USER GUIDE

ALF40 Bass Enhancer

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TECHNOLOGIES Ltd

Contents

Using the Adjustable Port System

The ALF40 features a unique port system which allows for great flexibility in positioning and concealing the product.
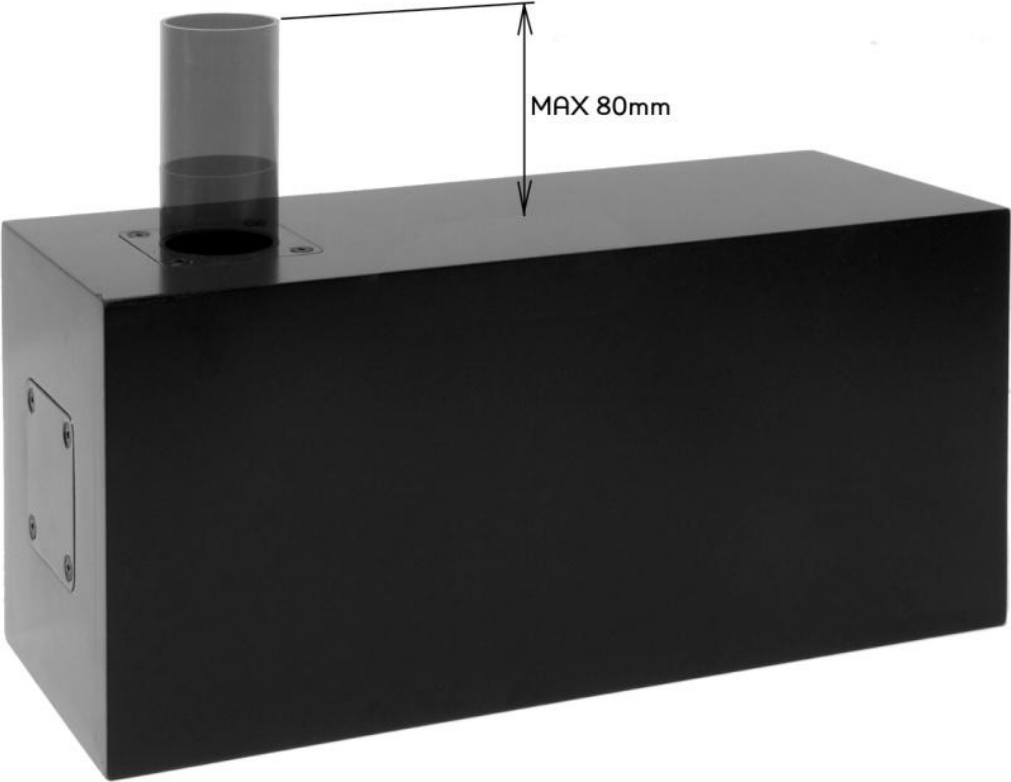
The port can be switched between two optional positions in the ALF40's cabinet. An aluminium plate [port plate] and rubber o-ring provides an air-tight seal around the port. A similar plate is used to cover the unused port hole [blanking plate].

WARNING:

BE CAREFUL NOT TO DROP ANY OBJECT INTO THE ALF40 ENCLOSURE THROUGH THE PORT HOLES.

Top Position

MAX 80mm

This port position can be useful if you need to stand the ALF40 on its end (connection terminal facing upward).

End Position

MAX
80mm

IMPORTANT NOTES:

- ALWAYS loosen the 4 screws in the port plate before adjusting the port

- the blanking plate MUST always be screwed down over the port position that is not in use

- be sure to tighten both the port plate and the blanking plate. NEVER over-tighten the screws

- ensure that the RUBBER O-RING is correctly in position around the plastic port and sitting in the circular rebate.

Positioning the ALF40

Free Standing

The ALF40 can be positioned anywhere in the room. A location near the corner of the room will give the most bass output. It is important to allow the bass port to "breathe" i.e. do not place any solid objects closer than 50mm (2") directly in front of the port. You may place the ALF40 in any orientation that doesn't block the port.

Concealed Placement

The ALF40 may be placed inside a cupboard or other piece of furniture, behind wall panelling or even within a ceiling cavity. Whatever structure you install the ALF40 inside, it is important to create a suitable hole for the port to protrude through so that it may "breathe" into the listening room.

There are 3 brackets supplied with the ALF40. These may be used to secure the ALF40 to a structure.
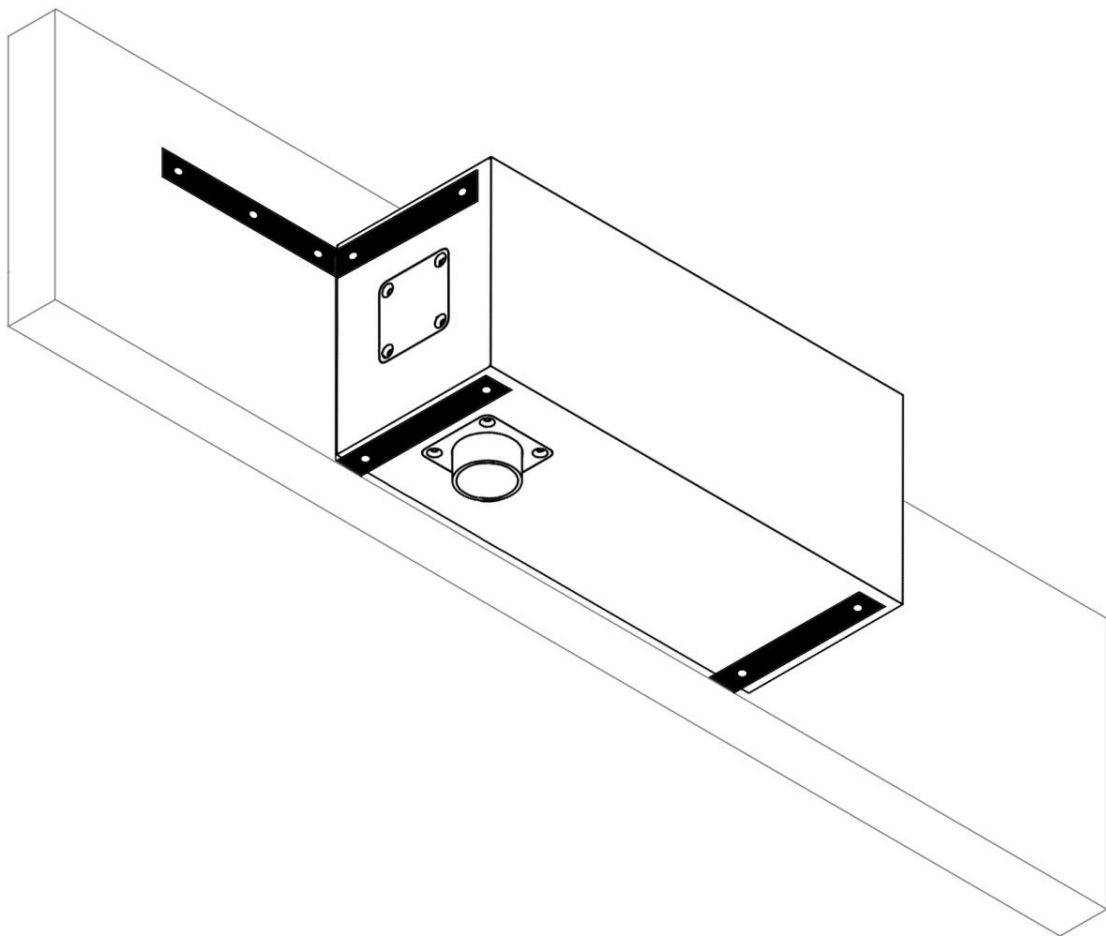
Please use wood screws not longer than 12mm (1/2") to fix the brackets to the ALF40 cabinet.

In-Ceiling

The illustration below shows how the supplied brackets can be used to fix the ALF40 to a ceiling joist.
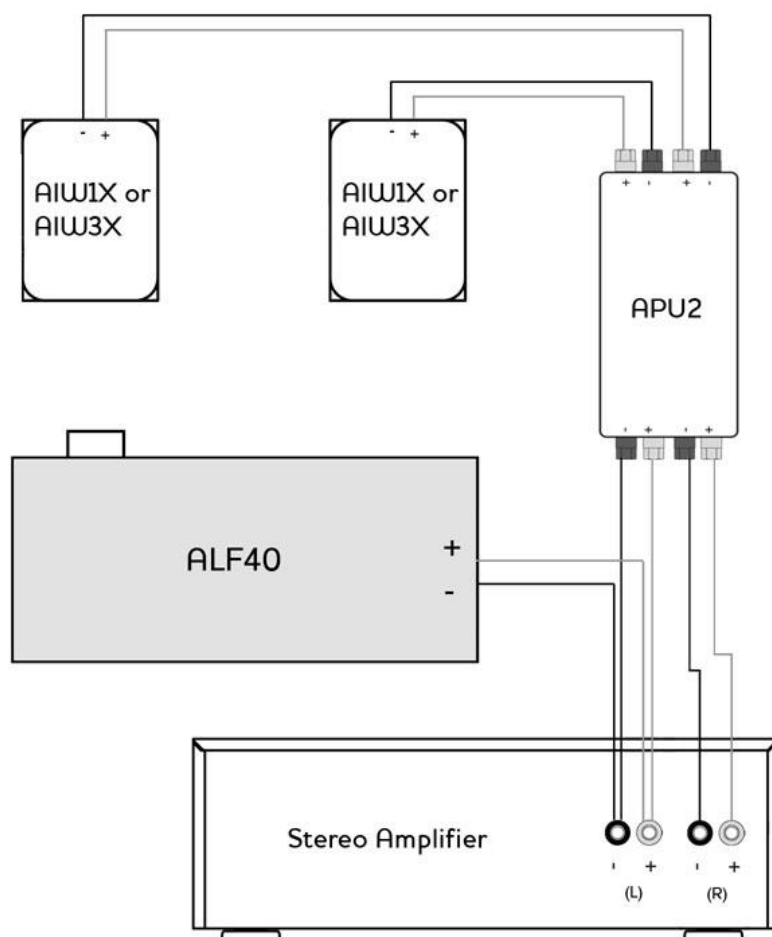
Notice the port protrudes from the cabinet – this is to allow it to protrude through a suitable hole cut in the plasterboard ceiling layer.

A suitable lighting trim may be placed over the port opening to improve its appearance.
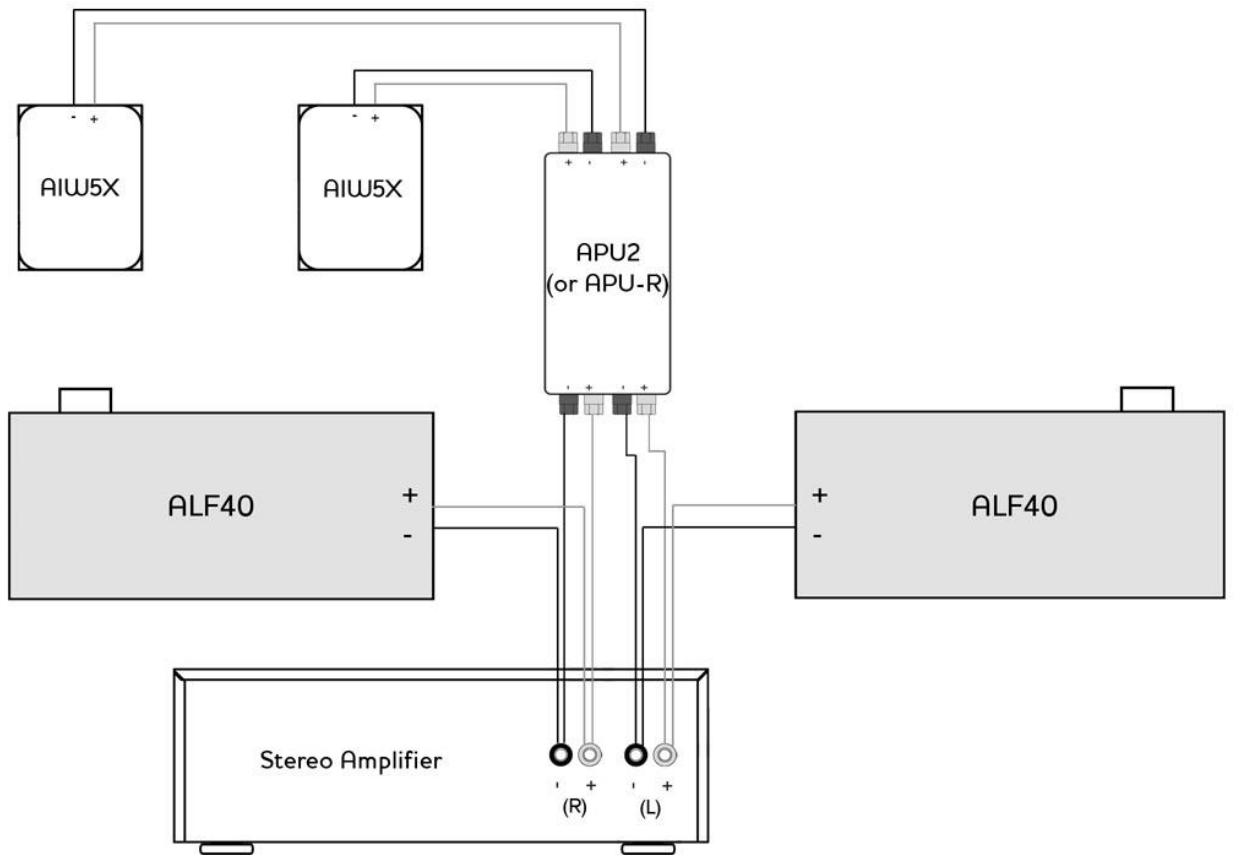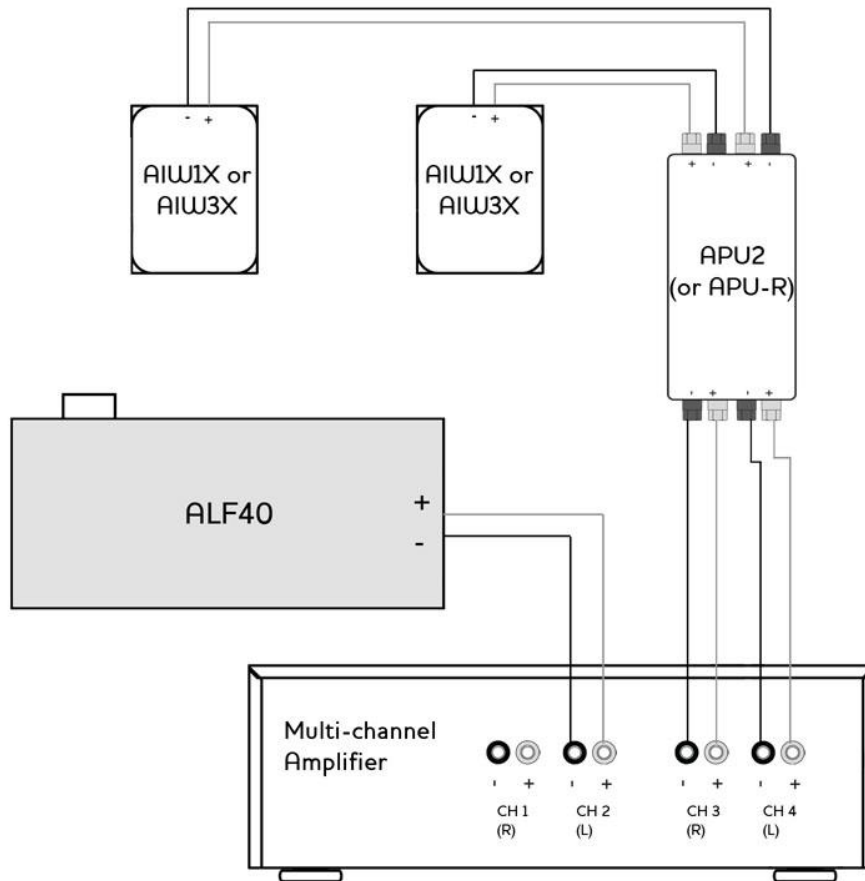
ALF40 Connection Options

Passive 2.1: The output of an ALF40 in most situations will match a pair of AIW1X or AIW3X speakers (2x ALF40 might be necessary to match a pair of AIW3X in a large room). The ALF40 is designed to be connected in parallel with an AIWX series speaker (the APU2 forms part of what is effectively a crossover between ALF40 and AIWX). In this scenario, one of the amplifier channels (Left or Right) is used to drive the ALF40 and one of the AIWX speakers together. It is assumed that bass frequencies are normally mixed in mono; however for orchestral music better performance will be obtained with the ALF40 connected to the Left channel of the amplifier.

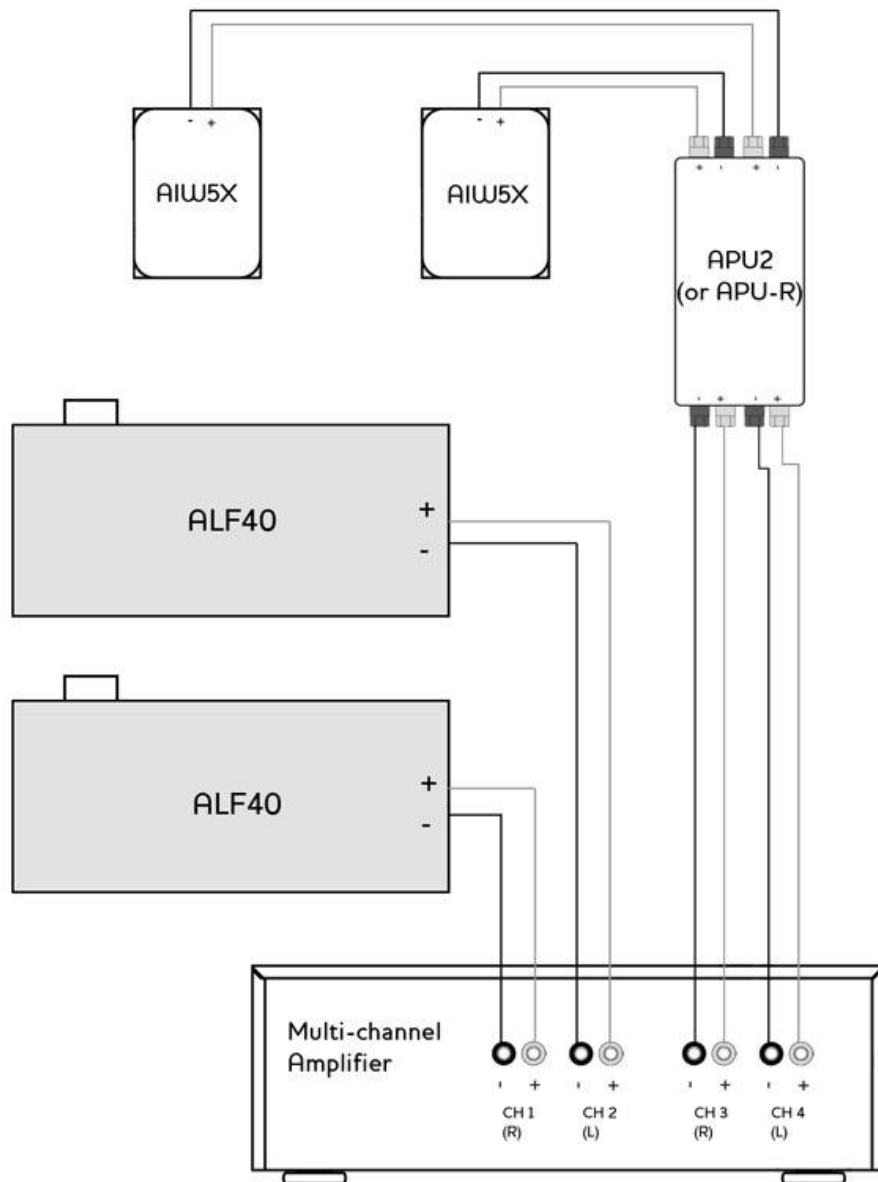## 2. Passive Stereo 2.2: AIW5X pair + 2x ALF40

Passive 2.2: For systems using a pair of AIW5X speakers, a pair of ALF40s will be necessary. In this scenario both channels of the stereo amplifier drive an ALF40 in parallel connection with an AIW5X.

3. Active Stereo 2.1: AIW1X/AIW3X pair + ALF40

Active 2.1: By connecting a single ALF40 to its own amplifier channel, its output relative to the AIW1X/AIW3X pair can be set optimally. In larger rooms care should be taken not to adjust the relative output of the ALF40 so high that its mechanical limits are reached well before those of the accompanying AIWX speakers – consider using two ALF40s if this is the case [see Active 2.2].
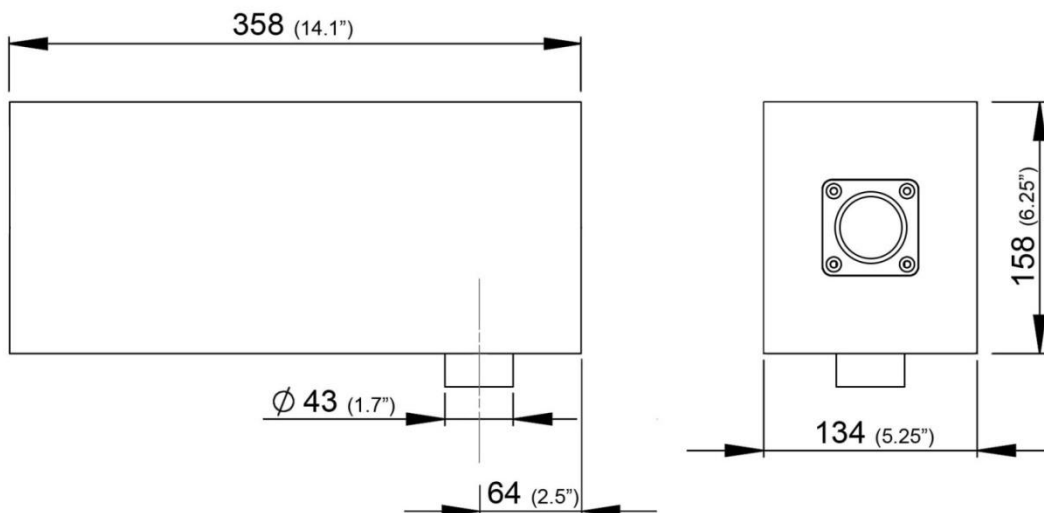
4. Active Stereo 2.2: AIW5X pair + 2x ALF40

Active 2.2: For systems using a pair of AIW5X speakers, a pair of ALF40s will be necessary. In this scenario the amplifier will need four independent channels.

Setup Tips

- When setting up any of the above system scenarios, it is advised to experiment with connecting the ALF40 in reverse phase with respect to the AIWX series speakers. Often, the reverse phase connection results in better integration and slightly higher sound pressure level through "cross-over" region.

- In scenarios 2 and 3 only, a maximum of two ALF40s may be connected in parallel to a single amplifier output [amplifier must be 4 ohm stable]. This will help provide the correct low frequency sound pressure levels in large rooms without needing additional amplifier channels.

- Where there is more than one pair of AIWX speakers in a room, decide which of the above scenarios is applicable to the system and multiply the number (e.g. 2.1) by the number of speaker pairs. Example: a large reception room requires four AIW3X speakers and the amplifier has provision for up to 6 independent amplifier channels. Therefore this could be an Active 4.2 system (2.1x2 = 4.2) or a Passive 4.4 system (2.2x2 = 4.4) depending on how much bass output is required.

Specifications

Dimensions:	358 x 159 x 134mm (14.2" x 5.3" x 6.3")
Weight:	3.03Kg (6.67 lbs)
Design:	Ported, acoustic bandpass with built in protection circuit
Power handling:	40W continuous
Nominal Impedance:	8 Ohms (4 Ohm when used in passive configurations with AIWX speakers)
Frequency Response:	60Hz - 150Hz (+/-6dB), 24dB/octave slope
Sensitivity:	88dB @ 1m/2.83V RMS
Maximum SPL/1m:	103dB
Port location:	Front or end convertible, length adjustable
Port diameter I.D/O.D:	39mm (1.55")/43mm (1.7")
Connection:	3-way binding post (accepts 4mm plugs)

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