



A 2696

Digital (DAB+) Internet FM Tuner



User Guide

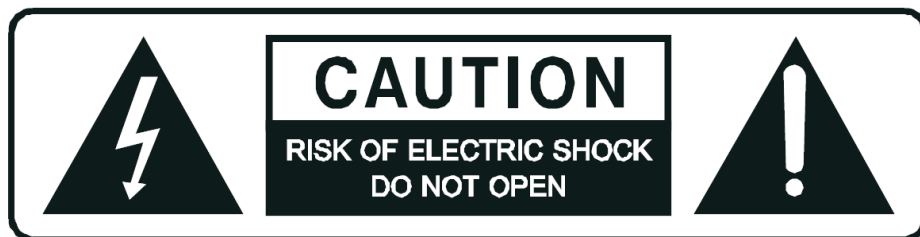
Dear Valued Customer

Thank you for deciding to purchase this product. This instruction manual will give you a general idea of how this device operates, as well as providing you with information on safety procedures and cleaning. In order to maintain this product in good condition, and to ensure it's safe operation, please take a few minutes to read and carefully follow all the safety and operating instructions found in this manual.

Please retain this instruction manual for future reference and pass it along with the device if handed over to a third party. Should you have any additional questions regarding the operation or installation of this device, or should any problems arise from its use, then please contact a specialized dealer or our service team for further information.

We assume no liability for any damage incurred as a result of improper use resulting from failure to comply with the safety instructions found in this manual. Under such circumstances all claims under warranty will become null & void. We assume no liability for any consequential damage!

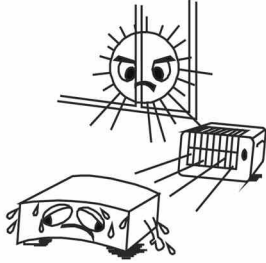
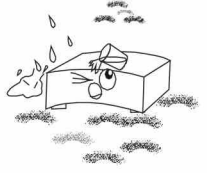
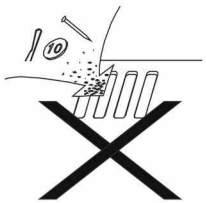
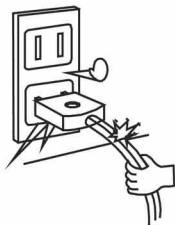
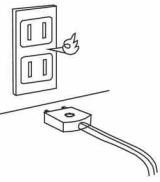
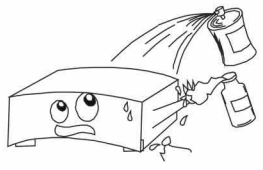

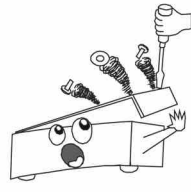
This product is EMV-certified and complies with all European and National guideline requirements. A declaration of CE conformity has been established for this product. Certification has been documented and entrusted to the manufacturer



1. Intended Use

This device is an FM/DAB/DAB+ stereo tuner with internet radio. It can be used for internet radio station reception by means of internet access either via a broadband high-speed Ethernet cable or wireless LAN (Wi-Fi). FM & DAB radio reception are also possible with an antenna. Music files stored on a network can also be accessed.

Please adhere to all of the safety information and instructions found in this instruction manual.

 <ul style="list-style-type: none"> ● Avoid high temperatures Allow for sufficient heat dispersion when installed on a rack. 	 <ul style="list-style-type: none"> ● Keep the set free from moisture, water, and dust. 	 <ul style="list-style-type: none"> ● Do not let foreign objects in the set.
 <ul style="list-style-type: none"> ● Handle the power cord carefully. Hold the plug when unplugging the cord. 	 <ul style="list-style-type: none"> ● Unplug the power cord when not using the set for long periods of time 	 <ul style="list-style-type: none"> ● Do not let insecticides, benzene, and thinner come in contact with the set.
	 <p>*(For sets with ventilation holes)</p> <ul style="list-style-type: none"> ● Do not obstruct the ventilation holes 	 <ul style="list-style-type: none"> ● Never disassemble or modify the set in any way.

Explanation of symbols



An exclamation mark is intended to inform the user of important information, operation or maintenance instructions, or that special attention is required.



This symbol is intended to alert you to the presence of unprotected live parts or components found within the product's enclosure, or of dangerous connections that upon contact may be of sufficient magnitude to constitute a risk of electric shock. Cable intended for such connections should only be connected by qualified personnel or you should only use ready to connect cables. There are no user-serviceable parts found inside the device, therefore the device need never be opened.

2. Safety Information

The following safety and hazard warnings are not only for the protection of your device, but also serve as a protection against potential health hazards. Please take time to read the following instructions carefully.



We assume no liability for personal or property damage resulting from the failure to comply with the safety instructions, or from improper operation or handling. Under such circumstances, all claims under warranty will become void.

- For safety and licensing (CE) reasons any unauthorized modification and/or changes to the device is prohibited and will void the warranty and all warranty claims.
- Any persons operating, installing, setting up, or servicing this device must be trained and qualified accordingly, and observe these operating instructions.
- Ensure that the device has been set up correctly by following all the instructions found in the instruction manual
- This is a protection class II device. Make sure that the voltage supply of the power outlet used meets the required voltage specifications 230V/~50 Hz.
- Power supply cables should be routed so that they are not likely to be walked on, squashed or pinched by items placed upon or against them. Pay particular attention to cords at plugs, power outlets, and at the point at which they exit from the device. Avoid exposing the cable to extreme heat or cold. Ignoring the above mentioned instructions could result in cable damage and present the danger of an electric shock.
- Should any obvious damage be seen on the device or on the connection cables, do not contact them in any way. Switch off the corresponding circuit breaker in the power distribution panel first, before carefully unplugging the power plug from the wall outlet. Do not operate the device further! Please contact or take it to a qualified service technician or specialty workshop.
- In order to completely cut off the power supply to the device, unplug the power plug from the wall outlet. Merely turning the device off with the ON/OFF button is not sufficient. Also make sure that power outlets are easily accessible.
- Always pull on the plug's grips and never on the cable to remove it from a wall outlet. Unplug the device from the power outlet if not in use for a longer period of time.
- For safety reasons, always unplug the device from the power outlet during thunder storms.
- Eliminate potential tripping hazards by routing cables in such a way that no one can trip or stumble over them.
- Never use the device, if the power cable or device is damaged.

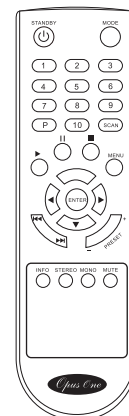


- Keep packaging and protective foil away from children at all times to avoid the danger of suffocation.
- The device should never come into contact with water or moisture.
- To prevent the risk of fire or electric shock make sure that liquids, such as dripping or splashing water, rain or moisture, do not come in contact with the device and power supply plug.
- Operate this device in a moderate climate and never expose it to extreme temperatures, such as high humidity.
- Condensation can build up suddenly if the device is brought from a colder area into a warmer area (e.g. when transporting). Should this happen, allow the device to warm up to room temperature first before using.
- Care should be taken so that liquids do not come in contact with the interior, this is why containers containing liquids, e.g. buckets, vases or plants should never be placed anywhere near this product, including the power supply plug. This could not only damage the device, but also present a fire hazard.
- It is imperative to avoid contact with moisture, e.g. never operate in the bathroom.
- Make sure the device is properly ventilated during operation and never operate it in constricted areas, such as for example in a bookcase or shelf. Never block ventilation openings with magazines, tablecloths, curtains or similar.
- Make sure the device is placed on a firm and stable surface.
- Never place any sources of fire on top of or near the device and power supply plug (e.g. lighted candle).
- Please note that excessive sound pressure created when listening to loud volume levels with earphones or headphones can lead to permanent hearing damage.
- Please adhere to the additional safety information found in the individual chapters of this instruction manual.
- When connecting other devices, please refer to the safety and operating instructions found in the literature accompanying the device.
- Please contact our technical hotline or a service technician for further information, should you be in doubt about device operation, safety or when making connections, or if any questions arise that are not explained within this manual.
- Contribute to a better environment by using a designated recycling site for the disposal of packaging material.

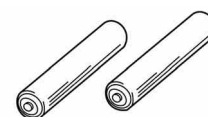
3. Accessories

The following accessories are supplied with the system. Please check all these parts are present before proceeding. Please inform your dealer if any part is missing or damaged.

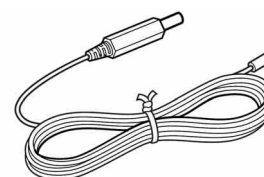
1 x Remote control handset



2 x AAA batteries for the remote control handset



1 x DAB radio antenna cable



1 x screw-in Wi-Fi antenna

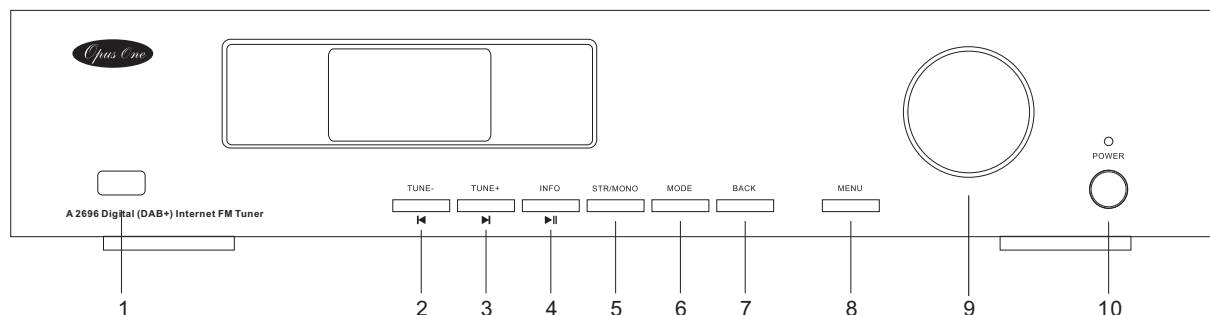


1 x stereo left and right Phono to Phono cable for connecting to amplifier



4. Description of parts

Front Panel



1. USB Port - Connect mass storage media like flash drives or Hard Drives. Not suitable for keyboards, mouse, and some MP3 players not supported.

2. TUNE - / ◀ : When operating mode is FM Radio press to auto scan for previous station.

When operating mode is Music Player, press to skip to previous track.

3. TUNE + / ▶ : When operating mode is FM Radio press to auto scan for next station.

When operating mode is Music Player press to skip to next track.

4. INFO / ▶◯ : When operating mode is FM Radio or DAB Radio press to see RDS / DLS information on the current station.

When operating mode is Music Player press to play, press again to pause.

5. STR / MONO: When operating in FM Radio mode use this button to switch between mono and stereo reception.
NOTE: Some stations may be MONO only FM broadcasts.

6. MODE: Change operating mode. Press to select modes either DAB+ Radio, FM Radio, Internet Radio or Music Player.

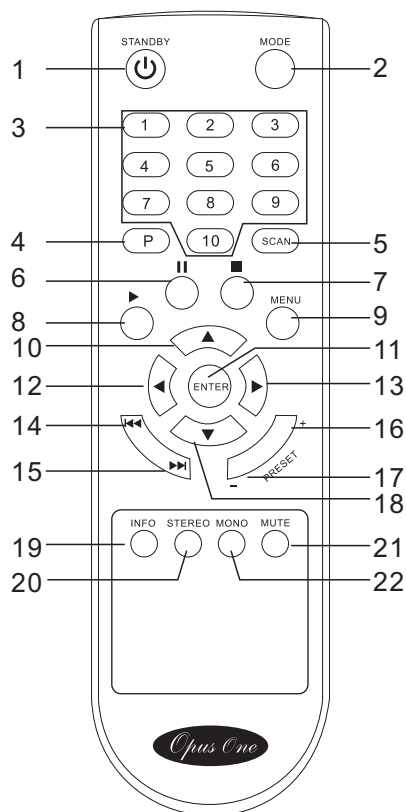
7. BACK: Press to go to Previous Menu screen. (This function is available from the Remote Control, but the BACK button is not included)

8. MENU: Press to go to Menu screen.

9. Jogwheel: This acts as a volume control, station selector or Menu function selector. Turn left or right to scroll through menu items. Press to confirm the selection.

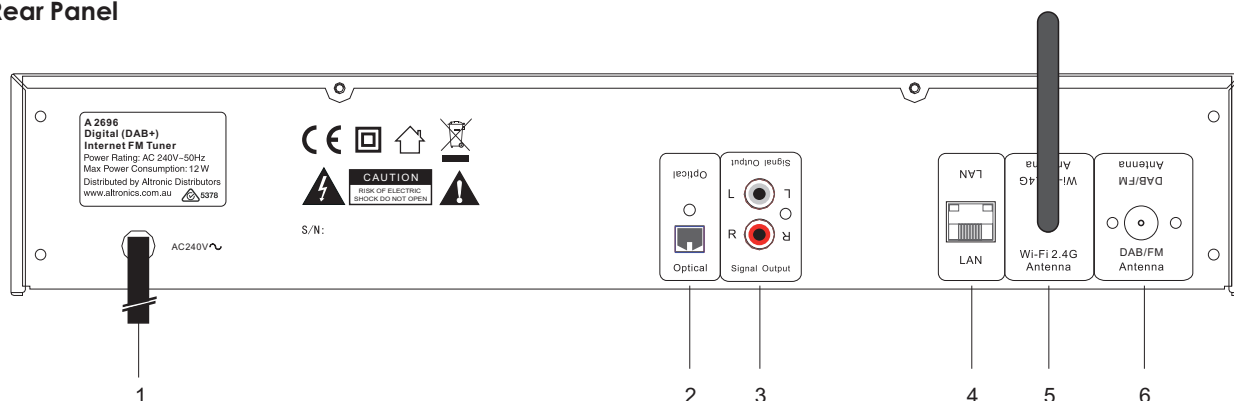
10. POWER: Press to switch the unit on or off.

Remote Control Handset



1. STANDBY: Press to turn unit on or off.
2. MODE: Press to select one mode within DAB, FM, Internet radio, Media player, USB.
3. Numbers (1-10): In FM or DAB modes, press and hold the number buttons to save station or frequency to a preset. Or press a button to select a stored station.
4. P: Press to browse preset station list. Use up/down arrow keys to highlight a station in the list, and press ENTER to select your preferred station.
5. SCAN: Press to auto search for stations in FM or DAB+ modes. In DAB mode, the scan function will capture all available stations and keep them in memory to be selected at will, or chosen as favourites in the presets list.
6. II : PAUSE – Press to pause playback of track in Media Player mode. Also acts as a menu control.
7. ■ : STOP –End all playback
8. ▶ : PLAY - Press to start playback of track in Media Player mode. Also acts as a menu control.
9. MENU: Press to go to menu list. Allows a user to change a range of parameters and control each mode of operation for the A2696.
10. ▲ : When play mode is FM, press up to change frequency by 0.05 MHz steps. When in MENU screen, press to go up the list of settings to highlight and change. This cursor can also be used for character input.
11. ENTER – OK or confirm button.
12. ◀ : Left move – When in MENU screen, press to go back to PREVIOUS menu screen or cancel an action. This cursor can also be used for character input.
13. ▶ : Right move - When in MENU screen, press to go forward to NEXT menu selection screen. This cursor can also be used for character input.
14. ◀◀ : When play mode is media player, press to skip to PREVIOUS track. When operation mode is tuner, press to auto scan for previous stations.
15. ▶▶ : When play mode is media player, press to skip to NEXT track. When play mode is tuner, press to auto scan for next stations.
16. PRESET+: press to go to next preset station.
17. PRESET-: Press to go to previous preset station.
18. ▼ : When play mode is FM, press down to change frequency by 0.05 MHz steps. When in MENU screen, press to go down the list of settings to change. This cursor can also be used for character input.
19. INFO: Information about current stations or tracks
20. STEREO: When in FM mode, press to change from mono to stereo reception (works only where station is broadcasting in stereo. Some low-power FM station broadcast in mono only!)
21. MUTE – Press to turn audio volume off and on again.
22. MONO: When in FM mode, cancels STEREO command.

Rear Panel



1. Power cord.
2. Optical: Connect an optical cable (not supplied) to connect to a digital input such as the optical input on amplifiers.
3. Signal Output: RCA stereo ANALOGUE output connections. Connect RCA to RCA stereo pair cable (supplied), ensuring the red connector on the cable is connected to the red connector on both the A 2696 and your amplifier.
4. LAN: Ethernet cable connection for connecting between the A 2696 and a router (UTP Cable not supplied).
5. Wi-Fi 2.4G Antenna: WLAN 2.4 GHz Wi-Fi antenna input jack for internet radio (supplied).
6. DAB/FM Antenna: 75 ohm Tuner antenna for both FM and DAB+ radio reception (supplied).

DESCRIPTIONS

Optical: Use this output to connect a digital amplifier using an optical cable (also known as an optical waveguide or Toslink). One of the advantages of digital transmission of the audio signal to the amplifier is that interference cannot affect the signal and reduce the quality as can occur with analogue transmission. You can also connect the optical input of a digital recorder to this output to save and then playback the audio.

This output uses the S/PDIF (Sony / Philips Digital Interface) protocol. This is a standard protocol for digital transmission of audio signals, which is supported by just about any device with a digital interface. Before making the audio connection to your amplifier, please make sure the volume is at a suitable level to prevent damage to your hardware.

Signal Out: The line output on the back of the device is intended to be connected to the Line input of a Hi-Fi amplifier or a pair of active speakers (speakers with built-in amplifiers). The output is designed for a voltage level of 2 VRMS. Before making the audio connection to your amplifier, please make sure the volume is at a suitable level to prevent damage to your hardware.

LAN: Use this port if you would like to integrate the A2696 into your network via a wired connection. To distinguish it from the wireless or WLAN connection, it is frequently referred to as a LAN or Ethernet port. The port supports data rates of 10 and 100 Mbps.

To connect the A2696 to your router in this manner, use a standard network cable (twisted pair with RJ45 plugs). To connect the A2696 directly to your desktop PC or laptop, either use a network switch (also known as a bridge) or a hub.

To connect the A2696 without any intermediate devices, use a crossover cable instead of a standard network cable. Two LEDs near the port show the status of the link: orange indicates a live connection to the network junction (node); network traffic is signalled by a green LED (usually flickering).

Wi-Fi 2.4 GHz WLAN Antenna: If you have access to a 2.4 GHz Wireless LAN (WLAN) router, screw the antenna provided onto this connector. If possible, ensure that the antenna is set to a vertical position to ensure the best possible reception.

Dear Customer!

Note:

Do not throw batteries and rechargeable batteries into household waste!

Consumers are legally obligated to return used and rechargeable batteries, whether they contain harmful substances* or not, to designated recycling areas, disposal sites, or stores where batteries/rechargeable batteries can be bought. By doing so, you are fulfilling all legal battery recycling and disposal obligations and are contributing to a better environment. Make sure batteries are completely discharged before disposing!

*) marked with Cd=cadmium Hg=mercuric Pb=lead



- Always follow the manufacturer's instructions when recharging rechargeable batteries.
- Touching leaking or damaged batteries could cause skin burns. Use protective gloves suitable for handling such batteries.
- Always ensure that the device has been turned off after use.
- Always change/replace all batteries at the same time.
- If required clean battery and device contacts before inserting.

Inserting/changing batteries

The remote control requires two "AAA" batteries to operate. Remove the battery compartment lid carefully. Remove the used batteries. Insert new batteries, observing the correct polarity as displayed inside the remote. Replace the battery lid carefully.

Information on handling batteries and rechargeable batteries

Please adhere to the following information when handling batteries and rechargeable batteries.



- Keep batteries out of children's reach.
- Batteries are hazardous and do not belong in household waste.
- Ensure correct polarity when inserting batteries.
- Always remove batteries when the remote control is not in use for long periods of time.
- Never leave batteries lying around unsupervised. If swallowed these could pose a choking hazard to children and pets. Seek emergency medical care immediately, should this happen.
- Never expose batteries to extreme temperatures, such as sunlight, fire, ovens, etc. There is a risk of explosion!
- Make sure that batteries are not dismantled, short-circuited or are thrown into fire. Never re-charge non-rechargeable batteries. There is a risk of explosion!

5. Connection

Power supply

- Plug the power cable into a correctly installed power outlet of your home power system.

Radio Aerials

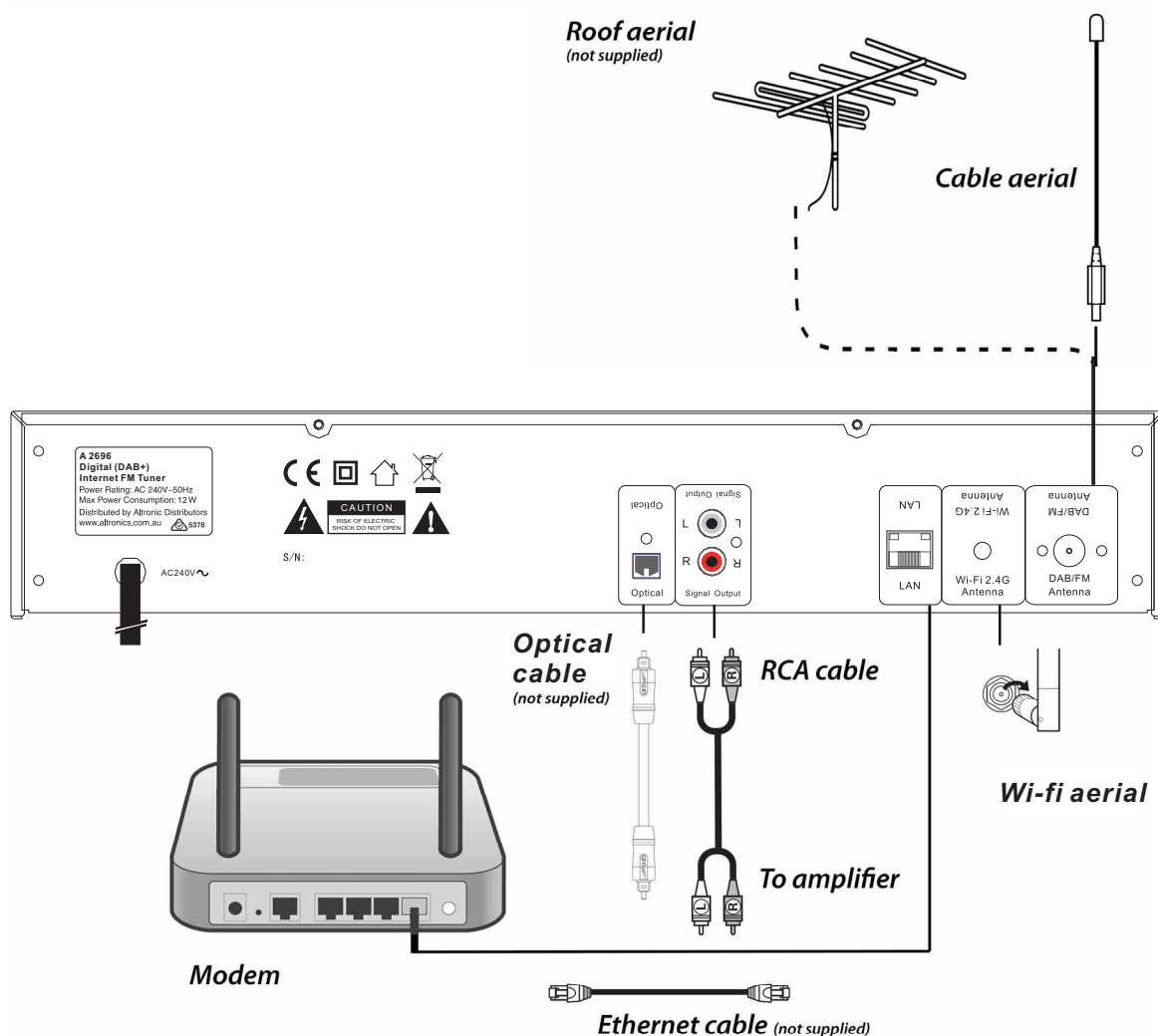
- In order to receive DAB or FM radio broadcasts it is necessary to connect the supplied wire aerial to the screw socket marked DAB/FM Antenna. Alternatively, if you have an external aerial, you can connect a suitable cable from the socket marked DAB/FM Antenna to a wall socket that connects to the roof aerial.

Ethernet Network Connection

- For best results when receiving internet radio stations or playing music files from your network, use an Ethernet cable (not supplied) to connect to a spare Ethernet port on your router.

Wireless LAN

- For wireless operation, attach the antenna to the "Wi-Fi 2.4G Antenna" connection. This screws in clockwise.



6. Before Getting Started

Screens

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

There are basically six types of screen:

- Standby
- Splash / temporary (e.g. changing modes)
- 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 by pressing the Mode button the A 2696 shows a **splash screen** for each mode.

After one second, the A 2696 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, the A 2696 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.



Menus

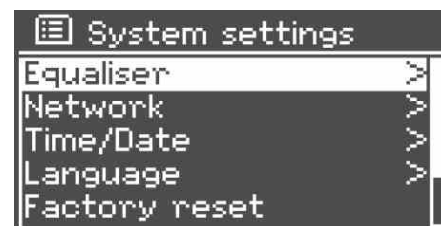
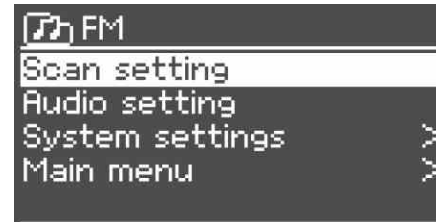
The A 2696 has basically three types of menu. Use the **Select** control to step through and select options. A scroll bar on the right of the screen shows if there are further options above or below those visible.

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.

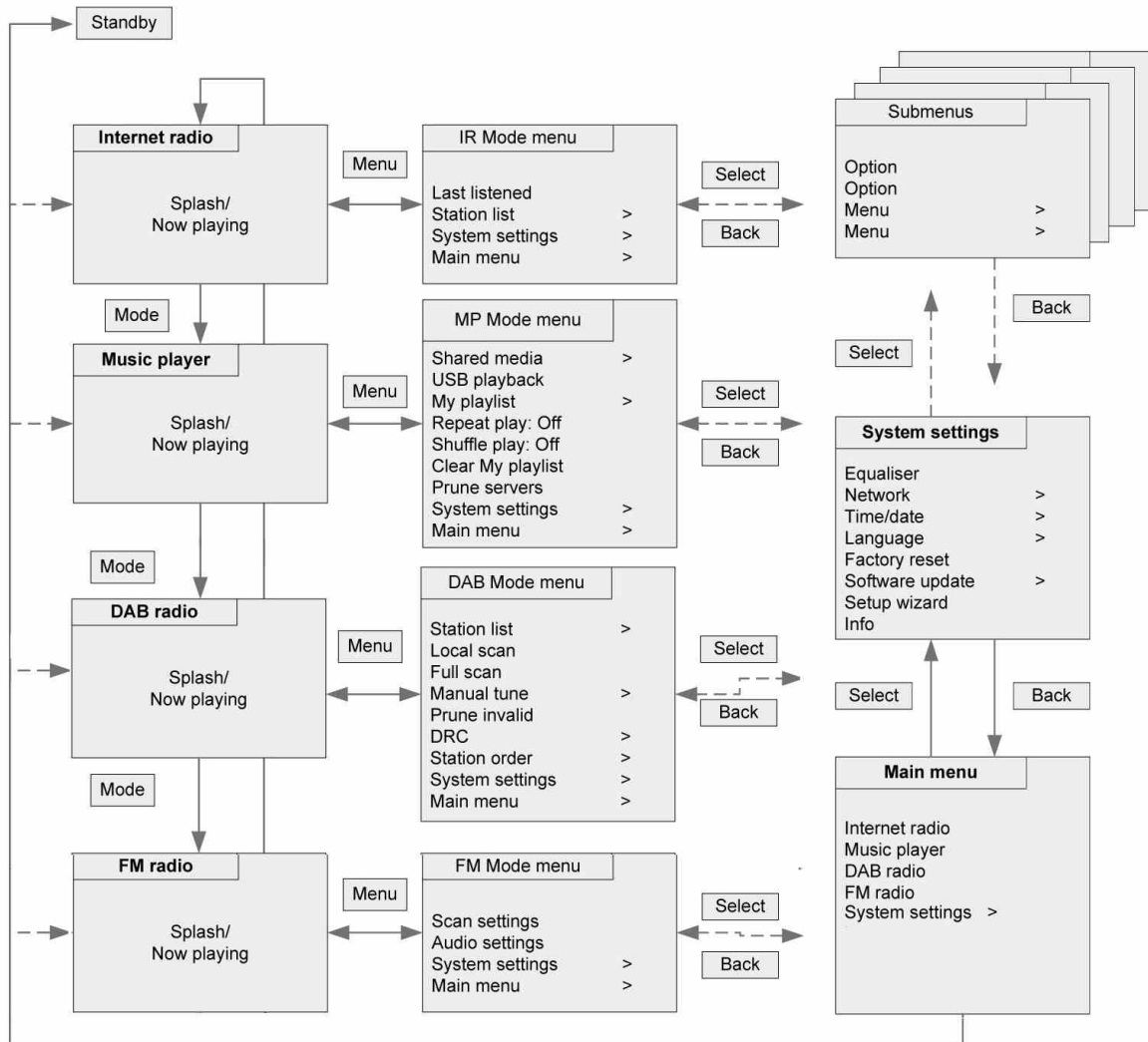
The **System settings menu** allows access to system settings and information such as network, time, language and software update. Menus with more options than will fit on one screen have a scroll bar to the right. The Main menu allows access to all modes plus sleep and timer functions.

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



Some menus, for example the System settings menu, have several submenus. See the **Modes and menu overview map** on page 15.

Modes and menus overview map



7. Getting Started

Although the A 2696 is sophisticated, getting started is simple. After connecting your system to the speakers, to play DAB or FM radio, all you need is a power source (a 220~240 V mains supply).

For Music Player mode, you need either a USB stick containing compatible music files or a wired or wireless Ethernet network and a UPnP music server (e.g. a PC or a network attached storage (NAS) drive containing your music library). For Internet-connected modes such as Internet radio you also need a broadband Internet connection.

Setup wizard

When the A 2696 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.

If you choose **No**, the next screen asks if you would like to run the wizard next time the A 2696 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 the A 2696 is started.

12/24 hour display

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

Time/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 vTuner Internet radio portal when in any network connected mode.

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

If you are updating from the network, set your time zone.

If your country uses daylight saving, the automatically updated time from the network may be wrong by one hour. When daylight savings are in effect (during the winter), turn on the **Daylight savings** option to rectify this. Note that if you are updating the time from DAB or FM, the **Daylight savings** option has no effect on the clock's time. The A 2696 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.

Network

The A 2696 is compatible with all common network protocols and encryption methods, including Wi-Fi Protected Setup (WPS).

To connect the A 2696 to your network, you need one of the following:

- A wired router and an Ethernet (RJ45 network) cable
- A Wi-Fi wireless router, together with password key if set

Select **WLAN region/country** (for the UK choose **Most of Europe**) > **Wi-Fi network (SSID)**, and then select a network from the list. To connect to a wired network, select **[Wired]**, after ensuring that the Ethernet cable from the wired router is connected to the Ethernet socket of the A 2696. If the network is open (non-encrypted), A 2696 connects immediately (see **Completion** below).

Standard encrypted network

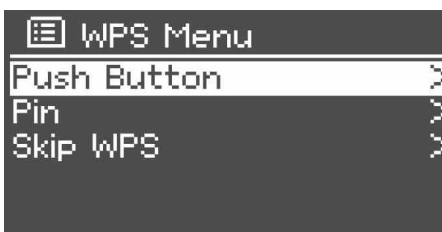
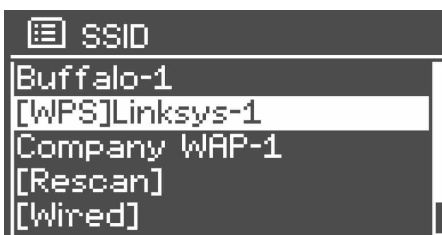
To enter the network's key (password), use the **Select** control to move the cursor through the characters and press **Select**. As each character is selected, the key is built up near the top of the display. There are three options accessible by turning **Select** back before the first characters (0123...) – **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 >**
The A 2696 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)
The A 2696 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

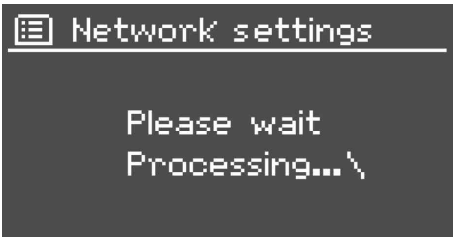
The A 2696 attempts to connect to the selected network.

If connecting fails, the A 2696 returns to a previous screen to try again.

If the network connection is lost, the A 2696 will automatically attempt to reconnect.

If network connection is successful the Connected screen will appear.

Upon completion of the process the Setup Wizard confirms connection and setup up has been successful



Network

The A 2696 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.

Setting up a music server

In order for the A 2696 to play music files from a computer, the computer must be set up to share files or media.

UPnP media sharing allows devices like the A 2696 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 (such as Allegro Media Server™ for Macintosh or PC) to work with an iTunes library. Alternatively if you are a PC user simply install and run Windows Media Player (10 or later) and add your iTunes library to the media library in Windows Media Player. You will be able to continue to use iTunes as your primary source of music library management and Windows Media Player will update automatically making your music always available on the A 2696.

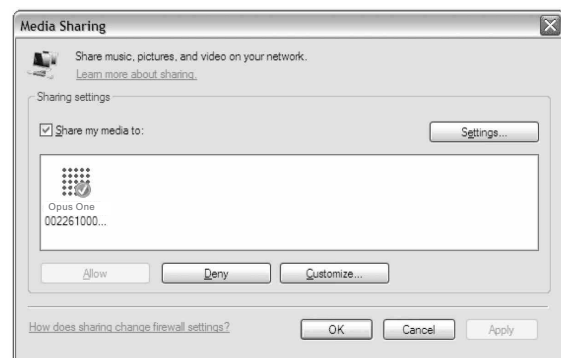
Sharing media with Windows Media Player

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 A 2696 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 The A 2696 (**Library > Add to Library...**).
4. In WMP, enable media sharing by right clicking on the **Library** and then selecting **Media sharing...**
5. In the next dialogue box you'll see the A 2696 displayed. Click on the icon representing the A 2696 and then click **Allow**

Your newly shared media library will now be listed under **Music Player > Shared Media** on the A 2696

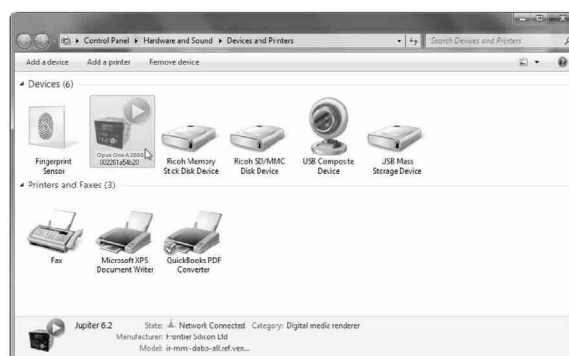
Note: The WMP UPnP service runs in the background; there is no need to start WMP explicitly each time.



Setting up the A 2696 for "Play To" Windows 7 streaming media feature.

To set-up the A 2696 to be controlled and to stream music via Windows Media Player 12 (Windows 7 only), perform the following steps:

1. Ensure that the PC is connected to the network.
2. Ensure that the A 2696 is powered on and connected to the same network. Note: the A 2696 must be in Internet Radio mode to be detected.
3. From the Windows 7 main screen, select **Start > Devices and Printers**.
4. Select the **Add a device** tab in the top left of the Devices and Printers window and follow the instruction prompts given by the wizard.
5. In the **Devices and Printers** window a A 2696 icon will appear and you are now ready to stream your Windows media music files to the A 2696
6. In order to use the Windows 7 Play To feature you will have to enable Media Sharing within Windows 7's network settings. For a full explanation please visit <http://windows.microsoft.com/en-GB/windows7/products/features/play-to>



8. Internet radio mode

The A 2696 can play thousands of radio stations and podcasts from around the world through a broadband Internet connection.

When you select Internet radio mode, the A 2696 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, the A 2696 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, etc. To use the favourites feature, register your radio with the portal website as described on page 26. If you have several of these radios, you can register them all on the same account so that each radio has access to the same favourites lists. It is possible to add favourites either directly through the A 2696 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 the A 2696 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
- Pre-sets

Or from the portal through the **Menu > Station list > menu:**

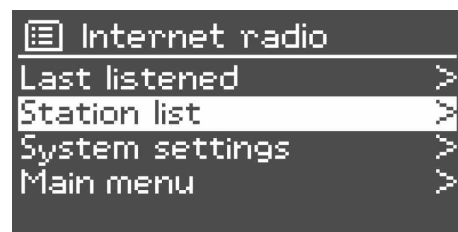
- Favourites lists
- Browse by Country, Genre, Most popular, Newest
- Search by keyword
- My added stations

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.

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.



Presets

Presets are stored in the radio and cannot be accessed from other radios. To store an Internet radio preset, press and hold the **P** button on the remote control handset until the display shows the Save to Preset screen. Using the down or up keys on the remote, select one of the 10 presets and press the **Enter** button on the remote control handset to store the currently playing station. To select a preset, press **P** button 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.

Also press and hold (1-10) button can save station to preset number.

Selecting a preset station

- There are different ways of selecting a preset station.
- Press a numeric button (1 – 10) on the remote control handset to select the memory presets 1-10.
- Press "P" to display a list of stored stations. Use the ▲ and ▼ buttons or turn the "CONTROL" dial to select the preferred station. Press the "ENTER" button or the "CONTROL" dial to confirm and switch to the selected station. Press "t", "P" or "BACK" to exit this menu. The menu will close automatically after a while.

Favourites

Favourites are different from Presets in that they can be stored on the internet radio portal directly, not just on the A 2696.

Before you set up an account on the portal from its web interface (www.wifiradio-frontier.com), the favourites are associated solely with A 2696.

After you set up a portal account, all the Favourites from your different radios are merged into a combined favourites list. This combined list is available to all the radios on your account. (see page 26 for details of how to register your A 2696 on the internet radio portal)

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]**.

Browse

To browse Internet broadcasts, select

Menu > Station list >

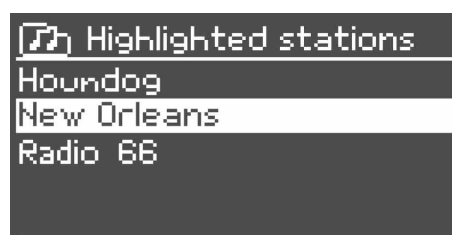
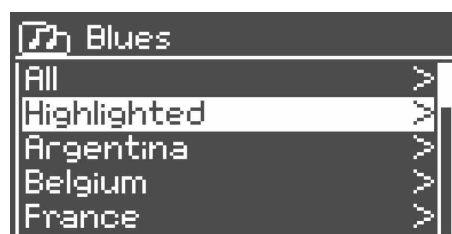
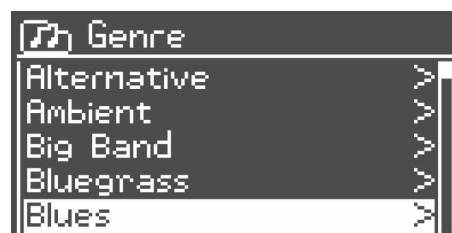
then either

Stations > or **Podcasts >**.

Browse through the menus to find broadcasts.

Note: BBC radio 'Listen Again' programs are accessible through the Podcast menu, for example

Menu > Podcasts > Location > Europe > United Kingdom > All shows > BBC Radio 4 > You and Yours > 20/10/2011 - October 20.



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.

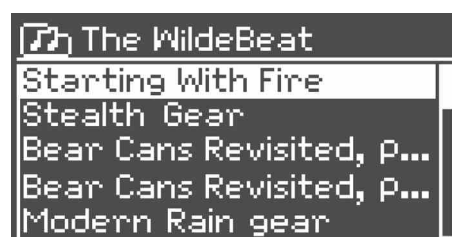
Select a broadcast from the list.

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

Now playing information

While the stream is playing, the screen shows its name and description. If artist and track information is available, this is also shown. To view further information, press **Info**. Each time you press **Info**, another set of information is displayed. Cycling through the following details:

- Artist and track name (default; where available)
- Station description
- Station genre and location
- Signal reliability
- Codec and sampling rate
- Playback buffer
- Today's Date



Internet radio portal registration

The Frontier Silicon Internet radio portal website allows you to organise the 'favourites' lists displayed on your internet radio devices and also listen to internet radio directly from a computer.

To register your A 2696 with the portal, switch to Internet radio mode as described in Section 4, and then obtain 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**.

If this is your first visit to the portal, click **register here** below login boxes to register for a new account.

You'll be asked for the following information:

- access code
- your e-mail address
- password
- radio model (A 2696)

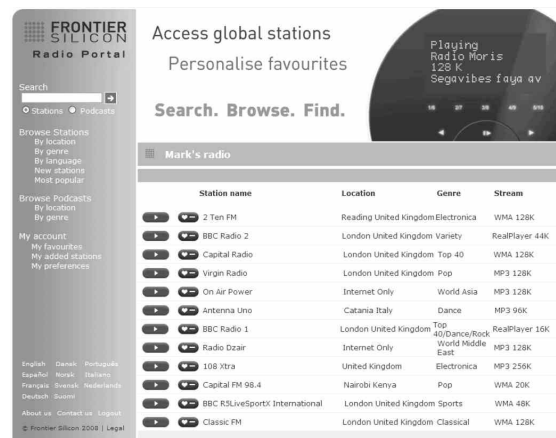
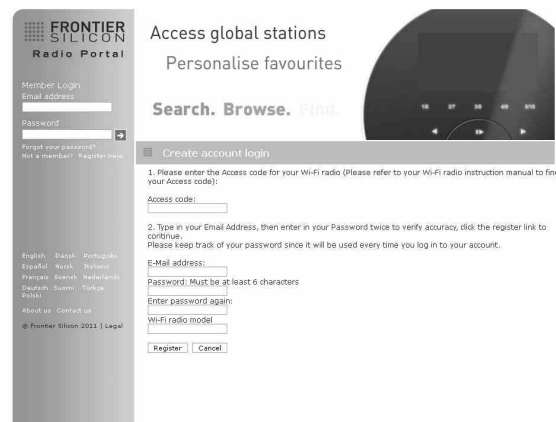
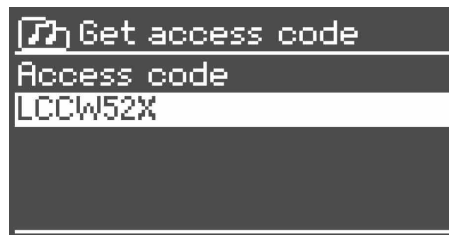
If you already have an account and wish to add the A 2696, log in to your account and select **My preferences > Add another Wi-Fi radio**.

Once your A 2696 is registered with the portal, you can immediately use the Internet radio favourites and added stations features on the unit.

My added stations

Using the internet radio portal you can add your own stations via the portal. These added stations are accessible from the A 2696 by selecting

Menu > Station list > My added stations > [Station].



9. Music player mode

(network and USB)

Music Player mode plays a variety of audio file formats such as MP3, AAC (Apple), WMA (Microsoft) as well as the completely lossless formats WAV & FLAC. These can be 'streamed' from a computer on the local network, or from a USB Flash stick or a hard drive on the network, known as a NAS drive (Network attached storage).

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 **⏭** on the remote or on the A 2696 itself to move through tracks. Press and hold to rewind or fast forward and press quickly to select previous or next track.

Shared media (from UPnP media server)

Select

Menu > Shared media >

If you have set up a music server (as described on page 20), 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. The A 2696 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 25.)

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

- Genre
- All Artists
- Contributing Artists
- Album Artists
- Composers
- Album
- 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. The A 2696 plays either the selected track or the playlist.



Wake-on-LAN

If shared media is selected, a list of available music servers will be displayed. If a question mark appears before the server name, this indicates that the server has been seen before and supports Wake-on-LAN functionality, but cannot currently be found on the network. If a server with a question mark is selected by the user, the device will try to wake the server up and connect to it. In some instances this may not be possible as the server may not be connected to the network any more or may be switched off.

Prune servers

From time to time it may be necessary to remove servers displaying question marks in front of the server name from the server list. For example, if the device is moved to a new network or if a Wake-on-LAN server is removed from your current network. To perform this function, go to

Menu > Prune servers > Yes

USB playback

To play audio from a USB mass-storage device such as a USB Flash stick or USB hard drive, Select

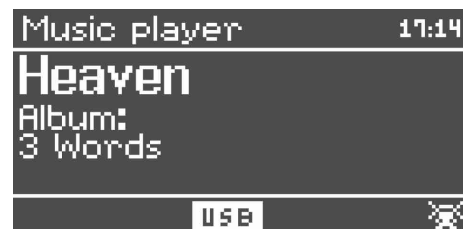
Menu > USB playback.

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 that 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. The A 2696 plays either the selected track or the playlist.

Viewing track metadata

While a track is playing, you can view extra information about it (called metadata) by pressing **Info**. Each time you press **Info**, a different item of metadata is displayed. See **Now Playing** section on page 29 for descriptions of the metadata for UPnP and USB.



Playlists

The A 2696 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, scroll through the playlist to the track you want and quickly press **Select**.
- To erase a track from the playlist, press and hold **Select** then confirm 'YES' by pressing **Select**.

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.

Repeat/shuffle

You can repeat tracks or play them in random order by selecting

Menu > Repeat play

or

Menu > Shuffle play

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 playback: progress bar (default), album, codec/sampling rate, playback buffer bar, today's date
- USB playback: progress bar (default), artist, album, folder, full file path, bitrate/codec type/sampling rate, playback buffer bar, today's date



10. Using the “Play To” feature in Windows 7

Windows 7 includes a feature called “Play To” and this lets your PC running Windows 7 control the A 2696 to push media and use the PC as a universal remote control for your media collection.

The A 2696 supports the industry standard DLNA (Digital Living Network Alliance) 1.5 digital media renderer. This allows you to “Play To” other devices around your home and combine media streaming with controlling a connected media receiver while streaming content to it from another Windows 7 PC on a home network. Before you can use the “Play To” feature you need the set-up the A 2696 for Windows 7 streaming media. See page 20.

Use “Play To” in Windows Media Player

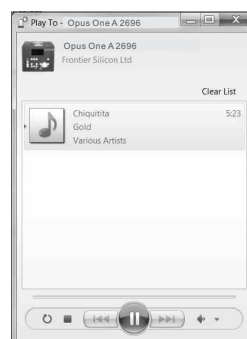
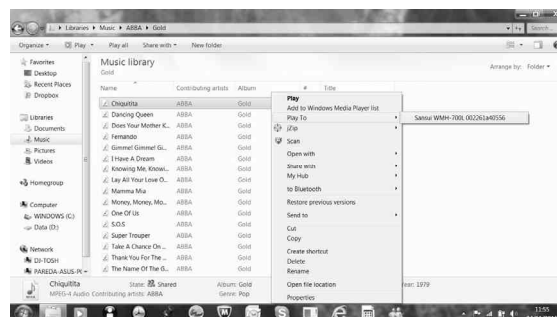
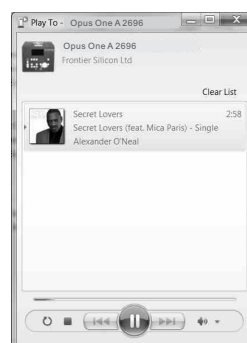
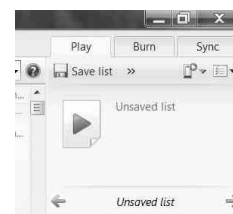
Windows Media Player makes it easy to manage your media, find items that you want to play, and open Play To. To select items that you want to play, follow these steps:

1. Click the **Start** button, click **All Programs**, and then click **Windows Media Player**. If the Player is currently open and you're in Now Playing mode, click the **Switch to Library** button in the upper-right corner of the Player.
2. If the list pane is closed or if the **Burn** or **Sync** tabs are exposed, click the **Play** tab.
3. Find the items that you want to play in the Player Library, and then drag those items from the details pane into the list pane.
4. Click the **Play to** button at the top of the list pane, click the device on your network that will receive the media.
5. In the **Play To** dialog box, use the playback controls to play, pause, or stop the media stream, and to change to the next or previous item in the list.

Use “Play To” elsewhere in Windows 7

Outside of Windows Media Player, you can stream media to the A 2696 with “Play To” by right-clicking music files. To select music files and stream them to the A 2696, follow these steps:

1. Click the files you want to stream to the A 2696.
2. Right-click the selected files, point to “Play to”, and then click the device on the network that will receive the media.
3. In the Play To dialog box, use the playback controls to play, pause, or stop the media stream, and to change to the next or previous item in the list.



Now playing information

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

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

- Artist, album, codec/sampling rate, playback buffer



11. Using the A 2696 with an Apple Macintosh computer

Because of the different system protocols used in computing it's not always possible to make every connected product instantly compatible with all computer technology.

The network system protocol used on the A 2696 is called DLNA (Digital Living Network Alliance) which is a system designed to give the user more convenience, choices and enjoyment of digital content through DLNA Certified® devices. (see www.dlna.org for more details)

Because Apple products are not automatically DLNA compatible it is necessary to install a software program to enable a DLNA device such as the A 2696 to see it and any music files stored on it, across the network.

There are many such programs available.

One such free application is called TV Mobili and can be downloaded from <http://www.tvmobili.com/>

Another is Serviio Media Server <http://www.serviio.org/>

There are many others. For more information talk to your local Apple reseller.

12. DAB radio 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**.

Scanning for stations

The first time you select DAB radio mode, or if the station list is empty, the A 2696 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 > 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**.

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 P on the remote handset until the display shows the Save preset screen. Select one of the 10 presets to save the currently playing station. Press Enter on the remote to store. To select a preset, press P on the remote control handset briefly, then select one of the listed preset stations with the up or down arrow keys. When a preset station is playing, it shows Pn (P1, P2 etc) in the bottom right of the screen.

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 program 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, program type, ensemble name/frequency, signal strength/error rate, bit rate/codecs/channels and today's date.

Settings

Dynamic range compression

Some DAB broadcasts offer dynamic range compression (DRC). This feature allows radios to compress the dynamic range of the output audio stream, so that the volume of quiet sounds is increased, and the volume of loud sounds is reduced. This can be useful if you are listening to music with a



high dynamic range in a noisy environment (for example, classical music while cooking).

To change the DRC of the A 2696, select

Menu > DRC, and then **DRC high**, **DRC low** or **DRC off**.

Note: The A 2696's DRC setting does have any effect if DRC data is not included in the broadcast.

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 BBC or South Wales local. Valid lists valid stations first, alphanumerically, then off-air stations.

To change station order, select

Menu > Station order > then **Alphanumeric**, **Ensemble** or **Valid**.

13. FM radio 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.

Selecting stations

To find a station, press Select . The frequency display starts to run up as the A 2696 scans the FM band.

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

Presets

To store an FM preset, press and hold P on the remote handset until the display shows the Save preset screen. Select one of the 10 presets to save the currently playing station. Press Enter on the remote to store.

To select a preset, press P on the remote control handset briefly, then select one of the listed preset stations with the up or down arrow keys. When a preset station is playing, it shows Pn (P1, P2 etc) in the bottom right of the screen.

Now playing information

While an FM station is playing, the screen shows one of the two following sets data:

- If RDS information is available, by default the service name (i.e. station name) is displayed. You can cycle through further RDS information by pressing **Info**. Each time you press **Info**, another set of information is displayed, cycling through RDS radio text, RDS program type, frequency and today's date.
- If no RDS information is available, the currently tuned frequency is shown.

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**.

14. Software upgrade and factory reset

Software upgrade

From time to time, We may make software upgrades available with upgrades and/or additional features. You can either check manually, or set A 2696 to check periodically automatically (this is the default). If the A 2696 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 the A 2696 is plugged into a stable mains power connection. 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.

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.**

15. Troubleshooting and error messages

The A 2696 is equipped with state-of-the-art technology and is safe to operate. Nevertheless, problems or malfunctions may occur. Before contacting our customer support, refer to the following for possible solutions.

PROBLEM	POSSIBLE SOLUTION
No power when switched on	<ul style="list-style-type: none"> - Mains socket not switched on or faulty - Plug not fully inserted into wall socket - Internal mains fuse has blown inside the unit, this will need to be replaced by a qualified service technician - Power cord has become damaged, this should be replaced immediately by a qualified technician
No sound	<ul style="list-style-type: none"> - Power not turned on - Volume setting low - Loudspeaker cables not connected - No input audio equipment is connected or is faulty - Correct audio input source not selected on front panel
No sound in one channel	<ul style="list-style-type: none"> - Audio source input cables connected incorrectly or damaged - Audio input source faulty - Loudspeaker cables connected incorrectly or damaged - Loudspeakers are faulty
Loud buzz or hum	<ul style="list-style-type: none"> - Audio input cables damaged or not correctly connected - Turntable earth lead incorrectly fitted - Turntable head shell incorrectly fitted. - CD player sited too close to TV
Weak bass, diffused stereo image	<ul style="list-style-type: none"> - Speaker connections out of phase check + and – terminals are connected to corresponding terminals on both amplifier and loudspeakers
Distorted sound	<ul style="list-style-type: none"> - Frayed wires may be touching on speaker terminals causing distortion - Bass and treble controls may be too high for loudspeaker specification. - Volume control may be set too high
Audio input source switches not working	<ul style="list-style-type: none"> - Internal fault would need servicing by a qualified service technician.
Remote control not working	<ul style="list-style-type: none"> - Check if the batteries have been inserted correctly. - If batteries are empty, replace them with new ones. - Point the remote control at the remote sensor and press to operate. - Remove any objects found between the remote control and the remote sensor. - Make sure the distance between the remote control and the device does not exceed 8 m
Interference during reception	<ul style="list-style-type: none"> - The reception frequency has not been set properly. - The antenna has not been positioned properly. - Start a station search.

Buttons do not function (on the A 2696 and/or remote control)	<ul style="list-style-type: none"> - Turn the A 2696 off and then on again. - As an alternative, turn the A 2696 off, unplug it from the power outlet and plug in again
Network connection is not possible	<ul style="list-style-type: none"> - The network is not available at the moment. Try again later. - The router restricts access to the listed MAC address of the unit. You can manually change this setting to allow the A 2696 to be recognised by your router. You will need to obtain the MAC address of your A 2696. You can find it by choosing MENU › System settings › View settings - The A 2696 may be too far from the wireless router. Check the distance to the router and adjust accordingly. - Change the selected encryption method on the A 2696. - Use the menu of the A 2696 to set up the system manually. - Check that your firewall is not preventing access. - Check the network cable.

Any repairs other than those mentioned above are to be carried out solely by an authorised technician.

Error messages

Message	Description	Example
Failed to connect	Key entered correctly, but the router rejects request.	MAC filtering is deactivated on the router
Format error	File format cannot be recognized – independent of the network.	Received *.wma , but found that the stream wasn't WMA when trying to decode. Check the file.
Network error	False information is being received from the network.	Data obtained from server is unreadable.
Network not ready	Problem with connection to router.	The router is switched off.
Network timeout	No response from the network, independent of the network.	Streaming IR station, which becomes unavailable. Re-tune or wait for connection to be re-established.
No UPnP media found	No UPnP servers found.	
No USB device found		Trying to access USB menu, but no USB plugged in.
Unauthorized	Incorrect user name/password for CIFS or access not granted by UPnP server.	
Update failed	Software Update failed	

16. Maintenance and handling

Carry out a technical safety inspection on a regular basis, e.g. check if the power cable or housing has not been damaged.

If there is reason to believe that the device can no longer be operated safely, then disconnect it immediately from the power supply and secure it against any unintentional operation. Carefully remove the power cable plug from the wall outlet and where applicable switch off the corresponding circuit breaker first.

It can be assumed that safe operation is no longer possible, if:

- there is visible damage to the device or power cable,
- the device has become wet or water has been able to get inside.
- it has been stored for a long period of time under unfavorable conditions
- Dropped, exposed to rigorous transport conditions or otherwise damaged.

Always adhere to the following safety instructions before cleaning and maintenance:



Live parts may be exposed, if the covering is opened or parts are removed.

- The device must be disconnected from the power supply source prior to service, maintenance or repairs.
- Repairs are only to be carried out by qualified personnel, who are familiar with the hazards involved and the relevant regulations.

Transporting or sending the device

Please retain the original box and the packaging material in case you need to transport or send the device out for maintenance at a later date. Please note that the device should be repacked in the original packaging. The box and packaging have been especially developed for this device in order to protect it during transport and against damage. Retain this instruction manual for future reference and where required pass it along with the device if handed over to a third party. It contains important information on initial operation and handling.

Keeping the external case clean

Never use volatile fluids near the device, as for example insect spray. Avoid letting the device come in contact with rubber or plastic products for longer periods of time. These could otherwise leave marks behind.

Cleaning the device

Unplug the power cable before cleaning. Always use a soft and dry cloth to clean the unit's exterior. If the device is extremely dirty you can use a soft cloth, dampened with water or a mild cleaning solution to clean. Never use any abrasive or harsh cleaning agents (e.g. alcohol, benzene or thinners) as these could damage the controls, casing or any markings and labels found on the device.

Important Notice

Please note that electrical and electronic devices must never be disposed of in regular household waste!

Consumers are legally obligated and responsible for the proper disposal of electronic devices by returning them to collection sites designated for the recycling of electrical and electronic equipment waste after the useful life of the device has come to an end. For more information concerning collection sites and correct disposal please contact your local authority or waste management company. The presence of the above symbol on a device, or its packaging or within the instruction manual indicates that the item must not be disposed of in normal unsorted municipal waste.

In doing so you are fulfilling all recycling and disposal obligations and are optimising and contributing to a better environment. These disposal regulations apply to batteries and rechargeable battery disposals as well. Most batteries contain hazardous chemicals which can contaminate the environment and human health if they are discarded in ordinary household waste. According to legislation batteries are to be returned to the place of purchase or disposed of at a designated recycling site.

17. Glossary

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

18. Specifications

- Operating voltage: AC 220/240 V / ~ 50 Hz
- Max. power consumption: 12 W
- Harmonic Distortion: < 0.2% at 1 KHz, 1 W
- Freq Response: 20Hz-20KHz, +/- 3dB
- S/N Ratio: > 83dB(A)
- 802.11b/g – WEP, TKIP, WPA, WPA2, WPS security
- DAB (Band 3)
- DAB+ with additional AAC+ codec
- Audio playback from USB (USB port is NOT Apple compatible)
- uPNP support
- iPhone apps support
- Frequency range:
 - o FM 87.5 – 108 MHz
 - o DAB 174.928 - 239.200 MHz
- Connections:
 - o Tuner antenna connection
 - o RJ-45 Ethernet jack
 - o Wi-Fi 2.4 G connection
 - o Analog stereo output via RCA connection
 - o Digital stereo output via optical TOSLINK connection
 - o USB port

Audio File Support

Codec	Supported	Min	Max [1]
FLAC	1.5 mbit/s [1]	undefined	24-bits/48k
WAV	1.5 mbit/s [1]	undefined	24-bits/48k
AAC	320 kbit/s [1]	8 kbit/s	576 kbit/s
Mp3	320 kbit/s	8 kbit/s	320 kbit/s [2]
WMA	320 kbit/s [1]	4 kbit/s	384 kbit/s [3]
RealAudio	64 kbit/s	8 kbit/s	96 kbit/s

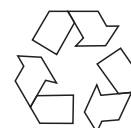
[1] – This is the maximum bit-rate tested. Higher bit-rates may work but are not currently tested.

[2] – This is the MP3 ISO standard maximum although some decoders can generate much higher data rates which we do not support.

[3] – The maximum offered by most encoders is 320 kbit/s (WMP limits it to 192 kbit/s)

All decoders use 32-bit internal precision and output 16-bit PCM except FLAC and MP3 which output 24-bit PCM

The FLAC decoder supports up to 24-bits/48k



NOTE: Specifications and design are subject to possible modifications without notice

19. Warranty Information

Altronic Distributors warrants this product for one year from date of purchase from Altronics or its resellers to the consumer. If this item is part of an installation or another product, please contact the installer or supplier for your warranty.

During the warranty period, we undertake to repair or replace your product at no charge if found to be defective due to a manufacturing fault. The warranty excludes damage by misuse or incorrect installation (i.e. failure to install and operate device according to specifications in the supplied instruction manual), neglect, shipping accident, or no fault found, nor by use in a way or manner not intended by the supplier.

For speakers, misuse includes burnt out voice coils.

For repair or service please contact your **PLACE OF PURCHASE**.

If this item was **purchased directly from Altronics** please make a warranty claim by:

1. FOR MAIL ORDER CUSTOMERS (includes school and trade orders),
 - a) Ringing us on 1300 797 007 and quoting your tax invoice number.
 - b) Upon contacting Altronics, we will issue an R.A. (Return Authorisation). As Altronics have a number of service agents throughout Australia, a copy of the R.A. will be emailed, faxed or mailed to you with full instructions of how and where to send the goods. The freight for shipping goods back to Altronics for all repairs is at the customer's expense.
 - c) A copy of the R.A. form, (or at the very minimum, the R.A. number) must accompany the goods to effect the repair.
 - d) Altronics will pay the return freight to the customer where the warranty claim has been accepted.
 - e) Please quote the R.A. number in any correspondence to us.
2. FOR OVER THE COUNTER PURCHASES; to make a warranty claim, please return the goods to us in any of our stores, with a copy of your proof of purchase (tax invoice).
 - a) Upon leaving the goods at one of our stores, an R.A. number will be issued to you.
 - b) Once repaired, you will be contacted, advising that the goods are ready to be collected from the store.

It is at Altronics discretion as to whether the goods will be repaired or replaced (whilst under warranty); and as to whether identical goods will be used to replace the item due to changes of models / products.

Note: Under no circumstances should you attempt to repair the device yourself or via a non-authorised Altronics service centre, as this will invalidate the warranty!

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

For repair or service please contact your place of purchase.

Note: Under no circumstances should you attempt to repair the receiver yourself or via a non-authorized Altronics service centre as this will invalidate the warranty! During the warranty period, we undertake to repair or replace your product at no charge if found to be defective due to a manufacturing fault. The warranty excludes damage by misuse, neglect, shipping accident, incorrect installation or no fault found.

NOT FIELD SERVICEABLE.

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