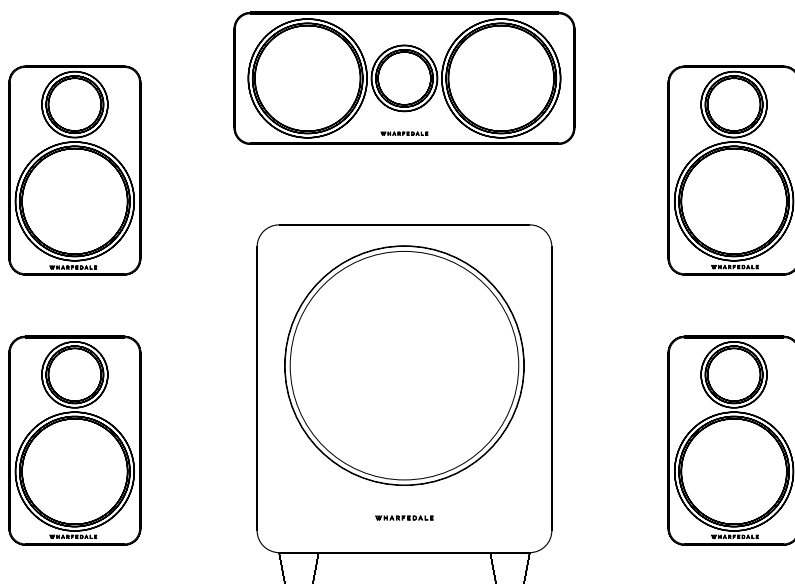


# DX-2

## 5.1 Home Cinema Packages

DX-2 Satellites  
DX-2 Centre  
DX-2 Subwoofer

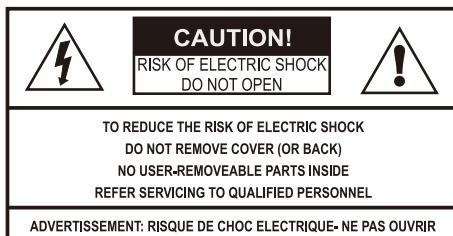


**W** H A R F E D A L E  
BRITAIN'S MOST FAMOUS LOUDSPEAKERS

**User's Manual**

## USER INSTRUCTIONS: DX-2

### Important safety information



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



This symbol indicated that dangerous voltage constituting a risk of electric shock is present within this unit

Read these instructions

Keep these instructions

Heed all warnings

Follow all instructions.

Do not use this apparatus near water.

Clean only with a dry cloth.

Do not block any ventilation openings

Install in accordance with the manufacturer's instructions.

Do no install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wider blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles and the point they exit from the apparatus.

Use only attachments / accessories specified by the manufacturer.



Use only with a cart, stand, tripod, bracket or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.

Unplug this apparatus during lightning storms or when unused for a long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in anyway, such as power-supply cord or a plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in anyway, such as power-supply cord or a plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Warning: To reduce the risk of fire or electrical shock, do not expose this product to rain or moisture. The product must not be exposed to dripping and splashing and no object filled with liquid such as a vase of flowers should be placed on the product.

No naked flame sources such as candles should be placed on the product.

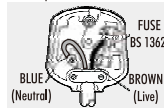
Caution: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this device.

Warning: The mains power switch for this appliance is located on the rear panel. To permit free access to this switch, the apparatus must be located in an open area without any obstructions.

### Essential Information for UK Users

The power cord on your subwoofer maybe supplied with a plug incorporating a fuse, the value of which is indicated on the pin face of the plug. Should the fuse need to be replaced, an ASTA or BSI approved BS1362 fuse must be used of the same rating. If the plug is cut off it must NOT be re-used. Dispose of any such plug safely. There is a danger of electric shock if a cut-off plug is inserted into a mains socket. The wires in the mains lead are coloured in accordance with the following code: Blue – Neutral, Brown – Live.

As the colours of the wires in the mains lead may not correspond with the markings identifying the terminals in the replacement mains plug, proceed as follows:



The blue wire coloured Blue must be connected to the terminal marked with the letter 'N' or coloured black. The wire coloured brown must be connected to the terminal marked with the letter 'L' or coloured red.



Class II construction double insulated. This product must not be connected to earth.

## USER INSTRUCTIONS: DX-2



Before installing this product read all the instructions!

Before making any connections, switch all the units in your system off at the mains.

Make sure all connecting cables are safely routed. Do not run cables over unprotected floor areas, route them around room boundaries if necessary.

Set the volume control at minimum when you switch on your system or change sources, and turn the level up gradually.

DO NOT use your amplifier at full volume.

Ensure that all loudspeakers in the system are correctly wired.

DO NOT subject your loudspeakers to excessive cold, heat, humidity or sunlight.

DO NOT place heavy objects on top of loudspeakers.

DO NOT connect speaker terminals to the mains supply.

DO NOT dismantle the loudspeaker. There are no user serviceable parts inside and you will void the warranty.

## Introduction

There are three DX-2 Packages Available:

- DX-2 5.1 System: 4 x DX-2 Satellite Speakers, 1 x DX-2 Centre Speaker, 1 x DX-2 Active Subwoofer
- DX-2 5.0 System: 4 x DX-2 Satellite Speakers, 1 x DX-2 Centre Speaker
- DX-2 Satellite Pack: 2 x DX-2 Satellite Speakers (can be purchased additionally to create a 7.1 system)

## Unpacking the speakers

Carefully remove each loudspeaker from its packing carton. Be especially careful when removing the polythene bag. DO NOT attempt to lift the loudspeaker by the polythene bag. When lifting the subwoofer from the carton, support it from the bottom. The unit is heavy; if you cannot manage it easily, get someone to assist you.

Check each unit and in the event of damage contact your dealer.

Retain the packing for future use. If you decide to dispose of the packing, please do so with regard to any recycling regulations in your area.

Retain the instructions. If you pass a product to a third party, please include the instructions.

The DX-2 is compatible with most modern audio-visual equipment – but a loudspeaker is only as good as the signal it gets. Your amplifier should have ample reserves of power – a low powered amplifier could easily run out of steam and the resulting distortion is unpleasant to listen to and could damage your speakers.

A larger amplifier will usually sound better and enhance the reliability and performance of your loudspeakers. Always turn down the volume if the music starts to sound distorted.

## USER INSTRUCTIONS:DX-2

### Installing The Subwoofer

Open the carton and remove all the top packing pieces. Lift the subwoofer out taking care not to damage the cabinet. DO NOT lift the subwoofer out of the carton using the protective bag. The unit is heavy; if you cannot manage it easily, get assistance.

Retain the packing materials. If you decide not to keep the packing, please dispose of it having regard to any recycling regulations in your area. Please retain the user manual. If you transfer this equipment to a third, please ensure all the instructions are passed on with the product.

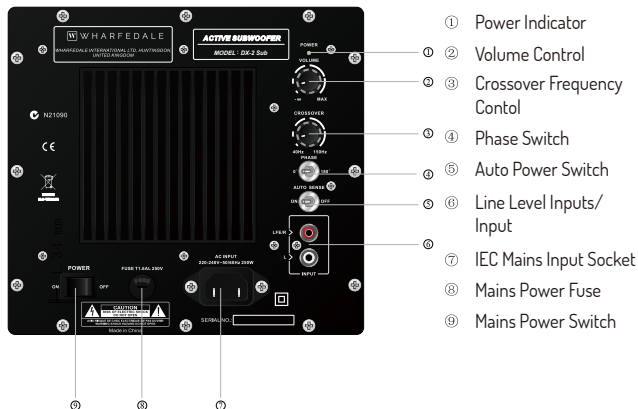
### Power Connections

This subwoofer is factory set to operate from the mains voltage marked on the amplifier panel. Before connecting check this voltage is correct for your mains supply.

- 230 volt products – 220 volts to 240 volts
- 115 volt products – 110 volts to 120 volts

If you move to an area with a different mains supply, consult your Wharfedale dealer for advice.

### Subwoofer rear panel connections



To connect the Subwoofer to a standard Digital Home Theatre Processor / Amplifier you should purchase a single RCA phono lead.

The cable should be a high quality unit and well screened to avoid hum and noise problems.

The lead should be long enough to reach the subwoofer without being stretched taut. Your Wharfedale dealer will be pleased to supply you with a suitable cable.

## Positioning Your Loudspeakers

### Installation

Before connecting your system consider where you will place the speakers in the room. Before making a final decision please experiment until you find the most suitable position.

### 5.1 Positioning

Place the front speakers as shown. Angling the speakers inward slightly will improve stereo images but too extreme an angle will impair movie sound.

The centre speaker can be placed above or below the TV Screen.

All the passive speakers are screened and may be placed close to a conventional CRT TV.

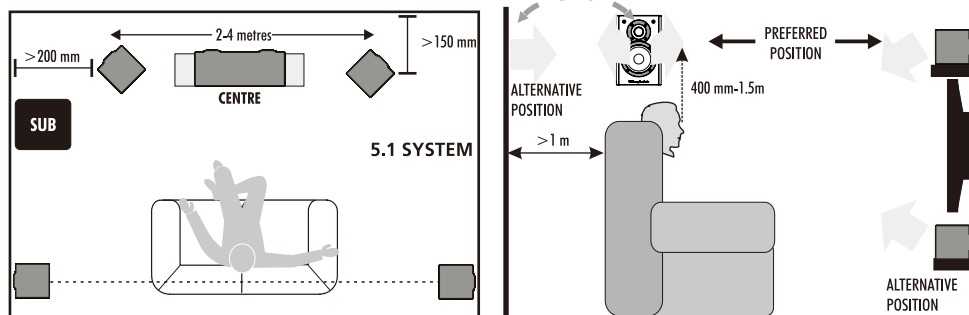
The surround speakers should be placed 400mm and 1.5m above ear level and preferably on the side walls but always behind the listener. If the distance between the side walls is too great, you could use high stands to mount the surround loudspeakers.

If mounting the surrounds on the side walls is not feasible they may be mounted on the rear walls between 2.5-3.5 metres apart, central to the listening position and 400mm – 1.5m above ear level.

Place the subwoofer close to the wall, leaving just enough space to operate the controls and mains switch. Room positioning is not critical but we recommend that it is placed in the front of the listening seat. Never operate the subwoofer within 450mm of a conventional TV. LCD and Plasma screens are unaffected. Ensure that there is a mains point close by.

The bass ports are rear mounted and move a lot of air, so make sure the back wall is sound. The subwoofer is front-firing so do not place it behind surfaces or objects that may rattle.

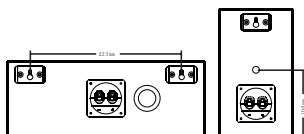
#### RECOMMENDED WALL MOUNTING POSITIONS



## USER INSTRUCTIONS:DX-2

### Wall Mounting Positions

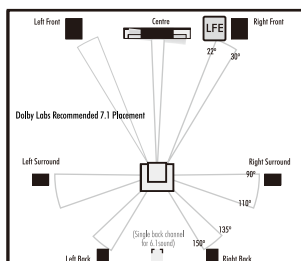
If you are wall mounting the centre and effects loudspeakers we recommend that they be mounted on suitable shelves fixed to the wall. Each DX-2 satellite speaker has a ¼ inch (US norm) or M6 (EU norm) threaded insert on the back panel for use with universal wall mount brackets.



### Multi-Channel Room Placement

The diagram shows the Dolby Labs recommend positions for multi-channel operation. For 5.1 channel operation use the satellites in the front and surround positions with the Subwoofer in the LFE position.

If you have a 7.1 channel processor / amplifier you can enhance the system further by buying one of the larger loudspeakers from the Wharfedale range to use as a front channel speakers and use the satellite units as back channels. Your Wharfedale dealer will be pleased to advise you.



The diagram shows the Dolby Labs recommended positions for multi-channel operation. For 5.1 channel operation use the satellites in the front and surround positions with the Subwoofer in the LFE position. If you have a 7.1 channel processor / amplifier you can enhance the system further by buying one of the larger loudspeakers from the Wharfedale range to use as front channel speakers and use the satellite units as back channels. For further information please contact your authorised Wharfedale dealer or global distributor.

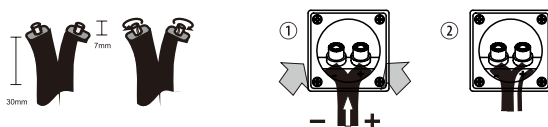
### Connecting The Passive Loudspeakers

You will need to purchase a suitable length of loudspeaker cable. You are advised to buy quality loudspeaker cable rather than low-cost 'bell' or 'zip' wire. Your dealer will be pleased to advise you.

Connect the loudspeakers as shown in the connecting diagrams.

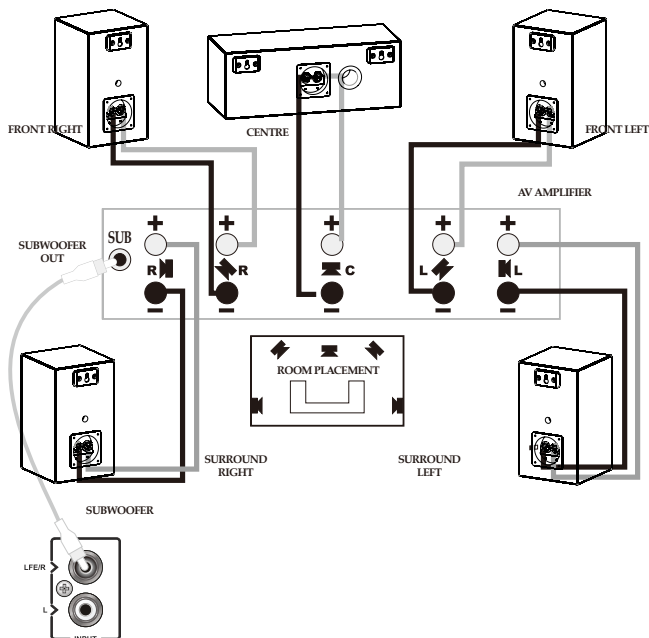
Ensure that the red speaker terminal is wired to the red (+) amplifier output terminal and that the black speaker terminal is wired to the black (-) amplifier output terminal.

It is convenient to use the striped core to connect the positive + RED terminals.



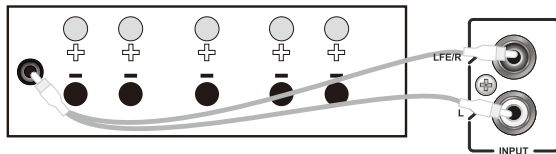
## Standard System Connections

Your subwoofer has been designed for optimum performance with a digital processor. If your AV processor has a line level or LFE subwoofer output you should use this connection. You will need to purchase a single screen RCA phono lead from your dealer. Connect this lead to the left or right line input of the Subwoofer as shown.



## Alternative Subwoofer connection

You may use a split mono lead from the processor to both inputs of the subwoofer. In this case the input level at the subwoofer will be slightly higher.



You may use a split mono lead from the processor to both inputs of the subwoofer. In this case the input level at the subwoofer will be slightly higher.



It is essential that you connect all the loudspeakers correctly with the striped core connected to the Positive (+) terminals and the plain core connected to the black (-) terminals in all cases. If one or more loudspeakers are incorrectly connected (out of phase), the definition will be poor and the bass will be indistinct.

## USER INSTRUCTIONS:DX-2

### Operation

#### Setting Up The System

- Set the subwoofer power switch to OFF.
- Turn the system Volume Control to Minimum.
- Re-check all system connections.
- Connect the supplied subwoofer power lead to the IEC power socket on the subwoofer and connect the mains plug into the wall socket.
- Set the subwoofer volume control midway (12 o'clock)
- Switch on the mains power.

#### Fine Tuning

Switch on the subwoofer power switch. Check that the power indicator on the cabinet glows. Now switch on the system. Play a programme with extended bass and set the system volume to a reasonable level. Adjust the subwoofer volume control to produce the desired level of bass.

#### Phase Switch

If the bass is indistinct or lacks depth, the phase switch may need adjustment. Set the Switch to  $0^{\circ}$  and listen carefully to some music with extend bass. If there is insufficient bass output set the phase switch to  $180^{\circ}$ . Select the position which produces the most natural, extended bass.

#### Low Pass Filter

This adjusts the blend between the subwoofer and the main speakers and enables you to set the system for optimum bass performance. The higher settings are for use with the supplied loudspeakers, the lower settings for large models. If you choose too low a setting with small speakers, there will be a 'hole' in the bass response; too high a setting with large speakers will result in the upper bass becoming bloated.

#### Auto Switch

In normal mode the subwoofer is permanently on. This may result in low level hum or noise if the rest of the system is switched off and the subwoofer is left switched on. Setting the AUTO switch on automatically turns the subwoofer on when a signal is detected at any of the inputs and turns it off (Standby Mode) after a period of inactivity.

In AUTO mode the indicator on the subwoofer will always be illuminated even when in Standby to show the unit is still powered. If your subwoofer is disconnected from the mains or the power switch is 'Off', the indicator will turn off. When the system is not in use for extended periods, we suggest you switch off the subwoofer to protect it from switching noises caused by domestic appliances, etc.



## Home Theatre Topics

As the ear is unable to detect the direction from which deep bass originates, this allows freedom in positioning the subwoofer. Varying the distance from the wall alters the amount of bass. Some prefer to place the subwoofer against a room corner. This arrangement gives more bass at the possible expense of clarity.

## Loudspeaker Sizes

Many digital AV processors require you to specify the size of speakers in the various channels. These are usually 'Large' or 'Small'. We recommend that you set the front centre and surround speakers to 'Small'. This will direct all the bass in the system to the subwoofer and provide a clean, deep and louder bass.

Set the 'Subwoofer' option on the processor to 'On' or 'Yes'.

## Setting Levels

Once the loudspeaker settings have been finalised, put the AV amplifier into its 'Test' mode (see your processor instructions). Adjust the levels until all channels are equally loud.

You may need to adjust the subwoofer output level. Avoid setting too high a level or you will swamp the sound with bass which is tiring to listen to and may limit the subwoofer's ability to respond to large bass transients. Set a sensible level going into the subwoofer. The subwoofer volume control should be between 12 o'clock and 3 o'clock.

## LFE

The Low Frequency Effects channel was designed as an additional bass channel with its own dedicated subwoofer. In practice however, if all the speakers are set to small, the LFE channel will be combined with the bass from other channels and all this feeds into the subwoofer. When you set the LFE level from your AV processor, use care with this setting as the LFE channel may contain powerful low frequencies which, although normal in a cinema, may overload a domestic subwoofer.

If, during a programme, you hear popping or thumping noises coming from the subwoofer, immediately turn the AV Processor's volume level down and then reduce the LFE level. If this does not cure the problem, reduce the volume level at the subwoofer.

Please read the relevant sections of your AV amplifier manual and familiarise yourself with the various issues. If you are unsure, consult your dealer or global distributor for advice.

## USER INSTRUCTIONS:DX-2

### Troubleshooting

Before investigating a problem, always switch off the system at the mains.

Symptom	Possible Cause
No Sound	System not switched on; Speaker cables shorting out terminals; Wrong source selected
Sound lacks bass content Bass reproduction indistinct	Front loudspeakers out of phase. Check all system connections and rectify. Subwoofer not switched on; Subwoofer phase incorrect; Subwoofer crossover control too low.
Excessive bass distortion at low volumes	Subwoofer level set too high; LFE level set too high; Subwoofer incorrectly wired
Excessive or distorted bass at high levels	System level set too high; bass control set too high; Speakers too close to room corners
Distorted / rattling sounds at high levels	System level set too high; Objects on speakers / subwoofer; Objects too close to subwoofer
Popping or thumping from the subwoofer	System level set high; Subwoofer level set too high; LFE level set too high
Indistinct sound; Poor localisation of effects. Poor localisation of dialogue	One or more loudspeakers are out of phase. Check all system connections and rectify. (Refer to the manual for the correct wiring procedure.
Television picture colour is distorted	Subwoofer too close to TV. (Switch off system and TV. Move units away. Leave for 15 mins. Switch on.)

### Subwoofer Maintenance

Subwoofers should only ever be cleaned with a soft dry cloth to remove finger-marks, etc.

Never touch subwoofers drive units as they can be damaged by improper handling.

Never use a vacuum cleaner to clean a subwoofer grille. Brush it carefully by hand with a soft brush.

When cleaning the floor under a subwoofer, switch it off, unplug it from the mains supply then lift it clear of the floor and move it to another location. Place the subwoofer back to its original position after cleaning.

### Servicing

Should a fault occur with your subwoofer, please pack it correctly using the original packing so you can ship it safely. Product for service should be returned to the appointed dealer from whom you purchased the product. If you experience difficulties or there is no Wharfedale Dealer in your area, contact the Wharfedale distributor for your country or the office below.

IAG House, 31/14 Glebe Road,

Huntingdon, Cambridgeshire,

PE29 7DL UK

Tel: +44 (0) 1480 452 561

## USER INSTRUCTIONS: DX-2

## Specifications

Model	DX-2 satellite	DX-2 Centre
General description	2-Way Closed Box Bookshelf Speaker	2-Way Aperiodic Centre Channel Speaker
Bass driver	3" (75mm) Woven Polypropylene cone	3" (75mm) Woven PP Polypropylene cone x2
Treble driver	3/4" (19mm) High frequency silk dome	3/4" (19mm) High frequency silk dome
Sensitivity (2.83V @ 1m)	86dB	87dB
Recommended amplifier power	25-100W	30-100W
Nominal impedance	4Ω	4Ω
Minimum impedance	3.6Ω	3.6Ω
Frequency response (+/-3dB)	100Hz - 22kHz	80Hz - 22kHz
Bass extension (-6dB)	100Hz	70Hz
Crossover frequency	2.8kHz	2.6kHz
Dimensions		
Height	190mm	120mm
Width	120mm	310mm
Depth (with terminals/grille)	122mm	122mm
Net weight	2kg	2.7kg
Finish	Leatherette with high gloss front baffle (Black / White)	Leatherette with high gloss front baffle (Black / White)

Model	DX-2 Subwoofer
General description	Active Dynamic-Drive IB subwoofer system
Bass driver	8" (200mm) Woven Polypropylene cone
Amplifier Power Output	70W
Peak Power Output	150W
Line Input Sensitivity	100mv for maximum output
Crossover Range	40Hz - 150Hz
Inputs	*2 x RCA Phono, LFE Line-in RCA*
Input Impedance	Line In 10kΩ
	LFE 5kΩ
Signal-to-noise ratio (S/N)	≥85dB
Avg. Max Output @1m	105dB
Features	*Low pass filter slope adjustment Phase inversion Auto on-off*
Dimensions (mm)	
Height (on plinth)	298 (+30)mm
Width	268mm
Depth (with terminals/grille)	300 (+22)mm
Net weight	7.8kg
Finish	Leatherette with high gloss front baffle (Black / White)

\*Design and specifications are subject to change without further notice

