instructions, or repair which reveals the product is in normal working order.
  - Cabinet parts, user replacement batteries or leads unless the defective items are reported at the time of purchase.
- C. Service calls only apply to Television display devices (CRT, LCD, Plasma) with screen sizes greater than 68cm in the major metropolitan areas of Australia or the normal operating areas of the nearest Authorised Service Centers.
- D. Requested service visits to the customer premises will be made during normal working hours of the customary working week upon request by the customer. Where such a visit is made on a day arranged by the customer and the service technician is unable to obtain access to the product, the Service Centre will be entitled to make a separate charge for service call fee, time and distance travelled.
- E. The AWA Service Centre and its Authorised Service Centres may charge for work done where the product is found to be in good working order. Example, charges may be made where the problem is found to be due to incorrect setting of customer controls, use of poor associated equipment (e.g. poor antenna systems) or the inability of the product to operate with faulty or incompatible equipment.
- F. If the product is sent to an Authorised Service Centre, the owner is responsible for the cost of transport to and from the Service Centre. In addition, the product is at the owners risk while in transit to and from the authorised Service Centre.



- G. No person is authorised to make or give any assertions, statements or undertakings, whether expressed or implied about the product other than or additional to the terms of this warranty.

**Please read instruction manual carefully**

Should you encounter any problems?

**Please contact Telefix for Warranty Support**  
**1300 366 144**

Email: [warrantyhelp@awa.com.au](mailto:warrantyhelp@awa.com.au)

The original proof of purchase must be kept and produced for service requirements under this Product Warranty.