

TILEVISION® *Product Specification*

6.5" Single Stereo Ceiling/Surface Mounted Loudspeaker



Speaker type:	Single stereo ceiling/surface mounted
Bass driver:	165 mm polypropylene twin voice coil*
Magnet:	10 oz.
Treble drivers:	13 mm PEI dome x 2 (water resistant)
Power:	Rated input: 25 watts Maximum power: 50 watts
Frequency response:	55–20k Hz
Impedance:	8 Ω nominal
Sensitivity:	88 dB \pm 3 dB
External dimensions:	240 mm \varnothing x 95 mm deep
Cutout:	208 mm \varnothing

Internal depth:	79 mm
Clamping range:	4–30 mm
Plastics:	UV resistant white
Hardware:	Stainless Steel
Grill:	Aluminium

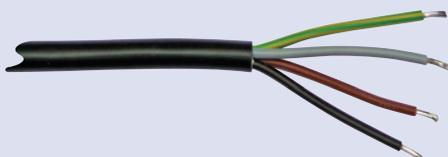
***Please Note:** Wiring the loudspeaker out of phase will reduce the speaker's output as the signals will cancel each other. If the power level is increased to compensate, the voice coils may overheat and damage the bass driver.

Specifications subject to change without notice.



Only 12 mm depth from mounting surface to top of grille.

The mounting clamps accept materials from 4 mm to 30 mm thick.



Both the TileVision® and the speaker are labelled to match the four core cable supplied with the first fix kit.



Speaker grill removal hook.

Placement Guidelines

Obstructions

When selecting a location for the speaker, care should be taken to ensure there are no joists or obstructions in the cavity behind the intended speaker position. A minimum of 80 mm depth is required.

Best Speaker Position

A single stereo speaker is best sited in one of two locations in the room; either fit the speaker in the ceiling or wall close to the TileVision® screen, or site the speaker close to the centre of the ceiling to minimise level variation at any point in the room.

Moisture

Care should be taken to position the speaker away from high moisture areas such as showers.

Heat

The speaker should not be located where the ambient temperature rises above 30°C. Installing the speaker in a sauna is not recommended but if it is inevitable, the speaker should be located close to the floor where the temperature is lowest. This will help to maximize the speaker's life expectancy.

Vibration

The speaker should be mounted in a non-resonant material. Typical plaster/drywall ceiling material is satisfactory, however, some more ridged materials and T-bar 'drop ceilings' with very thin fibreboard panels can buzz and vibrate. If you suspect this will happen, reinforce the drop-in panel with wood or particle board.

Speaker Installation

Painting the Speaker

1. If the speaker is to be painted to match the decor of a room, it should be painted prior to installation.
2. The speaker's outer surface is ready to accept ordinary Latex wall paint or aerosol spray paint.
3. All of the speaker's component parts behind the perforated grille should remain black.
4. A paint mask is included to protect the speaker.
5. When painting the grilles be careful not to clog the holes.
6. Depending on the thickness of the paint, you may want to thin it slightly.
7. A roller with a short or medium nap is better than a brush.
8. Paint the outer speaker frame and grille separately.

Cutting the Hole for the Speaker

1. Determine the location of your joists/studs so that the speaker can be approximately centred between them.
2. Make sure there are that there are no electrical cables, water pipes or heating ducts in the vicinity of the hole to be cut. If you are not sure, cut a small hole in the centre of the desired placement area and check for obstructions.
3. Draw a circle 208 mm in diameter or use the template provided.
4. Score the outline of the cutout area with a utility knife to prevent chipping or wall paper from tearing.
5. Drill a 25 mm hole close to the pencil outline and use a fine-toothed keyhole saw or even a hacksaw blade. Use very slow strokes to saw through and remove the inner surface.

Connecting Your Speaker

Single 4-core 16 gauge cable or two 2-core 16 gauge cables should be used between the speaker and television.

The cables should be colour coded or marked to ensure correct speaker phasing. The speaker connection block on the back of the screen assembly and the speaker input terminals are colour coded to indicate the positive and negative connections: RED + is positive and BLACK – is negative.

Caution: Correct connection is very important. If one of the channels is wired out of phase with the other channel, the speaker output (particularly at bass frequencies) will be reduced and speaker damage is likely to occur if excessive power is applied.

Terminating the Cables

1. Cut off excess wire, leaving roughly 500 mm extending through the cut-out hole.
2. Pull the conductors apart so they are separated for the first 50 mm from their ends.
3. Using a wire stripper, diagonal pliers or a knife, remove 10 mm of insulation from each conductor.
4. Twist the tiny strands in each conductor into tight bundles.
5. Attach the speaker wires to the appropriate red and black speaker terminals. Press down on the protruding levers while inserting the wire.
6. Make sure there are no loose or stray strands of wire that may cause a short circuit.

Final Assembly

1. Centre the speaker in the cutout hole and tighten the screws until the clamps are drawn up snugly from behind, clamping the speaker in place. Try to tighten each screw equally but do not over tighten them.
2. Insert the speaker grille by gently pressing it into place.
3. The grills will fit tightly without causing vibration.



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