ADORN User Guide

MARTIN AUDIO
LONDON

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Introduction

The Martin Audio ADORN series consists of ultra-compact, discreet, easy to deploy speakers for a wide range of commercial integration projects. They deliver superior sound quality and the signature Martin Audio tonal characteristics at a great price point. ADORN is an ideal partner with larger Martin Audio systems in venues with a variety of zones, providing a seamless transition between zones and retaining the same sonic performance and tonal quality.

Models in the range

The ADORN range consists of five on-wall speakers, four in-ceiling speakers and one pendant speaker.

The on-wall speakers are available in black (RAL 9005) or white (RAL 9016).

A40	4" on-wall speaker
A40T	4" on-wall speaker with transformer
A55	5" on-wall speaker
A55T	5" on-wall speaker with transformer
A80T	8" on-wall speaker with transformer

The in-ceiling speakers have bezel-free grilles for a clean look and are available in white only (RAL 9016):

ACS-40TS	4" ceiling speaker with transformer, shallow can
ACS-55TS	5" ceiling speaker with transformer, shallow can
ACS-55T	5" ceiling speaker with transformer, deep can

The pendant model is available in black (RAL 9005) or white (RAL 9016):

ACP-55T	5" pendant speaker with transformer

70/100 V line transformer

All but two of the ADORN speakers have a 70/100 V line transformer. This transformer has a dial that allows you to select the appropriate power output or to switch off the transformer by selecting low impedance. For further details, see 70/100 V line systems (page 13).

The two models without a transformer are the A40 and A55.

Low impedance mode

In low impedance mode, all ADORN speakers except the A80T have an impedance of 16 ohm. If your amplifier has a 2 ohm load capability, you can drive up to eight speakers from a single channel.

The A40 and A55 models don't have a transformer, so these models always have an impedance of 16 ohm.

Note that we don't have a version of the A80T without the transformer, but you can use an A80T and set it to low impedance mode. In this case the A80T has an impedance of 8 ohm.

Protection

All models have built-in independent protection for the high and low frequency drivers to ensure reliable operation in the event of an overload condition.

Weather resistance

You can upgrade any of the on-wall models to an IP rating of IP54 with the addition of an optional weatherised connector cover accessory.

ADORN on-wall speakers

A40 and A40T

A55 and A55T

The A40 is a two-way passive speaker with an elegant design that is perfect for architectural interiors that require high-fidelity sound from an unobtrusive, ultra-compact enclosure. Comprising a 4" (100 mm) LF driver and a 0.75" (19 mm) silk-dome HF driver on a 110° x 80° horn, it handles 40 W AES, 160 W peak and can produce 109 dB peak output at 1 metre.

It is available in black or white, or you can paint (page 37) the ABS enclosure. You can wall-mount the speaker horizontally or vertically using the mounting bracket supplied (page 11).

With the A40 (or the A40T in low impedance mode), the nominal impedance is 16 ohms. You can drive multiple speakers in parallel from a single channel of a low impedance amplifier (page 31) such as the Martin Audio VIA2004.

The A40T model features a built-in 70/100 V multi-tap transformer (page 13) for line operation.

For outdoor use, you can upgrade the speaker to an IP rating of IP54 by adding a waterproof connector cover (page 11) accessory (sold separately).

The A40 and A40T are priced individually and boxed in pairs.

The A55 features a 5.25" (135 mm) LF driver and a 0.75" (19 mm) silk-dome HF driver on a 110° x 80° horn. With a power handling of 50 W AES, 200 W peak, and a maximum SPL of 113 dB at 1 metre, it is designed for background and foreground applications that call for premium sound quality and high levels from a visually discreet enclosure.

It is available in black or white, or you can paint (page 37) the ABS enclosure. You can wall-mount the speaker horizontally or vertically using the mounting bracket supplied (page 11).

With the A55 (or the A55T in low impedance mode), the nominal impedance is 16 ohms. You can drive multiple speakers in parallel from a single channel of a low impedance amplifier (page 31) such as the Martin Audio VIA2004.

The A55T model features a built-in 70/100 V multi-tap transformer (page 13) for line operation.

For outdoor use, you can upgrade the speaker to an IP rating of IP54 by adding a waterproof connector cover (page 11) accessory (sold separately).

The A55 and A55T are priced individually and boxed in pairs.

A80T

The ADORN A80T is a two-way passive speaker with an elegant design that is perfect for architectural environments that require high fidelity sound from an unobtrusive, compact enclosure. Comprising an 8" (203 mm) LF driver and a 1" (25 mm) polymer dome HF compression driver on a 90° x 50° horn, it handles 200 W AES, 800 W peak and can produce 120 dB peak output at 1 metre. It has a smooth frequency response and strong bass reproduction that extends down to 63 Hz.

It is available in black or white, or you can paint (page 37) the speaker to match your décor. You can wall-mount the speaker horizontally or vertically using the supplied accessory WB6/8 bracket (page 11).

The A80T includes a high-quality 70/100 V multi-tap transformer (page 13) for line operation, with transformer taps selected by a rotary switch. Alternatively, you can switch off the transformer by choosing low impedance. In this case the impedance is 8 ohms.

For amplifiers (page 31), the VIA2502 or VIA5004 (or VIA5002 for 70V/100V line) in combination with a Martin Audio DX0.4 or DX0.6 controller will be perfect partners for small-scale efficient installations. Combine these amps with the DX4.0 controller for larger more complex installations managed by Martin Audio's Vu-Net control software.

For full bandwidth protection, the low and high-frequency sections are individually protected against overload.

For outdoor use, you can upgrade the speaker to an IP rating of IP54 by adding a waterproof connector cover (page 11) accessory (sold separately).

The A80T is priced and boxed individually.

ADORN ceiling speakers

ACS-40TS

ACS-55TS

The ACS-40TS ceiling speaker has a 4" (100 mm) LF driver and a 0.75" (19 mm) silk-dome tweeter. It produces 108 dB peak output at 1 metre and has a high-fidelity sonic character ideal for both music and speech reproduction. The ported design delivers strong bass that extends down to 73 Hz.

The very wide 180° conical coverage of the ACS-40TS makes it particularly suitable for low ceilings and reduces the number of speakers required for even coverage — leading to a reduction in installation cost. It features a shallow back can for installation in ceilings with a minimum cavity depth.

The ACS-40TS is priced individually and boxed in pairs.

The ACS-55TS ceiling speaker has a 5.25" (100 mm) LF driver and a 0.75" (19 mm) silk-dome tweeter. It produces 113 dB peak output at 1 metre and has a high-fidelity sonic character ideal for both music and speech reproduction. The ported design delivers strong bass that extends down to 79 Hz.

The wide 150° conical coverage of the ACS-55TS makes it particularly suitable for low ceilings and reduces the number of speakers required for even coverage — leading to a reduction in installation cost. It features a shallow back can for installation in ceilings with a minimum cavity depth.

The ACS-55TS is priced individually and boxed in pairs.

ACS-55T

The ACS-55T has a 5.25" (100 mm) LF driver and a 0.75" (19 mm) silk-dome tweeter. It produces 113 dB peak output at 1 metre and has a high-fidelity sonic character ideal for both music and speech reproduction. The ported bass reflex design and back can with generous internal volume maximises low frequency output and delivers strong bass that extends down to 62 Hz.

The wide 150° conical coverage of the ACS-55T reduces the number of speakers required for even coverage — leading to a reduction in installation cost.

The ACS-55T is priced individually and boxed in pairs.

ADORN pendant speaker

ACP-55T

The ACP-55T pendant speaker has a 5.25" (100 mm) LF driver and a 0.75" (19 mm) silk-dome tweeter and produces 109 dB peak output at 1 metre. It delivers superb sound quality for both music and speech reproduction. It has a stylish pendant enclosure equipped with a single point mounting system plus provision for attaching a safety cable.

The consistent and wide 150° conical coverage of the ACP-55T reduces the number of speakers required for even coverage — leading to a reduction in installation cost.

The ACP-55T is priced and boxed individually.

Subwoofers

For a full range music system, you can supplement ADORN speakers with one or more subwoofers from the Martin Audio SX series. You could use any of our SX subwoofers, but the combinations that make sense are as follows:

	A40 and A55	A80T
SX110	Yes	
SX210	Yes	Yes
SX112	Yes	Yes
SX212	Yes	Yes
SX115		Yes
SXC115		Yes
SX215		Yes

For details of the SX subwoofers, see our website martin-audio.com.

With a subwoofer, you also need a system controller (page 34), and you may need an additional amplifier. For details, see Amplifiers (page 31).

ADORN accessories

Weatherised connector cover kit AIPKIT

The optional AIPKIT weatherised connector cover kit upgrades the A40, A40T, A55 or A55T to an IP rating of IP54 rating for outdoor use. The kit includes a connection cover, screws, rubber gasket seal and cable gland. This kit is available in black (AIPKIT) and white (AIPKIT-W).

The input cable hole is on the left and there is a knockout hole on the right for an optional daisy chain cable.
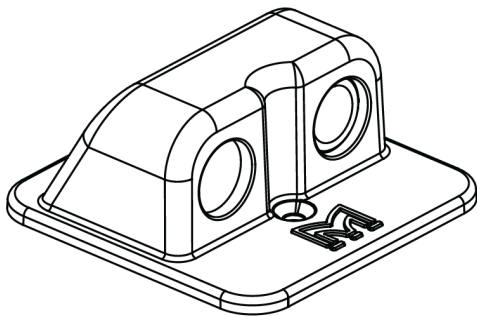
## Weatherised connector cover kit ASF09007

The optional ASF09007 weatherised connector cover kit upgrades the A80T to an IP rating of IP54 for outdoor use. The kit includes a connection cover, rubber gasket seal, cable gland and screws. This kit is only available in black.

The input cable hole is on the left and there is a knockout hole on the right for an optional daisy chain cable.
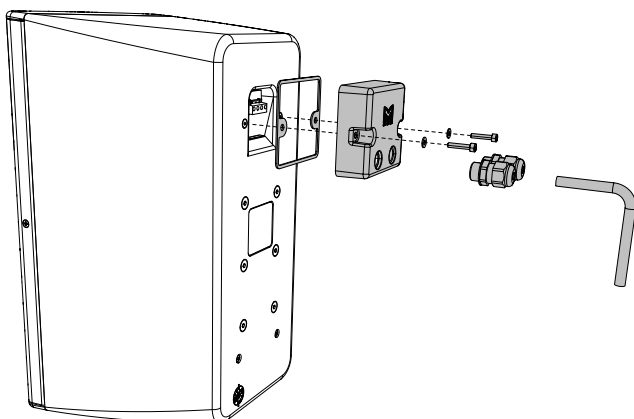
Wall bracket ASM10001/2

We supply the A40, A40T, A55 and A55T with a weatherised bracket that attaches to the wall (page 16) and provides tilt and pan (replacement part ASM10002 for black and ASM10001 for white).
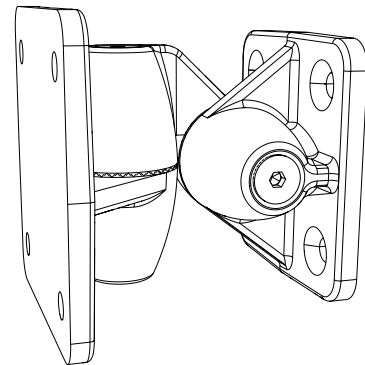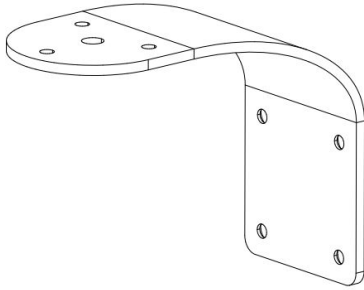
Wall bracket WB6/8

We supply the A80T with a weatherised bracket that attaches to the wall (page 19) and provides tilt and pan (replacement part WB6/8B for black and WB6/8W for white).
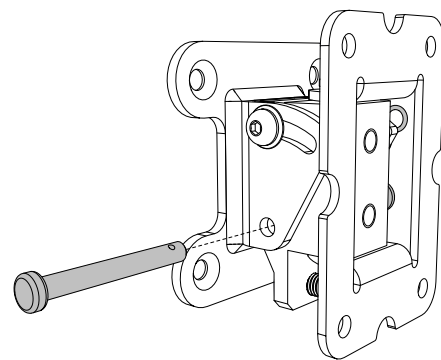
Ceiling bracket CDDCB5
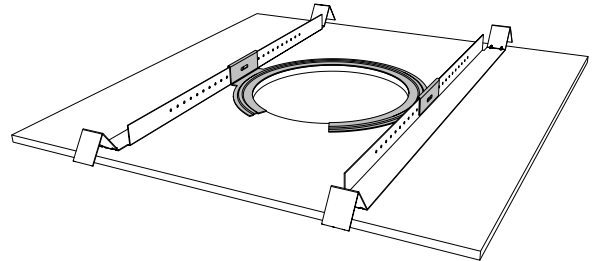
This optional bracket allows you to ceiling mount (page 22) the A40, A40T, A55 and A55T. This bracket is weatherised for outdoor use and is available in black (CDDCB5B) and white (CDDCB5W). This ceiling bracket connects to the wall bracket supplied with the speaker. Note that if you ceiling mount these speakers,

you can only install in landscape, and this will impact the dispersion of the speaker (page 16).

Ceiling bracket CDDCB6/8

This optional bracket allows you to ceiling mount (page 24) the A80T. This bracket is weatherised for outdoor use and is available in black (CDDCB6/8B), white (CDDCB6/8W) and custom RAL colours (CDDCB6/8RAL). Note that if you ceiling mount the A80T, you can only install in landscape, and this will impact the dispersion of the speaker (page 16).

Tile rails

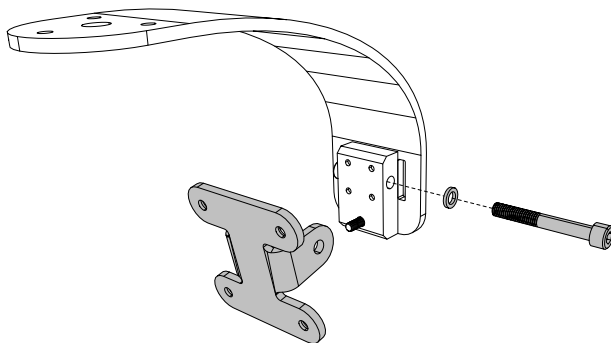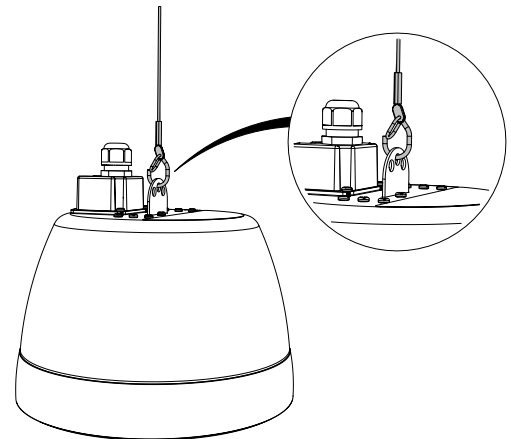We supply each ADORN ceiling speaker with two tile rails for installing into suspended ceilings (page 26).

C bracket

We supply each ADORN ceiling speaker with an appropriately sized C bracket for installing into suspended ceilings (page 26).
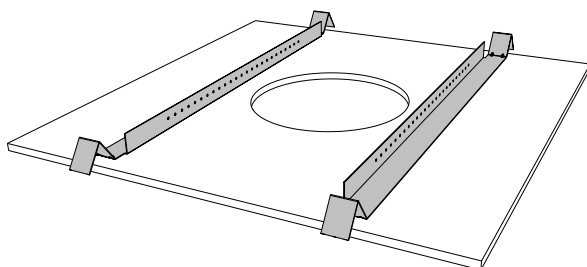
Suspension cable CK3

CK3 is an optional 3 metre (10 ft) steel suspension cable for suspending the ADORN pendant speaker ACP-55T. This accessory includes a pre-crimped snap-on hook and an express lock for cable length adjustment. CK3 is priced individually and packed in pairs.
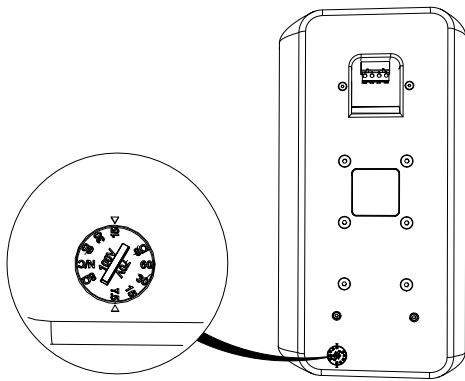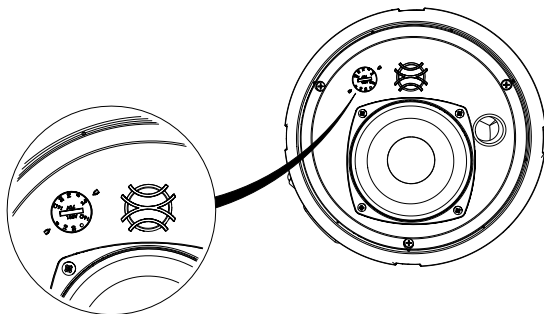
70/100 V line systems

For 70/100 V line systems, you select the appropriate tap using a rotary switch:

- For ADORN on-wall speakers A40T, A55T and A80T, the rotary switch is on the back.

- For ADORN ceiling and pendant models, the rotary switch is on the front baffle.

⚠ The sum of the speaker taps must be less than the rated power output of the amplifier channel.

A40T and ACS-40TS

Position	70 V	100 V
1	2.5 W	5 W
2	5 W	10 W
3	10 W	20 W
4	20 W	Not used
5	16 ohm	16 ohm

A55T, ACS-55T, ACS-55TS and ACP-55T

Position	70 V	100 V
1	3.75 W	7.5 W
2	7.5 W	15 W
3	15 W	30 W
4	30 W	Not used
5	16 ohm	16 ohm

A80T

Position	70 V	100 V
1	7.5 W	15 W
2	15 W	30 W
3	30 W	60 W
4	60 W	Not used
5	8 ohm	8 ohm

Amplification for 70/100 V line systems

For a 70/100 V line system, we recommend the VIA5002. For details, see Amplifiers (page 31).

Connecting on-wall speakers

With the ADORN on-wall speakers, there are two types of connections:

- The A40, A40T, A55 and A55T have a pair of spring-loaded push terminals, one red and one black.

- The A80T has a pluggable low-profile four-pin Phoenix-style connector.

To connect the A40, A40T, A55 and A55T

1. Strip about 10 mm of insulation from speaker cable ends.

2. If you have stranded cables, twist the ends or attach crimped bootlace ferrules.

3. Press the terminal lever and insert the cable. Connect positive (+) to the red terminal and negative (−) to the black terminal.

4. To daisy-chain connections to several speakers, insert pairs of cables into each hole. You could twist the cable ends together.

To connect the A80T

1. Take hold of the lower section of the connector (the part that sticks out) and ease it downwards until it unplugs from the upper section.
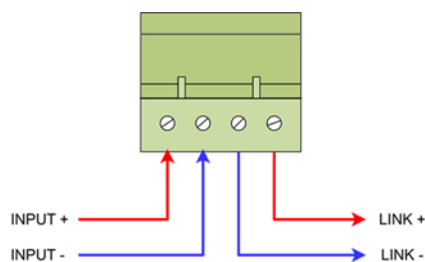
2. Wire the speaker cable to the connector using the two screw fittings on the left:

- Connect positive from the amplifier to the leftmost pin (labelled **INPUT +**).

- Connect negative from the amplifier to the second pin (labelled **INPUT –**).

3. To daisy-chain the amplifier output to further speakers on the same circuit, use the two screw fittings on the right:

- Connect negative for the next speaker to the third pin (labelled **LINK –**).

- Connect positive for the next speaker to the rightmost pin (labelled **LINK +**).

4. Plug the connector back into the speaker.

Connecting ceiling and pendant speakers

The ADORN ceiling and pendant speakers have a connection cover to keep the cable connections safe and help prevent accidental disconnections.

To connect ceiling and pendant speakers

1. Strip about 10 mm of insulation from speaker cable ends.

2. If you have stranded cables, twist the ends or attach crimped bootlace ferrules.

3. Loosen the four screws in the connection cover and remove this cover. You can remove the cover without removing the screws.

4. Pass the cable through the gland from the outside.

5. Connect the speaker cables to the four-pin ceramic terminal block using the cross-head screw fittings.

   - Connect positive (+) from the amplifier to the leftmost pin.

   - Connect negative (−) from the amplifier to the second pin.

   - If daisy-chaining, connect negative (−) for the next speaker to the third pin.

   - If daisy-chaining, connect positive (+) for the next speaker to the rightmost pin.

6. Replace the connector cover making sure there's no strain on the connections.

7. Tighten the gland to seal the connection.

Wall mounting

We supply all ADORN on-wall speakers with wall brackets:

- For the A40, A40T, A55 and A55T, the bracket has three parts: a part that attaches to the wall, a part that attaches to the cabinet and a link section that joins the two. This link section allows you to adjust the speaker both horizontally and vertically.

  If you only need to adjust the speaker in one plane (horizontally or vertically), you can leave out the link section. In this case, the speaker will fit a little closer to the wall.

- For the A80T, the bracket has two parts and allows you to adjust the speaker horizontally and vertically.

Portrait or landscape

Whenever possible, install ADORN on-wall speakers in portrait. If you install in landscape, the dispersion will be impacted because you can't rotate the driver:

| Speaker	Dispersion in landscape
A40, A40T, A55, A55T	80° H x 110° V
A80T	50° H x 90° V

Note that you if you ceiling-mount ADORN on-wall speakers (page 22), you can only install in landscape and so the dispersion will always be impacted.

To wall mount A40, A40T, A55 and A55T

1. Decide whether you need to adjust the installed speaker horizontally or vertically or in both planes.

2. Separate the wall section from the rest of the bracket using a 4 mm hex key (H4).

   - The wall section is larger and has fixing holes on 45 mm (1.77 in) centres.

   - The cabinet section is smaller and has countersunk holes on 35 mm (1.38 in) centres.
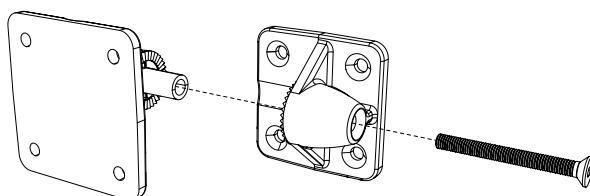
3. If you only need to adjust the speaker in one plane (horizontally or vertically), remove the link section from the cabinet section using a 4 mm hex key (H4).
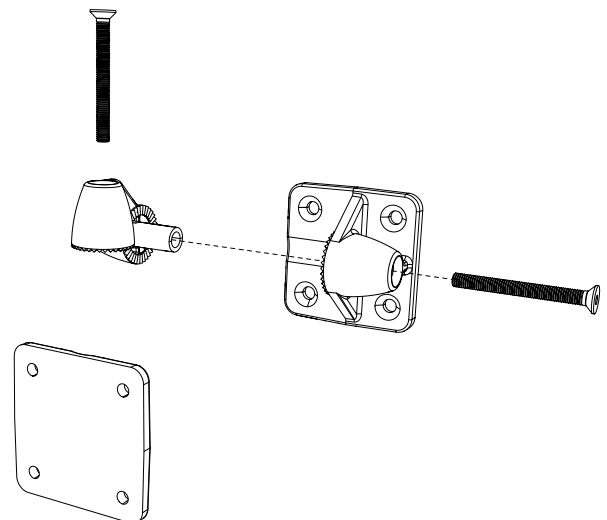

4. Attach the wall section to the wall. The wall section has four holes with diameter 5.2 mm (0.2 in).

   So that the installation is safe and secure, you must use fixings that are appropriate for the wall surface and the weight of the speaker.

   If you need to adjust the speaker in both planes (or horizontally only), fit the bracket with the peg upwards, as shown below.
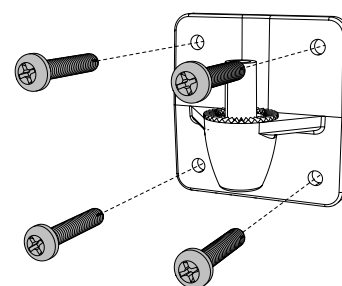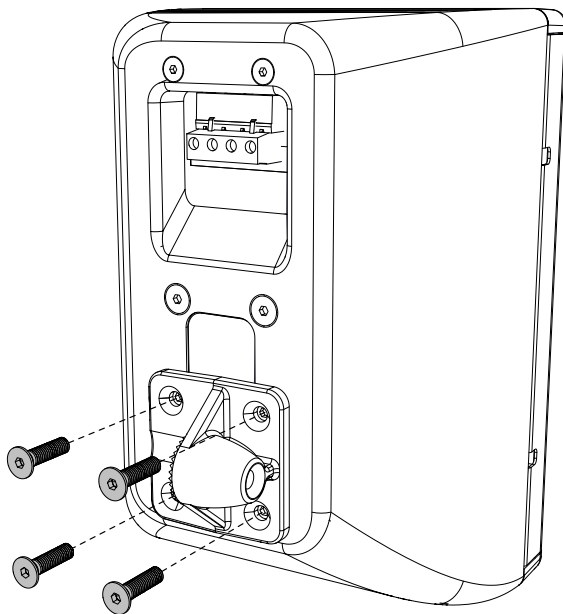
If you only need to adjust the speaker vertically, fit the bracket with the peg sideways, as shown below.
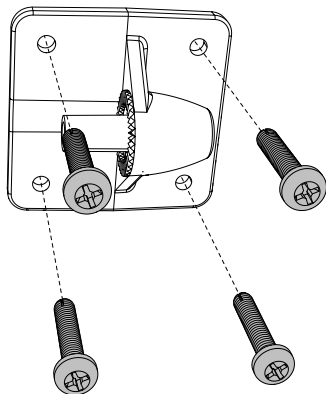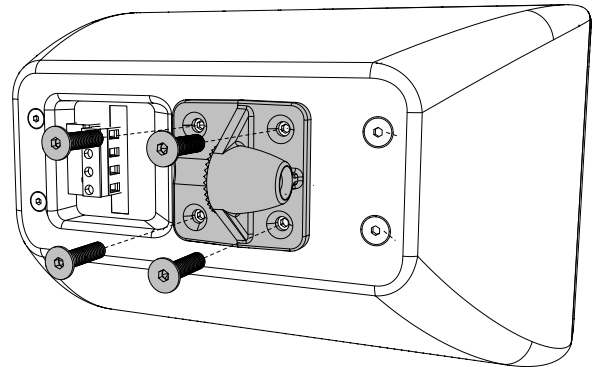

5. Remove four screws (M5) from the back of the cabinet using a 3 mm hex key (H3) and attach the cabinet bracket section using these screws.

    If you need to adjust the speaker in both planes (or vertically only), fit the bracket with the opening sideways, as shown below for portrait:
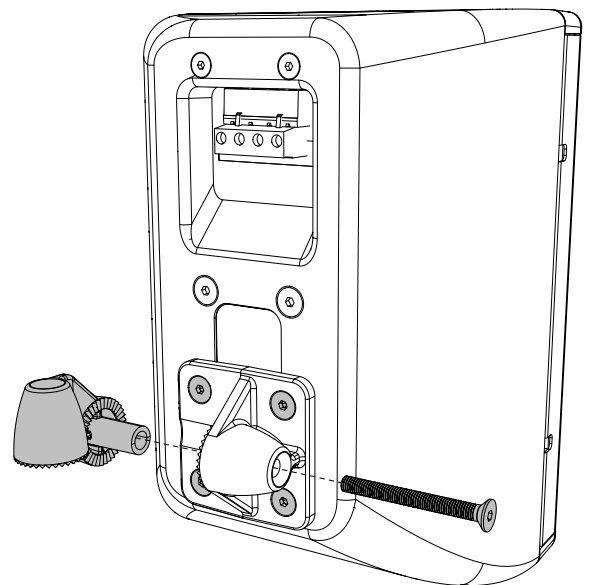

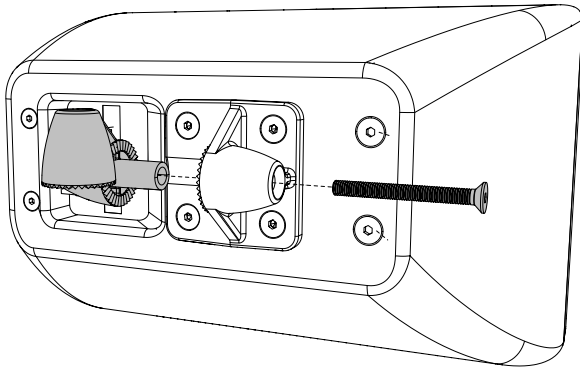For landscape, use the same arrangement, as shown below:

If you only need to adjust the speaker horizontally, fit the bracket with the opening downwards.
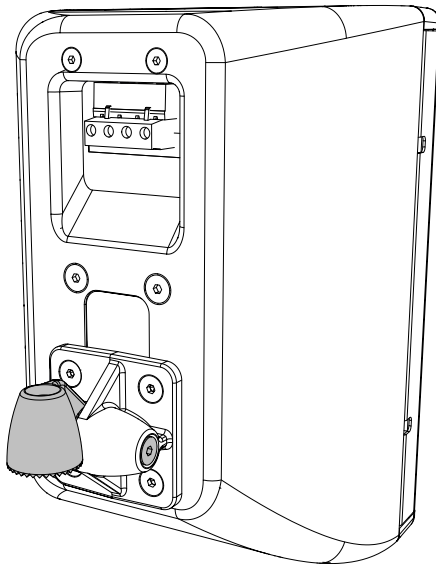
6. If you need to adjust in both planes, fit the link section to the cabinet section, as shown below for portrait:
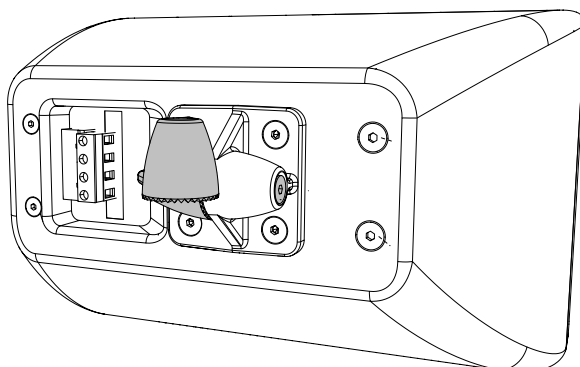
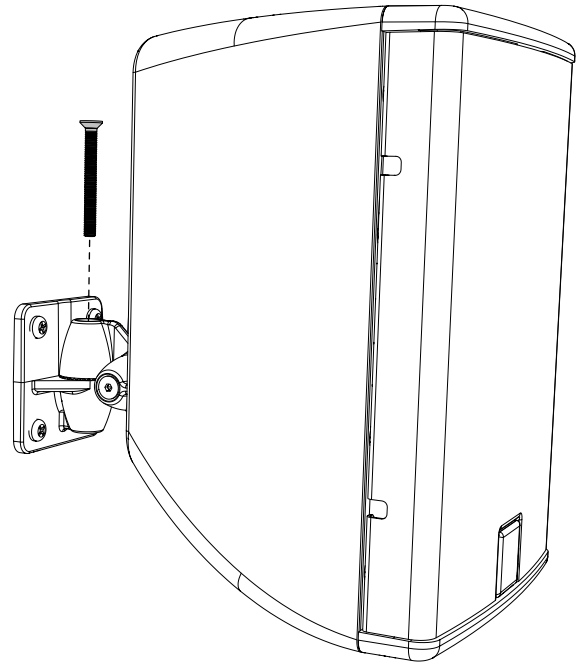For landscape, use the same arrangement, as shown below:

7. Bolt this link section in place, as shown below for portrait:

For landscape, use the same arrangement, as shown below:

8. Lift the speaker up to the wall bracket section.

If the wall bracket peg is upwards, the other section will hook securely in place freeing up your hands. You can then fit the pivot bolt.

If the wall bracket peg is sideways (allowing only vertical adjustment), slide the two sections of the bracket together and support the speaker with one hand while you insert the pivot bolt with your other hand.

9. Tighten the bolt but leave it a little loose to allow for final adjustment. The radial teeth of the bracket allow you to adjust the speaker in increments of approximately 10°. If the fitting includes the link section, loosen the other fitting slightly, so that you can adjust in the other plane.

10. Connect the speaker cables (page 14).

11. Check the coverage using an audio source and make final adjustments to the vertical and horizontal positions.

12. When you have found the best position, tighten the vertical and horizontal bolts.

To wall mount A80T

1. Remove the R-clip and washer from the lower pin.
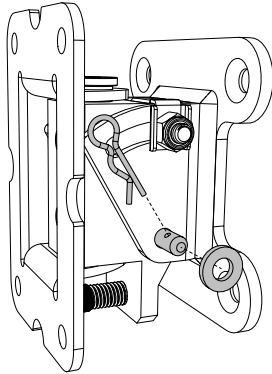
2. Remove the lower pin and separate the two halves of the bracket (don't remove the upper nut and bolt in the curved slot).
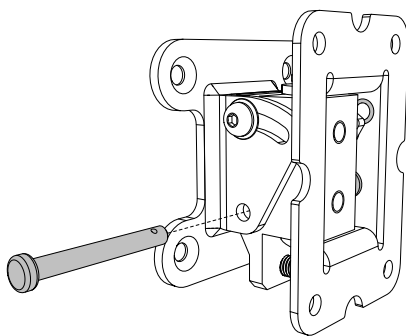
3. Attach the wall section to the wall. Note that the wall section is rectangular while the cabinet section is square. The grub screw needs to be at the bottom and the sideways notch at the top.
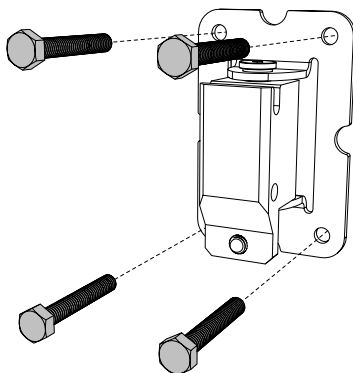
So that the installation is safe and secure, you must use fixings that are appropriate for the wall surface and the weight of the speaker.

The wall section has four holes with diameter 7 mm.

4. Remove (and keep) four screws from the back of the cabinet (using a 4 mm hex key). For landscape, remove the four screws in the middle of the cabinet. For portrait, remove the lower four screws.
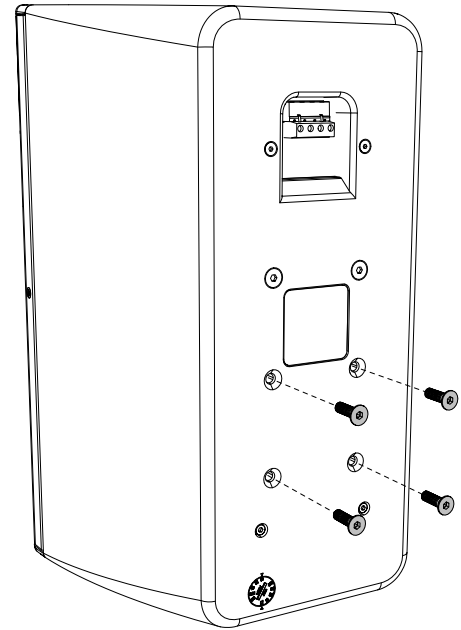
5. Attach the cabinet section using the same screws. The bolt needs to be horizontal as shown below.
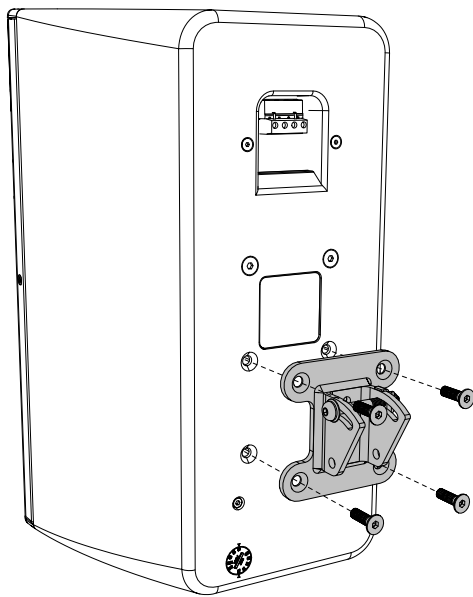
6. Lift the speaker up to the bracket and hook the horizontal bolt into the notch of the wall section.

⚠ If you attach a safety tether to one of the two remaining holes in the cabinet, the M6 screw must be at least 25 mm (1 in) long.
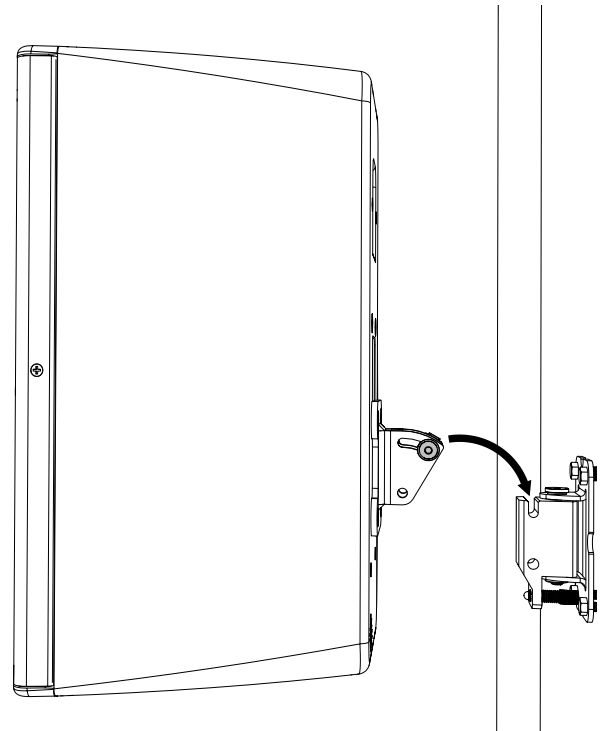
The bracket will now hold the speaker in place.
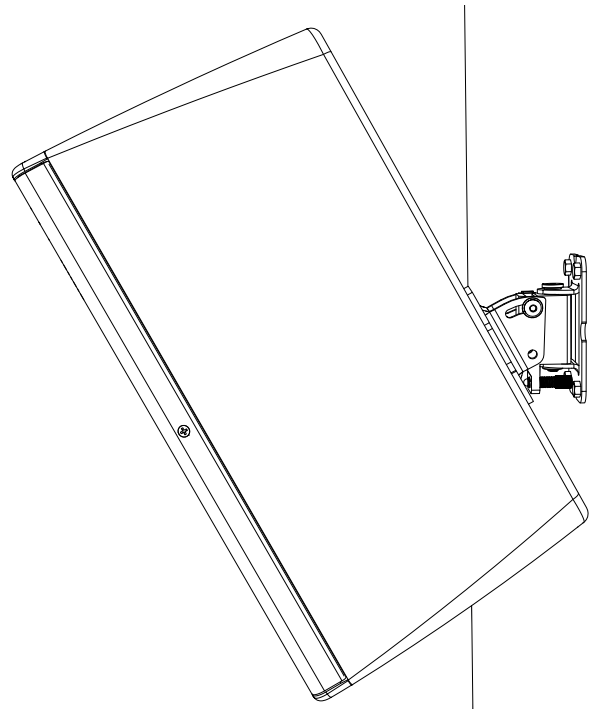
⚠️ When working at height, you must use appropriate safety measures.

A scaffold tower or lifting platform will allow you to use both hands safely.

7. Replace the lower pin.
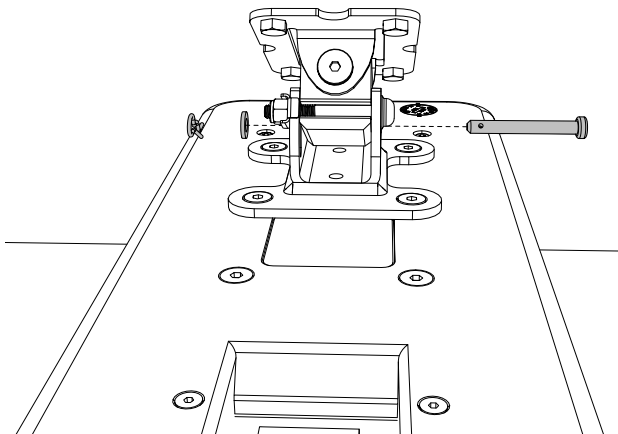
8. Replace the washer and R-clip.
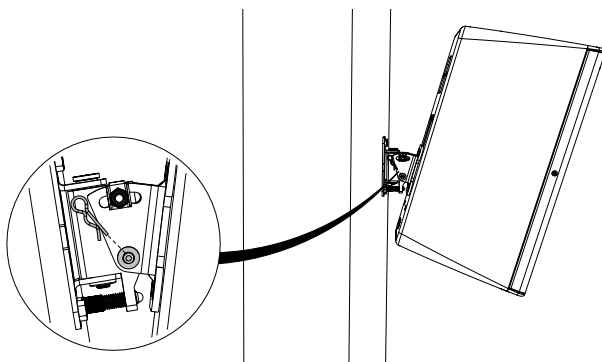
9. Loosen the vertical bolt (using an M5 hex key) and adjust the speaker horizontally on this bolt.
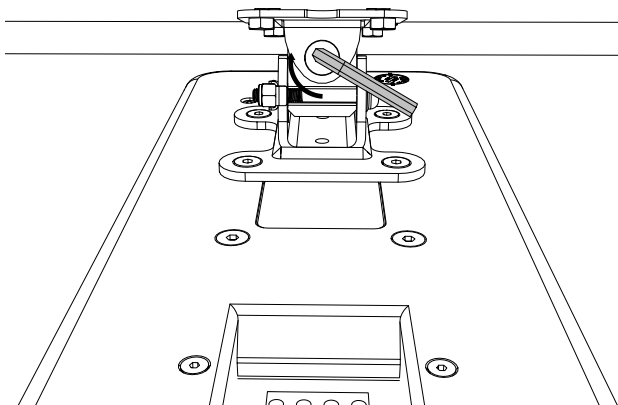
10. Loosen the upper horizontal bolt.
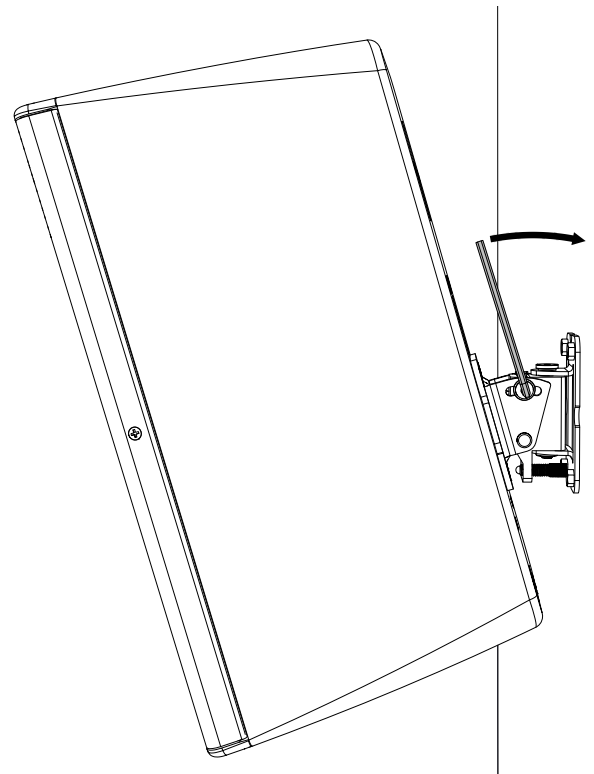
11. Adjust the vertical position using the grub screw.
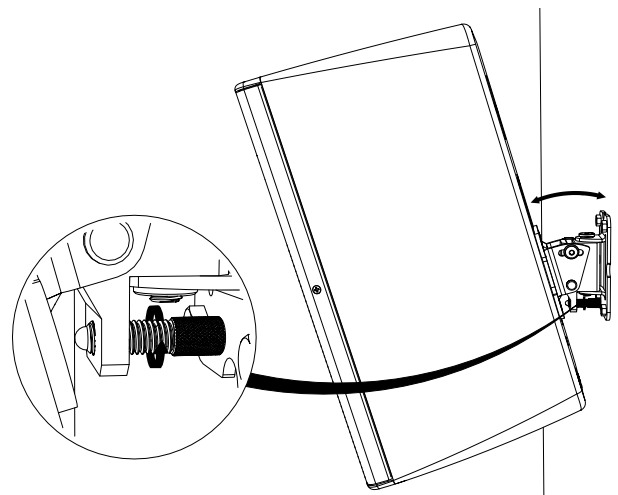
12. Connect the speaker cables (page 14).

13. Check the coverage using an audio source and make final adjustments to the vertical and horizontal positions.

14. When you have found the best position, tighten the vertical and horizontal bolts.

MARTIN AUDIO
L O N D O N

Ceiling mounting on-wall speakers

To mount ADORN on-wall speakers on the ceiling, use optional ceiling brackets:

- For A40, A40T, A55 and A55T use bracket CDDCB5.

- For A80T use bracket CDDCB6/8.

If you mount ADORN on-wall speakers on the ceiling, you can only install in landscape, and this will impact the dispersion. For details, see Portrait or landscape (page 16).

To mount A40, A40T, A55 and A55T on the ceiling

1. Disassemble the wall bracket (supplied with the speaker). This is because ceiling bracket CDDCB5 connects to the wall bracket rather than the speaker.

   For details of the wall bracket, see Wall mounting (page 16).

2. Bolt the wall section of the wall bracket to the ceiling bracket using the four M5 screws, plain washers and Nyloc nuts supplied with the ceiling bracket.
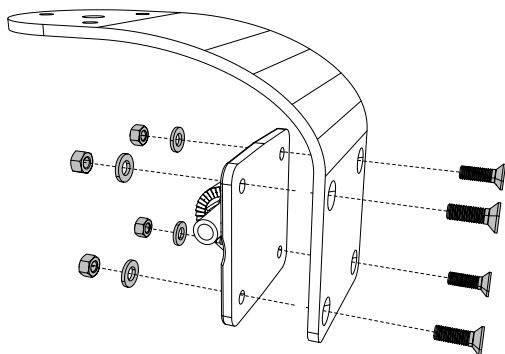
Make sure that the peg is sideways as shown below:
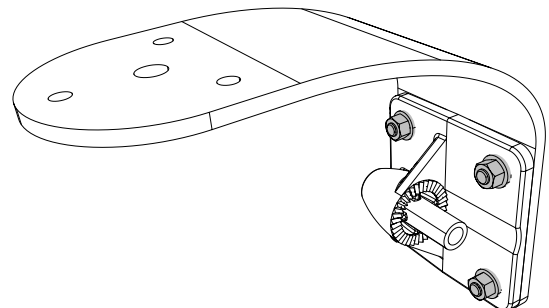
3. Fix the ceiling bracket to the ceiling. The bracket has three 5.5 mm (0.22 in) holes and a central 8.5 mm (0.33 in) hole.
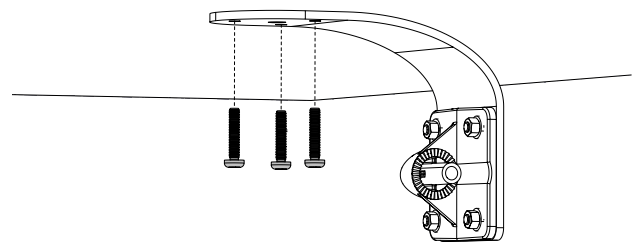
If the three smaller holes will give a safe and secure fixing (for example, by using wood screws into a batten above plasterboard), you could use the central hole for cable routing.

Alternatively, you could start by using a single fixing through the central hole, allowing you to find the correct horizontal coverage by pivoting the speaker on this fixing. When you have found the best position, tighten the central fixing and add fixings to the three smaller holes.

⚠️ Since the speakers may be positioned over people's heads, you must use fixings that are appropriate for the ceiling construction and the speaker's weight. Ensure that the attachment is safe and secure.

4. Remove four M5 screws from the back of the cabinet using a 3 mm hex key (H3) and attach the cabinet section of the bracket using the same screws.
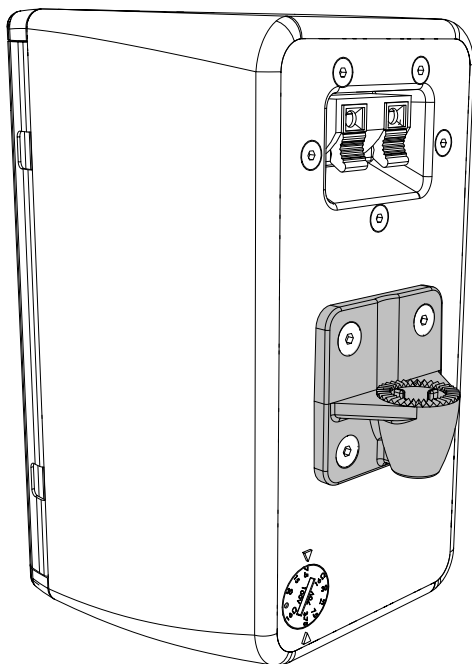
5. Connect the link section to the cabinet section of the wall bracket.
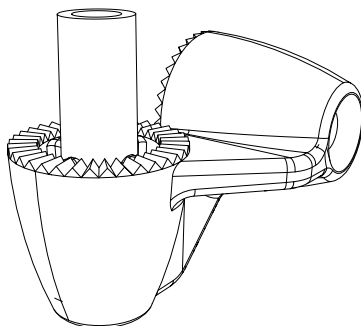
6. Lift the cabinet up to the ceiling bracket.
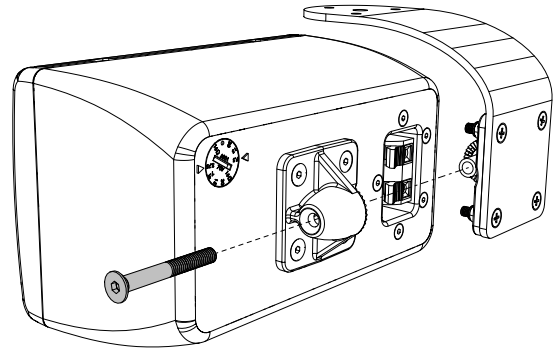
Attach the two parts of the bracket using the 5 mm securing bolt. So that you can adjust the speaker, leave the bolt slightly loose.
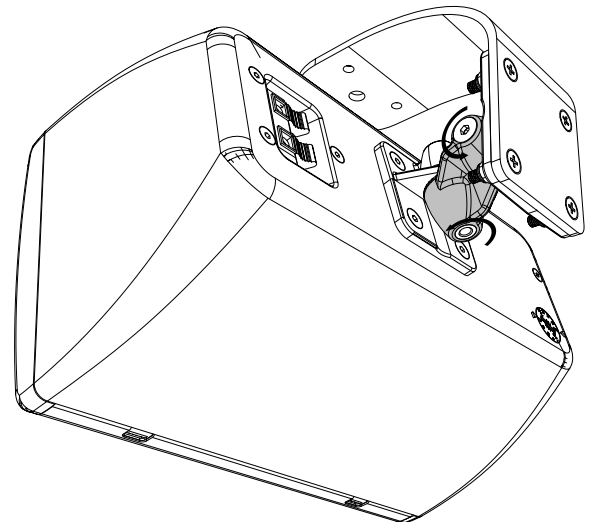
7. Connect the speaker cables (page 14).

8. Check the coverage using an audio source and make final adjustments to the vertical and horizontal positions.

9. When you have found the best position, tighten the vertical and horizontal bolts.

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To mount the A80T on the ceiling

1. Unscrew the cabinet section of the bracket from the ceiling arm using an M6 hex key.
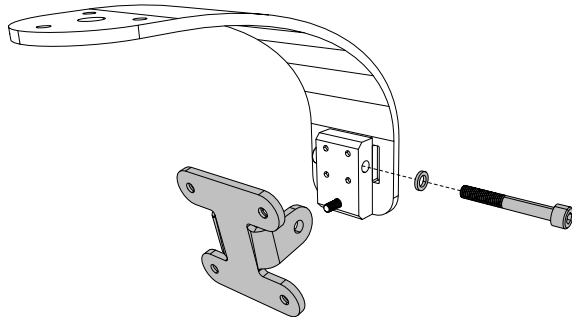
2. Fix the ceiling arm to the ceiling. The ceiling arm has three 6.5 mm (0.26 in) holes and a central 13 mm (0.51 in) hole.
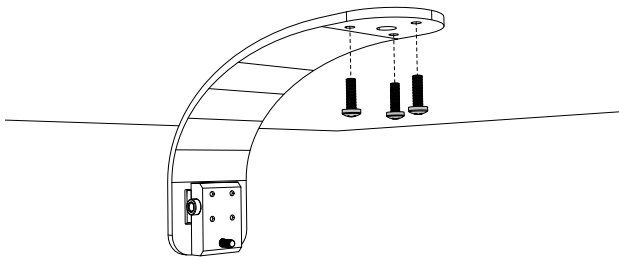
    If the three smaller holes will give a safe and secure fixing (for example, by using wood screws into a batten above plasterboard), you could use the central hole for cable routing.

    Alternatively, you could start by using a single fixing through the central hole, allowing you to find the correct horizontal coverage by pivoting the speaker on this fixing. When you have found the best position, tighten the central fixing and add fixings to the three smaller holes.

    > ⚠️ Since the speakers may be positioned over people's heads, you must use fixings that are appropriate for the ceiling construction and the speaker's weight. Ensure that the attachment is safe and secure.

3. Terminate the speaker cable with the Phoenix-style connector (page 14) supplied with the speaker.

Note that you could stop at this stage (for first fix) and complete the rest of the steps later (for second fix).

4. Remove four M6 screws from the cabinet using a 4 mm hex key (H4) and attach the cabinet bracket section using the same screws.

    There are six M6 screws and you need to remove the four screws in the middle of the cabinet.
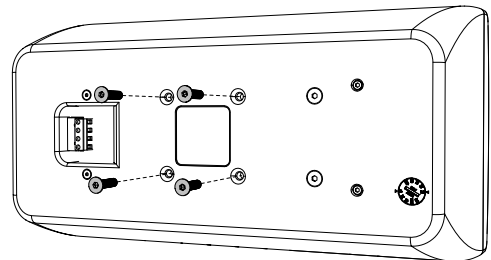
    Fit the bracket with the bolt holes horizontal, as shown below.
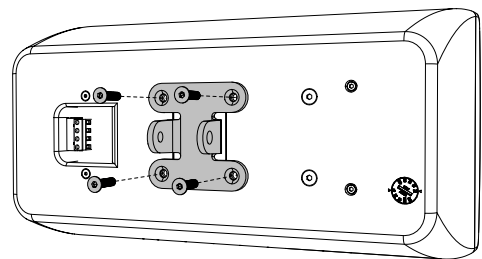
    > ⚠️ If you attach a safety tether to one of the two remaining holes in the cabinet, the M6 screw must be at least 25 mm (1 in) long.

5. Lift the cabinet up to the ceiling bracket and attach the two parts of the bracket using the 5 mm securing

bolt. Leave the bolt a little loose, so you can adjust the vertical speaker position.
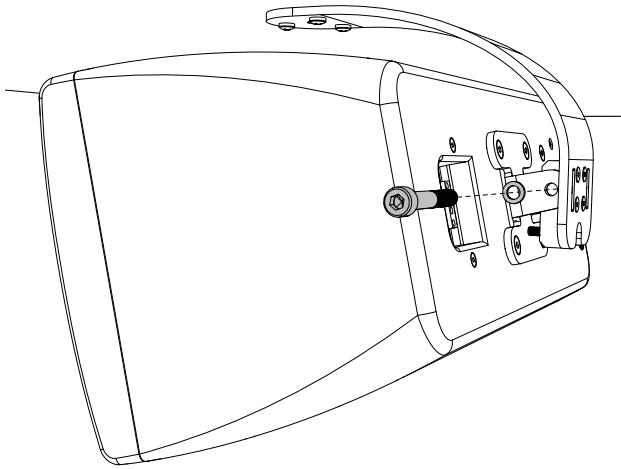
6. Adjust the vertical position using the grub screw accessed from the rear of the bracket.
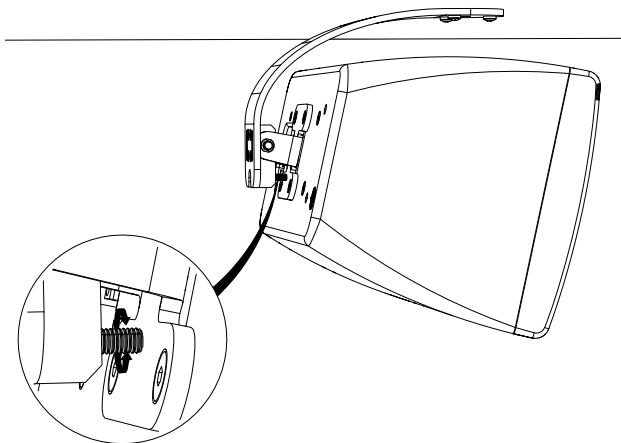
7. Plug in the Phoenix-style connector (page 14).

8. Check the coverage using an audio source and make final adjustments to the vertical and horizontal positions.

9. When you have found the best position, tighten the vertical and horizontal bolts.

Installing ceiling speakers

Cutting ceiling holes

We supply the ADORN ceiling speakers with a cut-out template. This template also acts as the packaging holding the speaker in place in the cardboard box, so take care not to throw this temple away with the packaging.

As an alternative, you can cut a circular hole with the following diameter:

ACS-40TS	197 mm (7.76 in) diameter ceiling hole
ACS-55TS and ACS-55T	222 mm (8.74 in) diameter ceiling hole

The ceiling speaker fixings allow a maximum ceiling thickness of 30 mm (1.18 in).

Suspended ceilings

The ADORN ceiling speakers include two tile rails and a C bracket for use with suspended or false ceilings.

To prepare a suspended ceiling

1. Remove the ceiling tile and cut a hole in the centre of the tile (see above).
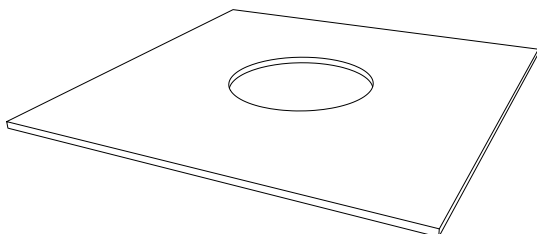
2. Place the tie rails on either side of the hole, orientated as shown and ensuring that the ends align with the edges of the tile.
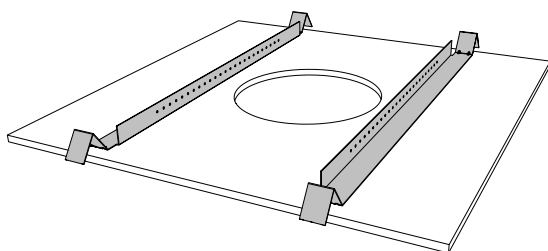
3. Place the C-bracket in position over the hole with the clips hooked over the rails. Make sure the bracket is aligned accurately with the hole.
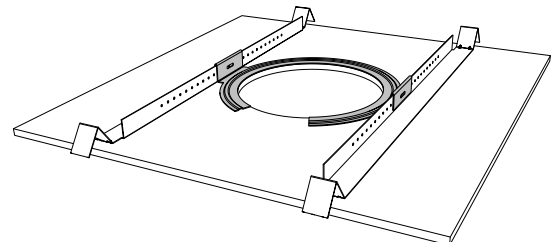
4. Screw the C-Bracket in place with the screws provided. Screw from the hole side through to the rails. This will make it easier to access the screws if you need to make an adjustment later.
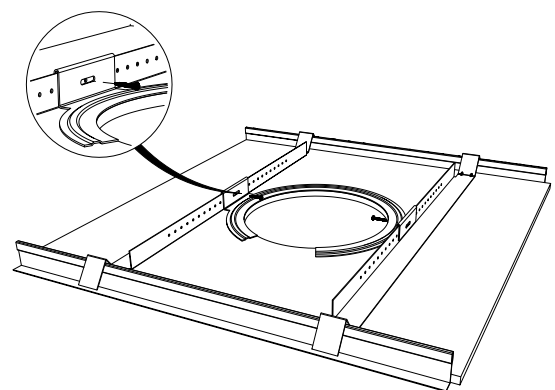
5. Place the bracket assembly into the ceiling. Re-shape the ends of the tile rail so that they fit onto the supporting frame for the ceiling. Note that the tile rails simply hook on top of the ceiling frame; they are not fixed in position.

6. Once the tile is back in position, make sure that the rails sit on the ceiling frame and that the C-Bracket is accurately lined up with the hole.

   If necessary, reach through the hole and loosen the fixing screws holding the C-Bracket to the rails, adjust the position and re-tighten the screws.

Installing a ceiling speaker

Once you have prepared a suitable hole in the ceiling, or have prepared a suspended ceiling as described above, you can now install the speaker.

To install a ceiling speaker

1. Pull the cabling down through the hole. It is important that there is enough slack on the cable to allow easy connection of the cables to the speaker.

2. Connect the speaker cable (page 15).

3. Fit a safety wire to the tab and make sure that this is firmly attached to a fixing point independent of the ceiling structure.

4. If necessary, rotate the fixing tabs so that they are parallel to the edge of the bezel, and will be out of the way when you insert the speaker through the ceiling hole. When you tighten the fixing screws, these fixing tabs rotate 90° and tighten to the ceiling to hold the speaker securely in place.
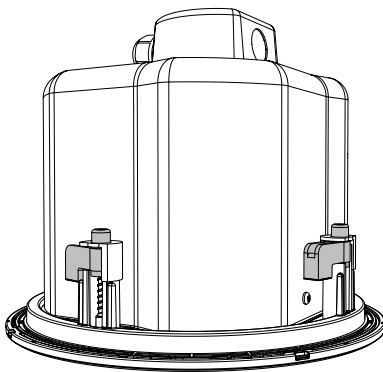
5. If you are fitting a shallow ceiling speaker (ACS-40TS or ACS-55TS), hold the speaker at an angle and guide the connector cover and cables into the hole first. With the shallow ceiling speakers, the connector cover is on the side, so that the depth of the speaker is kept to a minimum for shallow voids above ceilings.
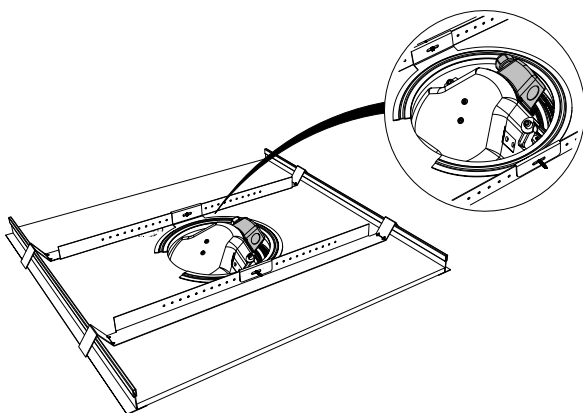
If you are fitting a deep ceiling speaker (ACS-55T), you can install the speaker straight upwards, as the connector cover is on the back rather than the side.
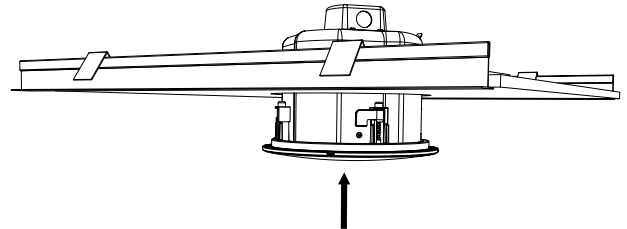
6. If you are installing several ceiling speakers in a line, orient the tweeters so that an imaginary line between the woofer and tweeter points along the line of speakers. This will minimise the phase issues at the crossover point that are inevitable with a two-way speaker.
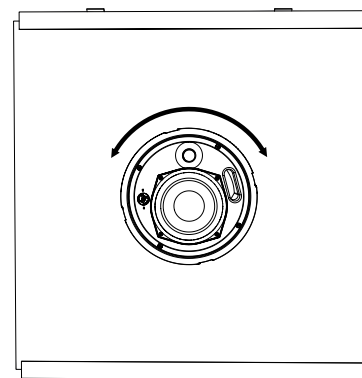
7. Tighten the mounting screws from the front baffle to secure the speaker to the ceiling. The ACS-40TS has three mounting screws, the ACS-55TS and ACS-55T have four. Tighten these screws clockwise so that the swivel tabs rotate 90° and pull down onto the ceiling or ceiling tile to hold the speaker securely in place.

    We recommend a torque setting of 0.5 Nm (and no more than 1 Nm to avoid over tightening). Note

that the fittings allow a maximum ceiling thickness of 30 mm (1.18 in).
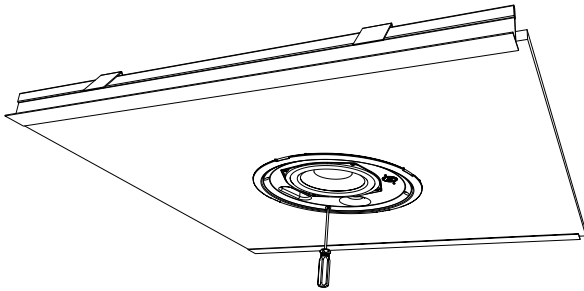
To fit the grille

1. The grille has a simple bayonet fitting. Locate the lugs on the underside of the grille and position them on the ceiling speaker.
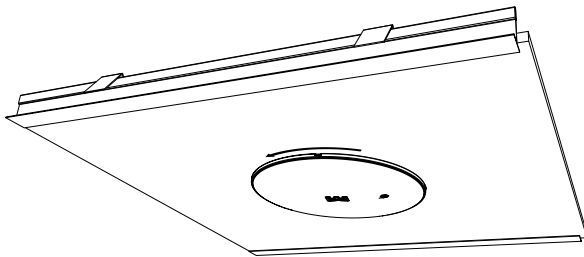
2. Rotate the grille clockwise about 5 degrees to fix it in place.

3. To remove the grille for maintenance or adjustment, rotate the grille anticlockwise about 5 degrees.

Safety information for ceiling speakers

- Martin Audio ADORN ceiling speakers must be installed by experienced installation personnel using all accessories appropriate to the ceiling construction.

- The installer must check with all relevant local, national and international electrical, fire and building safety authorities to ensure compliance with all regulations.

- Each ADORN ceiling speaker must be fitted with a steel safety wire between its rear can safety tag and a suitable overhead supporting structure independent of the ceiling. This is to provide a secondary safety support in the event of damage to the ceiling.

- When installed in an air handling space, the steel cover plates must be sealed to the loudspeaker back cans with firestop putty or a suitable alternative. This is to ensure plenum tight enclosure of the electrical connections.

Fitting pendant speakers

The ACP-55T is designed to be suspended in free space from a single point. Use the mounting tab on the top of the enclosure to attach the CK3 accessory (page 12) or your own wire rope or chain.
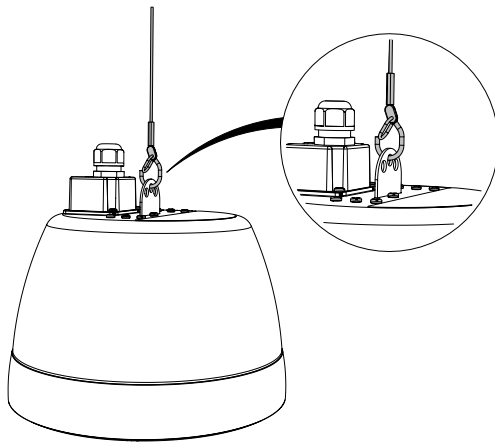
The grille fits in exactly the same way as for the ceiling speakers. For details, see To fit the grille (page 28).
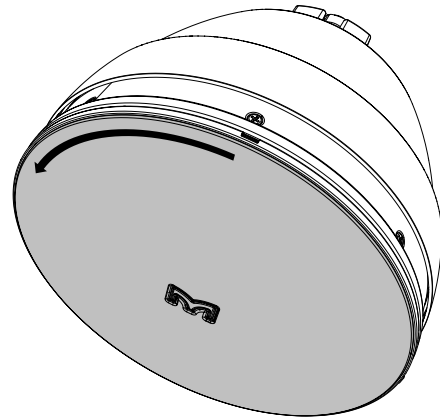
> ⚠️ The suspension method and fixings must be rated for flown applications and have a working load limit greater than the weight of the speaker.

Fitting the pendant speaker grille

If you know the required electrical configuration (low impedance or the specific 70/100 V line tap), you can select the power (page 13) and fit the grille before you suspend the ACP-55T.

Amplifiers

For low impedance ADORN systems, we recommend Martin Audio VIA amplifiers. For a larger ADORN system, you could use an iKON amplifier. For details of compatibility, see ADORN amplifier compatibility (page 33).

VIA amplifiers

We have four VIA amplifiers, two with two channels and two with four channels.

Amplifier	Power output
VIA2004	4 x 500 W into 4 ohms
	4 x 250 W into 8 ohms
VIA2502	2 x 1,250 W into 2 ohms
	2 x 800 W into 4 ohms
	2 x 450 W into 8 ohms
	1 x 2,500 W bridged into 4 ohms
	1 x 1,600 W bridged into 8 ohms
VIA5002	2 x 2,500 W into 4 ohms
	2 x 1,600 W into 8 ohms
VIA5004	4 x 1,250 W into 2 ohms
	4 x 800 W into 4 ohms
	4 x 450 W into 8 ohms
	2 x 2,500 W bridged into 4 ohms
	2 x 1,600 W bridged into 8 ohms

For further details, see our website martin-audio.com.

iKON amplifiers

We have three iKON amplifiers, two with four channels and one with eight channels.

The iKON amplifiers have on-board system processing, so you don't need a separate system controller.

Amplifier	Power output
iK41	4 x 1,500 W into 2 ohms
	4 x 1,500 W into 4 ohms
	4 x 750 W into 8 ohms
	4 x 325 W into 16 ohms
	2 x 3,000 W bridged into 4 ohms
	2 x 3,000 W bridged into 8 ohms
iK42	4 x 5,000 W into 2 ohms
	4 x 3,000 W into 4 ohms
	4 x 1,500 W into 8 ohms
	4 x 750 W into 16 ohms
	2 x 10,000 W bridged into 4 ohms
	2 x 6,000 W bridged into 8 ohms
iK81	8 x 1,250 W into 2 ohms
	8 x 1,250 W into 4 ohms
	8 x 1,250 W into 8 ohms
	8 x 625 W into 16 ohms
	4 x 2,500 W bridged into 4 ohms
	4 x 2,500 W bridged into 8 ohms

For further details, see our website martin-audio.com.

Amplifiers for 70/100 V systems

For a 70/100 V line system, use one of the following amplifiers:

- Martin Audio VIA5002. This is the only VIA amplifier that supports 70/100 V line systems.

- Martin Audio iKON amplifiers (iK41, iK42 and iK81). Note that the iKON amplifiers have on-board system processing, so you don't need a separate system controller with these amplifiers.

Amplifier	Power output
VIA5002	2 x 2,500 W, 70 V line
	2 x 2,500 W, 100 V line
iK41	4 x 1,500 W, 70 V line
	4 x 1,163 W, 100 V line
iK42	4 x 3,500 W, 70 V line
	4 x 5,000 W, 100 V line
iK81	8 x 1,250 W, 70 V line
	8 x 1,250 W, 100 V line

For further details, see our website martin-audio.com.

ADORN amplifier compatibility

The following table shows the amplifier compatibility for ADORN speakers in low impedance mode. This applies to all ADORN speakers except the A80T.

Amplifier	Channels	Channels used	One speaker per channel (16 ohm)	Two, three or four speakers per channel (4 ohm for four)	Five, six, seven or eight speakers per channel (2 ohm for eight)
iK41	One channel	1 of 4	Yes	Yes	Yes
	Two channels bridged	2 of 4	NA	NA	NA
iK42	One channel	1 of 4	Yes	Yes	Yes
	Two channels bridged	2 of 4	NA	NA	NA
iK81	One channel	1 of 8	Yes	Yes	Yes
	Two channels bridged	2 of 8	NA	NA	NA
VIA5004	One channel	1 of 4	Yes	Yes	Yes
	Two channels bridged	2 of 4	NA	NA	NA
VIA2502	One channel	1 of 2	Yes	Yes	Yes
	Two channels bridged	2 of 2	NA	NA	NA
VIA5002	One channel	1 of 2	Yes	Yes	No
	Bridging not available	NA	NA	NA	NA
VIA2004	One channel	1 of 4	No	Yes	No
	Bridging not available	NA	NA	NA	NA

A80T amplifier compatibility

The following table shows the amplifier compatibility of the A80T in low impedance mode:

Amplifier	Channels	Channels used	One A80T per channel (8 ohm)	Two A80T per channel (4 ohm)	Three A80T per channel (2.67 ohm)	Four A80T per channel (2 ohm)
iK41	One channel	1 of 4	Yes	Yes	Yes	−0.3
	Two channels bridged	2 of 4	NA	NA	NA	NA
iK42	One channel	1 of 4	Yes	Yes	Yes	Yes
	Two channels bridged	2 of 4	NA	NA	NA	NA
iK81	One channel	1 of 8	Yes	Yes	Yes	−1.1
	Two channels bridged	2 of 8	NA	NA	NA	NA
VIA5004	One channel	1 of 4	Yes	Yes	−1.1	−1.1
	Two channels bridged	2 of 4	NA	NA	NA	NA
VIA2502	One channel	1 of 2	Yes	Yes	−1.1	−1.1
	Two channels bridged	2 of 2	NA	NA	NA	NA
VIA5002	One channel	1 of 2	Yes	Yes	No	No
	Bridging not available	NA	NA	NA	NA	NA
VIA2004	One channel	1 of 4	−2.0	−2.0	No	No
	Bridging not available	NA	NA	NA	NA	NA

System controllers

For system controllers, we recommend the Martin Audio DX0.4, DX0.6 or DX4.0. Note that if you use an iKON amplifier, you don't need a system controller as these amplifiers have on-board system processing. For further details, see our website martin-audio.com.

Using other controllers

If you use a controller from another manufacturer, you need to configure settings such as crossovers, limiters and equalisation points. You can find these settings in our **Loudspeaker parameter spreadsheet**, which we provide as a free download. For details of how to use the spreadsheet, read the instructions in the spreadsheet or watch the video guide.

To download the loudspeaker parameter spreadsheet

1. Go to our website martin-audio.com.

2. Select **Support > Loudspeaker Settings**.

3. Scroll to **CURRENT-PRODUCT-PARAMETERS** and click **DOWNLOAD**.

To view the video guide to the parameter spreadsheet

1. Go to our website martin-audio.com.

2. Select **Support > Loudspeaker Settings**.

3. Scroll to **PARAMETER VIDEO** and click **VIDEO**.

System design

To design your system and decide on the best positions for speakers and subs, we recommend Martin Audio **Display 3** software, which we provide as a free download from our website.

Display 3 allows you to model your space and experiment with various system configurations and speaker positions. Display 3 predicts the performance of your experimental configurations, allowing you to optimise the performance of your system at the design stage.

To download Display 3

1. Visit our website martin-audio.com.
2. Select **Support > Software/Firmware**.
3. Scroll to **Display 3** and click **Download**.

EASE and EASE Focus files

For acoustic modelling of ADORN, we recommend **Display 3**. However, if you wish to use EASE, EASE Focus or other modelling software, we provide a zip file of high-resolution GLL and CLF files as a free download.

The GLL files for the on-wall speakers are compatible with EASE and EASE Focus. The GLL files for the ceiling speakers are compatible with EASE only.

To download GLL and CLF files

1. Visit our website martin-audio.com.
2. Select **Support > Measurement Data**.
3. Scroll to **ADORN Series** and click **Download**.

3D SketchUp files

For modelling ADORN in **Sketchup**, we provide 3D SketchUp files as free downloads.

To download 3D Sketchup files

1. Visit our website martin-audio.com.
2. Select **Products > Product List** and click on the appropriate speaker.
3. Select the **Technical drawings & 3D models** section and click **SKP-BLACK** or **SKP-WHITE**.
4. For accessories, select the **Accessories** section and click **SKP-B** or **SKP-W**.

Revit families for ADORN

For modelling ADORN speakers in Revit, we provide three Revit families as free downloads:

- ADORN A series Revit family — for on-wall speakers A40, A40T, A55, A55T and A80T.
- ADORN ACS series Revit family — for ceiling speakers ACS-40TS, ACS-55TS and ACS-55T.
- ADORN ACP series Revit family — for pendant speaker ACP-55T.

To download the ADORN on-wall speaker Revit family

1. Visit our website martin-audio.com.
2. Select **Products > Product List** and select any of the ADORN on-wall speakers.
3. Select the **Technical drawings & 3D models** section and click **REVIT FILE**.

To download the ADORN ceiling speaker Revit family

1. Visit our website martin-audio.com.
2. Select **Products > Product List** and select any of the ADORN ceiling speakers.
3. Select the **Technical drawings & 3D models** section and click **REVIT FILE**.

To download the ADORN pendant speaker Revit family

1. Visit our website martin-audio.com.
2. Select **Products > Product List** and select the ADORN pendant speaker ACP-55T.
3. Select the **Technical drawings & 3D models** section and click **REVIT FILE**.

DWG files

For viewing the ADORN technical drawings in CAD software such as AutoCAD, we provide DWG files as free downloads.

To download DWG files

1. Visit our website martin-audio.com.

2. Select **Products > Product List** and click on the appropriate speaker.

3. Select the **Technical drawings & 3D models** section and click **DWG**.

4. For DWG files for accessories, select the **Accessories** section and click **DWG**.

Painting speakers

If you want to change the colour of your ADORN on-wall loudspeakers, we recommend that you paint the ABS enclosure using acrylic paint. Before you do this, remove the grille (see below).

If you want to change the colour of the grille, you should, strictly speaking, strip off the powder coating back to bare metal before you repaint. However, you can get a great finish using standard automobile nitrocellulose spray paint over the top of the powder coat. Before painting, remove the fabric grille cloth attached to the inside of the grille. After painting, reattach this fabric using a general-purpose spray adhesive such as 3M Super 77.

Grille removal

The ADORN loudspeakers have a sprung grille that clips into slots in the sides of the cabinet, making it quick and easy to remove.
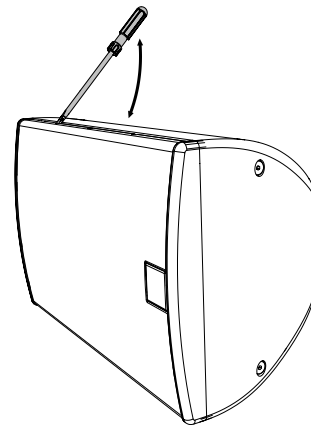
To remove the grille

1. Place the speaker on a suitable surface.

2. For A80T, remove the two screws that hold the grille in place.
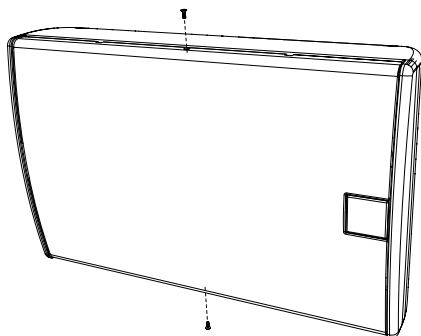
For A40, A40T, A55 or A55T, there are no screws to undo.

3. Insert an appropriately sized flat-bladed screwdriver into one of the two gaps at the side of the grille.

4. Gently push the handle down slightly to ease the grille out of the slot.

5. Lift the handle slightly to ease the grille forward so that it doesn't clip straight back into the slot.

6. Repeat this process with the second gap and ease the grille out of the slot all the way up one side of the cabinet. The grille should now pop out of the slot.
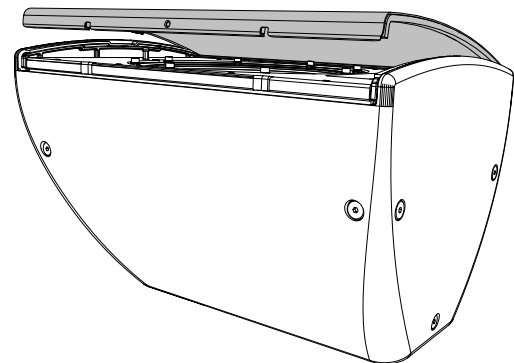
Grille refitting

This is the reverse of the grille removal process.

To refit the grille

1. Insert one side of the grille into the slot on one side of the cabinet. Make sure the grille is completely engaged in the slot.

2. Push the front of the grille with the flat of your hand so that the other edge of the grille clips into place.

3. Make sure that the grille is engaged in the slot by pushing the edge of the grille back starting at the top or bottom. You may need to do this a little at a time, working down the length of the grille until it pops into place.

4. For A80T, replace the two screws that hold the grille in place.

Specifications

On-wall speakers A40 and A40T

Type	Ultra-compact passive two-way system, front ported bass reflex
Frequency response[1]	98 Hz − 17 kHz ± 3 dB, −10 dB @ 70 Hz
Drivers	LF: 4" /1" high-temp voice coil, coated paper cone, rubber surround, ferrite motor, pressed steel chassis HF: 0.75" silk dome, neodymium motor
Rated power[2]	40 W AES, 160 W peak
Recommended amplifier	VIA2004 (for A40), VIA5002 (for A40T)
Sensitivity[3]	87 dB
Maximum SPL[3]	103 dB continuous, 109 dB peak, 115 dB peak with crest factor 4
Nominal impedance	16 ohms
Dispersion[4]	110° H x 80° V
Crossover	3.5 kHz passive (LF and HF auto-resetting fuses)
Transformer taps (A40T only)	70 V: 20, 10, 5 and 2.5 W 100 V: 20, 10 and 5 W
Recommended high pass filter	60 Hz 24 dB/oct
Enclosure	ABS, UL 94V-0 rated
Finish	Black (RAL 9005) or white (RAL 9016)
Grille	Perforated steel
Connectors	Push terminals
Dimensions (excluding bracket)	(W) 124 mm x (H) 200 mm x (D) 114 mm (W) 4.9 in x (H) 7.9 in x (D) 4.5 in
Weight	A40: 1.75 kg (3.9 lbs) A40T: 2.13 kg (4.7 lbs)
IP rating	IP54 compliant when used with optional connector cover (see accessories below)
Accessories (supplied)	Weatherised wall bracket supplied with speaker (replacement part ASM10002 for black or ASM10001 for white)
Accessories (optional)	Weatherised connector cover kit (AIPKIT for black or AIPKIT-W for white) containing cover, screws, gasket and cable gland Weatherised ceiling bracket (CDDCB5B for black or CDDCB5W for white). The dispersion will be impacted as you can only install in landscape (page 16)

[1]On-axis in half space (2 pi) at 1 m.
[2]AES Standard ANSI S4.26-1984.
[3]In half space (2 pi) at 1 m with 2.83 V input and band-limited pink noise.
[4]In open space (4 pi) at 2 m to −6 dB.

On-wall speakers A55 and A55T

Type	Ultra-compact passive two-way system, front ported bass reflex
Frequency response[1]	90 Hz − 17 kHz ± 3 dB, −10 dB @ 65 Hz
Drivers	LF: 5.25" /1" high-temp voice coil, coated paper cone, rubber surround, ferrite motor, pressed steel chassis HF: 0.75" silk dome, neodymium motor
Rated power[2]	50 W AES, 200 W peak
Recommended amplifier	VIA2004 (for A55), VIA5002 (for A55T)
Sensitivity[3]	90 dB
Maximum SPL[3]	107 dB continuous, 113 dB peak, 119 dB peak with crest factor 4
Nominal impedance	16 ohms
Dispersion[4]	110° H x 80° V
Crossover	3.5 kHz passive (LF and HF auto-resetting fuses)
Transformer taps (A55T only)	70 V: 30, 15, 7.5 and 3.75 W 100 V: 30, 15 and 7.5 W
Recommended high pass filter	60 Hz 24 dB/oct
Enclosure	ABS, UL 94V-0 rated
Finish	Black (RAL 9005) or white (RAL 9016)
Grille	Perforated steel
Connectors	Push terminals
Dimensions (excluding bracket)	(W) 152 mm x (H) 245 mm x (D) 140 mm (W) 6.0 in x (H) 9.6 in x (D) 5.5 in
Weight	A55: 2.21 kg (4.9 lbs) A55T: 2.81 kg (6.2 lbs)
IP rating	IP54 compliant when used with optional connector cover (see accessories below)
Accessories (supplied)	Weatherised wall bracket supplied with speaker (replacement part ASM10002 for black or ASM10001 for white)
Accessories (optional)	Weatherised connector cover kit (AIPKIT for black or AIPKIT-W for white) containing cover, screws, gasket and cable gland Weatherised ceiling bracket (CDDCB5B for black or CDDCB5W for white). The dispersion will be impacted as you can only install in landscape (page 16)

[1]On-axis in half space (2 pi) at 1 m.
[2]AES Standard ANSI S4.26-1984.
[3]In half space (2 pi) at 1 m with 2.83 V input and band-limited pink noise.
[4]In open space (4 pi) at 2 m to −6 dB.

On-wall speaker A80T

Type	Compact passive two-way system, front ported bass reflex
Frequency response[1]	63 Hz − 17 kHz ± 3 dB, −10 dB @ 50 Hz
Drivers	LF: 8" with 2" high-temp voice coil, ferrite motor system HF: 1" with 1" exit polymer dome compression driver
Rated power[2]	200 W AES, 800 W peak
Recommended amplifier	VIA2502 or VIA5004 (or VIA5002 for 70/100 V line)
Sensitivity[3]	91 dB
Maximum SPL[3]	114 dB continuous, 120 dB peak, 126 dB peak with crest factor 4
Nominal impedance	8 ohms
Dispersion[4]	90° H x 50° V
Crossover	2.3 kHz passive (LF and HF auto-resetting fuses)
Transformer taps	70 V: 60, 30, 15 and 7.5 W 100 V: 60, 30 and 15 W
Recommended high pass filter	40 Hz 24 dB/oct (8 ohm), 60 Hz 24 dB/oct (transformer)
Enclosure	ABS, UL 94V-0 rated
Finish	Black (RAL 9005) or white (RAL 9016)
Grille	Perforated steel
Connectors	Phoenix-style plug with screw connections (see accessories below)
Fittings	6 x M6 inserts for wall or ceiling brackets
Dimensions (excluding bracket)	(W) 246 mm x (H) 421 mm x (D) 233 mm (W) 9.7 in x (H) 16.6 in x (D) 9.2 in
Weight	9.1 kg (20.0 lbs)
IP rating	IP54 compliant when used with optional connector cover (see accessories below)
Accessories (supplied)	Weatherised wall bracket supplied with speaker (replacement part WB6/8B for black or WB6/8W for white) Phoenix-style 12 A plug supplied with speaker (replacement part PCX00006)
Accessories (optional)	Weatherised connector cover kit (ASF09007 black only) containing cover, screws, gasket and cable gland Weatherised ceiling bracket (CDDCB6/8B for black or CDDCB6/8W for white). The dispersion will be impacted as you can only install in landscape (page 16)

[1]On-axis in half space (2 pi) at 1 m.

[2]AES Standard ANSI S4.26-1984.

[3]In half space (2 pi) at 1 m with 2.83 V input and band-limited pink noise.

[4]In open space (4 pi) at 2 m to −6 dB.

Ceiling speaker ACS-40TS

Type	Ultra-compact, passive two-way ceiling speaker, ported bass reflex
Frequency response[1]	106 Hz − 20 kHz ± 3 dB, −10 dB @ 73 Hz
Drivers	LF: 4" with 1" high-temp voice coil, coated paper cone, rubber surround, ferrite motor, pressed steel chassis HF: 0.75" silk dome, neodymium motor
Rated power[2]	40 W AES, 160 W peak
Recommended amplifier	VIA2004 (for low impedance), VIA5002 (for 70/100 V)
Sensitivity[3]	86 dB
Maximum SPL[3]	102 dB continuous, 108 dB peak, 114 dB peak with crest factor 4
Nominal impedance	16 ohms
Dispersion[4]	180° conical up to 10 kHz
Crossover	3.5 kHz passive (LF and HF auto-resetting fuses)
Transformer taps	70 V: 20, 10, 5 and 2.5 W 100 V: 20, 10 and 5 W
Recommended high pass filter	75 Hz 24 dB/oct
Enclosure	UL 94V-0 rated ABS baffle with steel back can
Finish	Baffle and grille: white (RAL9016) Back can: zinc plated
Grille	Perforated steel, powder coated, bayonet fitting
Connectors	Ceramic connector (in and link) behind fire-retardant steel cover
Dimensions	Diameter: 221 mm (8.7 in) Back can depth: 97 mm (3.8 in) or 115 mm (4.5 in) with grille
Maximum ceiling thickness	30 mm (1.18 in)
Hole cut-out dimension	197 mm (7.75 in) diameter
Weight	2.2 kg (4.8 lbs)
Accessories (supplied)	Two tile rails and C-ring backing plate supplied with speaker Cut-out template (supplied as part of packaging)

[1]On-axis in half space (2 pi) at 1 m.

[2]AES Standard ANSI S4.26-1984.

[3]In half space (2 pi) at 1 m with 2.83 V input and band-limited pink noise.

[4]In open space (4 pi) at 2 m to −6 dB.

Ceiling speaker ACS-55T

Type	Compact, passive two-way ceiling speaker, ported bass reflex
Frequency response[1]	98 Hz − 20 kHz ± 3 dB, −10 dB @ 62 Hz
Drivers	LF: 5.25" with 1" high-temp voice coil, coated paper cone, rubber surround, ferrite motor, pressed steel chassis HF: 0.75" silk dome, neodymium motor
Rated power[2]	50 W AES, 200 W peak
Recommended amplifier	VIA2004 (for low impedance), VIA5002 (for 70/100 V)
Sensitivity[3]	90 dB
Maximum SPL[3]	107 dB continuous, 113 dB peak, 119 dB peak with crest factor 4
Nominal impedance	16 ohms
Dispersion[4]	150° conical up to 7 kHz
Crossover	3 kHz passive (LF and HF auto-resetting fuses)
Transformer taps	70 V: 30, 15, 7.5 and 3.75 W 100 V: 30, 15 and 7.5 W
Recommended high pass filter	65 Hz 24 dB/oct
Enclosure	UL 94V-0 rated ABS baffle with steel back can
Finish	Baffle and grille: white (RAL9016) Back can: zinc plated
Grille	Perforated steel, powder coated, bayonet fitting
Connectors	Ceramic connector (in and link) behind fire-retardant steel cover
Dimensions	Diameter: 245 mm (9.7 in) Back can depth: 192 mm (7.55 in) or 209 mm (8.23 in) with grille
Maximum ceiling thickness	30 mm (1.18 in)
Hole cut-out dimension	222 mm (8.74 in) diameter
Weight	3 kg (6.6 lbs)
Accessories (supplied)	Two tile rails and C-ring backing plate supplied with speaker Cut-out template (supplied as part of packaging)

[1]On-axis in half space (2 pi) at 1 m.

[2]AES Standard ANSI S4.26-1984.

[3]In half space (2 pi) at 1 m with 2.83 V input and band-limited pink noise.

[4]In open space (4 pi) at 2 m to −6 dB.

Ceiling speaker ACS-55TS

Type	Compact, passive two-way ceiling speaker, ported bass reflex
Frequency response[1]	117 Hz − 20 kHz ± 3 dB, −10 dB @ 79 Hz
Drivers	LF: 5.25" with 1" high-temp voice coil, coated paper cone, rubber surround, ferrite motor, pressed steel chassis HF: 0.75" silk dome, neodymium motor
Rated power[2]	50 W AES, 200 W peak
Recommended amplifier	VIA2004 (for low impedance), VIA5002 (for 70/100 V)
Sensitivity[3]	90 dB
Maximum SPL[3]	107 dB continuous, 113 dB peak, 119 dB peak with crest factor 4
Nominal impedance	16 ohms
Dispersion[4]	150° conical up to 7 kHz
Crossover	3 kHz passive (LF and HF auto-resetting fuses)
Transformer taps	70 V: 30, 15, 7.5 and 3.75 W 100 V: 30, 15 and 7.5 W
Recommended high pass filter	65 Hz 24 dB/oct
Enclosure	UL 94V-0 rated ABS baffle with steel back can
Finish	Baffle and grille: white (RAL9016) Back can: zinc plated
Grille	Perforated steel, powder coated, bayonet fitting
Connectors	Ceramic connector (in and link) behind fire-retardant steel cover
Dimensions	Diameter: 245 mm (9.7 in) Back can depth: 100 mm (3.95 in) or 118 mm (4.65 in) with grille
Maximum ceiling thickness	30 mm (1.18 in)
Hole cut-out dimension	222 mm (8.74 in) diameter
Weight	2.8 kg (6.2 lbs)
Accessories (supplied)	Two tile rails and C-ring backing plate supplied with speaker Cut-out template (supplied as part of packaging)

[1]On-axis in half space (2 pi) at 1 m.

[2]AES Standard ANSI S4.26-1984.

[3]In half space (2 pi) at 1 m with 2.83 V input and band-limited pink noise.
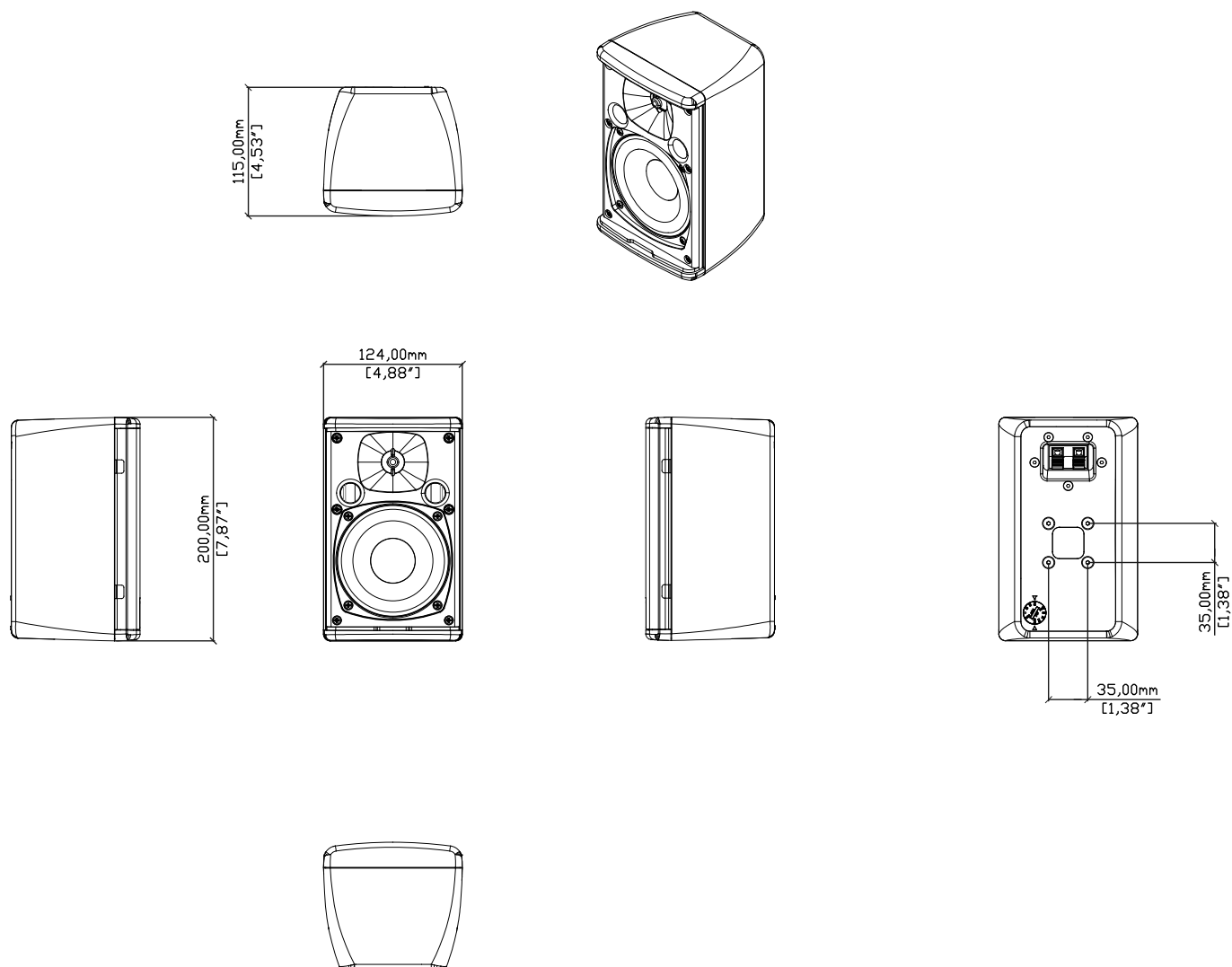
[4]In open space (4 pi) at 2 m to −6 dB.

Pendant speaker ACP-55T

Type	Passive two-way pendant speaker, ported bass reflex
Frequency response[1]	98 Hz − 20 kHz ± 3 dB, −10 dB @ 56 Hz
Drivers	LF: 5.25" with 1" high-temp voice coil, coated paper cone, rubber surround, ferrite motor, pressed steel chassis HF: 0.75" silk dome, neodymium motor
Rated power[2]	50 W AES, 200 W peak
Recommended amplifier	VIA2004 (for low impedance), VIA5002 (for 70/100 V)
Sensitivity[3]	86 dB
Maximum SPL[3]	103 dB continuous, 109 dB peak, 115 dB peak with crest factor 4
Nominal impedance	16 ohms
Dispersion[4]	150° conical up to 7 kHz
Crossover	3 kHz passive (LF and HF auto-resetting fuses)
Transformer taps	70 V: 30, 15, 7.5 and 3.75 W 100 V: 30, 15 and 7.5 W
Recommended high pass filter	65 Hz 24 dB/oct
Enclosure	UL 94V-0 rated ABS baffle with steel back can
Finish	Black (RAL 9005) or white (RAL 9016)
Grille	Perforated steel, powder coated, bayonet fitting
Connectors	Ceramic connector (in and link)
Dimensions	Diameter: 246 mm (9.7 in) Depth: 238 mm (9.35 in)
Weight	3.46 kg (7.62 lbs)
Accessories (optional)	3 metre (10 ft) suspension cable accessory kit (part CK3) (page 12)

[1] On-axis in open space (4 pi) at 1 m.

[2] AES Standard ANSI S4.26-1984.

[3] In open space (4 pi) at 1 m with 2.83 V input and band-limited pink noise.

[4] In open space (4 pi) at 2 m to −6 dB.

Technical drawings

To use these technical drawings in CAD software, see
DWG files (page 35).

On-wall speaker A40
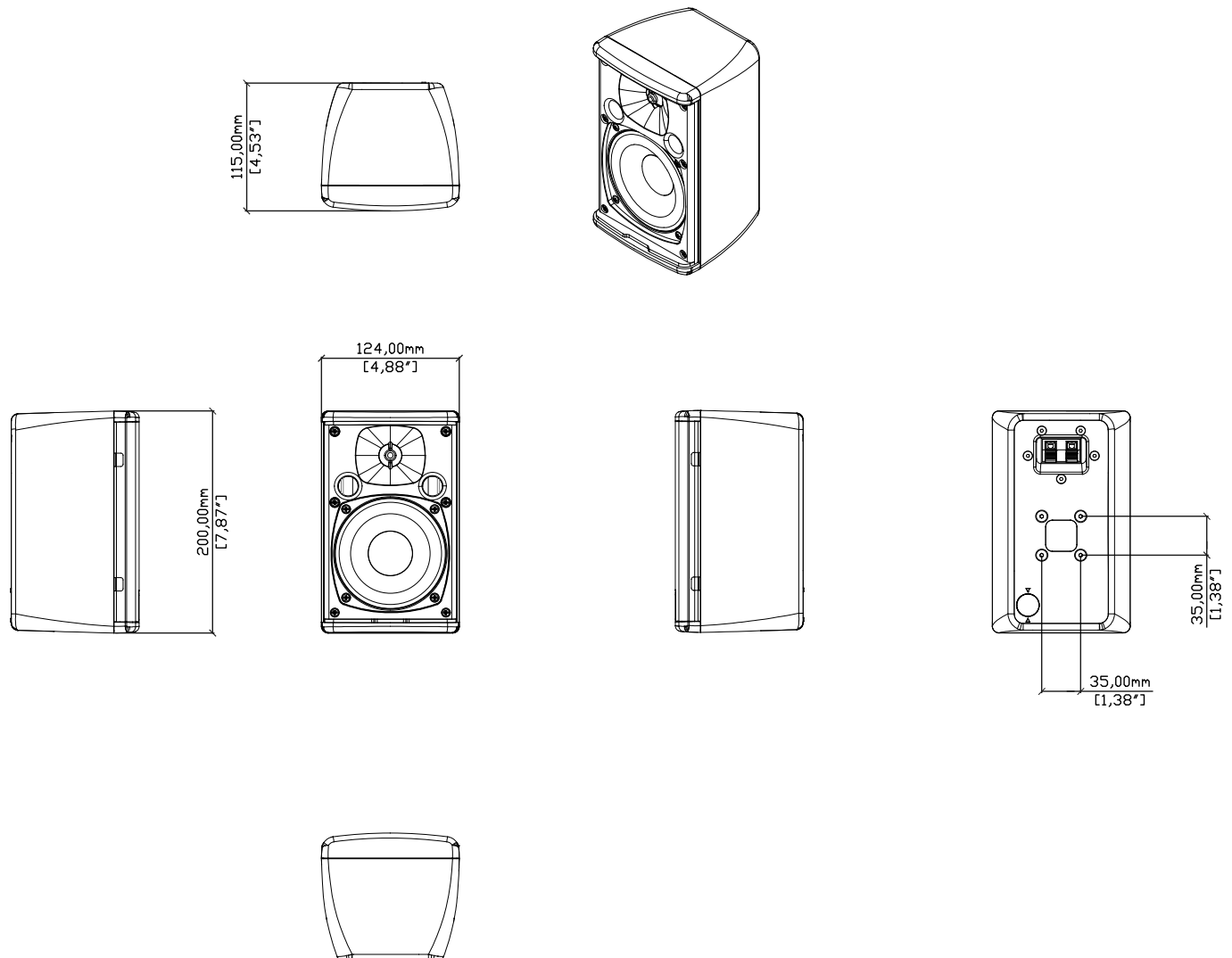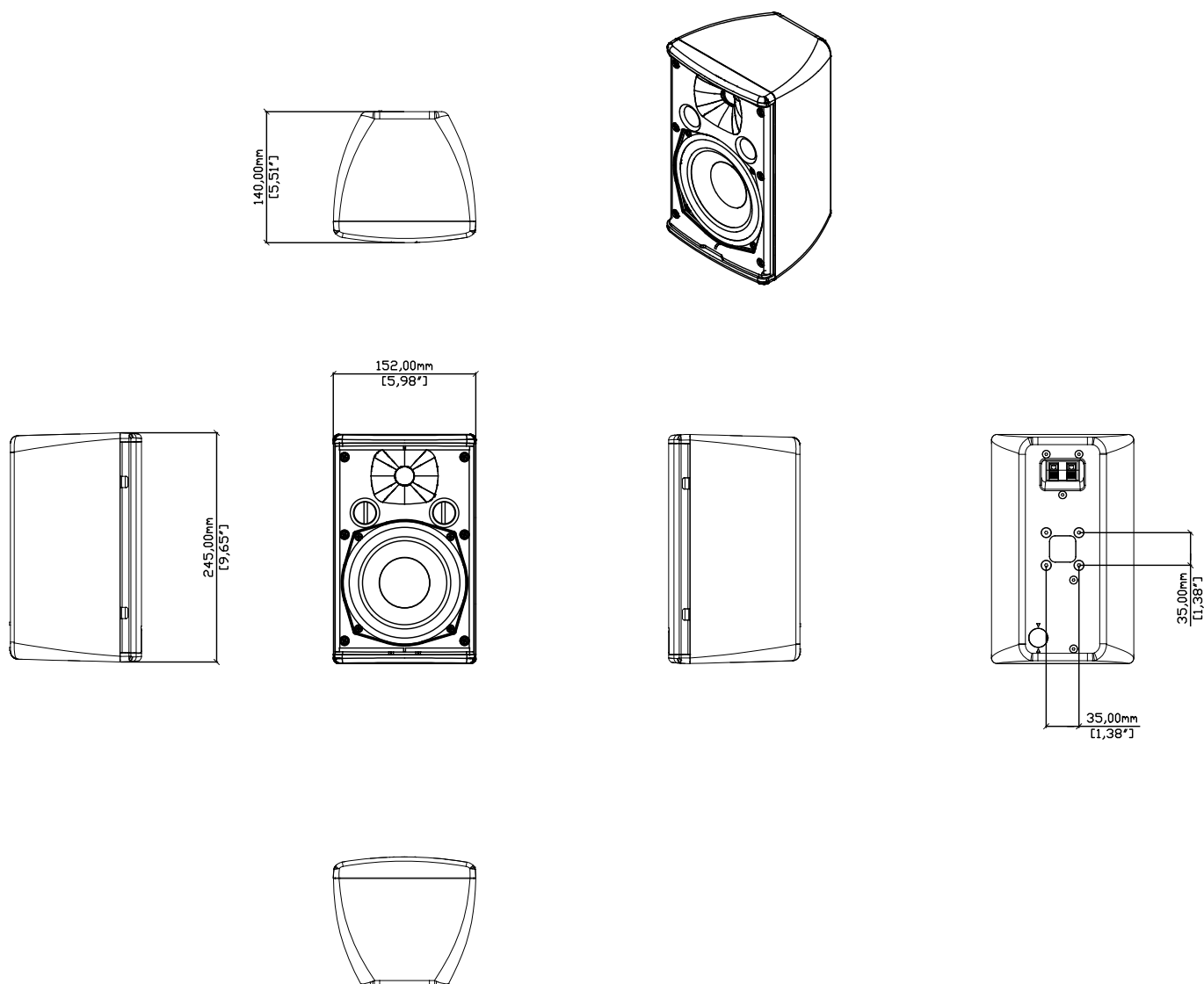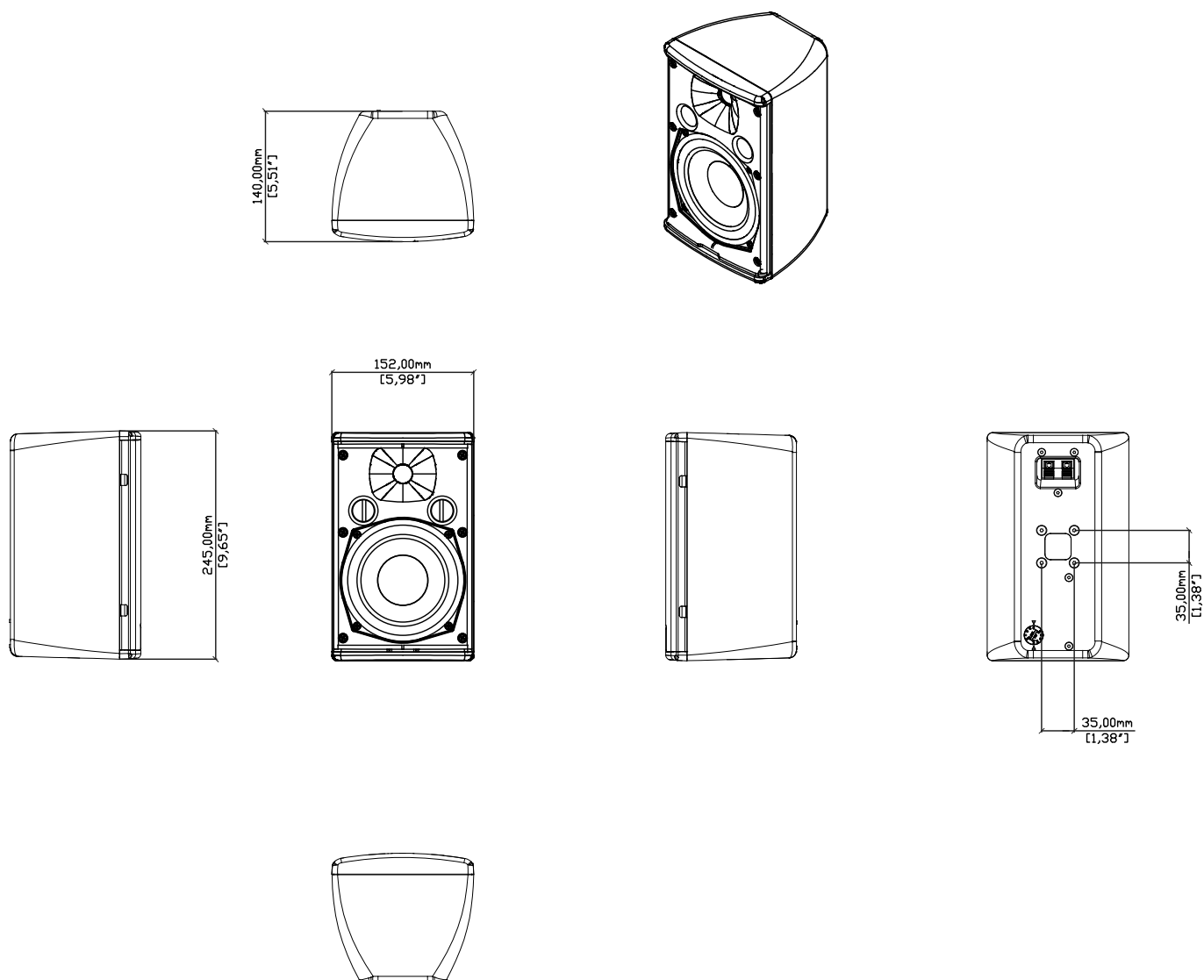
115,00mm [4,53"]

124,00mm [4,88"]

200,00mm [7,87"]

35,00mm [1,38"]

35,00mm [1,38"]

On-wall speaker A40T

115,00mm
[4,53"]

124,00mm
[4,88"]

200,00mm
[7,87"]

35,00mm
[1,38"]

35,00mm
[1,38"]

On-wall speaker A55

140,00mm
[5,51"]

152,00mm
[5,98"]

245,00mm
[9,65"]

35,00mm
[1,38"]

35,00mm
[1,38"]

On-wall speaker A55T

140,00mm
[5,51"]

152,00mm
[5,98"]

245,00mm
[9,65"]

35,00mm
[1,38"]

35,00mm
[1,38"]

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On-wall speaker A80T

233,00mm [9,18"]

240,00mm [9,47"]

421,00mm [16,56"]

65,00mm [2,56"]

65,00mm [2,56"]

A80T

Ceiling speaker ACS-40TS

115,00mm
[4,51"]

97,00mm
[3,81"]

221,00mm
[8,70"]

ACS-40TS

MARTIN AUDIO
LONDON

Ceiling speaker ACS-55TS

100,00mm [3,95"]

118,00mm [4,64"]

245,00mm [9,64"]

ACS-55TS

Ceiling speaker ACS-55T

209,00mm
[8,23"]

192,00mm
[7,55"]

ACS-55T

245,00mm
[9,64"]

Pendant speaker ACP-55T

238,00mm
[9,35"]

246,00mm
[9,68"]
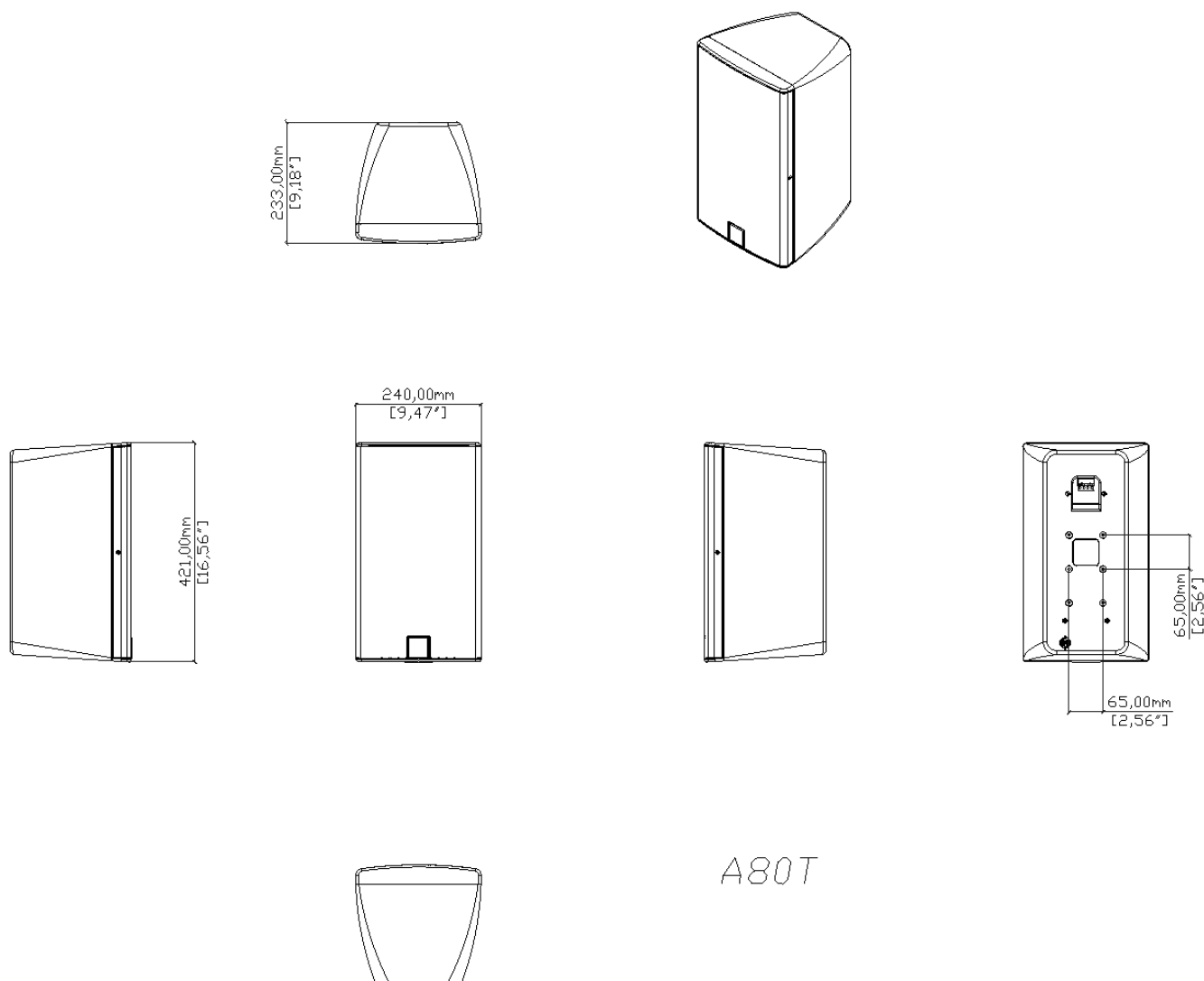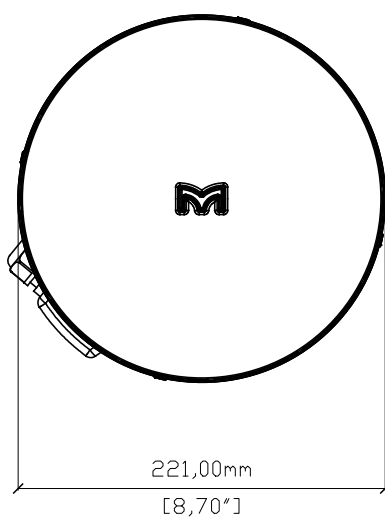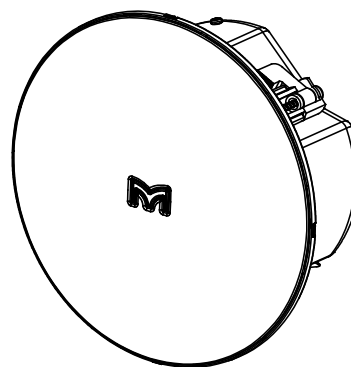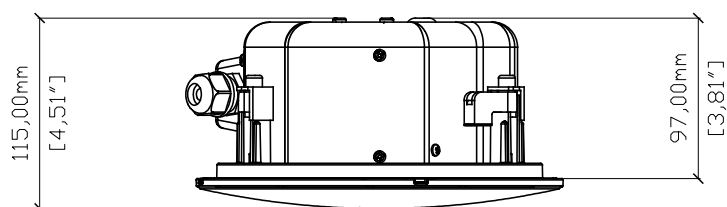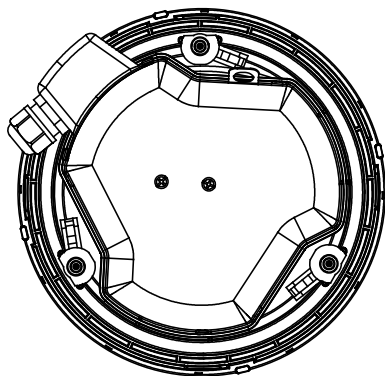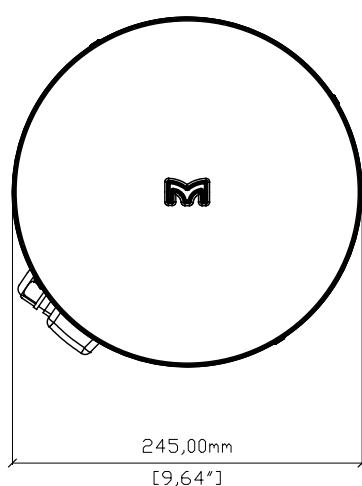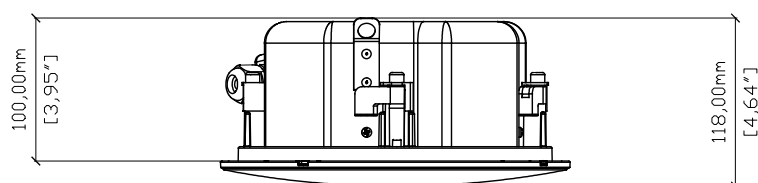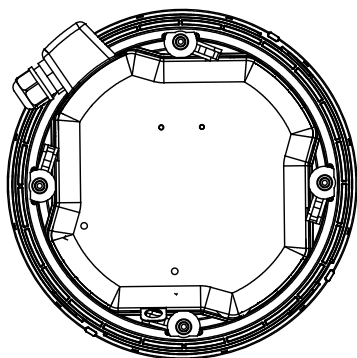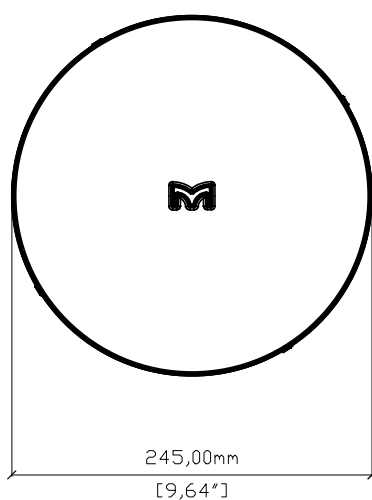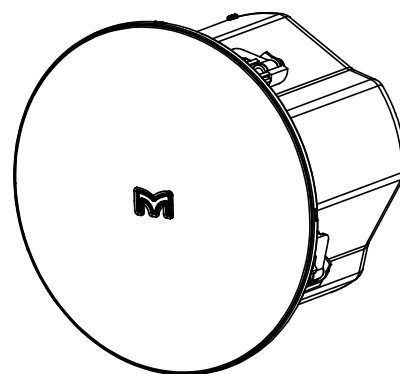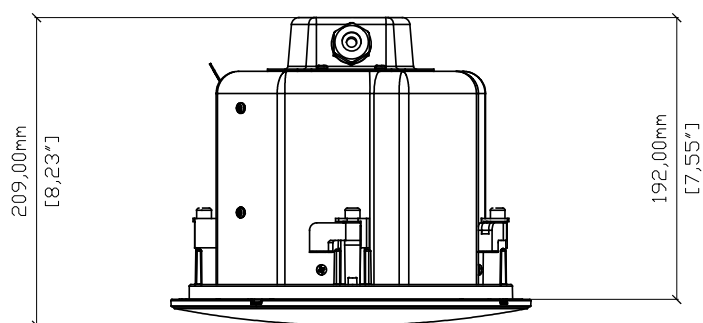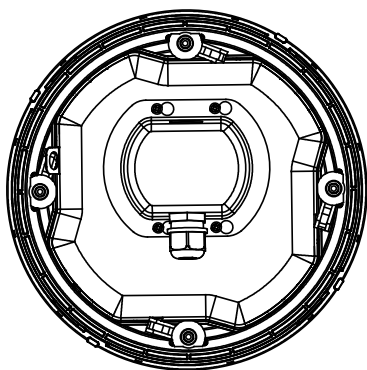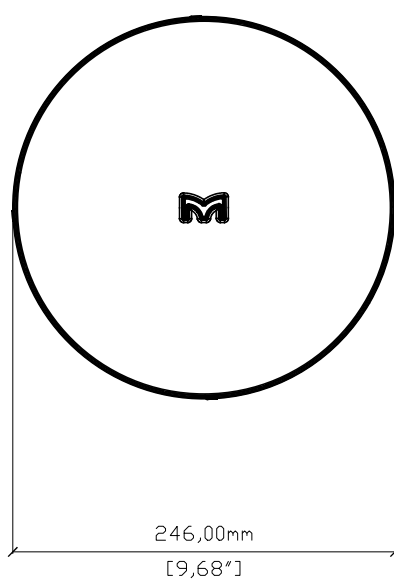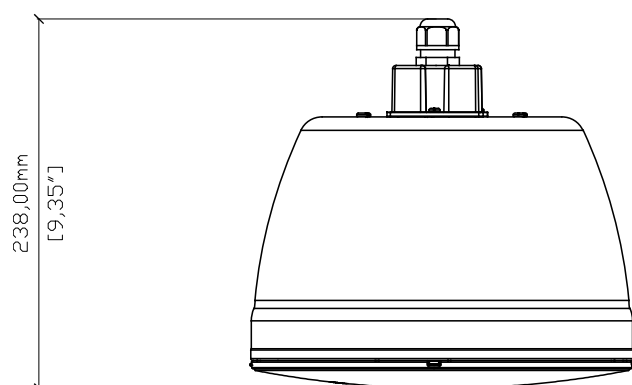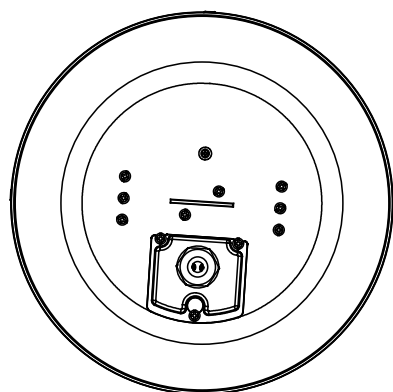
ACP-55T

Wall bracket ASM10001 (white) and ASM10002 (black)

Supplied with A40, A40T, A55 and A55T.

Wall fixing (square section with peg): four 5.2 mm (0.2 in) holes.

WALL BRACKET

CABINET BRACKET

Wall Mount No Link

Single plane adjustment

Wall Mount With Link

Adjustment in two planes

LINK BRACKET
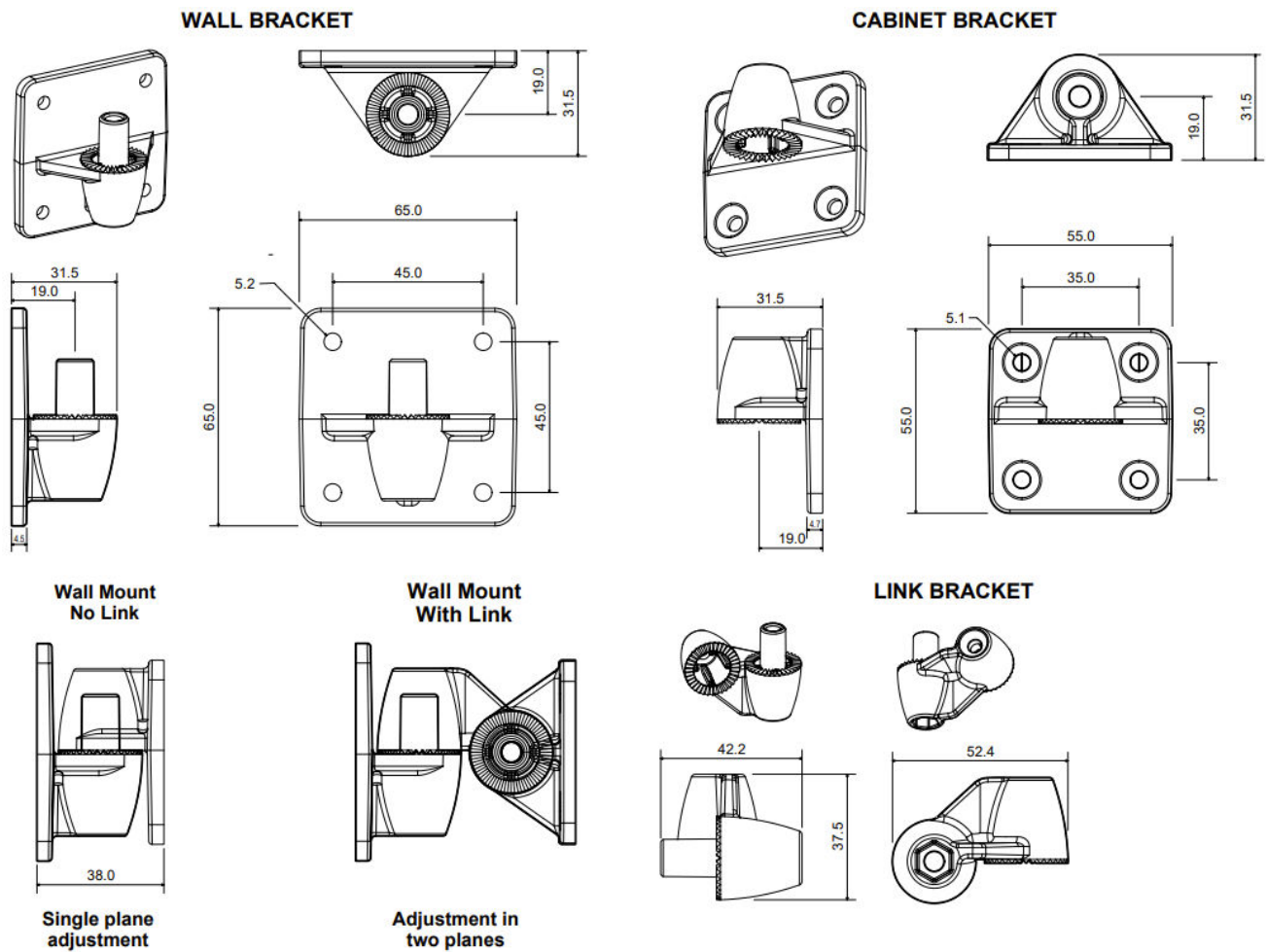
Wall bracket WB6/8

Supplied with A80T.

Wall fixing (the rectangular section): four 7 mm (0.28 in) holes.
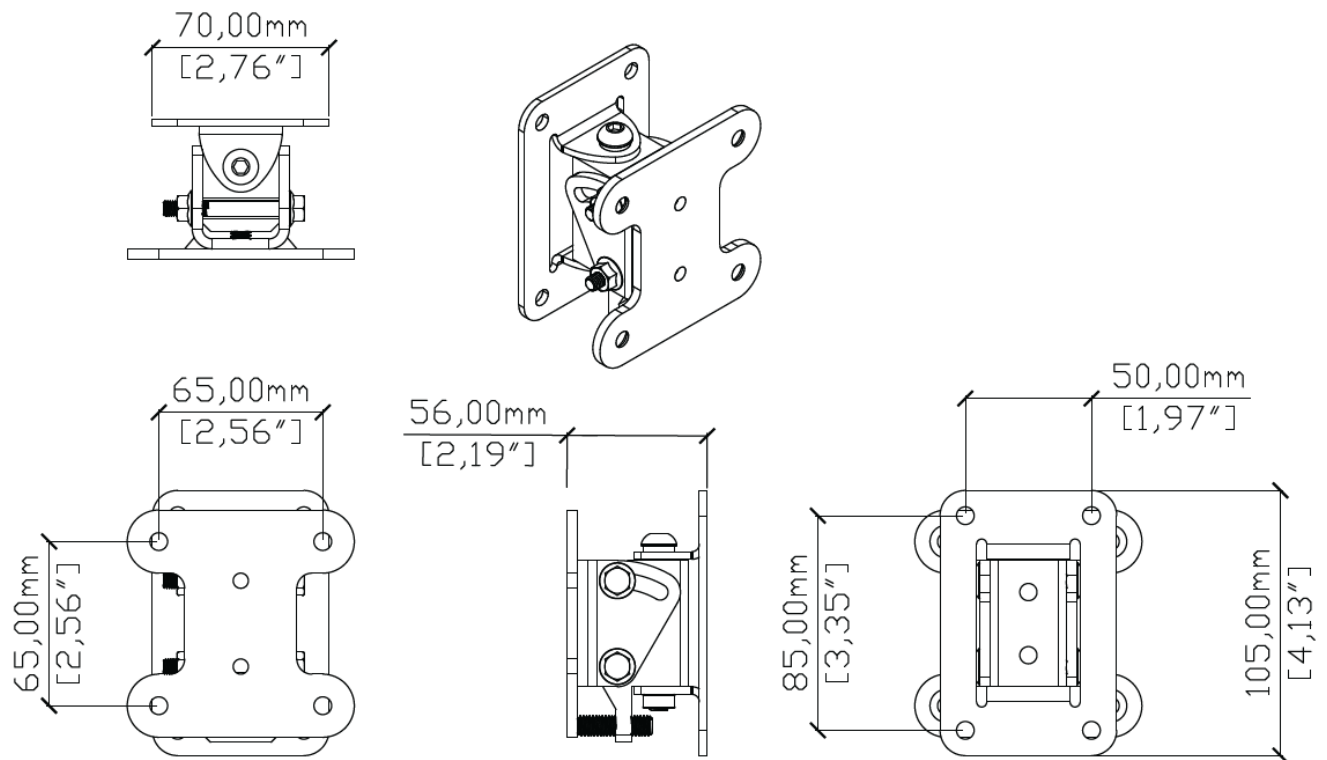
Ceiling bracket CDDCB5

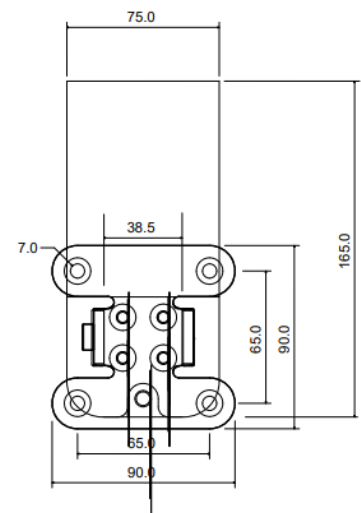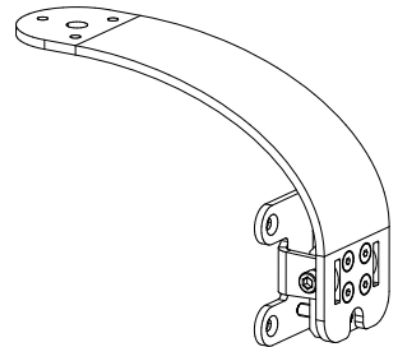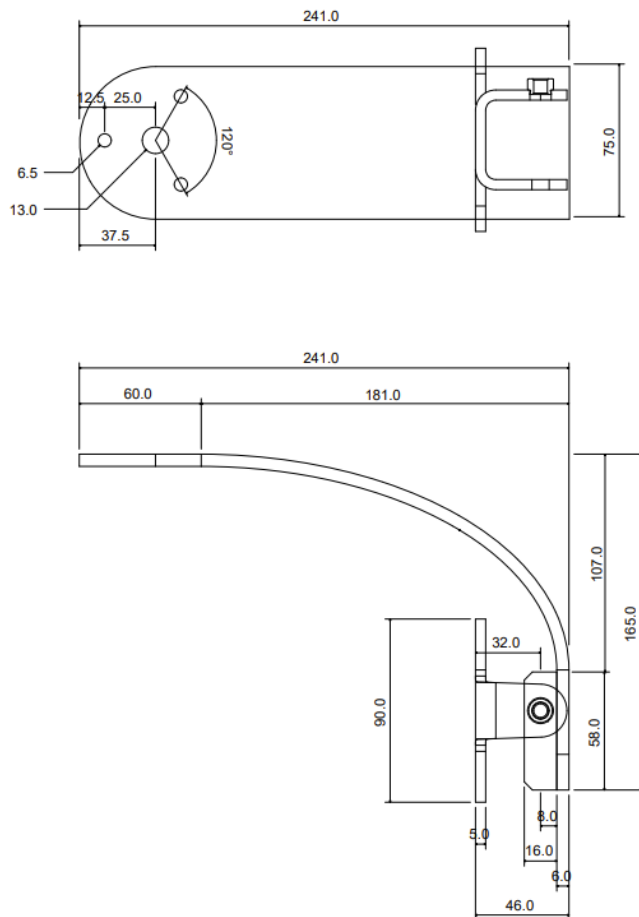Optional accessory for A40, A40T, A55 and A55T.

Ceiling fixing: three 5.5 mm (0.22 in) holes and central 8.5 mm (0.33 in) hole (optional fixing).
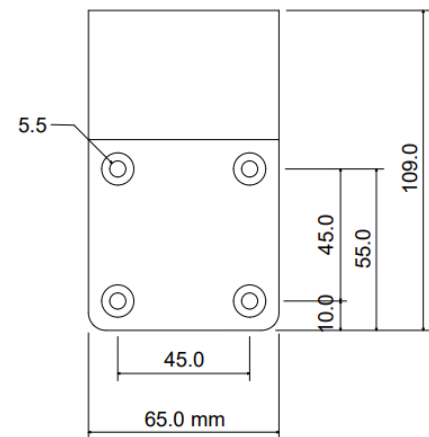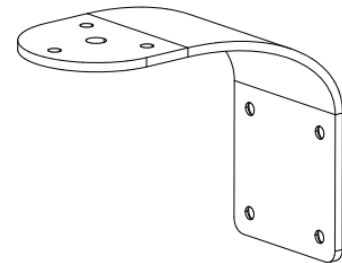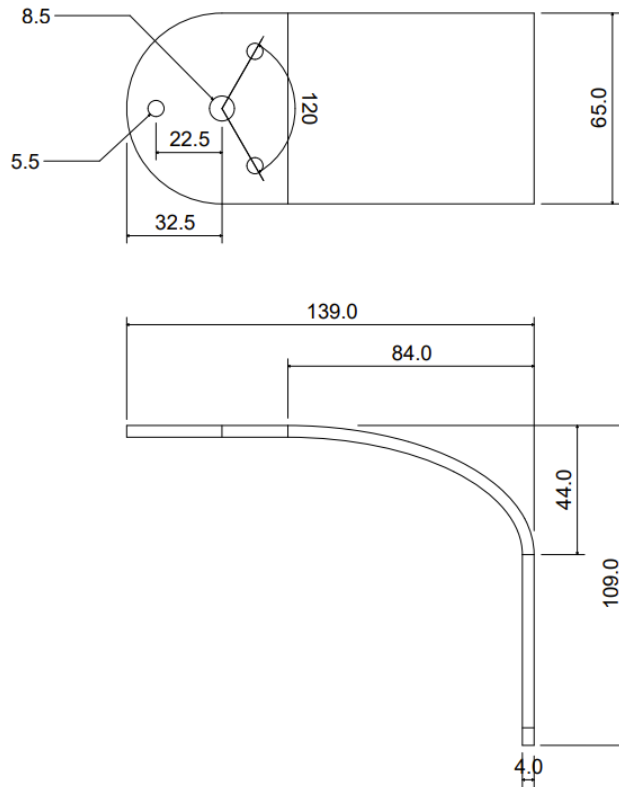
Ceiling bracket CDDCB6/8

Optional accessory for A80T.

Ceiling fixing: three 6.5 mm (0.26 in) holes and central 13 mm (0.51 in) hole (optional fixing).

ADORN User Guide

Troubleshooting

- Sound not right. Make sure the input and output connectors are fully plugged into the sockets. Check the sound quality with headphones at the amplifier or preamp.

Technical support

- For technical support, contact your supplier or Martin Audio technical support.
- For Martin Audio technical support, go to our website martin-audio.com and select **Support > Support Contacts**.

Service

- For service information, go to our website martin-audio.com and select **Support > Service & Returns**.

Warranty

- For warranty information, go to our website martin-audio.com and select **Support > Service & Returns**.

Unpacking

After unpacking, carefully check your speakers for any signs of transit damage. If you find any issues, inform your dealer straight away. If possible, keep the packaging for future use.

Recycling

When the product reaches the end of its life, please dispose of it responsibly at a recycling centre.

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MARTIN AUDIO
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