

Bowers & Wilkins



**AVAILABLE AT  
DIGITAL CINEMA**

# Panorama 2

## Welcome to Bowers & Wilkins and Panorama 2

Panorama 2 is an integrated solution to home theatre sound that is as simple to install as it is remarkable to experience. Rather than require multiple speakers positioned around the room, Panorama 2 uses sophisticated digital signal processing to steer the sound from one source and create a genuine home theatre audio experience without the complication of multiple speakers. But Panorama 2 is not only simple to install and use, thanks to advanced acoustic technology borrowed directly from our highest performance hi-fi designs, it offers sound quality more often associated with the best hi-fi separates.

Before you immerse yourself in a great movie with Panorama 2, please take a moment to read through this manual. Bowers & Wilkins maintains a network of dedicated distributors in over 60 countries who will be able to help you should you have any problems your dealer cannot resolve. There is also further information and installation advice on all Bowers & Wilkins products at [www.bowers-wilkins.com](http://www.bowers-wilkins.com)



## Overview

Panorama 2 is a complete home theatre audio system contained in one easily installed unit that can be wall or table mounted. It incorporates a 5.1 channel home theatre audio decoder along with front, centre, surround, and subwoofer speakers and their drive amplifiers. An additional active subwoofer can be connected and Panorama 2 will automatically detect its use and adjust its own settings appropriately.

Panorama 2 incorporates four HDMI digital audio/video interface sockets and one combined digital/analogue audio input socket. The HDMI interface sockets enable the connection of digital audio/video sources to Panorama 2. One of them is specifically intended to be used to connect a television. The combined digital/analogue audio input enables non-HDMI audio sources to be connected to Panorama 2.

The Panorama 2 HDMI sockets specifically intended for the connection of a television enables the video element from other audio/video sources to be routed via Panorama 2 to the television. If the television incorporates an HDMI Audio Return Channel (ARC), television based audio signals will also be automatically routed to Panorama 2 via this HDMI connection.

Panorama 2 is controlled by an intuitive front panel user interface combined with a simple remote control handset. Setup and configuration is achieved through a simple menu based on screen display using the HDMI connected television.

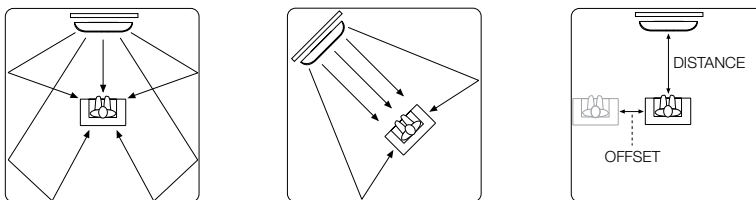


Figure 1  
Possible room layouts

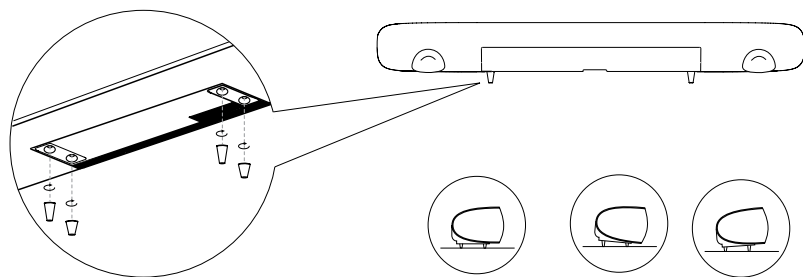


Figure 2  
Fitting the feet

### 1. Panorama 2 carton contents

- Panorama 2
- Wall bracket
- Quick Start Guide
- Warranty and registration documents
- Remote handset
- Power cord
- 4 x 25mm feet
- 4 x 35mm feet
- Mini-Toslink optical connection adaptor
- Micro-fibre polishing cloth

### 2. Installing Panorama 2

#### 2.1 Panorama 2 Location and Mounting

The home theatre surround performance achieved by Panorama 2 will be optimised if it is located in the room approximately symmetrically between two sound-reflective walls. Figure 1 illustrates two possible room layouts. Panorama 2 can be either mounted on a table centrally in front of the home theatre TV or be wall mounted using the supplied bracket centrally above or below the TV.

*Note: A Panorama 2 setup function enables selection of bass equalisation characteristics appropriate to either wall or table locations. See Section 4.1.*

If Panorama 2 is to be table mounted the bracket is not required. Panorama 2 may be either placed directly on the table or raised using one of the sets of feet supplied. To fit the feet carefully turn Panorama 2 upside-down on the surface and screw them into the tapped holes. Figure 2 illustrates fitting the feet.

If Panorama 2 is to be wall mounted, the bracket screw hole positions on the wall must first be established. Use a spirit level to ensure the bracket is level before marking the hole positions. Drill and

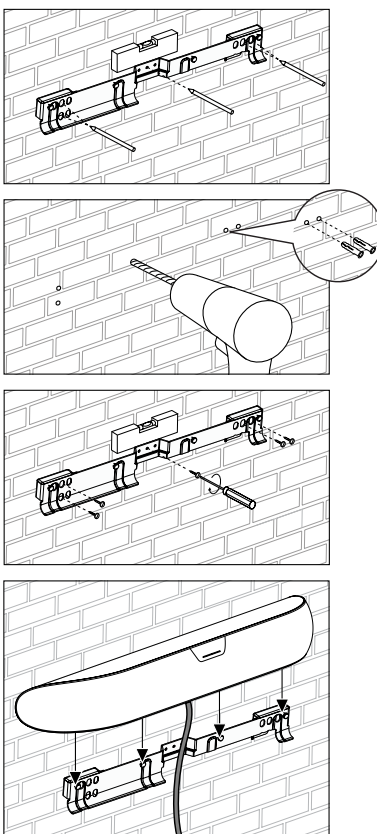


Figure 3  
Using the wall bracket

plug the wall for appropriate screws. A second person to assist with marking holes and lifting Panorama 2 is recommended.

Use wall plugs that are appropriate for the type of wall construction and ensure that wall, plugs and screws are capable of reliably supporting Panorama 2's weight (10.6kg/23.4lbs). If you have any doubt over your ability to mount the bracket securely to the wall you should engage specialist help. Once the bracket has been secured to the wall, Panorama 2 can be lifted into the bracket where it is secured by lugs on its rear face engaging with key-hole slots. Figure 3 illustrate use of the wall bracket.

## 2.2 Panorama 2 Input Connections

The Panorama 2 connection sockets are located on the rear of the unit. Panorama 2 may be turned upside-down to gain access to the sockets. Ensure that the surface on which Panorama 2 is placed when upside-down will not damage its front grille.

Panorama 2 requires connection to mains power, to one or more HDMI, digital or analogue audio sources, and to an HDMI equipped television. Panorama 2 offers six connection sockets.

Socket	Type
1	HDMI digital audio/video input interface
2	HDMI digital audio/video input interface
3	HDMI digital audio/video input interface
4	HDMI digital audio/video ARC interface
5	Digital/analogue audio 3.5mm combination input jack
6	Analogue audio subwoofer output RCA jack

*Note: The Panorama 2 HDMI Out (ARC) socket is both an input and an output. It sends video signals from sources connected to other Panorama 2 HDMI inputs to the television, while also receiving television based audio for reproduction. Televisions that don't incorporate an ARC enabled HDMI socket can still be used with Panorama 2. See the Panorama 2 Connection Guide available for download from [www.bowers-wilkins.com](http://www.bowers-wilkins.com) for more information.*

*Note: The audio/video routed to the HDMI Out interface is always the selected HDMI input. Digital or analogue audio jack input signals cannot be routed to the HDMI Out.*

Figure 4 illustrates Panorama 2 connected in a typical home entertainment system including a television, a DVD player, a games console and a wireless audio-visual network streamer. In this system, in which Panorama 2 plays the role of system "hub", the connection scheme is as follows:

- The DVD player is connected to Panorama 2 HDMI Input 1.
- The games console is connected to Panorama 2 HDMI Input 2.
- The wireless audio-visual network streamer is connected to Panorama 2 HDMI Input 3.
- The television is connected to Panorama 2 HDMI Out (Input 4). The HDMI cable must be connected to the television "ARC" HDMI socket.

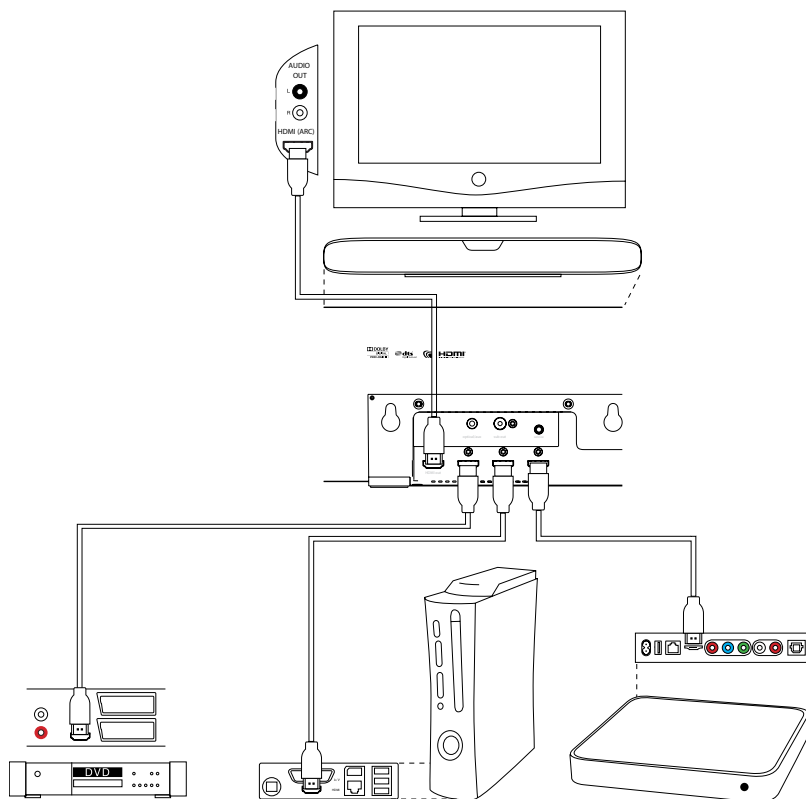


Figure 4  
Panorama 2 connected to home entertainment system

With this connection scheme the majority of audio programme formats can be reproduced through selection of the appropriate Panorama 2 input.

*Note: For further information on connecting Panorama 2 to a wide variety of audio sources a Panorama 2 Connection Guide is available for download from the Bowers & Wilkins web site at [www.bowers-wilkins.com](http://www.bowers-wilkins.com)*

In addition to the mains, HDMI and subwoofer sockets, a service socket is also present on the Panorama 2 connection panel. The service socket is not intended for consumer use. Figure 5 illustrates and identifies all the Panorama 2 connection sockets.

### 2.3 Panorama 2 Subwoofer Connection

An active subwoofer can be connected to Panorama 2. A subwoofer can enhance the Panorama 2 experience by providing extra impact on movie soundtracks and extending bass response on stereo music programmes.

The subwoofer is connected via the Panorama 2 subwoofer output socket. Connect one end of an RCA phono cable to the socket and the other end of the cable to the subwoofer's input socket.

Ensure that the subwoofer is switched on. As Panorama 2 handles the appropriate low-pass filtering on its subwoofer output, the subwoofer's internal low pass filter should be set to its maximum or switched off. Initially set the subwoofer's volume level control to between half and three-quarters maximum then fine control its volume via the Panorama 2 subwoofer level setup menu (See Paragraph 4.1).

## 3. Using Panorama 2

Panorama 2 is simple to operate with commonly used functions available on both its front panel and remote control handset. It has two operational modes: Normal Mode and Setup Mode. When Panorama 2 is switched on from standby it will start up in normal mode.

Setup Mode, which requires the Panorama 2 to be connected using HDMI to a television input for on screen display, is selected via the remote handset OSD button. Panorama 2 front panel controls are described in Section 3.1, the remote handset is described in Section 3.2, and Panorama 2 setup is described in Section 4.

### 3.1 Panorama 2 Front Panel Controls

The Panorama 2 front panel display incorporates a standby button and indicator with a proximity and touch sensitive screen. When Panorama 2 is switched on, the display screen is operational only when it senses an operator's hand nearby. Furthermore, the display only makes available the options inherent to the specific Panorama 2 installation. For example, if only two out of the four Panorama 2 inputs are connected, the display will make only those two inputs available for selection. Figure 6 illustrates the Panorama 2 front panel controls.

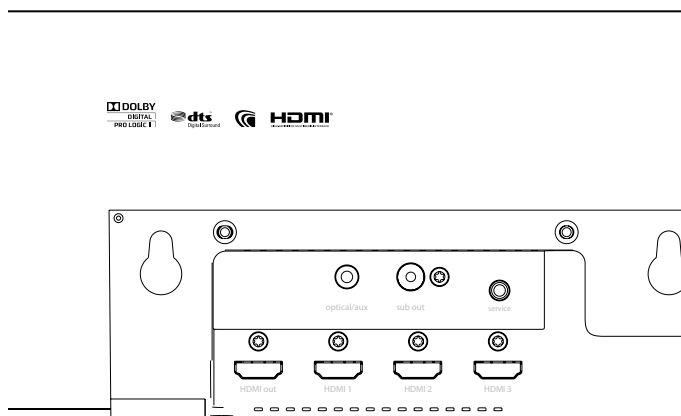


Figure 5  
Panorama 2 connection sockets

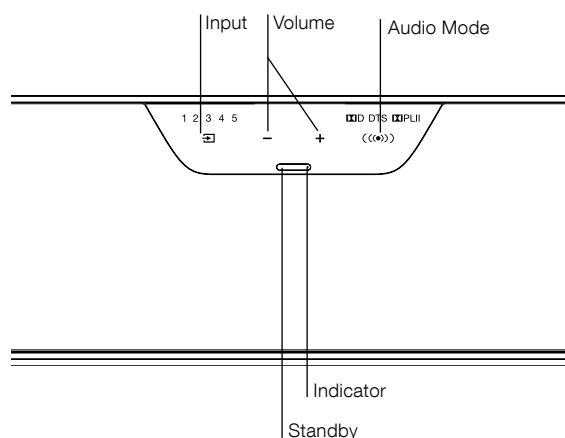


Figure 6  
Front panel controls

### 3.2 Remote Handset

Before the remote handset is first used the clear plastic insulating tab that prevents its battery from draining must be removed. Follow the procedure illustrated in Figure 7 and described below to remove the insulating tab.

- Rotate the battery cover anticlockwise 1/8 full turn and remove it.
- Release the battery by pressing down on the edge opposite the metal spring.
- Remove and discard the insulator.
- Replace the battery, first locating one side under the small lugs opposite the metal spring.
- Replace the cover.

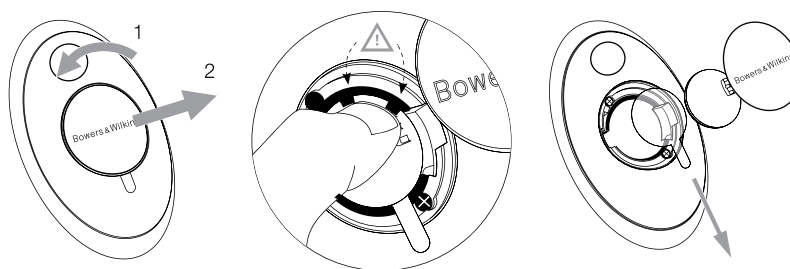
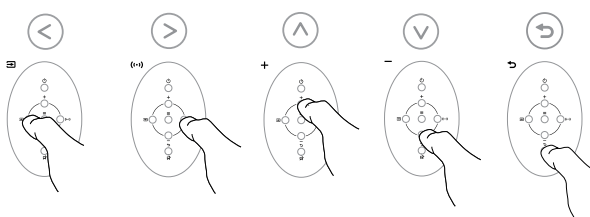


Figure 8 illustrates the Panorama 2 handset controls.

Figure 7  
Removing the insulating tab from the remote

*Note: Universal or "learning" remote handsets may also be used to control Panorama 2. If Panorama 2 remote control codes are required for handset programming they can be found in the Support section of the Bowers & Wilkins web site at [www.bowers-wilkins.com](http://www.bowers-wilkins.com)*

*Note: An HDMI based remote control sharing technology called CEC (Consumer Electronics Control) may, if implemented on your television, enable the television remote control handset automatically to control some Panorama 2 functions. The manufacturer of your television may use an alternative proprietary name for CEC.*



### 3.3 Switching On and Using Panorama 2

Ensure that the DVD player is connected to Panorama 2 Input 1 and that a television is connected via its ARC input to the Panorama 2 HDMI Out. Switch on both the DVD player and television, play a disc on the DVD player and select the appropriate television input.

In its default setup Panorama 2 will switch on automatically when an input signal is present on Input 1. It will also automatically select Input 1 together with a default group of setup parameters that have been specifically chosen to provide good initial performance in a typical domestic environment. If a signal is present on Input 1 Panorama 2 will immediately reproduce it.

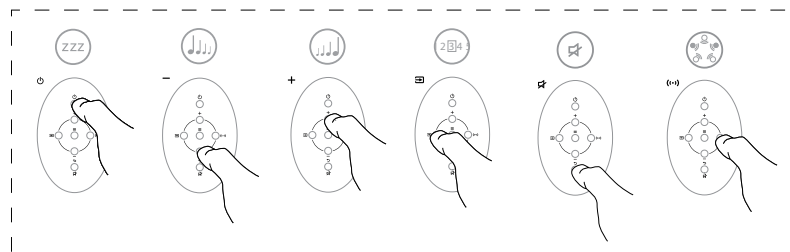


Figure 8  
Handset controls

Once reproducing audio satisfactorily, use the Panorama 2 handset or front panel controls to raise or lower the volume, select inputs or any available alternative decode modes.

### 3.4 Audio Decode Modes

Audio from DVD, games consoles, streaming and broadcast sources is often encoded with a variety of surround sound formats. Panorama 2 is capable of decoding Dolby Digital, DTS, Dolby PLII surround sound formats as well as providing virtual surround and music optimised modes. However, not all decode modes can be used with every Panorama 2 input or type of programme material.

Panorama 2 will detect Dolby Digital and DTS encoded 5.1 programme material and automatically select the appropriate decode mode. With stereo programme (2.0) material (analogue or digital), Panorama 2 provides a choice of Cinema or Music decode modes. Cinema mode encompasses either Dolby PLII decoding with appropriately encoded programme material, or "virtual surround" processing that creates a surround sound field from non-encoded material. Music mode comprises an algorithm that reproduces stereo material with

a wider stereo effect to provide a sound from Panorama 2 similar to conventional stereo systems.

When the choice is available, Cinema and Music decode modes can be selected from the Panorama 2 front panel or from the remote control handset.

#### 4. Panorama 2 setup

Using Panorama 2's default setup is likely to provide good results in many situations, however its functionality and performance can be customised in numerous ways through its Setup Mode better to suit specific installations or personal preferences. You may choose to adjust any or all of the setup parameters.

To switch Panorama 2 into Setup Mode press the remote handset OSD button. The Panorama 2 Setup top level menu will be displayed on the connected television. To Exit from Setup Mode press the Back button **↵** on the remote handset.

*Note: The Panorama 2 Setup Mode on screen display can be shown in a variety of languages. See Section 4.4 of this manual for information on changing the display language.*

*Note: If no button is pressed for thirty seconds in Setup Mode Panorama 2 will return automatically to normal mode.*

+	Select the next menu item up
-	Select the next menu item down
<b>Input</b> <b>⊞</b>	Select left item
<b>Audio mode</b> <b>↔</b>	Select right item
<b>OSD</b> <b>≡</b>	Select menu item and advance to next menu level
<b>Mute (back)</b> <b>↵</b>	Return to the previous menu

These six handset buttons enable navigation around the Panorama 2 setup menus and selection of setup options. There is no need to "save" selected setup options. Once a menu option is selected, it is implemented and saved automatically.

*Note: Only the six menu navigation buttons are operational when Panorama 2 is in Setup Mode. Other handset buttons are non-operational.*

The top level Panorama 2 setup menu comprises four items: **SOUND**, **ROOM SETUP**, **TUNING** and **DEVICE**. The setup parameters and options available beneath each top level menu item are described in the following sections. Select each top level menu item in turn using the handset **OSD** button **≡**.

##### 4.1 The Sound Menu

The **SOUND** menu enables adjustment of Panorama 2 **BASS** and **TREBLE**, **BASS EQ** (equalisation), **SUBWOOFER LEVEL** and **SUBWOOFER DISTANCE**.

*Note: The subwoofer menu items will only be available if a subwoofer is connected to Panorama 2.*

The **BASS** menu option enables the relative level of Panorama 2 bass output to be adjusted. Select **BASS** and use the Input (**⊞**) and Audio Mode (**↔**) buttons to increase or decrease the level. Return to the previous menu by pressing the Back button **↵**.

The **TREBLE** menu option enables the relative level of Panorama 2 treble output to be adjusted. Select **TREBLE** and use the Input (**⊞**) and Audio Mode (**↔**) buttons to increase or decrease the level. Return to the previous menu by pressing the Back button **↵**.

*Note: Bass and treble adjustment is best done after listening to a variety of programme material. Set levels that sound natural and comfortable. Over emphasis of either bass or treble is likely to become wearing after a while. Final bass and treble level is best determined following Panorama 2 **BASS EQ** and **ROOM SETUP** adjustment.*

The **BASS EQ** menu option enables the relative level of bass output to be configured to take account of the immediate environment around Panorama 2. Select **BASS EQ** and use the Input (**⊞**) and Audio Mode (**↔**) buttons to select **WALL** if Panorama 2 is wall mounted or **TABLE** if Panorama 2 is table mounted. Return to the previous menu by pressing the Back button **↵**.

The **SUBWOOFER LEVEL** menu option enables the relative level of a subwoofer connected to Panorama 2 to be adjusted. Select **SUBWOOFER LEVEL** and use the Input (**⊞**) and Audio Mode (**↔**) buttons to adjust the level. Adjust the subwoofer level after listening to a variety of different programme material. Choose a setting that enables the low bass elements of programme to be heard, but not to dominate. Return to the previous menu by pressing the Back button **↵**.

The **SUBWOOFER DISTANCE** menu option enables the distance between a subwoofer connected to Panorama 2 and the listening position to be specified. Select **SUBWOOFER DISTANCE** and use the Input (**⊞**) and Audio Mode (**↔**) buttons to adjust the distance. Return to the previous menu by pressing the Back button **↵**.

*Note: Specifying the distance between the subwoofer and the listening position is important to ensure that bass from the subwoofer integrates correctly with the sound from Panorama 2. The distance need not be measured very accurately – plus or minus 0.25m (1 ft) is fine. Measurement units can be changed in the **DEVICE** setup menu.*

##### 4.2 The Room Setup Menu

The **ROOM SETUP** menu enables adjustment of Panorama 2 **VIEWING DISTANCE** and **OFFSET**, and **LEFT WALL** and **RIGHT WALL** reflective character to be specified.

The **VIEWING DISTANCE** menu option enables the distance between Panorama 2 and the listening position to be specified. Select **VIEWING DISTANCE** and use the Input (**⊞**) and Audio Mode (**↔**) buttons to adjust the distance. Return to the previous menu by pressing the Back button **↵**.

The **OFFSET** menu option enables the distance, left or right, that the central listening position is offset from the centre of Panorama 2 to be specified. Select **OFFSET** and use the Input (**⊞**) and Audio Mode (**↔**) buttons to set the distance. Return to the previous menu by pressing the Back button **↵**.

*Note: Specifying the offset distance helps ensure that the timing of surround speaker output from Panorama 2 is correct. The offset need not be measured very accurately – plus or minus 0.25m (1 ft) is fine. Measurement units can be changed in the **DEVICE** setup menu.*

The **LEFT WALL** and **RIGHT WALL** menu items enable the sound reflection characteristics of the walls to either side of Panorama 2 to be specified. Select **LEFT WALL** and **RIGHT WALL** in turn and use the Input (**⊞**) and Audio Mode (**↔**) buttons to select from the option – soft, medium or hard – that most accurately describes the character of the wall. Return to the previous menu by pressing the Back button **↵**.

*Note: Panorama 2 generates a surround sound field by reflecting sound from the side walls of the room. Specifying the reflective character of the walls helps optimise performance. A typical "hard" wall would be a large window or solid brick structure; a "medium" wall would be a stud construction or brick wall screened with furniture items, and a "soft" wall would be a heavily curtained window or wall with a fabric hanging.*

##### 4.3 The Tuning Menu

The **TUNING** menu enables adjustment of Panorama 2 **GAIN**, **DELAY** and **BI-LANGUAGE** settings.

The **GAIN** menu enables adjustment of Panorama 2's analogue input (Input 5) sensitivity. Select **GAIN** and use the Input (**⊞**) and Audio Mode (**↔**) buttons to adjust the value. Return to the previous menu by pressing the Back button **↵**.

*Note: Input sensitivity adjustment is sometimes useful to compensate for the low output level of some analogue source items.*

*Note: The **GAIN** menu will only be available if an analogue input is selected.*

The **DELAY** menu enables adjustment of Panorama 2's overall audio output delay so that any video lip-sync errors can be corrected. Delay adjustment only applies to the currently selected input. For example, if Input 1 requires delay adjustment it must be selected before Panorama 2 enters Setup Mode. To adjust the delay, select **DELAY** and use the Input (**⊞**) and Audio Mode (**↔**) to adjust the value. Return to the previous menu by pressing the Back button **↵**.

The **BI-LANGUAGE** function enables Panorama 2 to reproduce appropriately encoded dual language programme material. Languages can be selected individually or reproduced simultaneously. Panorama 2's ability to create distinct left and right sound fields makes simultaneous language reproduction viable. The bi-language function is not available on Panorama 2's analogue input.

To engage the bi-language function, select **BI-LANGUAGE** and use the Input (**⊞**) and Audio Mode (**↔**) buttons to select **FIRST language**, **SECOND language** or **MIX** (both languages) as required. Return to the previous menu by pressing the Back button **↵**.

*Note: The **BILANG** menu will only be available if bilingual encoded material is detected by Panorama 2.*

#### 4.4 The Device Menu

The **DEVICE** menu enables configuration of Panorama 2 auto **ON/OFF**, distance **UNITS**, **DISPLAY** options and **LANGUAGE** settings.

The **ON/OFF** menu enables selection of Panorama 2's auto on/off function. When auto on/off is engaged Panorama 2 will switch on automatically when an input signal is detected and switch off automatically when no signal is detected for ten minutes. Select **ON/OFF** and use the Input (⏻) and Audio Mode (⏮) buttons to select an option. Return to the previous menu by pressing the Back button ⏪.

The **UNITS** menu enables selection of measurement units where they are used in menus that specify distance. Select **UNITS** and use the Input (⏻) and Audio Mode (⏮) buttons to select an option. Return to the previous menu by pressing the Back button.

The **LANGUAGE** menu enables the language used for the Panorama 2 Setup Mode on screen display to be changed. Select **LANGUAGE** and use the Input (⏻) and Audio Mode (⏮) buttons to select from the available languages. Return to the previous menu by pressing the Back button ⏪.

#### 5. Aftercare

The cabinet surfaces usually only require dusting, or if grease marks are apparent, polishing with the microfibre cloth supplied. If you wish to use an aerosol or other cleaner apply the aerosol or cleaner first onto an alternative cleaning cloth, not directly onto the product. Test a small area first, as some cleaning products may damage some of the surfaces. Avoid products that are abrasive, or contain acid, alkali or anti-bacterial agents. Do not use cleaning agents on the drive units. Do not attempt to remove the grille.