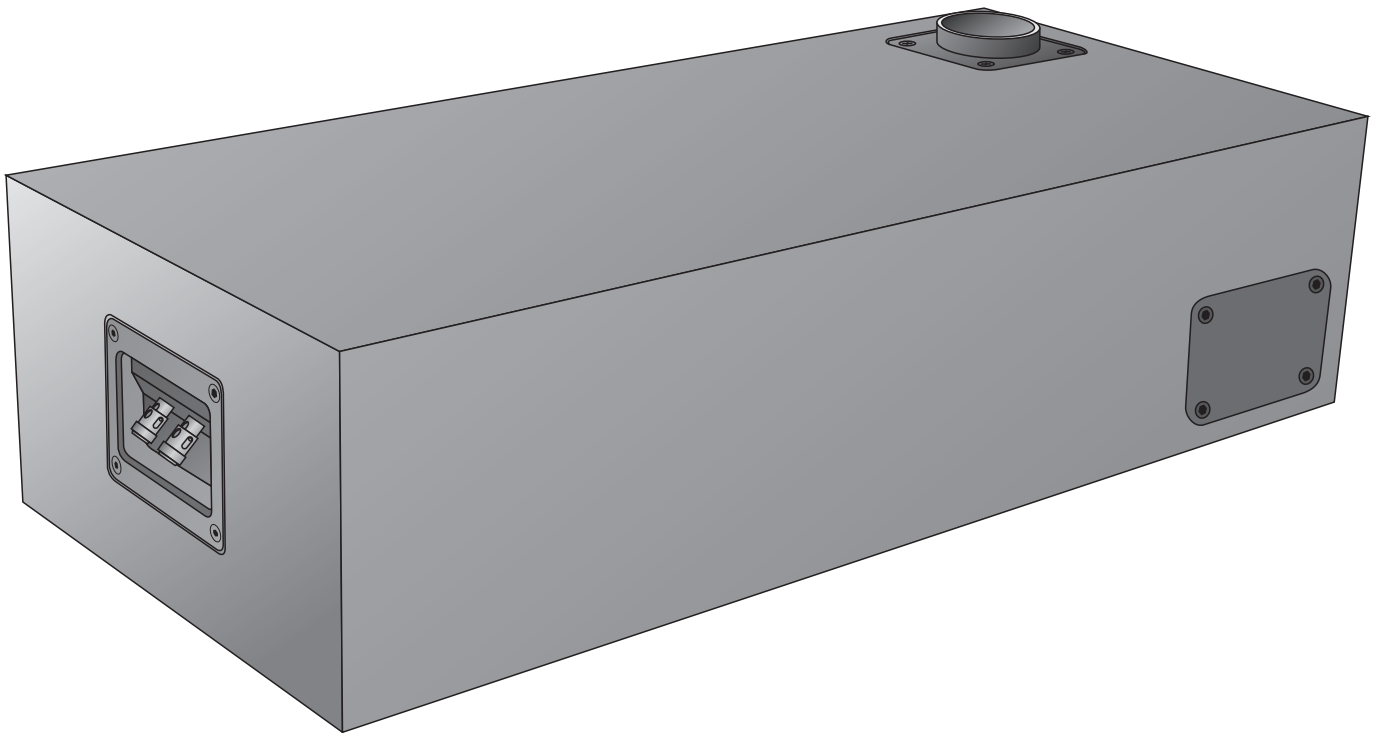

Installation guide

Discreet Subwoofer

ALF80



amino®
THE INVISIBLE SPEAKER CO.

Caution: Read this before operating your unit

1. To ensure optimal performance, please read this guide carefully and keep in a safe place for future reference.
2. Install this product in a cool, dry, clean place - away from direct sunlight and heat sources, vibration, dust and moisture.
3. Do not expose this unit to sudden temperature changes or locate it in an environment with high humidity. This is to prevent condensation forming inside which may cause damage to the unit.
4. Do not clean this unit with chemical solvents as this may damage the finish. Use a clean, dry or damp cloth.
5. Do not attempt to modify or repair the unit. Contact your distributor or manufacturer if a fault should occur.
6. Ensure that any fixing structures will support the weight of this product.
7. Do not modify the length of the port by cutting it or by extending it using additional tubing or flexible pipes. Doing so will seriously compromise the acoustic performance of the product.



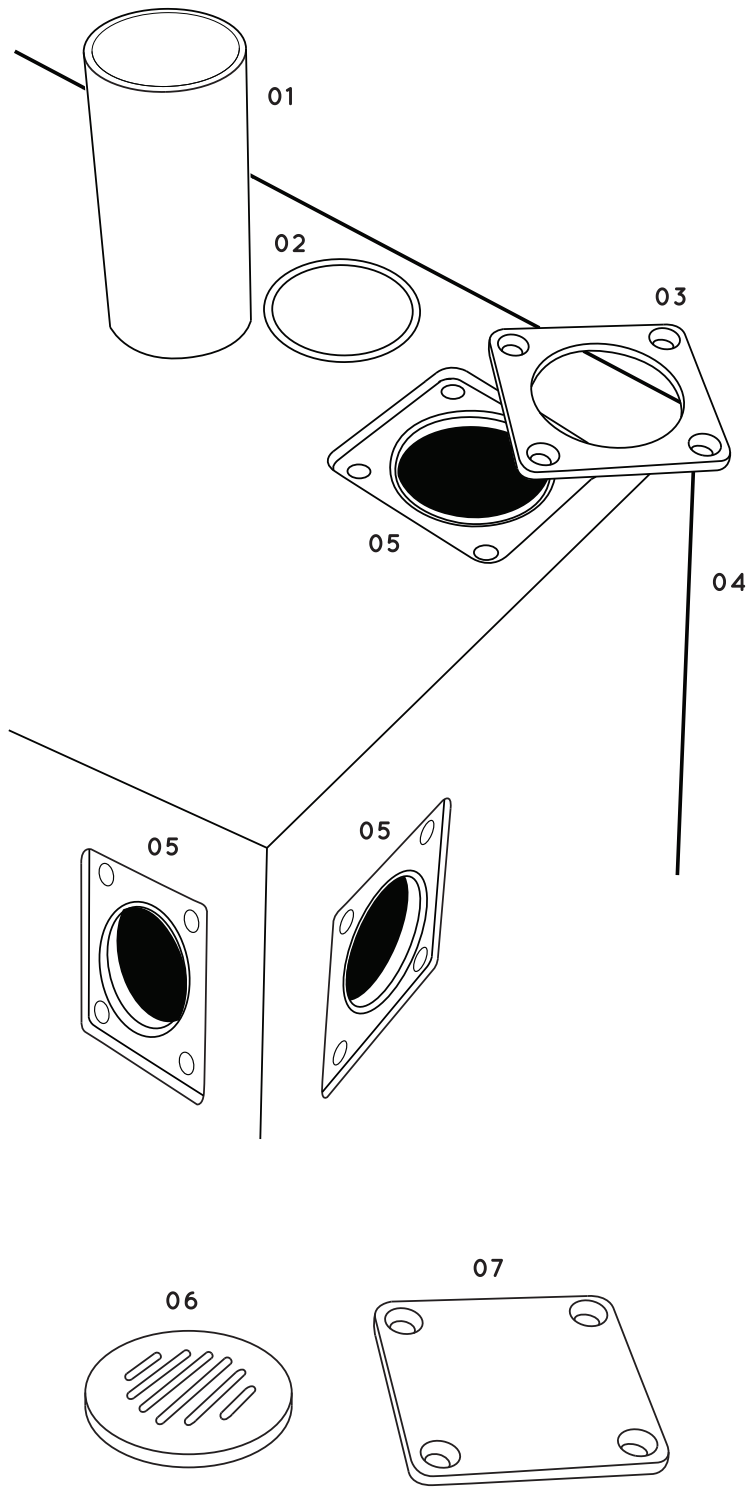
WARNING:

No attempt should be made to install this product within existing building structures unless you are certain no electric cables, water pipes, gas pipes or supporting joists will be cut through.

Contents

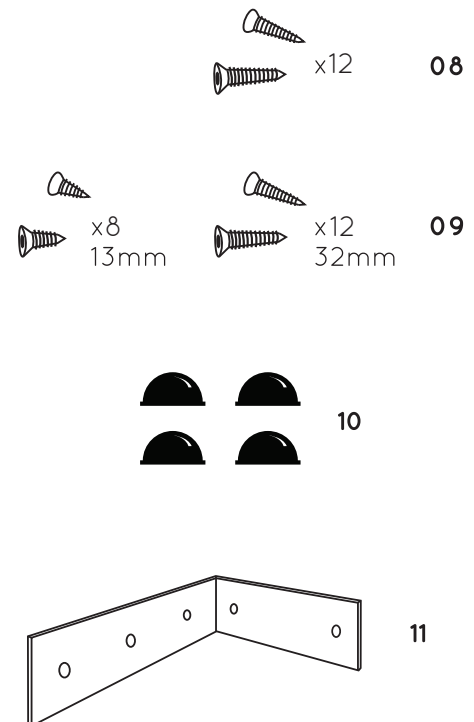
Included in the carton	1
Using the Adjustable Port System.....	2
Positioning the ALF80	4
Positioning the ALF80 (Diagram).....	5
Connection Options (Passive 2.1)	6
Connection Options (Passive 2.2)	7
Connection Options (Active 2.1)	8
Connection Options (Active 2.2).....	9
Connection Options (Home Cinema).....	10
Spring Terminals.....	11
Setup Tips.....	11
Specifications	12
Limited Warranty:.....	12
Dimensions.....	13

Included in the carton



Parts:

- 01 Port x1
- 02 Rubber o-ring x1
- 03 Port Plate x1
- 04 Cabinet x1
- 05 Port opening x3
- 06 Port Trim x1
- 07 Blanking Plate x2
- 08 Port Plate and Blanking Plate Screws x12
- 09 Fixing Screws (8x 13mm for cabinet. 12x 32 mm for joist etc)
- 10 Rubber feet x4
- 11 Bracket x4



Please contact your dealer if any of the above parts are missing or you require spares.

WARNING: TAKE CARE NOT DROP OBJECTS THROUGH THE PORT HOLES AND INTO THE ALF80 ENCLOSURE.

Using the Adjustable Port System

The ALF80 features a unique port system allowing for greater flexibility when positioning and concealing the product.

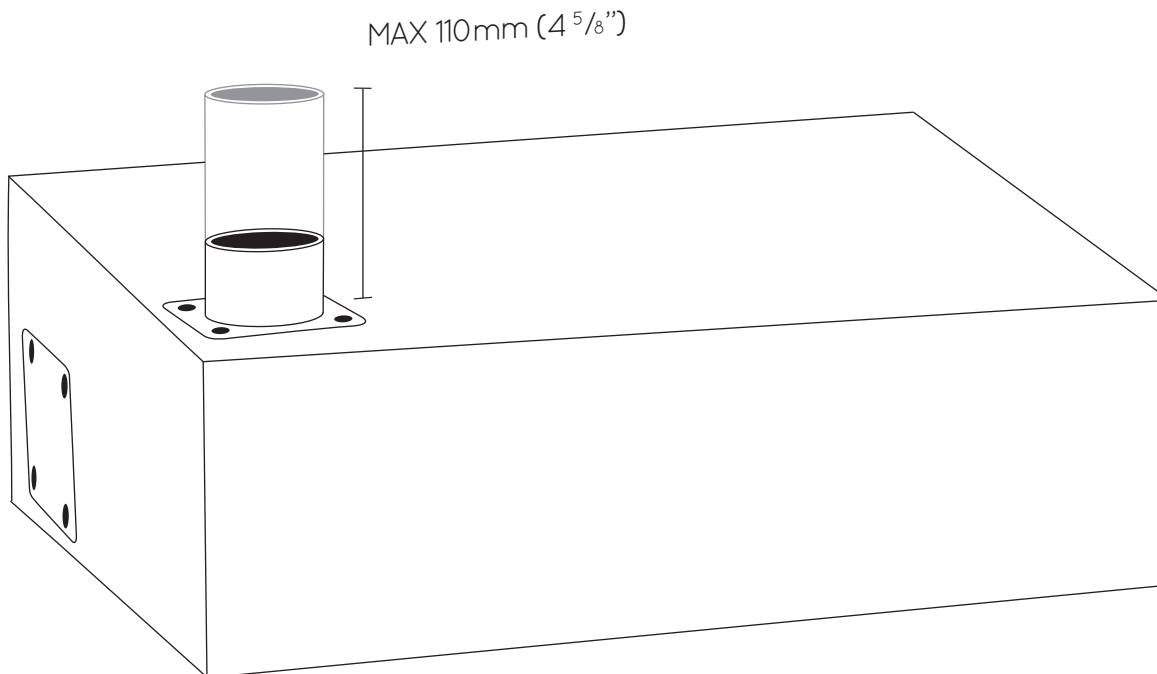
There are three optional positions where the port can be connected to the ALF80 cabinet. A steel plate (port plate) and a rubber o-ring provide an air tight seal around the port. Two similar blanking plates are used to cover and seal the unused port holes.

To remove the port and blanking plates use a number 2 pozi screwdriver to remove the four fixing screws. Then remove the plate from the cabinet taking care not to drop the o-ring through the port opening.

To adjust the amount the port protrudes from the ALF80 cabinet, remove the screws along with the port plate and pull/push the port by gripping the inside surface. Ensure the o-ring is correctly positioned in its rebate before re-securing the port plate and make sure the port is absolutely firm. If it appears loose, check the o-ring has not dropped through the opening.

Top Position

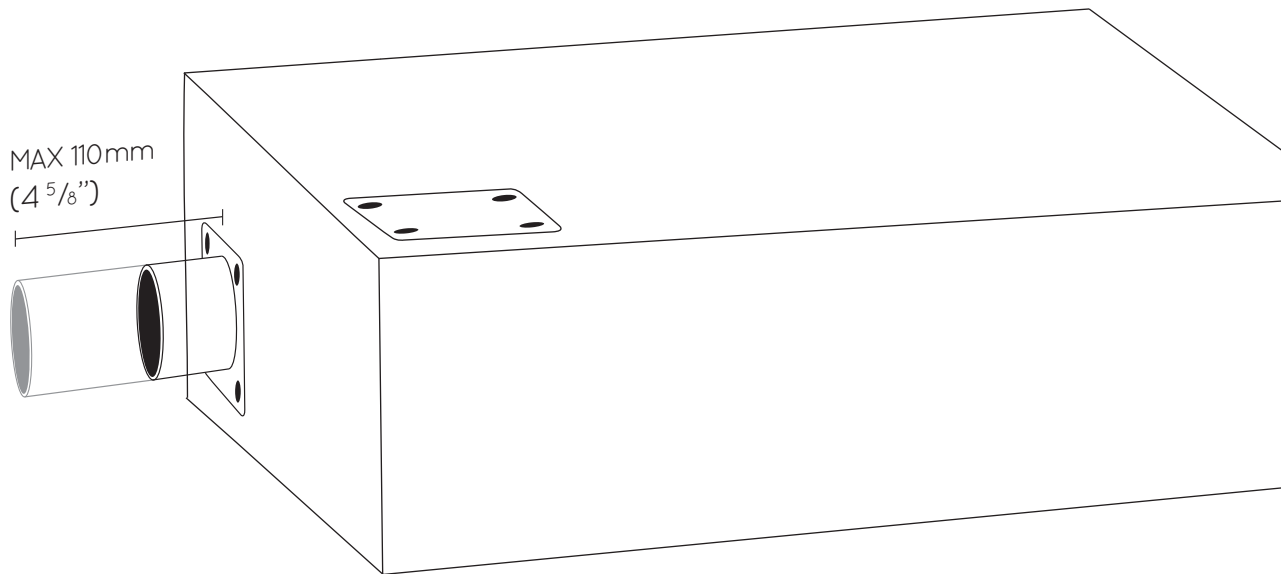
This port position can be useful if you need to stand the ALF80 on its end (connection terminal facing upward), or when locating it in a ceiling void, port firing downwards.



Using the Adjustable Port System

End/Side Positions

These port positions can be useful when the ALF80 is located behind a kickboard, or underneath a sofa.



Important notes:

1. ALWAYS loosen the four screws in the port plate before adjusting the port.
2. Blanking plates MUST always be screwed down over the port openings that are not in use.
3. Be sure to tighten both the port plate and the blanking plates. Never over-tighten the screws.
4. Use ONLY the supplied screws to fix the port and blanking plates. Contact your dealer if spares are required.
5. Ensure the rubber o-ring is correctly in position around the port and sitting within the circular rebate.
6. To release the blanking plate from its position, it may be necessary to push it from behind from within the cabinet. This can be done via the other port opening once the port is removed.



DO NOT modify the length of the port by cutting it or extending it using additional tubing or flexible pipes.

Doing so will seriously compromise the acoustic performance of the product.

Positioning the ALF80

Free Standing

The ALF80 can be positioned anywhere within a room and in any orientation. A location near the corner of a room will give the most bass output however it is important to allow the bass port to breathe. Do not place any solid objects closer than 50mm (2") directly in front of the port. Adhere the supplied rubber feet to the cabinet, this will protect the product from dirt and scratches when positioned on the floor.

Fixing Brackets

Use the supplied brackets to secure the ALF80 to a solid structure. Use only the supplied, 13mm screws to fix the brackets to the cabinet. Never use longer screws as these may damage the unit's internal components. Ensure the brackets are not fixed over the port plate, blanking plate or connection terminal.

Concealed Placement

The ALF80 can be placed within furniture, behind wall panelling or even within a ceiling cavity. Whatever structure you install the ALF80 inside, it is important to create a suitable opening for the port to protrude through allowing it to breathe into the listening room.

Use the brackets and screws provided to secure the ALF80 within the structure.

In-Ceiling

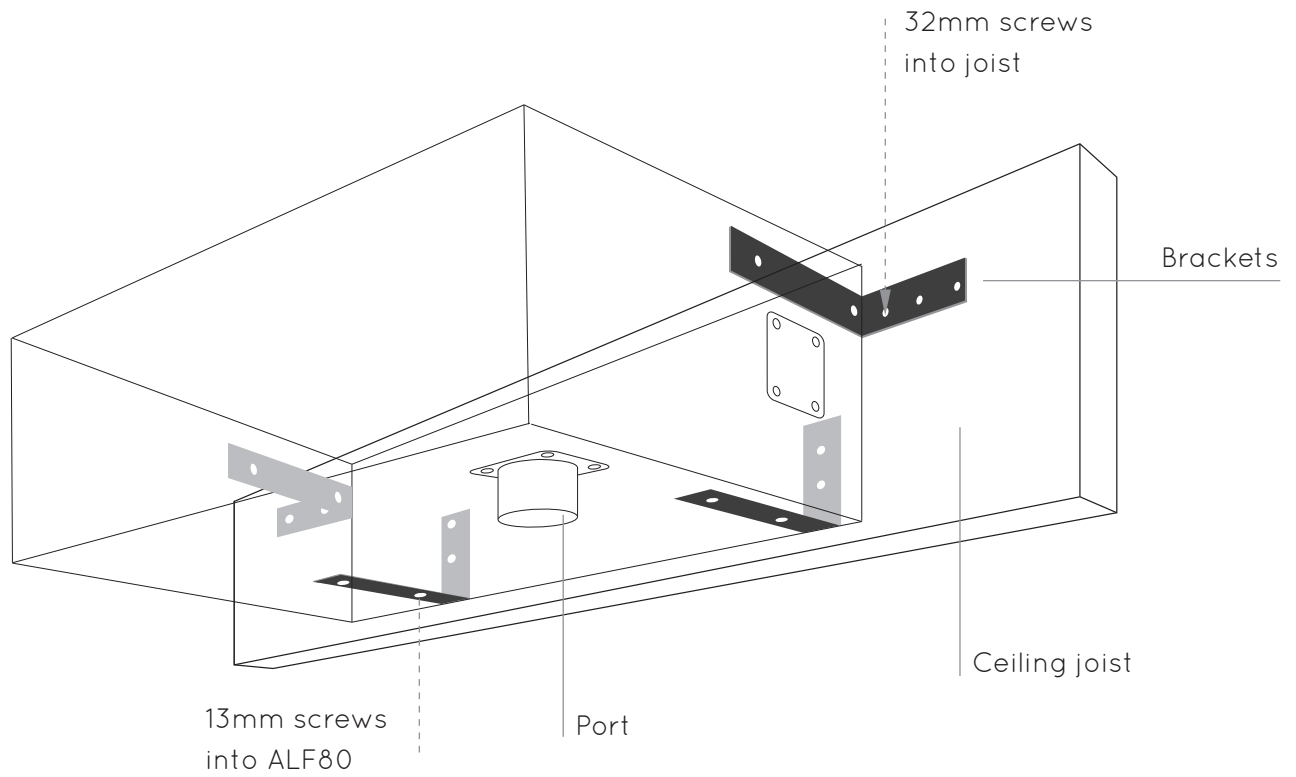
The illustration on the next page shows how the brackets supplied can be used to fix the ALF80 to a ceiling joist.

Notice the port protrudes from the cabinet - this allows it to then protrude through a suitable hole cut in the plasterboard ceiling layer.

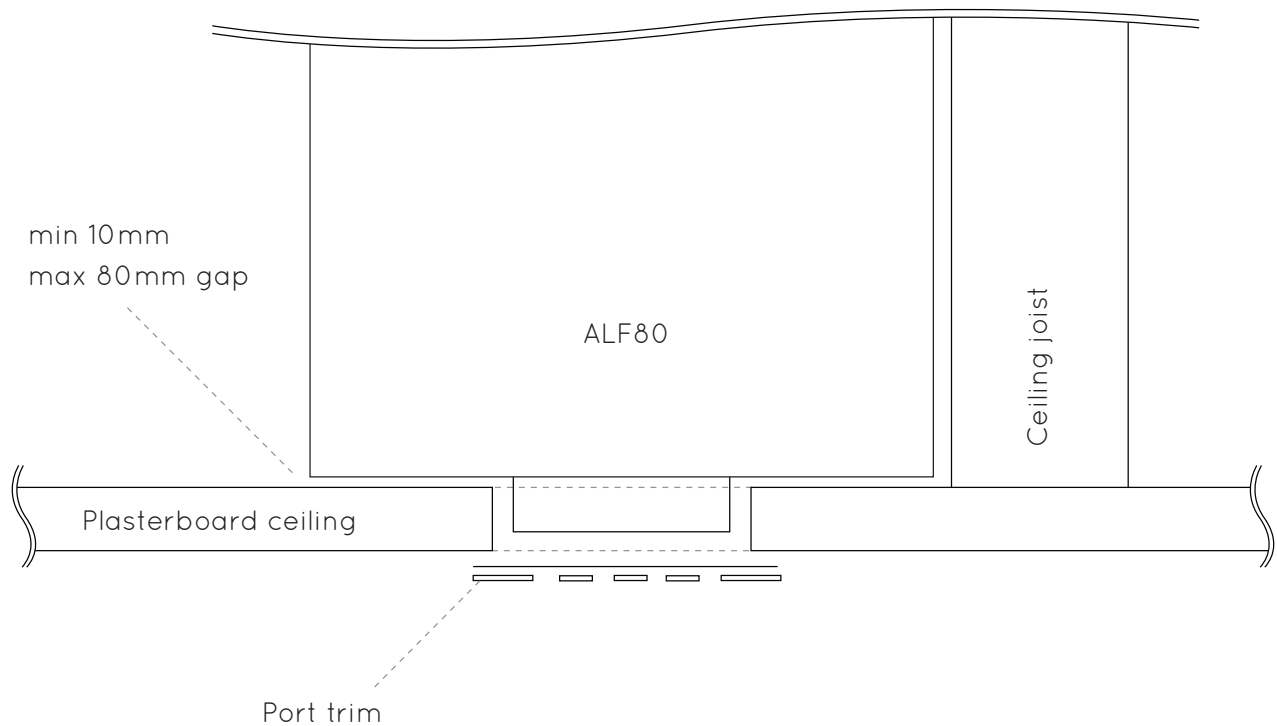
The supplied Port Trim may be placed over the port opening to improve its appearance, (this is detailed on the next page).

Positioning the ALF80 (Diagram)

In-Ceiling cont.



Detail view

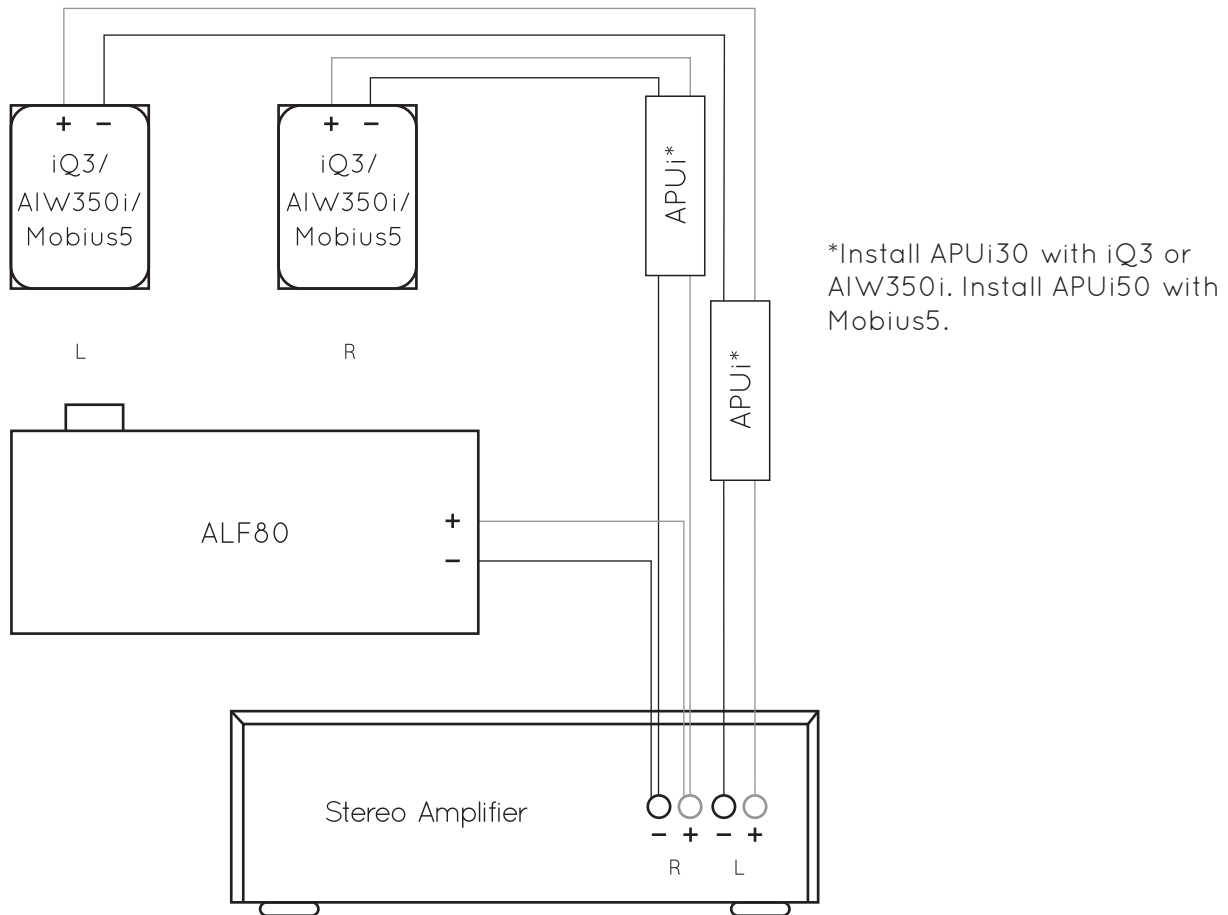


Connection Options (Passive 2.1)

The ALF80 has been optimised to work with the Amina Evolution, Mobius and Amina iQ series of Invisible speakers.

The following examples illustrate its use with these series of speakers. The ALF80 is designed so it can be connected in parallel with Amina Evolution, Mobius or iQ speakers.

Passive Stereo 2.1 : iQ3 / AIW350i / Mobius5 pair + ALF80



Note: Amplifier must be 4 Ohm stable.

In this scenario, one of the amplifier channels (left or right) is used to drive the ALF80 and one of the Amina Evolution, iQ or Mobius5 speakers together in parallel. It is assumed bass frequencies are mixed in mono on most program material, however for orchestral music better performance will be obtained with the ALF80 connected to the left channel of the amplifier.

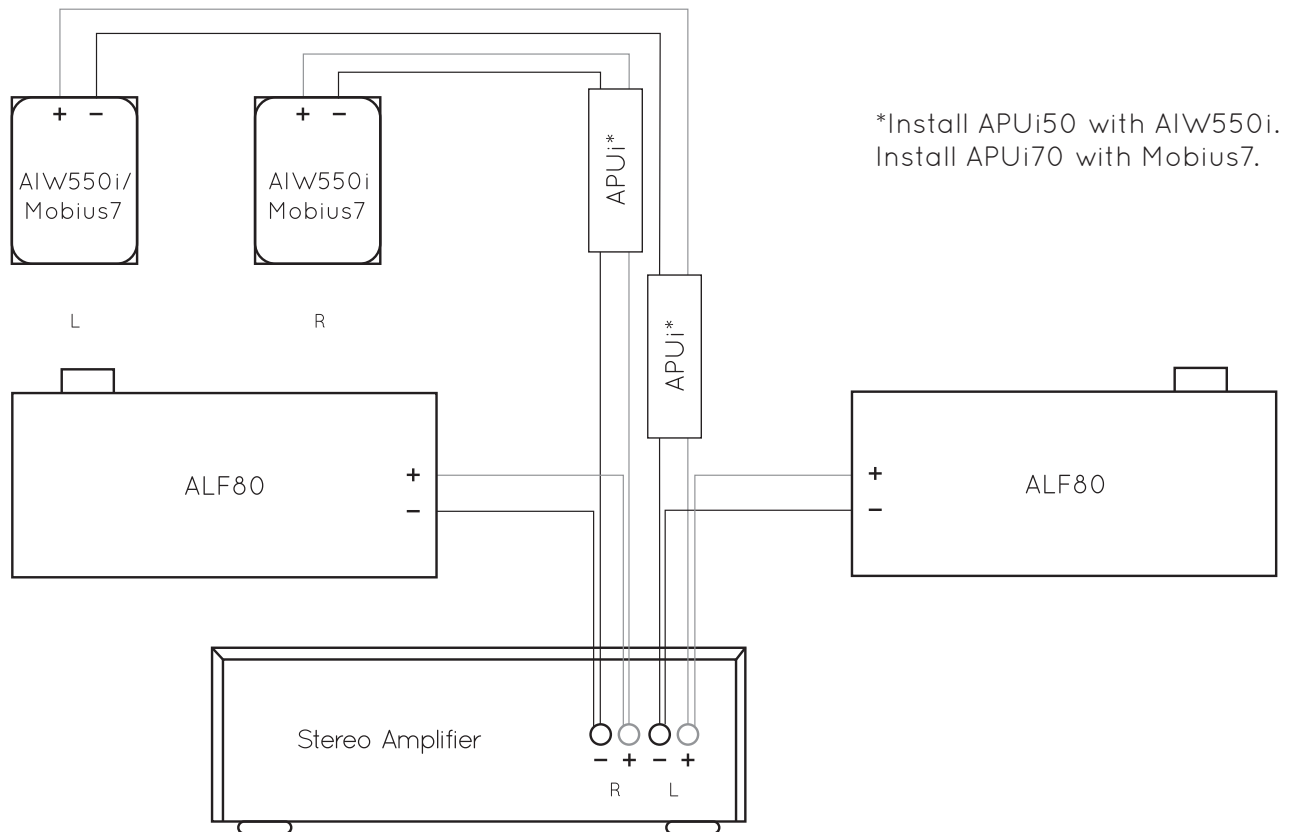
The output of an ALF80 in most situations will match a pair of AIW350i, a pair of iQ3 or a pair of Mobius5 speakers.

Note:

You may need to adjust the amplifier's balance control to obtain an equal output from both speakers.

Connection Options (Passive 2.2)

Passive Stereo 2. 2: AIW550i/Mobius7 pair + 2x ALF80



Note: Amplifier must be 4 Ohm stable.

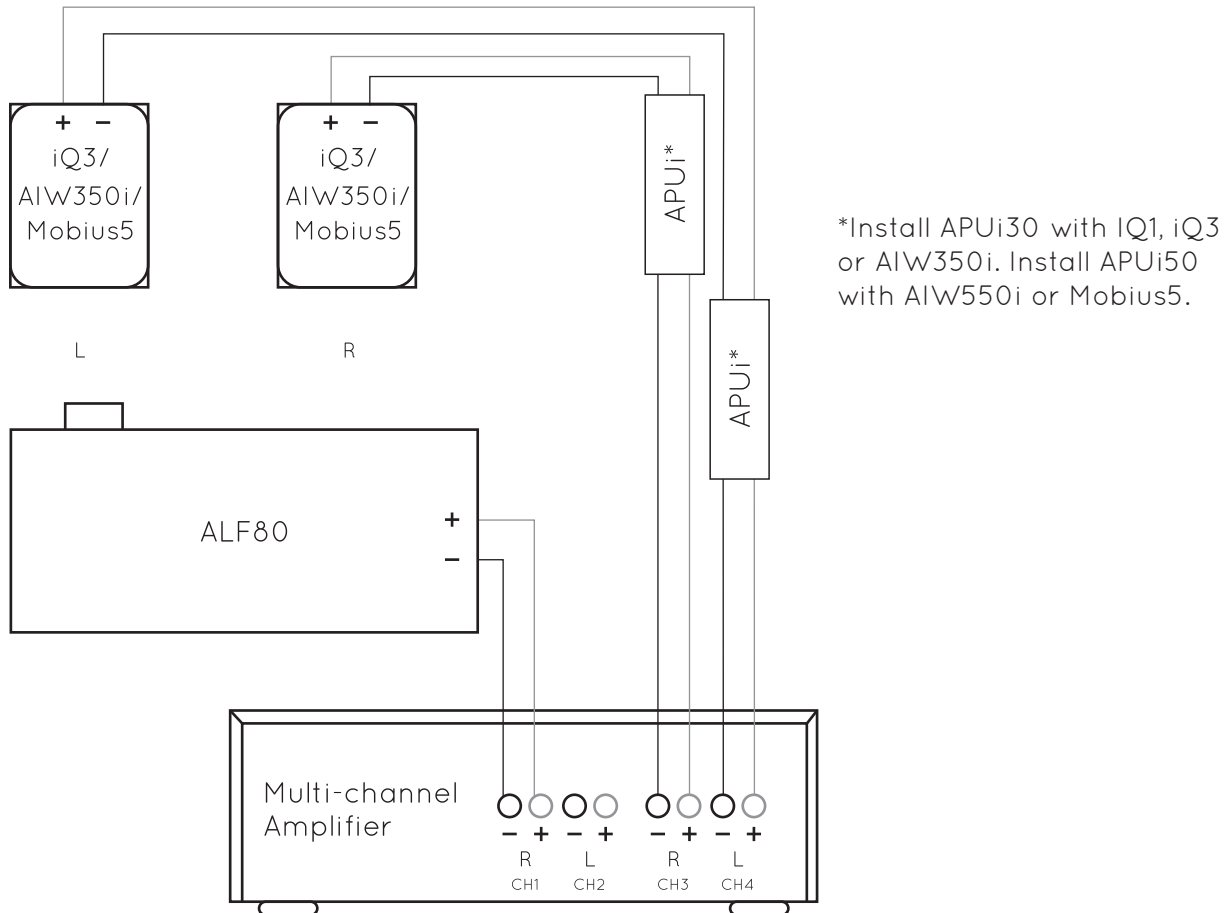
For systems using a pair of AIW550i or Mobius7 speakers, a pair of ALF80's will be necessary. In this scenario both channels of the stereo amplifier drive one ALF80 in parallel connection with an AIW550i/Mobius7.

This scenario will also apply to a situation where a pair of AIW350i, iQ3 or Mobius5 speakers are used in larger rooms or where more bass is required.

Connection Options (Active 2.1)

Active Stereo 2.1:

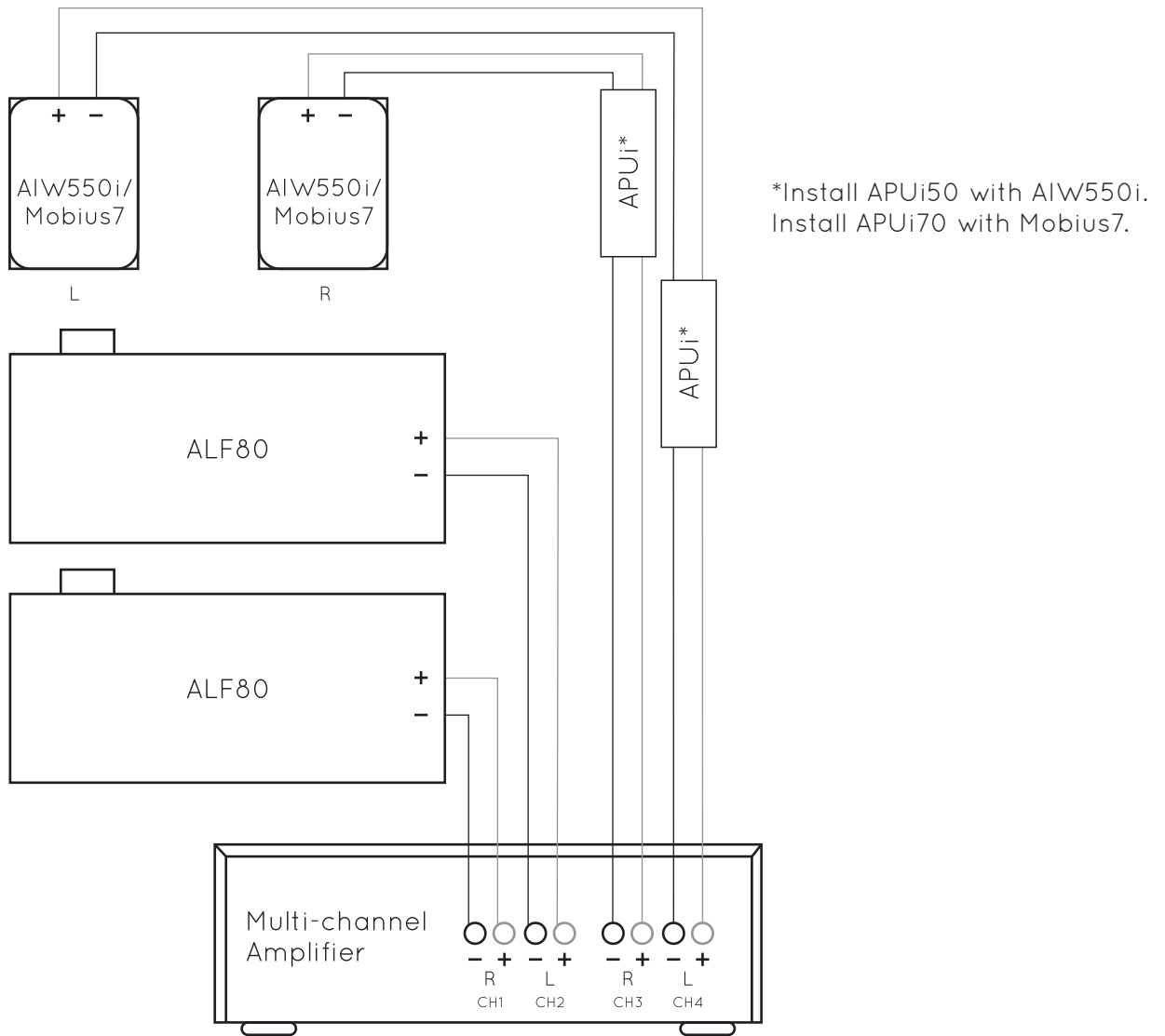
AIW350i / AIW550i / iQ1 / iQ3 / Mobius5 pair and ALF80



By connecting a single ALF80 to its own amplifier channel, its output (relative to the Amina speaker pair) can be set optimally. In larger rooms care should be taken not to adjust the relative output of a single ALF80 too high. This may result in the unit reaching its mechanical limits well before that of the accompanying Amina speakers. In a larger room (>75m²) a second ALF80 may be required.

Connection Options (Active 2.2)

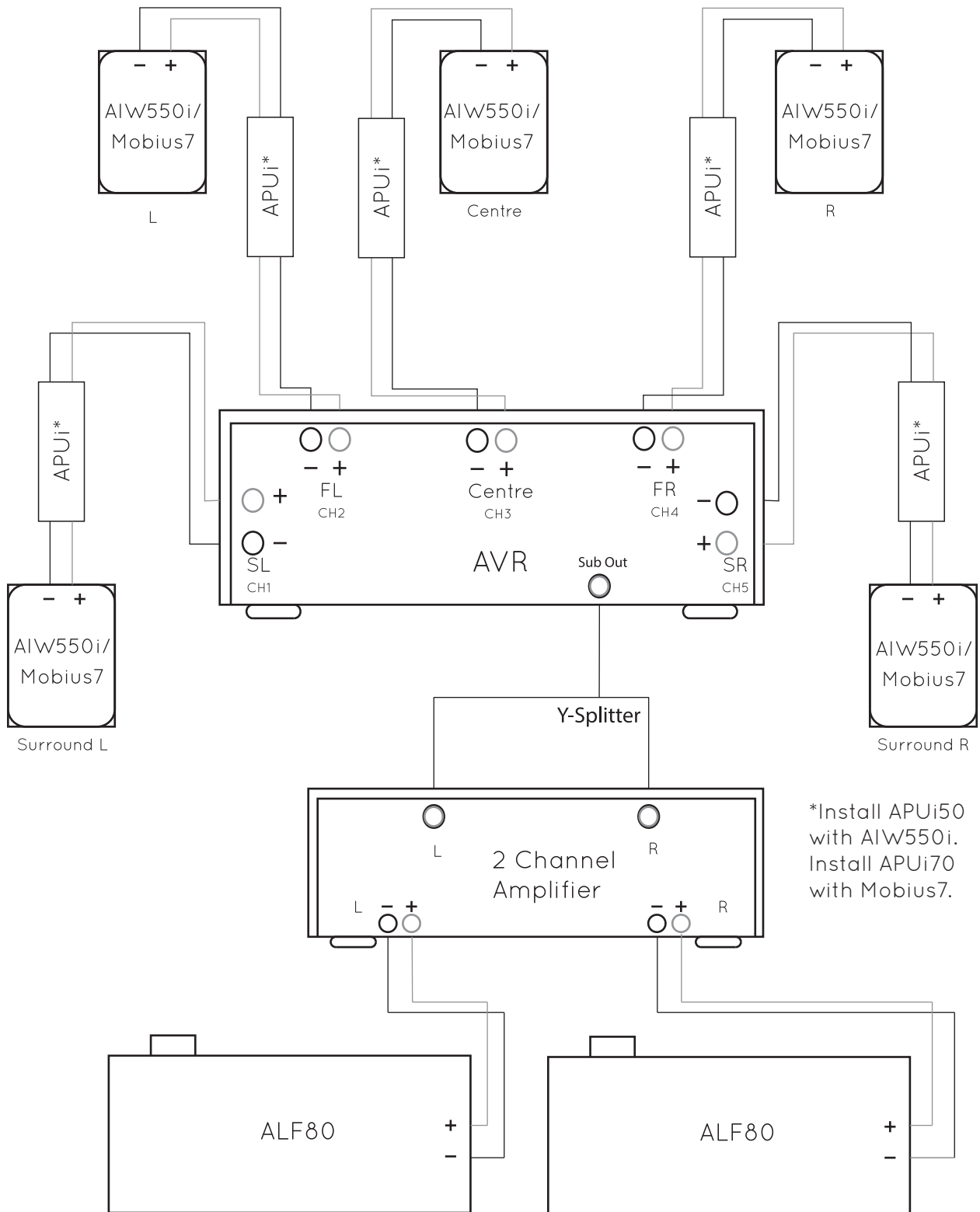
Active Stereo 2. 2: AIW550i/Mobius7 pair + 2x ALF80



For systems using a pair of AIW550i/Mobius7 speakers in rooms larger than 75m², two ALF80's will be necessary. In this scenario the amplifier will need four independent channels.

Connection Options (Home Cinema)

5.1 Cinema system: 5x AIW550i/Mobius7 + 2x ALF80

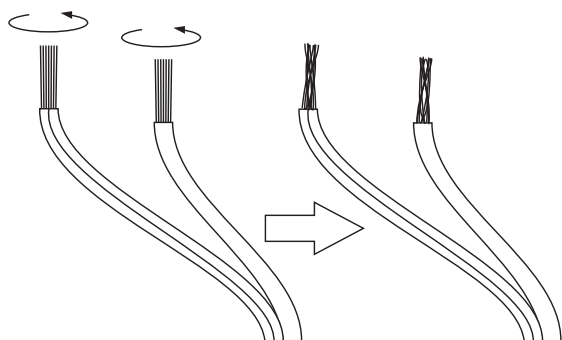


Spring Terminals

The spring terminals will grip bare, twisted wire securely without the need to fit plugs or spade terminals.

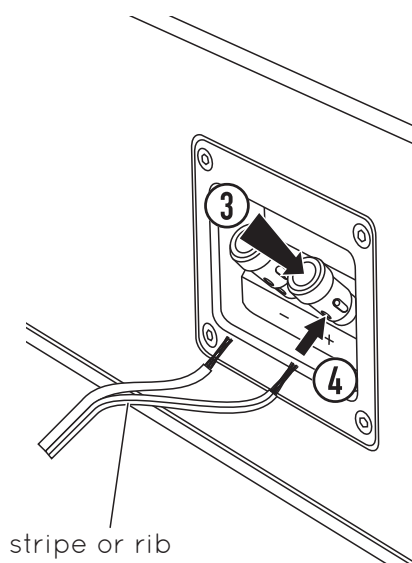
To connect wires to the terminals

1. Strip approximately 15mm ($\frac{3}{4}$ "") of insulation from the ends of the wires.
2. Twist the wire strands together.



3. Press the top of the terminal down against spring pressure.
4. Hold the top of the terminal down against spring pressure and pass the twisted wire through the hole in the terminal.

Make sure that the wire polarity is correct. Connect the wire marked with a stripe or rib to the positive terminal.



5. Release the top of the terminal.
The spring within the terminal will grip the wire.

Setup Tips

1. When setting up any of the above system scenarios, it is advised to experiment with connecting the ALF80 in reverse phase with respect to the Amina speakers.

Often the reverse-phase connection results in better integration and slightly higher sound pressure level through "cross-over" region.

Using pink noise can be a good way of judging the difference between the in-phase and reverse-phase connections.

2. To avoid unwanted vibrations, ensure the ALF80 is fixed securely to a structure or, if free standing, the supplied rubber feet are used.
3. The supplied port cover plate can be used to improve the appearance of the port when, for example, the ALF80 is installed behind plasterboard walls or ceilings. The plate is supplied with acrylic transfer adhesive already fitted; use the tab to assist removal of the liner paper then press the plate firmly into place. Please refer to the detail view on page 5.

Alternative finishes can be applied to the cover plate; for best results use water based paints and primers.

Specifications

Dimensions	605 x 270 x 156mm (23 7/8 x 10 5/8 x 6 1/8")
Weight:	9.2kg (20lbs 4 1/2oz)
Design:	Ported, acoustic band-pass with built-in protection circuit
Compatibility:	Optimised for Amina AIW, Mobius and iQ series speakers (can also be used with other 8Ohm speakers)
Power handling:	150W (continuous)
Nominal impedance:	4 Ohms
Frequency response:	36Hz - 140Hz (+/- 6dB), 18dB bandpass octave slope
Sensitivity:	86dB @ 1m/1W*
Maximum short-term SPL/1m:	108dB**
Port location:	Front, side or end convertible + length adjustable
Port diameter I.D / O.D:	50.8mm (2") / 55.8mm (2 3/16")
Connection:	Spring-loaded post (bare wire)

* Corrected nearfield measurement

** Corrected nearfield port measurement. Assumes no in-room boundary loading which in some cases may increase SPL by as much as 6dB.

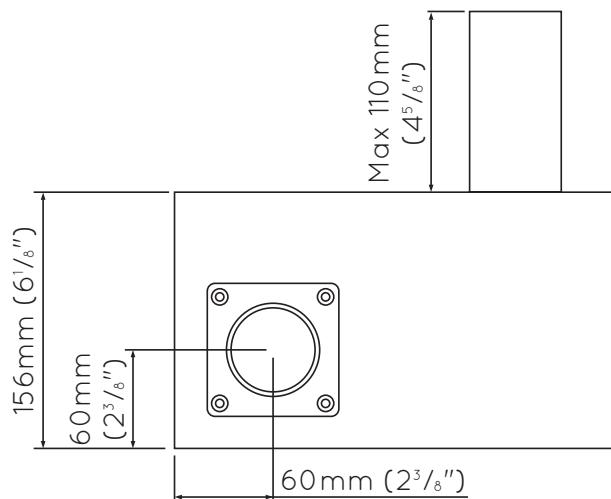
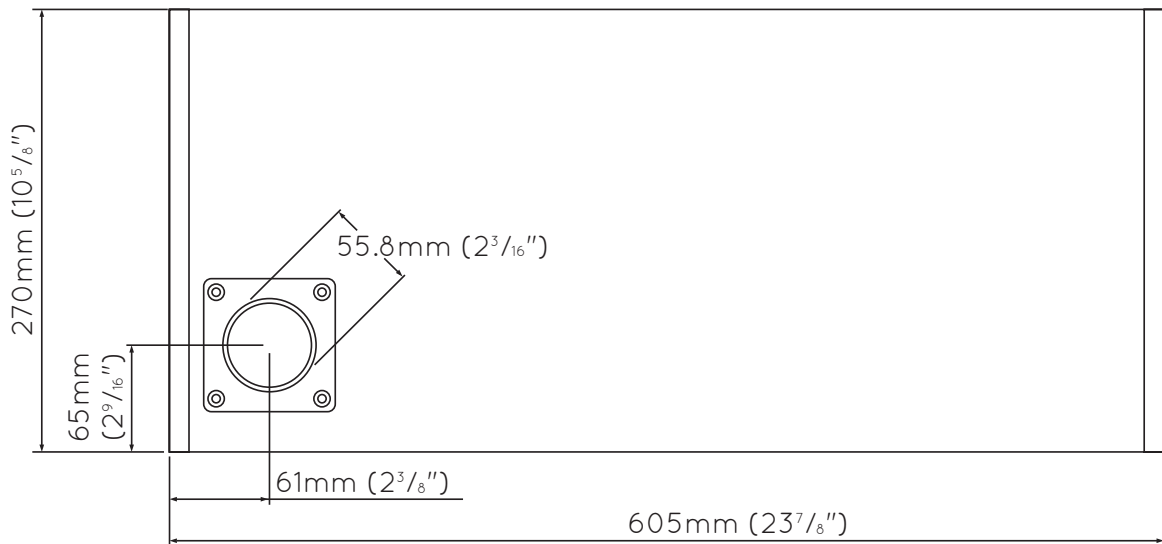
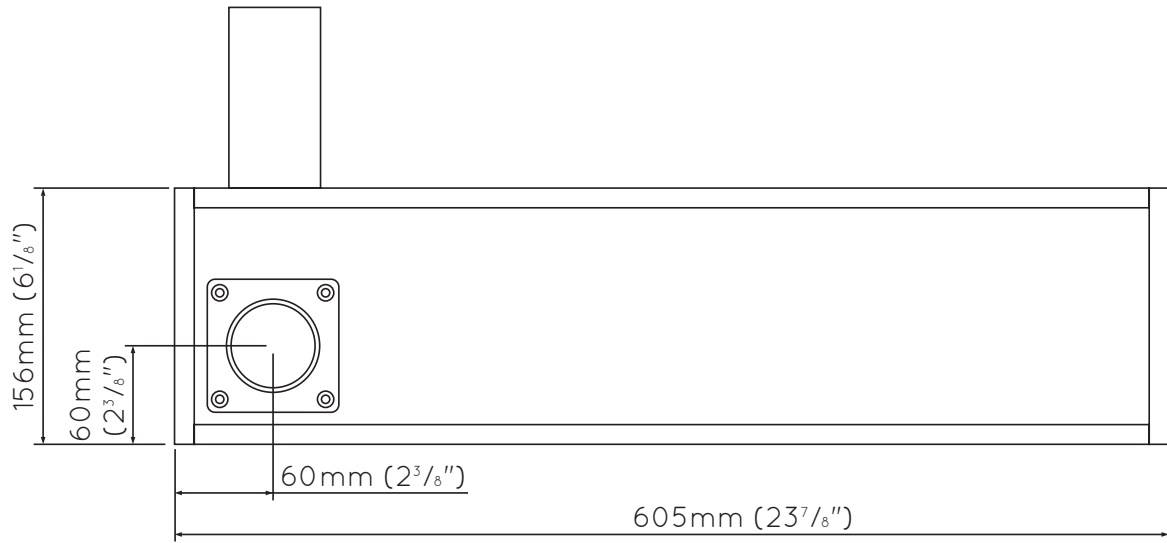
Limited Warranty:

The ALF80 is designed to operate reliably for many years. Correctly installed and in accordance with these instructions, Amina warrants the ALF80 against defective materials and workmanship for a period of one year.



RoHS
Compliant

Dimensions



Amina®

THE INVISIBLE SPEAKER CO.

Amina Technologies Ltd
Cirrus House, Glebe Road
Huntingdon, Cambs, PE29 7DL England
T: +44 1480 354390
W: www.aminasound.com / E: inspired@aminasound.com
Copyright 2017

ALF80 V2.1
