



# W INSTALL SERIES

IN-WALL AND IN CEILING AND OUTDOOR

WCM-65

WCM-80

WWS-65

WWS-80

WOS-53

WOS-65

 WHARFEDALE

User's Manual





## USER INSTRUCTIONS: W INSTALL SERIES

---

### Safety instructions

#### Safety First!

- Please read this manual fully before installing and operating this product.
- Retain a copy of this manual for future reference.
- Comply with all warning labels and instructions.
- Do not attempt the installation of this equipment unless you are qualified to do so.
- Protect your hearing from high sound pressure levels.

### Rigging and Suspension

The rigging, suspension or mounting of these products can expose the installer and members of the public to serious health risks and even death. Under no circumstances attempt to rig, suspend or otherwise mount this equipment unless you are fully qualified and certified to do so by relevant local, state and national authorities. All relevant safety regulations must be followed. If you are not properly qualified or do not know of pertinent regulations, consult qualified personnel for advice and assistance.

### Limited Liability

Wharfedale assumes no liability whatsoever for any damage or loss, either direct or consequential arising from the installation and use of these products. Liability is limited to replacement of product or refund, at Wharfedale's discretion. Your rights to compensation may vary by territory; consult with your local Wharfedale office or distributor.

### Warranty & Service

These products are designed to be used as specified, and are warranted to be free from defects in materials or workmanship. Warranty terms and conditions vary by territory. Please contact your local Wharfedale sales office or distributor for complete details. Under no circumstances should you attempt to repair these products. Doing so may limit or void warranty coverage.





## USER INSTRUCTIONS: W INSTALL SERIES

### Introduction

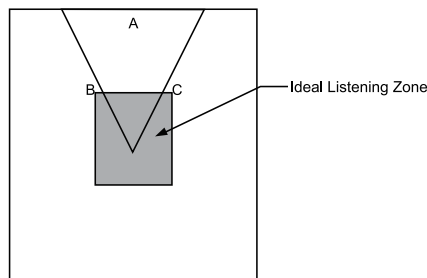
The Wharfedale W Install Series are two-way high performance in-ceiling and in-wall mounted speaker systems for home and public areas. All speakers are combine premium drive units, discrete ABS front baffles and attractive magnetic metal grilles which can be sprayed to fit in seamlessly with your environment. Follow these instructions carefully for installation and when properly installed you can enjoy the speakers with highest quality sound for many years.

### Speaker Placement

To get the most from your loudspeakers, please view our recommendations for the most efficient configuration of your W Install Series.

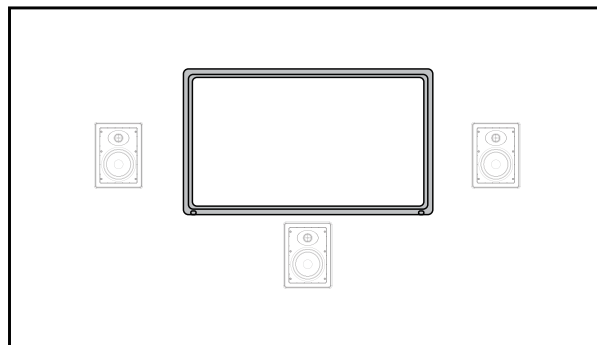
### WWS In-Wall Stereo Configuration

The best positioning of your in-wall speakers is around ear level – For standing we would recommend around 50° / 127cm and for seating around 40° / 102cm. The distance from the listener to the speakers and the distance between the two speakers should make an equilateral triangle and should be the same distance apart.



### WWS In-Wall Home Theatre Configuration

When using with a flat screen TV or projector, the left and right speakers should line up centrally with the screen where possible. Depending on available space and the height of your TV the speaker can go above or below, however try to keep the speaker as near to the height of the stereo speakers where possible.

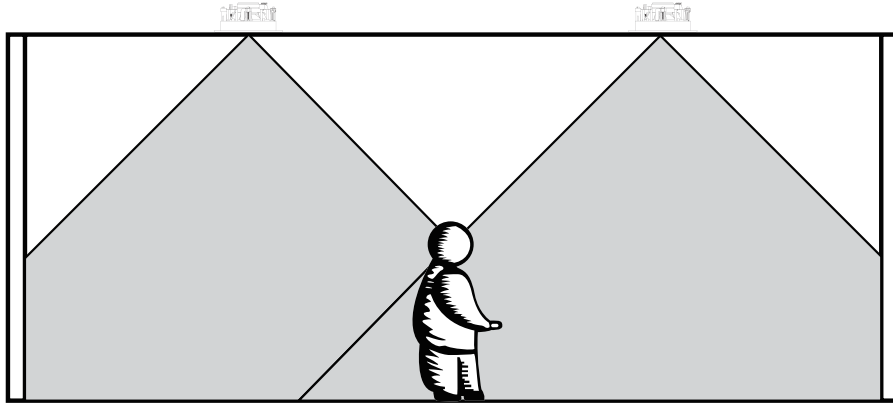




## USER INSTRUCTIONS: W INSTALL SERIES

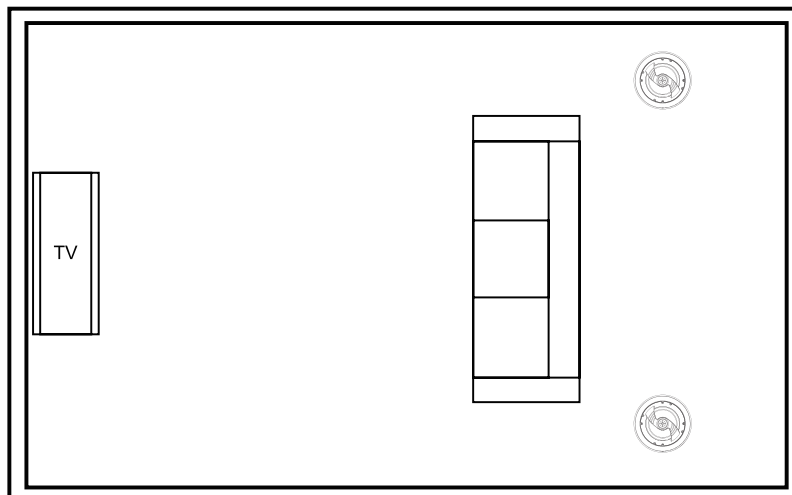
### WCM In-Ceiling Stereo Configuration

When using the wcm in-ceiling speakers, separate them roughly 6 – 10ft (1.8m – 3m) apart. Where possible try to position the speakers the same distance away from the listening position for best results.



### WCM In-Ceiling Home Cinema Configuration

The in ceiling speakers can also be used as surround sound speakers. When installing the speakers in the ceiling, position the speakers from 3 – 6ft (1- 1.8m) behind the listening position and separate them roughly 6 – 10ft (1.8m – 3m) apart.





## USER INSTRUCTIONS: W INSTALL SERIES

### Installation

- Check the desired ceiling / Wall area for safety and that is suitably hollow (you can check by tapping, and if a 'hollow sound' is heard).
- Trace around the cardboard template for speaker placement. Use a pencil in case the location has to be changed.
- Find the centre of the outline and drill a hole.
- Use a bent coat hanger wire inserted into the drilled hole to check the area is safe and free from any obstructions. Do this by bending a right angle with the coat hanger and slowly rotating when in the hole. If there are any obstructions the speaker will have to be relocated.
- Use a drywall saw to carefully cut the outlined area and remove the cutout.
- Run cable from your amplifier through the hole of the cut out. You should allow an extra few metres of cable to reach outside of the cutout. This gives you extra room to make the connections and not to put pressure on any parts of the speaker or amplifier.
- The speaker will perform better if the wall cavity has some insulation. We recommend use of some fiberglass to do so. Put the fiberglass sheet behind and around the speaker.
- Pull the cable through the hole and once the cable is stripped back, connect the positive wire from the amplifier to the red terminal on the speaker. Warning: Make sure the amplifier is turned off while connecting to the speakers.
- With the magnetic grille removed, push the speaker into the cavity in the ceiling or wall. Do so by pushing one side in first, then following with the other side so the speaker is flush with the ceiling.
- Tighten the screws so the speaker is secure in the ceiling. If you are using a drill, use a low torque setting to ensure the screws are not over-tightened.
- Replace the magnetic grille
- The speaker grilles can also be painted if desired. We would advise to use paint lightly and use roughly 5 parts thinning agent to 1 part paint. Too much paint can cause an obstruction to the holes in the grille and affect the speaker sound quality.
- Both the WCM & WWS Series utilise an adjustable tweeter for efficient direction of the high frequencies. Depending on varying acoustic conditions and if the recommended positioning is unachievable the HF can be angled to compensate for this. On the WWS Series the HF can be angled up or down and on the WCM Series the HF can be pointed at any 360° angle. When adjusting be sure to put pressure on the outer rim of the tweeter and not damage the dome. Please refer to your installer or Wharfedale sales representative for further information on adapting the loudspeaker to your environment.





## USER INSTRUCTIONS: W INSTALL SERIES

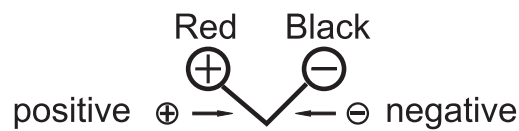
### Installation

The WOS may be mounted vertically or horizontally.

The Outdoor speakers case is weather resistant IP67 and made with UV stabilized ABS. But for longest life, we recommend placement in a protected area, such as under an eave.

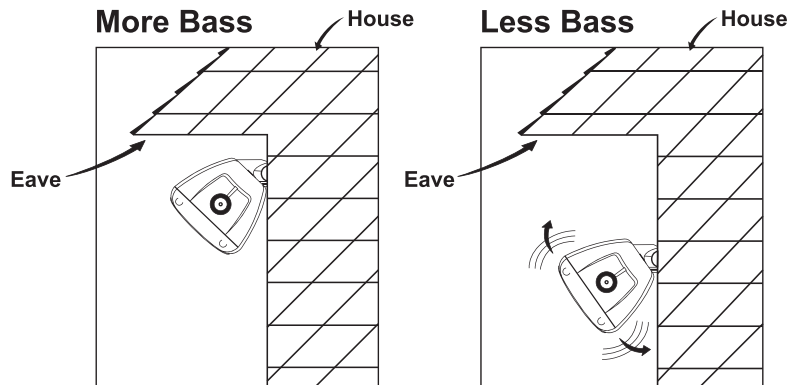
We recommend wiring with AWG 16 or larger, standard wire.

For proper phasing, both speakers must be wired alike. Connect red wire to red terminal on speakers and to red or plus terminal on amplifier.



To control the volume of the speakers locally, use an impedance matching BT volume control. e. g. BTVC-1 and BTVC-2

Mounting Suggestions:



Mounting close to the Eave will increase bass output





## USER INSTRUCTIONS: W INSTALL SERIES

### Specifications

	<b>WCM-65</b>	<b>WCM-80</b>
System Description	In-Ceiling 2-Way	In-Ceiling 2-Way
Nominal Impedance	8 Ohms	8 Ohms
Power (RMS / Peak)	30W / 80W	40W / 100W
Reccomended Amp. Power	20 - 120W	30 - 140W
Max SPL	97dB	98dB
Sensitivity (1W @ 1m)	87dB	88dB
Frequency Response	65Hz - 20kHz	45Hz - 20kHz
Bass driver	6.5" / 165mm Polypropylene	8" / 200mm Polypropylene
Treble driver	1" Titanium Dome	1" Titanium Dome
Terminal	Gold Plated, Spring Loaded	Gold Plated, Spring Loaded
Dimensions (mm)	225mm (Diameter) x 97mm	268mm (Diameter) x 108mm
Net Weight (each)	1.23kg	1.8kg

	<b>WWS-65</b>	<b>WWS-80</b>
System Description	In-Wall 2-Way	In-Wall 2-Way
Nominal Impedance	8 Ohms	8 Ohms
Power (RMS / Peak)	30W / 80W	40W / 100W
Reccomended Amp. Power	20 - 120W	30 - 140W
Max SPL	98dB	99dB
Sensitivity (1W @ 1m)	88dB	89dB
Frequency Response	63Hz - 20kHz	43Hz - 20kHz
Bass driver	6.5" / 165mm Polypropylene	8" / 200mm Polypropylene
Treble driver	1" Titanium Dome	1" Titanium Dome
Terminal	Gold Plated, Spring Loaded	Gold Plated, Spring Loaded
Dimensions (mm)	298mm x 211mm x 86mm	348mm x 246mm x 104mm
Net Weight (each)	1.5kg	2.0kg





## USER INSTRUCTIONS: W INSTALL SERIES

---

	<b>WOS-53</b>	<b>WOS-65</b>
System Description	All Weather Outdoor Speaker	All Weather Outdoor Speaker
Nominal Impedance	8 Ohms	8 Ohms
Power (RMS / Peak)	30W / 80W	40W / 100W
Reccomended Amp. Power	20W - 120W	30 - 140W
Max SPL	98dB	99dB
Sensitivity (1W @ 1m)	88dB	89dB
Frequency Response	70Hz - 20kHz	65Hz - 20kHz
Bass driver	5.25" / 135mm Polypropylene	6.5" / 165mm Polypropylene
Treble driver	1" Hard Dome, Ferrofluid cooled	1" Hard Dome, Ferrofluid cooled
Terminal	Gold Plated	Gold Plated
Dimensions (mm)	250mm x 196mm x 237mm	292mm x 227mm x 249mm
Net Weight (each)	3.66kg	5.3kg







## USER INSTRUCTIONS: W INSTALL SERIES

---

### Servicing

In the unlikely event that your unit develops a fault you should return it to your Wharfedale dealer using the original packing to ensure safe shipping.

The terms of your guarantee may vary in different countries. However, in all cases the guarantee excludes:

Liability for damage or loss occurring in transit to or from the purchaser.

All damage caused through accident, misuse, wear and tear, neglect, incorrect installation, adjustment or repair by unauthorised personnel.

Wharfedale will not be liable for any consequential damage, loss or injury, arising from or in conjunction with this equipment.

### Service Centre Address

**UK**

IAG Service Dept.

13/14 Glebe Road

Huntingdon

Cambridgeshire

PE29 7DL

UK

Tel: +44 (0)1480 452 561

Fax: +44 (0)1480 413 403

For further help and advice please visit our website

[www.wharfedale.co.uk](http://www.wharfedale.co.uk)



## USER INSTRUCTIONS: W INSTALL SERIES

---





## USER INSTRUCTIONS: W INSTALL SERIES

---





 WHARFEDALE

IAG House, 13/14 Glebe Road, Huntingdon, Cambridgeshire, PE29 7DL, UK  
Tel: +44(0)1480 452561 Fax: +44(0)1480 413403 <http://www.wharfedale.co.uk>  
IAG reserves the right to alter the design and specifications without notice. All rights reserved © IAG Group Ltd.  
Wharfedale is a member of the International Audio Group.

