

EVOLVE Wall mount kit

EVOLVE-WMK-PB, EVOLVE-WMK-PW, EVOLVE-WMK-NB, EVOLVE-WMK-NW, EVOLVE-TM-B



en Installation Manual

Table of contents

| 1 | Safety | 4 |
|-------|---|----|
| 1.1 | Suspension | 4 |
| 1.2 | Notices | 4 |
| 2 | Short information | 6 |
| 3 | Introduction | 7 |
| 3.1 | System features | 7 |
| 3.2 | Packing list | 9 |
| 4 | Wiring and installation | 11 |
| 4.1 | Wiring the EVOLVE column | 12 |
| 4.2 | Attaching the column speaker adapter to the EVOLVE column | 15 |
| 4.3 | Attaching the EVOLVE column to the wall bracket | 15 |
| 4.3.1 | Installing the wall part | 16 |
| 4.3.2 | Attaching the handle part to the EVOLVE column | 17 |
| 4.3.3 | Mounting the wall bracket | 18 |
| 4.3.4 | Attaching the cosmetic cover set | 19 |
| 4.4 | Attaching the EVOLVE column to the truss mount bracket | 20 |
| 4.5 | Wiring the subwoofer | 23 |
| 4.6 | Installing the subwoofer amplifier input cover | 25 |
| 5 | Troubleshooting | 27 |
| 6 | Technical data | 28 |
| 6.1 | Additional pin-out tables | 28 |
| 6.2 | Dimensions | 29 |

1 Safety

1.1 Suspension



Warning!

Read and fully understand this manual and all safety instructions before attempting to suspend the loudspeaker.

Warning!



Suspending any object is potentially dangerous and should only be attempted by individuals who have a thorough knowledge of the techniques and regulations of suspending objects overhead. Electro-Voice strongly recommends that loudspeakers be suspended taking into account all current national, federal, state, and local laws and regulations. It is the responsibility of the installer to ensure all loudspeakers are safely installed in accordance with all such requirements. When loudspeakers are suspended, Electro-Voice strongly recommends the system be inspected at least once per year or as laws and regulations require. If any sign of weakness or damage is detected, remedial action should be taken immediately. The user is responsible for making sure the wall, ceiling, or structure is capable of supporting all objects suspended overhead. Any hardware used to suspend a loudspeaker not associated with Electro-Voice is the responsibility of others.

Safety point

As an added safety measure, Electro-Voice recommends the user install and secure the secondary auxiliary support cable to a different structural support point. This safety point should have as little slack as possible (less than 25 mm/1 in. is preferable).



1.2





Old electrical and electronic appliances

Electrical or electronic devices that are no longer serviceable must be collected separately and sent for environmentally compatible recycling (in accordance with the European Waste Electrical and Electronic Equipment Directive).

To dispose of old electrical or electronic devices, you should use the return and collection systems put in place in the country concerned.

Copyright and disclaimer

All rights reserved. No part of this document may be reproduced or transmitted in any form by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. For information on getting permission for reprints and excerpts, contact Electro-Voice.

All content including specifications, data, and illustrations in this manual are subject to change without prior notice.

For China only

| 1016 30/1 11304-2014 编制115月 苦初风农 | | | | | | |
|----------------------------------|-----------|-----------|-----------|----------------|-----------------------|-----------------|
| | 铅 (Pb) | 汞 (Hg) | 镉 (Cd) | 六价铬 (Cr 6+) | 多溴 联苯 (PBB) | 多溴二苯醚 (PBDE) |
| 电路板 (PCB) | 0 | 0 | 0 | 0 | 0 | 0 |
| 电子组件 | х | 0 | х | 0 | 0 | 0 |
| 机电组件 | x | 0 | 0 | 0 | 0 | 0 |
| 显示屏 | х | 0 | 0 | 0 | 0 | 0 |
| 电缆和导线 | 0 | 0 | 0 | 0 | 0 | 0 |
| 塑料材料 | 0 | 0 | 0 | 0 | 0 | 0 |
| 金属材料 | х | 0 | 0 | 0 | 0 | 0 |
| | | | | | | |
| | | | | | | |
| | | | • | • | • | |

根据 SJ/T 11364-2014 编制的有害物质表

本表系根据 SJ/T 11364 的规定编制而成

o: 上述有害物质在所有包含该物质的均质材料中的含量均低于 GB/T 26572 规定的限值

x: 上述有害物质在特定均质材料中的含量均高于 GB/T 26572 规定的限值

关于该类产品生产日期代码的详细说明,请见: http://www.boschsecurity.com/datecodes/



博世(珠海)安保系统有限公司

2

Short information

The following table lists products in a family, with CTN (Commercial Type Number) and identifying product name DESCRIPTION.

| Part number | CTN | Description |
|---------------|---------------|---------------------------------------|
| F.01U.392.641 | EVOLVE-WMK-PB | EVOLVE Wall mount kit, Phoenix, black |
| F.01U.392.642 | EVOLVE-WMK-PW | EVOLVE Wall mount kit, Phoenix, white |
| F.01U.392.643 | EVOLVE-WMK-NB | EVOLVE Wall mount kit, NL4, black |
| F.01U.392.644 | EVOLVE-WMK-NW | EVOLVE Wall mount kit, NL4, white |
| F.01U.395.777 | EVOLVE-TM-B | Truss mount, EVOLVE, black |

3 Introduction

Thank you for choosing an Electro-Voice wall mount kit for your EVOLVE column speaker system. Please take time to consult this manual to understand all the features and requirements of the EVOLVE Wall Mount Kit. This is necessary to ensure proper use of the wall mount kit and to provide the highest level of acoustic performance, reliability and safety. Electro-Voice strongly recommends that loudspeakers be suspended taking into account all current national, federal, state and local laws and regulations. Suspending any object is potentially dangerous. Only individuals who have thorough knowledge of the techniques and regulations of suspending objects overhead should attempt to suspend loudspeakers. The Electro-Voice EVOLVE Wall Mount Kit provides users the flexibility to mount the EVOLVE column speaker remotely from the subwoofer and without the distance pole. This provides a safe method for mounting the column speakers higher than the distance pole allows and remote locating the subwoofer for aesthetic or acoustic purposes. The installation can be permanent with the wall mount bracket, or temporary to a truss with the truss mount kit. The wall mount kit is available in both black and white colors to match the EVOLVE columns speaker system and the venue. Both permanent installation friendly Phoenix-style connectors internal to the adapters and easy to use NL4 adapters are available in each color. The truss mount kit allows the EVOLVE column to be clamped to trusses when needed and is available with NL4 adapters.

3.1 System features

EVOLVE-WMK-PB / EVOLVE-WMK-PW

- Innovative mount system is included for quick, simple, and reliable installations of EVOLVE column speakers.
- Sturdy wall mount bracket with 15 degrees of downward tilt, and 45 degrees, each way, of left and right adjustment.
- Subwoofer and column adapters with internally secured PCB screw terminal blocks.
- Compatible with EVOLVE 30M, EVOLVE 50 and EVOLVE 50M column speakers, available in black or white.
- Suggested to use correctly rated speaker cable for installation: wire gauges 1.5 mm² 2.5 mm² (AWG16-AWG14).

EVOLVE-WMK-NB / EVOLVE-WMK-NW

- Innovative mount system is included for quick, simple, and reliable installations of EVOLVE column speakers.
- Sturdy wall mount bracket with 15 degrees of downward tilt, and 45 degrees, each way, of left and right adjustment.
- Subwoofer and column adapters with NL4 connections.
- Compatible with EVOLVE 30M , EVOLVE 50 and EVOLVE 50M column speakers, available in black or white.
- Suggested to use correctly rated speaker cable for installation: wire gauges 1.5 mm² 2.5 mm² (AWG16-AWG14).

EVOLVE-TM-B

- Innovative mount system is included for quick, simple, and reliable installations of EVOLVE column speakers to trusses.
- Sturdy truss mount bracket works with M10 threaded studs found on common truss clamps.
- Subwoofer and column adapters with NL4 connections.

- Compatible with EVOLVE 30M, EVOLVE 50 and EVOLVE 50M column speakers, available in black.
- Suggested to use correctly rated speaker cable for installation: wire gauges 1.5 mm² 2.5 mm² (AWG16-AWG14).
- For use with truss clamps rated for WLL= 20 kg (44 lb) SF = 5:1.

3.2 Packing list

EVOLVE-WMK-PB / EVOLVE-WMK-PW



| Item | Quantity | Component |
|------|----------|-----------------------------------|
| А | 1 | Wall mount bracket |
| В | 1 | Subwoofer amplifier input cover |
| С | 1 | Column speaker adapter |
| D | 1 | Subwoofer adapter |
| E | 1 | Secondary auxiliary support cable |
| F | 1 | Installation manual |
| G | 2 | Rubber grommets |

Table 3.1: Components list for EVOLVE-WMK with Phoenix-style connector

EVOLVE-WMK-NB / EVOLVE-WMK-NW



| ltem | Quantity | Component |
|------|----------|-----------------------------------|
| А | 1 | Wall mount bracket |
| В | 1 | Subwoofer amplifier input cover |
| С | 1 | Column speaker adapter |
| D | 1 | Subwoofer adapter |
| E | 1 | Secondary auxiliary support cable |
| F | 1 | Installation manual |
| G | 2 | Rubber grommets |

Table 3.2: Components list for EVOLVE-WMK with NL4 connector

EVOLVE-TM-B



| ltem | Quantity | Component |
|------|----------|-----------------------------------|
| А | 1 | Truss mount, EVOLVE, black |
| В | 1 | Subwoofer amplifier input cover |
| С | 1 | Column speaker adapter |
| D | 1 | Subwoofer adapter |
| E | 1 | Secondary auxiliary support cable |
| F | 1 | Installation manual |

Table 3.3: Components list for EVOLVE-TM-B

Wiring and installation

The EVOLVE-WMK is used to suspend EVOLVE 30M, EVOLVE 50 and EVOLVE 50M column speakers remotely from the subwoofer and without the distance pole.

| | $\mathbf{}$ | |
|---|-------------|---|
| L | ! | 7 |

4

Warning!

The EVOLVE-WMK is designed to only suspend EVOLVE 30M, EVOLVE 50 and EVOLVE 50M column speakers (maximum 11 lbs/5 kg load weight). Do not use to suspend any other loudspeakers or additional equipment.

For safety, ensure the mounting surface supports more than the weight of the speaker. Use only industry-accepted fasteners and mounting methods when mounting the wall bracket. Consult an expert if you are unsure.



Caution!

It is the installer's responsibility to determine and use the proper mounting hardware for the wall construction type.

Disregarding this caution could result in damage to the product and personal injuries may occur.



Caution!

It is the installer's responsibility to determine and use properly rated truss clamps with truss system.

Disregarding this caution could result in damage to the product and personal injuries may occur.



Notice!

If the loudspeaker installation will be delayed, cover it with the paint shield/dust shield.

4.1 Wiring the EVOLVE column

The process of wiring the EVOLVE column is different depending on the connection type of the wall mount kit, as described in this section.

To wire the EVOLVE column to the column speaker adapter:

EVOLVE-WMK-NB / EVOLVE-WMK-NW / EVOLVE-TM-B

- Connect the cable using an NL4 connector to the corresponding NL4 connector on the column speaker adapter.



EVOLVE-WMK-PB / EVOLVE-WMK-PW

1. Remove the four screws that attach the upper housing of the column speaker adapter to the lower housing.





- 2. Strip back each individual wire's insulation to leave approximately 6 mm of bare wire exposed.
- 3. Twist the wire ends to prevent individual strands from separating.
- Insert the bare wire into the input terminal connector.
 Make sure no excess bare wire is exposed beyond the terminal connector. The connector must clamp down on the bare wire, not the wire insulation.
- 5. Install the rubber grommet on the cable and attach the Phoenix-style connector to the wire. Connect the positive wire to the pin marked with a "+", and the negative wire to the pin marked with a "-".
- 6. Plug the connector into the lower housing of the column speaker adapter.



- 7. Attach the strain relief clamp using TR20 screws.
- 8. Replace the upper housing of the column speaker adapter onto the set.



9. Attach the upper housing of the column speaker adapter to the lower housing with the supplied screws.



If you're connecting a Phoenix to an NL4, refer to Additional pin-out tables, page 28.

Refer to

- Additional pin-out tables, page 28

4.2 Attaching the column speaker adapter to the EVOLVE column

To attach the column speaker adapter to the $\ensuremath{\mathsf{EVOLVE}}$ column:

- $1. \quad {\rm Remove \ the \ two \ screws \ on \ the \ bottom \ of \ the \ EVOLVE \ column.}$
- 2. Insert the column speaker adapter in the opening at the bottom of the EVOLVE column.
- 3. Attach the column speaker adapter to the EVOLVE column with the supplied TR20 screws.

EVOLVE-WMK-NB / EVOLVE-WMK-NW / EVOLVE-TM-B

EVOLVE-WMK-PB / EVOLVE-WMK-PW



4.3 Attaching the EVOLVE column to the wall bracket

The wall bracket is composed of two pieces: the wall part and the handle part. The installation of the wall bracket comprises:

- 1. Installing the wall part, page 16
- 2. Attaching the handle part to the EVOLVE column, page 17
- 3. Mounting the wall bracket, page 18
- 4. Attaching the cosmetic cover set, page 19

4.3.1 Installing the wall part

To install the wall part of the bracket:

- 1. Separate the two pieces of the wall bracket by unscrewing the two bolts on the side.
- 2. Use a bubble level to align the wall part on the wall.
- 3. Mark the position of the screw holes with a pen.
- 4. Attach the wall part to the wall with the mounting screws.





Notice!

Consult an engineer and install fasteners according to the hardware manufacturer.



Caution!

It is the installer's responsibility to determine and use the proper mounting hardware for the wall construction type.

Disregarding this caution could result in damage to the product and personal injuries may occur.

4.3.2 Attaching the handle part to the EVOLVE column

To attach the handle part of the bracket to the $\ensuremath{\mathsf{EVOLVE}}$ column:

- 1. Attach and secure the clips to the back of the EVOLVE column with two screws and nuts.
- 2. Install the screw at the top of the clips. Do not fully insert the screw until the handle part is in place.





Notice!

Safety point

As an added safety measure, Electro-Voice recommends the user install and secure the secondary auxiliary support cable to a different structural support point. This safety point should have as little slack as possible (less than 25 mm/1 in. is preferable).

3. Slide the top screw of the clips down the slit of the handle part.



4. Install the screw at the bottom of the clips.



4.3.3 Mounting the wall bracket

To mount the wall bracket:

1. Attach the handle part to the wall bracket and join both pieces by reinstalling the two bolts.



When the speaker is in the proper pan angle (1) position, tighten the wall mount screw (2) to lock it in place.



3. When the speaker is in the proper tilt angle (1) position, tighten the wall mount screw (2) to lock it in place.



4.3.4 Attaching the cosmetic cover set

To attach the cosmetic cover set onto the bracket:

- 1. Cut out one or two slots on the cosmetic cover set to route the cable, as needed. The area to be cut out will be of a thinner material.
- 2. Install the supplied rubber grommets.



3. Route the cable and attach the cosmetic cover set onto the bracket. There are at least three options to route the cable.



4.4 Attaching the EVOLVE column to the truss mount bracket

The truss mount bracket is composed of two pieces: the truss part and the handle part.

1. Screw the truss mount bracket to the truss mount clamps using the top and bottom screw holes.





Notice!

Use two truss mount clamps with M10 threaded studs rated for 20 kg (44 lb) working load limit (WLL) or greater and 5:1 safety factor (SF).



2. Attach the truss mount bracket with clamps to the desired support point.

- 3. Attach and secure the clips to the back of the EVOLVE column with two screws and nuts.
- 4. Install the screw at the top of the clips. Do not fully insert the screw until the handle part of the truss mount bracket is in place.





Notice!

Safety point

As an added safety measure, Electro-Voice recommends the user install and secure the secondary auxiliary support cable to a different structural support point. This safety point should have as little slack as possible (less than 25 mm/1 in. is preferable).

5. Slide the top screw of the clips down the slit of the handle part of the truss mount bracket.





6. Install the screw at the bottom of the clips.



7. Attach the EVOLVE column to the truss mount bracket and join both pieces by reinstalling the two bolts.



4.5 Wiring the subwoofer

The process of wiring the subwoofer is different depending on the connection type of the wall mount kit, as described in this section.

To wire the subwoofer to the subwoofer adapter:

EVOLVE-WMK-NB / EVOLVE-WMK-NW / EVOLVE-TM-B

- 1. Connect the cable using an NL4 connector to the corresponding NL4 connector on the subwoofer adapter.
- 2. Plug the subwoofer adapter by inserting it in the slot on the upper part of the subwoofer.



EVOLVE-WMK-PB / EVOLVE-WMK-PW

1. Follow the steps described in *Wiring the EVOLVE column, page 12*.



2. Plug the subwoofer adapter by inserting it in the slot on the upper part of the subwoofer.



If you're connecting a Phoenix to an NL4, refer to Additional pin-out tables, page 28.

Refer to

• Wiring the EVOLVE column, page 12

4.6 Installing the subwoofer amplifier input cover

The subwoofer amplifier input cover is included with the EVOLVE-WMK to provide protection from dust and occasional light moisture, such as splashes. The cover will also block the light from the LCD display when needed.



Warning!

Do not use the subwoofer amplifier input cover outdoors in wet or damp environments. The cover does not protect the amplifier from rain.

To install the subwoofer amplifier input cover:

- 1. Wrap the cloth around the handle of the subwoofer.
- 2. Attach the hook and loop.



5 Troubleshooting

| Problem | Possible Causes | Action |
|---|--|---|
| No Sound | Amplifier | Connect a known working test speaker to the amplifier outputs. If there is no sound, check all electronics are on, the signal routing is correct, the source is active; the volume is turned up, and so on. Correct/Repair/Replace as necessary. If there is sound, the problem is in the wiring. |
| | Wiring | Verify you have connected the correct wire pairs to the amplifier. Play something at low level through the amplifier (for example, from a CD player or tuner). Connect the test speaker in parallel with the malfunctioning line. If the sound has gone or is very weak, the line has a short in it (possibly a severe scrape, pinch, or staple puncture). If the sound level is normal the wire is open (possibly a cut wire or missed connection). Using the test speaker, move down the line and test each connection/junction until you find the problem and correct it. Observe proper polarity. |
| | | Verify you have the inputs and outputs connected to the correct wires. If the subwoofer input panel is not correctly wired, there will be little or no sound. Observe proper polarity. |
| Poor Low- Frequency Response | Speakers Wired Out- of-Polarity | When two speakers are connected out of polarity (out of phase), the low frequencies will cancel each other acoustically. Carefully observe the wire markings or tracers on your speaker wires. Verify the amplifier (+) terminal is connected to the red speaker terminals and the amplifier (-) terminal is connected to the black speaker terminals. |
| | Improperly Wired Subwoofer Panel | Using a test speaker as described above, verify all amplifier and speaker wires are connected to their proper terminals with the correct polarity. Reversing just one set of amplifier wires can cut out all bass output from the subwoofer. |
| Intermittent Output such as, Crackling or Distortion | Faulty Connection | Check all connections at amplifier and speakers to ensure they are clean and tight. If the problem persists, it may be in the amplifier or wiring. See other actions above. |
| Constant Noise such as Buzzing, Hissing, Humming | Defective Amplifier or other Electronic Device | If the noise is present but no program material is playing, the likely cause is the signal chain in the electronics. Evaluate each component as necessary to isolate the problem. |
| | Poor System Grounding or Ground Loop | Check and correct the system grounding, as required. |

If these suggestions do not solve your problem, contact your nearest Electro-Voice dealer or Electro-Voice distributor.

6 Technical data

| | EVOLVE-WMK-PB/PW | EVOLVE-WMK-NB/NW | EVOLVE-TM-B |
|----------------------------|--|------------------|--------------------|
| Connectors: | Phoenix style | NL4 | |
| Environmental: | Indoor | | |
| Color: | Black or white Black | | Black |
| Dimensions (H x W x D): | 80 mm x 400 mm x 400 mm (3.1 in. x 15.75 in. x 15.75 in) | | 75 in. x 15.75 in) |
| WLL: | 5 kg (11.0 lbs) | | |
| Net weight: | 1.35 kg (3.0 lbs) | | |
| Shipping weight: | 1.8 kg (4.0 lbs) | | |

6.1 Additional pin-out tables

| Column | Phoenix | NL4 |
|------------------------|---------|------|
| Positive connection | 1 | n.c. |
| | 1 | +1 |
| Negative | 2 | -1 |
| connection | 2 | n.c. |

| Subwoofer | Phoenix | NL4 |
|------------|---------|------|
| Positive | n.c. | n.c. |
| connection | 1 | +1 |
| Negative | 2 | -1 |
| connection | n.c | n.c. |

6.2 Dimensions



Figure 6.1: Wall mount bracket



Figure 6.2: Wall mount bracket without covers



Figure 6.3: Column speaker adapter for EVOLVE-WMK with Phoenix-style connector



Figure 6.4: Subwoofer adapter for EVOLVE-WMK with Phoenix-style connector



Figure 6.5: Column speaker adapter for EVOLVE-WMK with NL4 connector



Figure 6.7: Truss mount bracket





Figure 6.8: 1:1 template for drilling holes





Bosch Sicherheitssysteme GmbH Bosch Security Systems, LLC

Robert-Bosch-Ring 5 85630 Grasbrunn Germany www.boschsecurity.com © Bosch Sicherheitssysteme GmbH, 2022

12000 Portland Avenue South Burnsville MN 55337 USA www.electrovoice.com © Bosch Security Systems, LLC, 2022