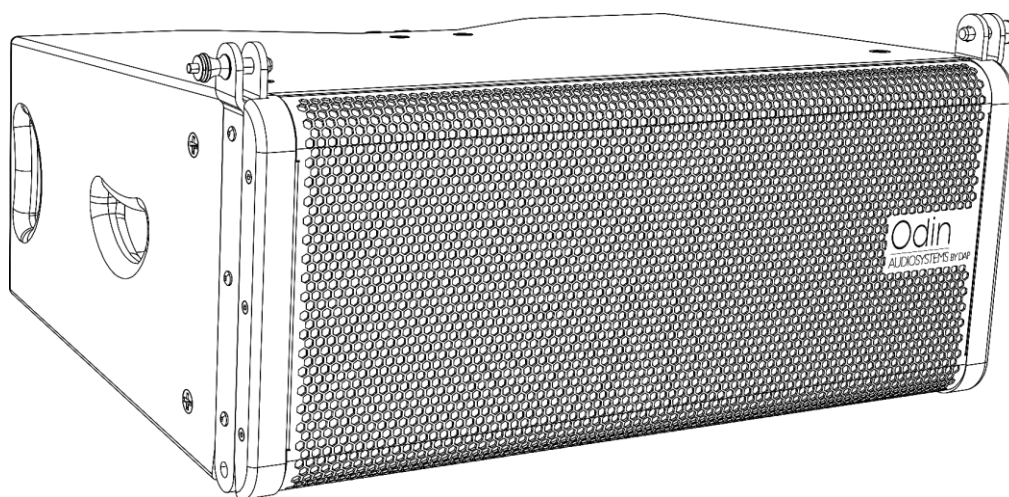


DAP

USER MANUAL



ENGLISH

Odin T-8 Line Array Satellite V1

Product code: D3970

Table of contents

1. Introduction	3
1.1. Before Using the Product	3
1.2. Intended Use	3
1.3. Text Conventions	3
1.4. Symbols and Signal Words	4
1.5. Symbols on the Information Label	4
2. Safety	5
2.1. Warnings and Safety Instructions	5
2.2. Requirements for the User	7
3. Description of the Device	8
3.1. Front View	8
3.2. Back View	8
3.3. Product Specifications	9
3.4. Optional Accessories	10
3.5. Dimensions	10
4. Installation	11
4.1. Safety Instructions for Installation	11
4.2. Personal Protective Equipment	11
4.3. Installation Site Requirements	11
4.4. Stacking Multiple Devices	12
4.5. Mounting Options	13
4.5.1. Installation on a Distance Pole	14
4.5.2. Installation with the Odin FB-01 Flybar	15
4.5.3. Installation with the Odin FB-02 Flybar	16
4.5.3.1. Flying Installation	16
4.5.3.2. Stacked Installation	17
5. Setup and Operation	18
5.1. Safety Instructions for Operation	18
5.2. Setup	18
5.2.1. Connecting the Amplifier	18
5.3. Setting the Crossover Filter	19
5.4. Setting the Signal Boost	19
6. Troubleshooting	20
7. Maintenance	20
7.1. Preventive Maintenance	20
7.1.1. Basic Cleaning Instructions	20
7.2. Corrective Maintenance	20
8. Deinstallation, Transportation and Storage	21
8.1. Instructions for Deinstallation	21
8.2. Instructions for Transportation	21
8.3. Storage	21
9. Disposal	21
10. Approval	21

Preface

Thank you for purchasing this DAP product.

The purpose of this user manual is to provide instructions for the correct and safe use of this product.

Keep the user manual for future reference as it is an integral part of the product. The user manual shall be stored at an easily accessible location.

This user manual contains information concerning:

- Safety instructions
- Installation and operation of the device
- Intended and non-intended use of the device
- Maintenance procedures
- Troubleshooting
- Transport, storage and disposal of the device

Non-observance of the instructions in this user manual may result in serious injuries and damage of property.

©2023 DAP. All rights reserved.

No part of this document may be copied, published or otherwise reproduced without the prior written consent of Highlite International.

Design and product specifications are subject to change without prior notice.

For the latest version of this document or other language versions, please visit our website www.highlite.com or contact us at service@highlite.com.

Highlite International and its authorized service providers are not liable for any injury, damage, direct or indirect loss, consequential or economic loss or any other loss arising from the use of, or inability to use or reliance on the information contained in this document.

1. Introduction

1.1. Before Using the Product



Important

Read and follow the instructions in this user manual before installing, operating or servicing this product.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

After unpacking, check the contents of the box. If any parts are missing or damaged, contact your Highlite International dealer.

Your shipment includes:

- DAP Odin T-8 Line Array Satellite
- User manual

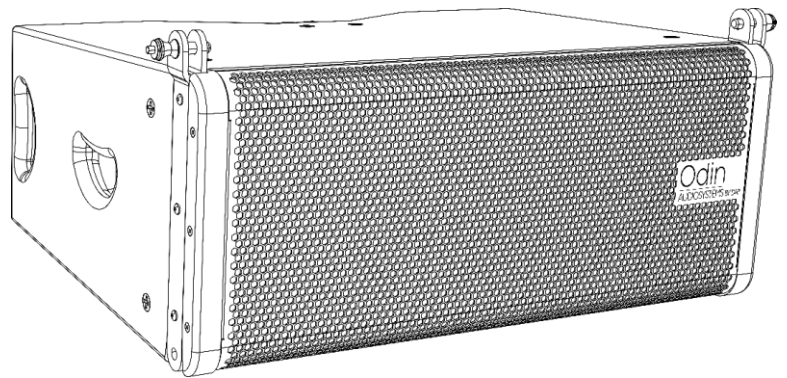


Fig. 01

1.2. Intended Use

This device is designed to be used as a passive satellite loudspeaker. It is suitable only for indoor use. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

1.3. Text Conventions

Throughout the user manual the following text conventions are used:

- References: References to chapters and parts of the device are in bold lettering, for example: "Refer to **2. Safety**", "press the **power switch (03)**"
- 0–255: Defines a range of values
- Notes: **Note:** (in bold lettering) is followed by useful information or tips

1.4. Symbols and Signal Words

Safety notes and warnings are indicated throughout the user manual by safety signs.

Always follow the instructions provided in this user manual.



DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

Indicates an imminently hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.



Attention

Indicates important information for the correct operation and use of the product.



Important

Read and observe the instructions in this document.



Electrical hazard



Provides important information about the disposal of this product.

1.5. Symbols on the Information Label

This product is provided with an information label. The information label is located on the bottom plate of the device.

The information label contains the following symbols:



This device is designed for indoor use.



This device shall not be treated as household waste.



Caution: Risk of electric shock. Disconnect input power before opening.
Warning: This appliance must be earthed.

2. Safety

**Important**

Read and follow the instructions in this user manual before installing, operating or servicing this product.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

2.1. Warnings and Safety Instructions

**DANGER**

Danger for children

For adult use only. The device must be installed beyond the reach of children.

- Do not leave various parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within children's reach. Packaging material is a potential source of danger for children.

**DANGER**

Electric shock caused by dangerous voltage inside

There are areas within the device where dangerous touch voltage ($> 120 \text{ V DC}$) may be present.

- Do not open the device or remove any covers.
- Do not operate the device if the covers or the housing are open.
- Disconnect the device from electrical power supply before service and maintenance, and when the device is not in use.

**DANGER**

Electric shock caused by short-circuit

This device falls under IEC protection Class I.

- Make sure that the device is electrically connected to ground (earth). Connect the device only to a socket-outlet with ground (earth) connection.
- Do not cover the ground (earth) connection.
- Do not bypass the thermostatic switch or fuses.
- Do not let the power cable come into contact with other cables. Handle the power cable and all connections with the mains with caution.
- Do not modify, bend, mechanically strain, put pressure on, pull or heat up the power cable.
- Make sure that the power cable is not crimped or damaged. Examine the power cable periodically for any defects.
- Do not immerse the device in water or other liquids. Do not install the device in a location where flooding may occur.
- Do not use the device during thunderstorms. Disconnect the device from the electrical power supply immediately.



Attention Speaker load

- Make sure that the total wattage of all connected speakers does not exceed the rated wattage of the amplifier.
- Make sure that the speaker cable run is appropriate for the total speaker load.



Attention Power supply

- Before connecting the device to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device.
- Make sure that the cross-sectional area of the extension cords and power cables is sufficient for the required power consumption of the device.



Attention General safety

- Do not shake the device. Avoid brute force when installing or operating the device.
- If the device is exposed to extreme temperature variations (e.g. after transportation), do not switch it on immediately. Let the device reach room temperature before switching it on, otherwise it may be damaged by the formed condensation.
- If the device fails to work properly, discontinue the use immediately.



Attention This device shall be used only for the purposes it is designed for.

This device is designed to be used as a passive satellite loudspeaker. It is suitable only for indoor use. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

- This device is not suitable for households.
- This device is not designed for permanent operation.
- This device does not contain user-serviceable parts. Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.

**Attention**

Before each use, examine the device visually for any defects.

Make sure that:

- There are no deformations on the housing.
- The power cables are not damaged and do not show any material fatigue.

**Attention**

Do not expose the device to conditions that exceed the rated IP class conditions.

This device is IP20 rated. IP (Ingress Protection) 20 class provides protection against solid objects greater than 12 mm, such as fingers, and no protection against harmful ingress of water.

2.2. Requirements for the User

This product may be used by ordinary persons. Maintenance and installation may be carried by ordinary persons. Service shall be carried out only by instructed or skilled persons. Contact your Highlite International dealer for more information.

Instructed persons have been instructed and trained by a skilled person, or are supervised by a skilled person, for specific tasks and work activities associated with the installation, service and maintenance of this product, so that they can identify risks and take precautions to avoid them.

Skilled persons have training or experience, which enables them to recognize risks and to avoid hazards associated with the installation, service and maintenance of this product.

Ordinary persons are all persons other than instructed persons and skilled persons. Ordinary persons include not only users of the product but also any other persons that may have access to the device or who may be in the vicinity of the device.

3. Description of the Device

The DAP Odin T-8 is an 800 W passive line-array satellite speaker. You can combine multiple devices in a stacked setup (up to 4 devices) or in a flown setup (up to 12 devices). The device has a 3 dB high-frequency boost switch.

3.1. Front View

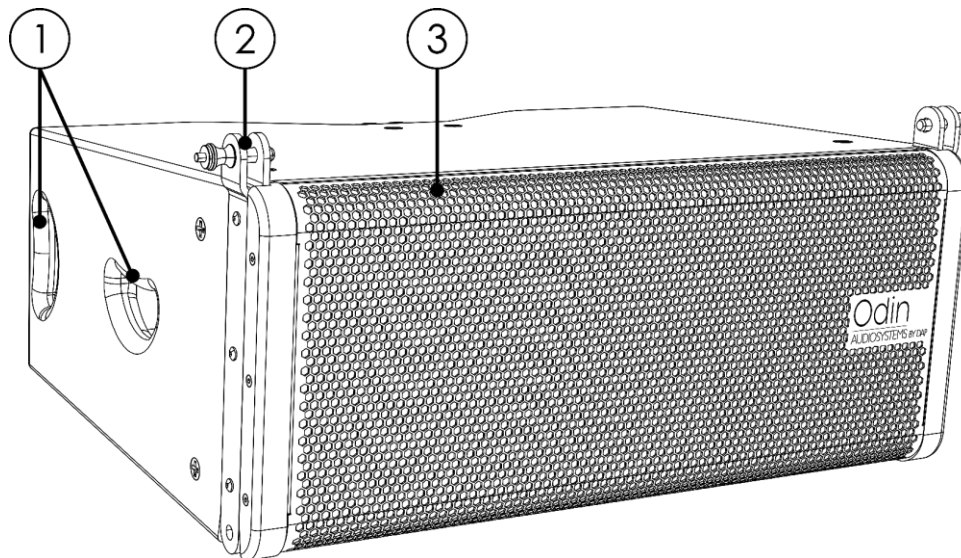


Fig. 02

- 01) 4 x carrying handle
- 02) 2 x spring-loaded pin
- 03) Speaker grill

3.2. Back View

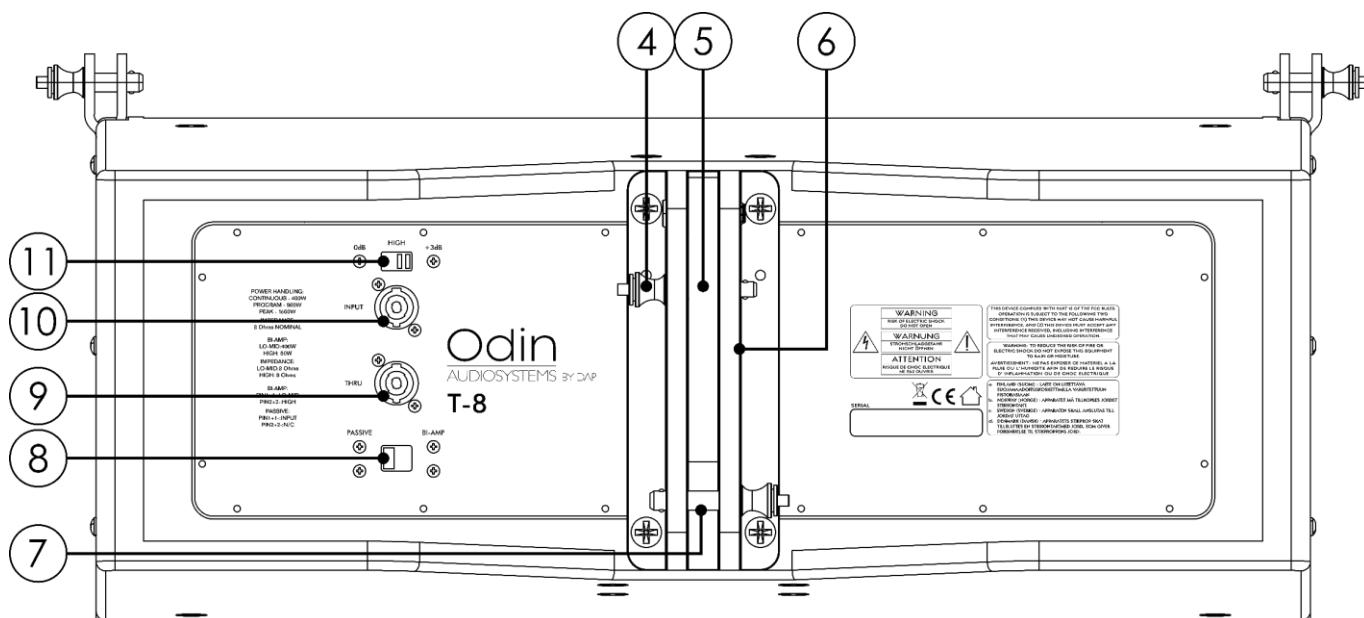


Fig. 03

- 04) Spring-loaded pin (for the rigging bracket)
- 05) Rigging connector
- 06) Rigging bracket
- 07) Spring-loaded pin (for the rigging bracket)
- 08) Passive/bi-amp switch
- 09) Speaker connector THRU
- 10) Speaker connector IN
- 11) Boost switch (0 db/+3 db)

3.3. Product Specifications

Model:	DAP Odin T-8 Line Array Satellite
Physical:	
Dimensions:	465 x 649 x 300 mm (L x W x H)
Weight:	20,7 kg
Inputs:	
RMS input power:	800 W
Peak input power:	1200 W
Audio Specifications:	
Speaker system:	2-way line array
Speaker sensitivity (1 W/1 m):	97 dB
Speaker impedance:	8 Ω
Maximum SPL at 1 m:	129 dB
Frequency response (-3 dB):	80–19000 Hz
Crossover frequency (high):	1800 Hz
Woofer diameter:	8 "
Woofer voice coil:	2 "
Woofer magnet type:	Ferrite
Compression driver diameter:	1 "
Compression driver voice coil:	1,75 "
Compression driver magnet type:	Neodymium
Dispersion angle (horizontal):	100°
Dispersion angle (vertical):	10°
Construction:	
Housing:	Plywood
Color:	Black
IP rating:	IP20
Connections:	
Passive input connection:	Speaker connector IN
Passive output connection:	Speaker connector THRU
Product Properties:	
Speaker adapter diameter:	Ø 35 mm
Speaker grill:	Steel
Mounting options:	3-point suspension
Speaker handle positions:	Left, right, back
Rigging options:	Flying, stacking
Thermal:	
Maximum ambient temperature t_a :	40 °C
Minimum ambient temperature t_a :	0 °C

3.4. Optional Accessories

You can additionally purchase the following accessories:

- [D3910](#) (Odin FB-01 Flybar)
- [D3911](#) (Odin FB-02 Flybar)
- [D3912](#) (Odin PM-01 Polemount Adapter)
- [D3913](#) (Odin CA-01 Connection Adapter)
- [D8610](#) (DAP Distance Tube 35 mm)
- [D8611](#) (DAP Distance Tube M20)

3.5. Dimensions

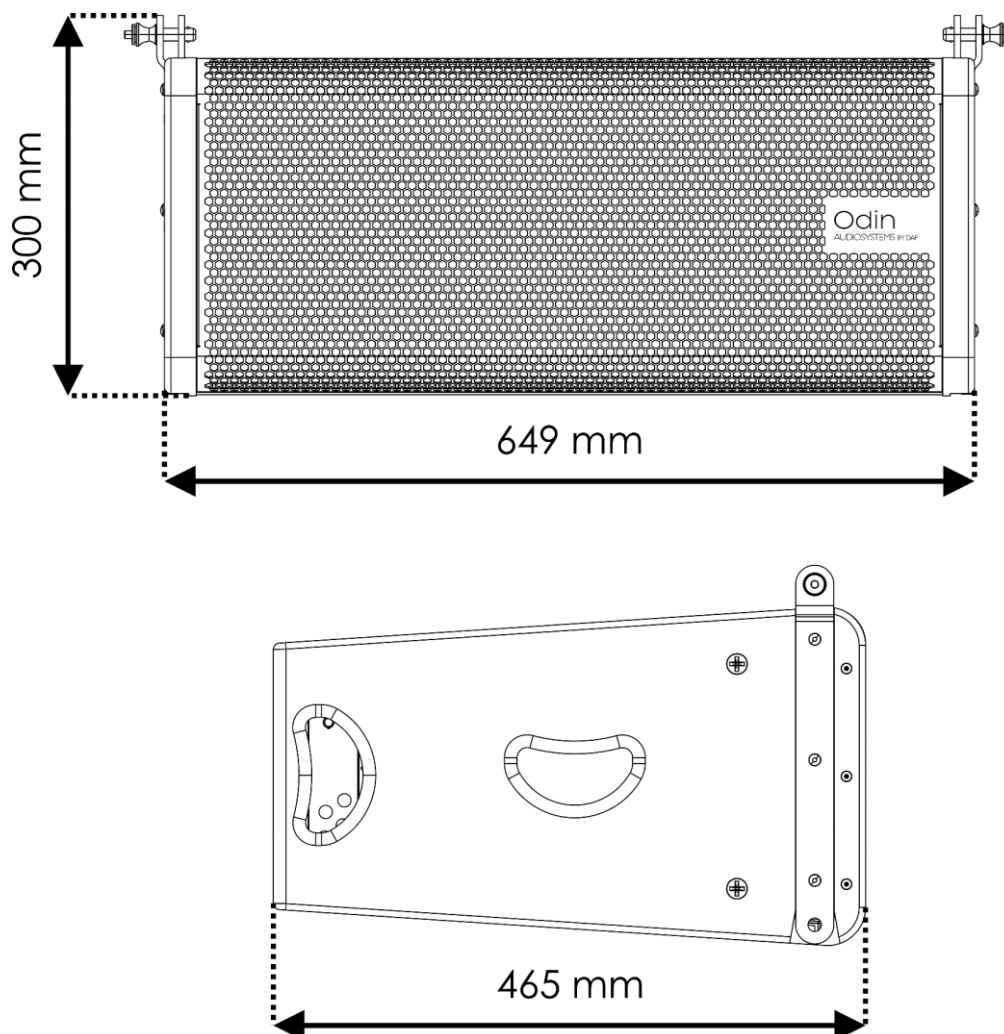


Fig. 04

4. Installation

4.1. Safety Instructions for Installation



WARNING

Incorrect installation can cause serious injuries and damage of property.

Installation must be carried out only by instructed persons.

Follow all applicable European, national and local safety regulations concerning rigging and trussing.

- Make sure that the overhead structure can hold the weight of the device.
- Make sure that the installation location is free of any obstructions and the speaker cables do not come in contact with other objects.

4.2. Personal Protective Equipment

During installation and rigging wear personal protective equipment in compliance with the national and site-specific regulations.

4.3. Installation Site Requirements

- The device must be installed only indoors.
- The device can be installed on a pole mount or be stacked and suspended on an overhead structure.
- The maximum ambient temperature $t_a = 40\text{ °C}$ must never be exceeded.
- The relative humidity must not exceed 90 % with an ambient temperature of 40 °C.

4.4. Stacking Multiple Devices

You can stack multiple Odin T-8 Line Array Satellite devices in one setup.

To stack multiple devices, follow the steps below:

- 01) Put one device on another device.
- 02) Push and hold down the buttons of the **spring-loaded pins (02)**.
- 03) Remove the **spring-loaded pins (02)**.
- 04) Align the openings of top device with the openings of the bottom device.
- 05) Put the **spring-loaded pins (02)** through the openings of the top and bottom devices.

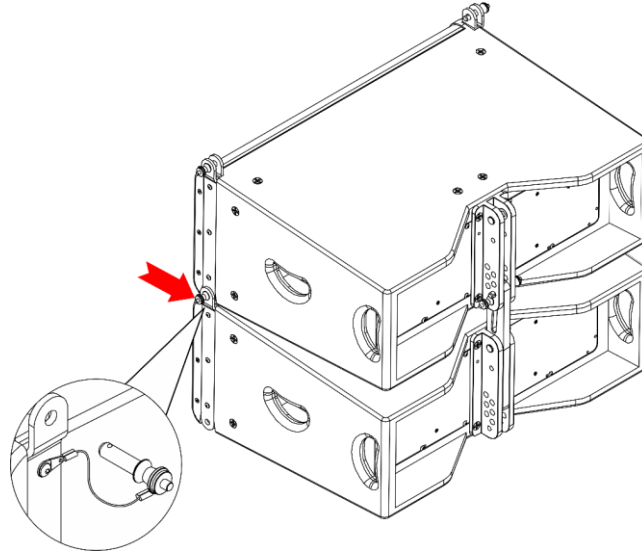


Fig. 05

- 06) Unfold and insert the **rigging connector (05)** of the bottom device into the **rigging bracket (06)** of the top device.
- 07) Put the **spring-loaded pin (04)** through the openings of the **rigging connector (05)** of the bottom device and the openings of the **rigging bracket (06)** of the top device. The inclination angle depends on the selected opening.

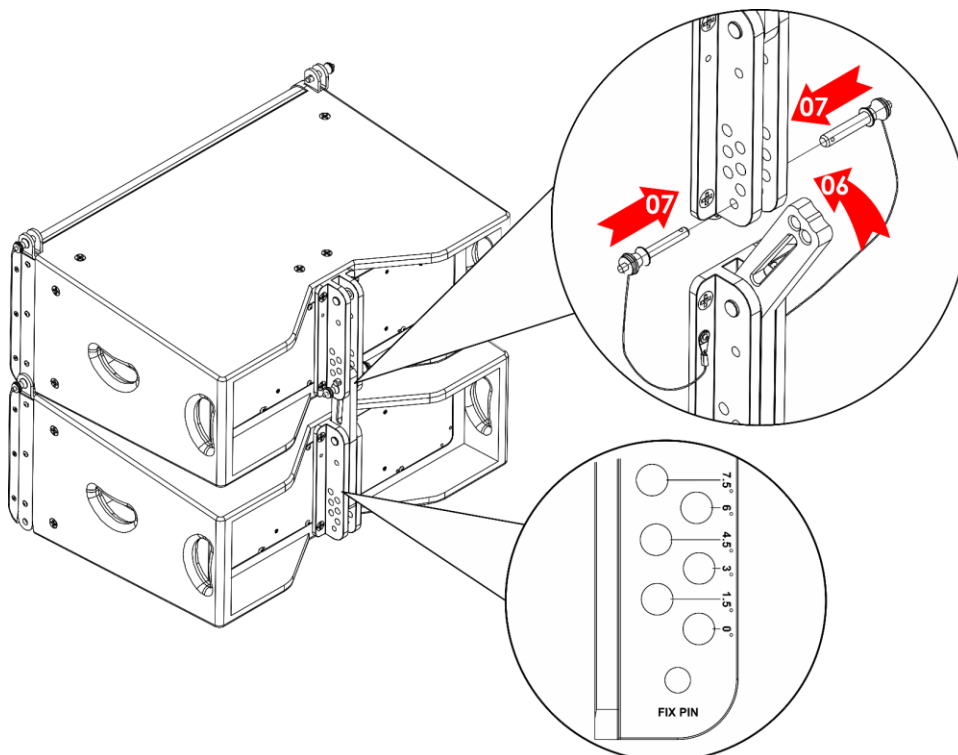


Fig. 06

4.5. Mounting Options



CAUTION

Restrict the access under the work area during installation and/or deinstallation.

You can mount an array of devices in the following ways:

- on a distance pole
- on a fly bar (Odin FB-01 or Odin FB-02)

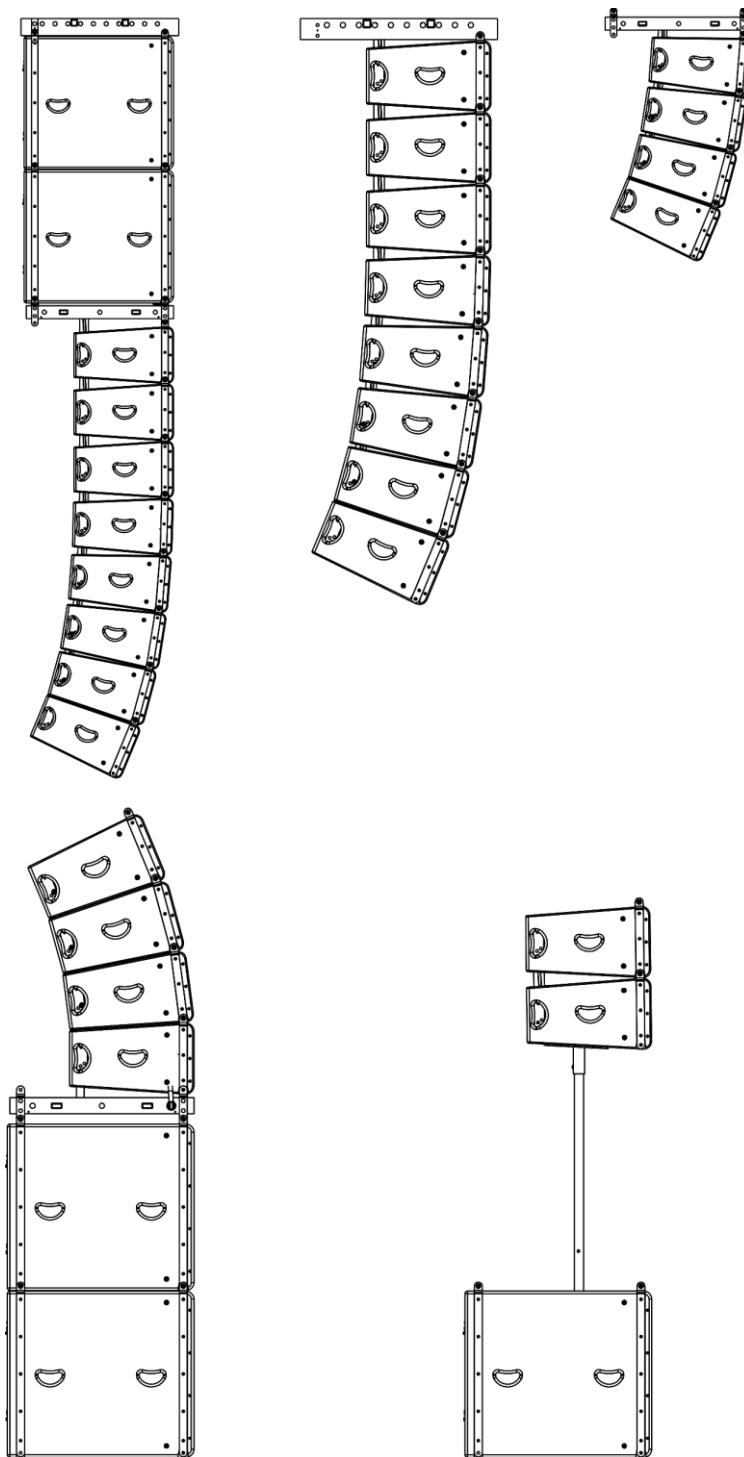


Fig. 07

4.5.1. Installation on a Distance Pole

You can create a setup of 2 satellites on top of the Odin subwoofer, with an M20 distance pole (D8611). You need the Odin PM-01 Polemount Adapter (D3912) if you want to mount the device on a distance pole. See **3.4. Optional Accessories** on page 10.

To install the device on an M20 distance pole, follow the steps below:

01) Attach the Odin PM-01 Polemount Adapter to the bottom of the device, with 4 screws.

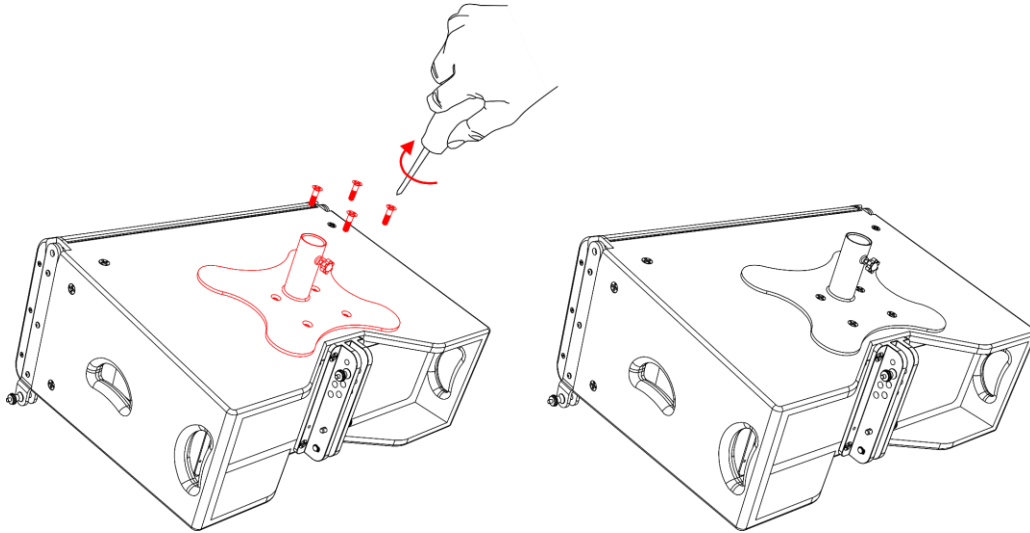


Fig. 08

02) Insert the distance pole into the opening of the Odin PM-01 Polemount Adapter.

03) Insert the other end of the distance pole into the opening of the Odin subwoofer.

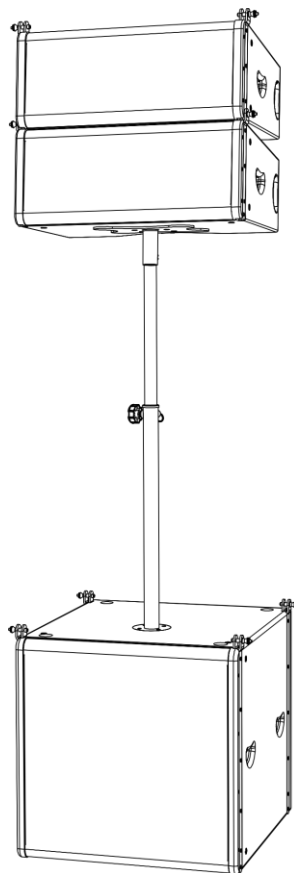


Fig. 09

4.5.2. Installation with the Odin FB-01 Flybar



WARNING

Do not hang more devices on one fly bar than the maximum allowed number.

You can fly a maximum of 12 x Odin T-8 Line Array Satellites on the Odin FB-01 Flybar.

To connect the device to the Odin FB-01 Flybar, follow the steps below:

- 01) Push and hold down the buttons of the **spring-loaded pins (02/04)**.
- 02) Remove the **spring-loaded pins (02/04)**.
- 03) Align the device with the fly bar.
- 04) Put the **spring-loaded pins (02)** through the openings of the fly bar and of the device.

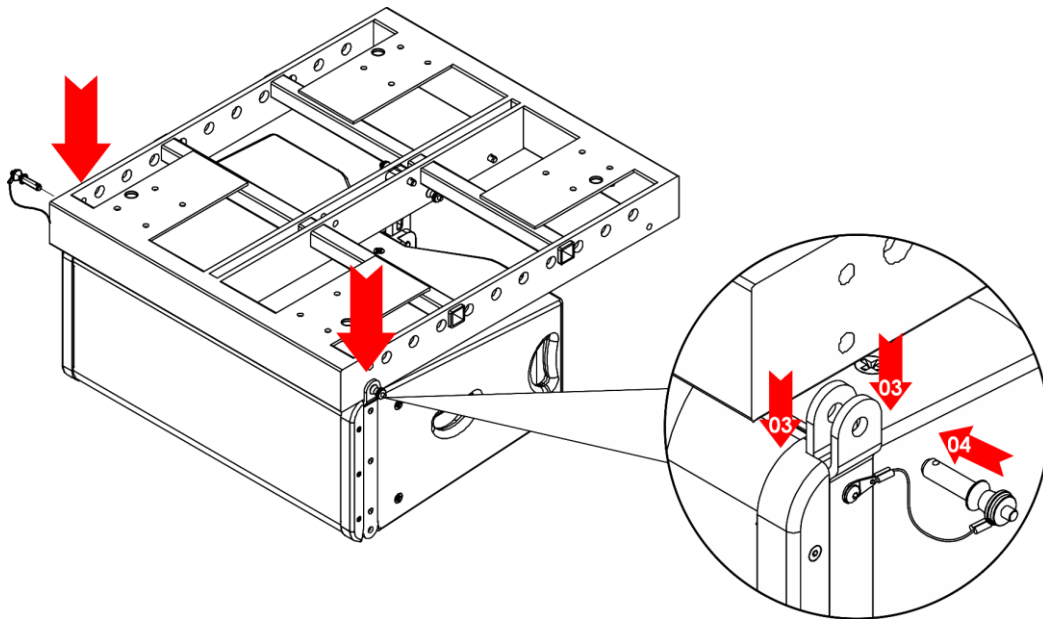


Fig. 10

- 05) Unfold and insert the **rigging connector (05)** into the opening of the fly bar.
- 06) Put the **spring-loaded pin (04)** through the openings of the **rigging connector (05)** and of the fly bar.

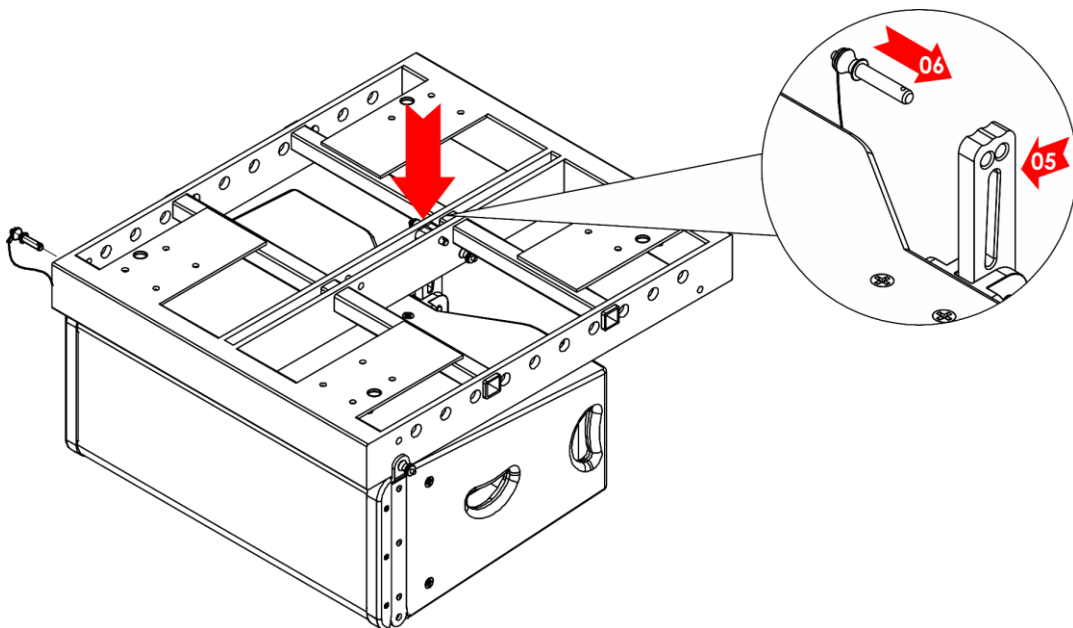


Fig. 11

4.5.3. Installation with the Odin FB-02 Flybar



WARNING

Do not hang more devices on one fly bar than the maximum allowed number.

With the Odin T-8 Line Array Satellites with the Odin FB-02 Flybar, you can:

- stack up to 4 x Odin T-8 Line Array Satellites on the Odin subwoofers.
- fly up to 8 x Odin T-8 Line Array Satellites under the Odin subwoofers (when used together with the Odin FB-01).
- fly up to 4 x Odin T-8 Line Array Satellites, with limited tilt options. This type of installation should be used only in exceptional settings.

4.5.3.1. Flying Installation

In a flying installation, the device is mounted to the bottom of the Odin FB-02 Flybar.

To connect the device to the Odin FB-02 Flybar, follow the steps below:

- 01) Push and hold down the buttons of the **spring-loaded pins (02/04)**.
- 02) Remove the **spring-loaded pins (02/04)**.
- 03) Align the device with the fly bar.

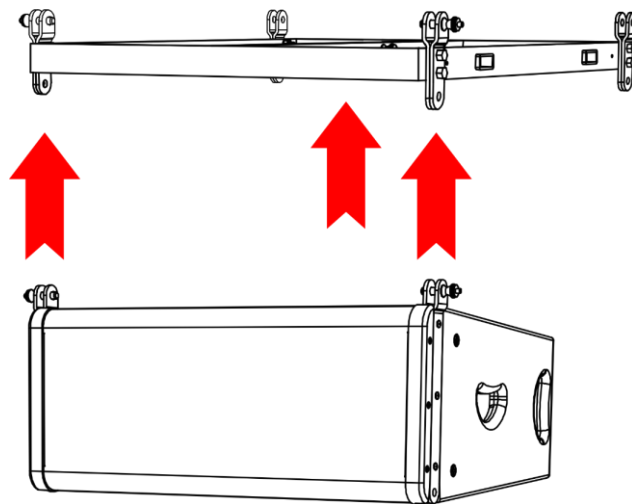


Fig. 12

- 04) Put the **spring-loaded pins (02/04)** through the openings of the fly bar and of the device.

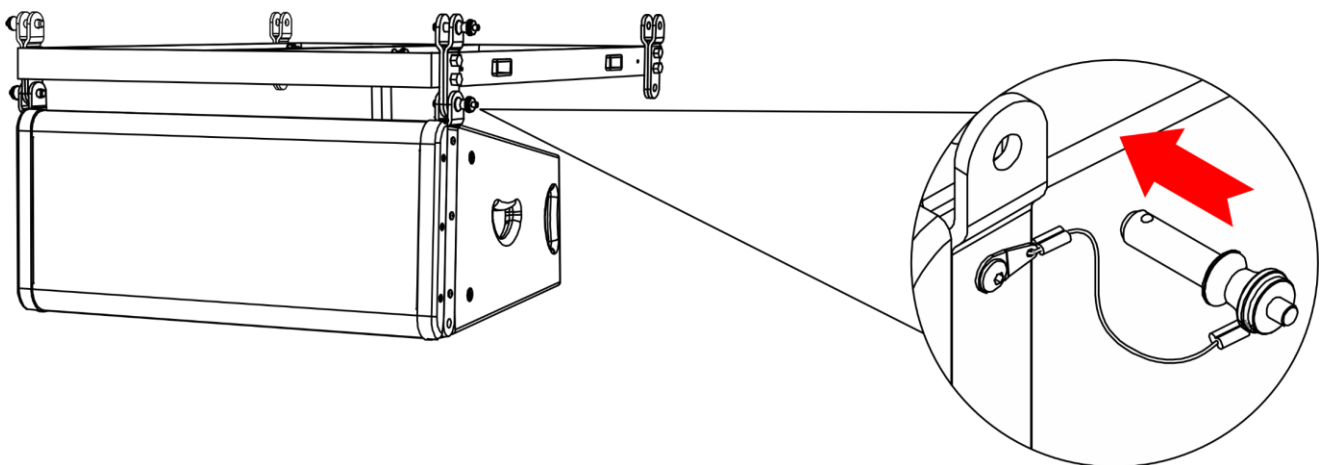


Fig. 13

4.5.3.2. Stacked Installation

In a stacked installation, the device is mounted to the top of the fly bar.

To be able to install the device, you need to install the Odin CA-01 Connection Adapter (D3913) on the Odin FB-02 Flybar. For more information see **3.4. Optional Accessories** on page 10.

To connect the device to the Odin FB-02 Flybar, follow the steps below:

- 01) Put the device on top of the fly bar.
- 02) Push and hold down the buttons of the 2 spring-loaded pins of the fly bar.
- 03) Put the spring-loaded pins of the fly bar through the openings of the fly bar and of the device.

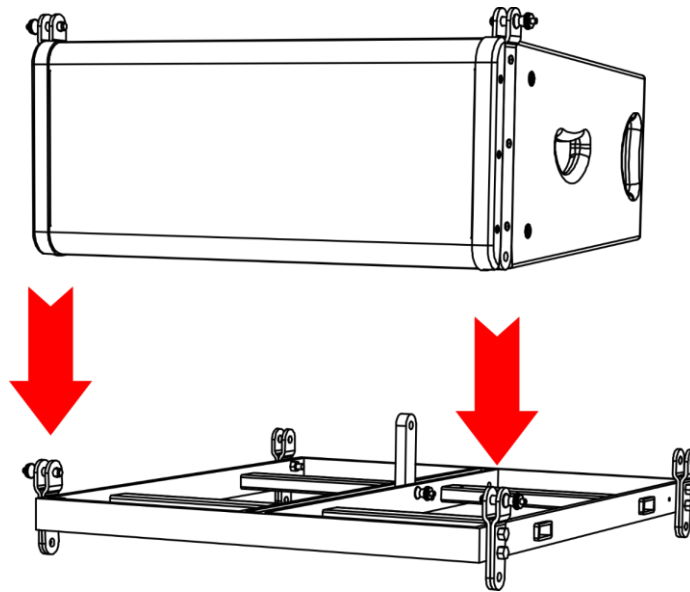


Fig. 14

- 04) Put the **spring-loaded pin (07)** through the openings of the **rigging bracket (06)** and of the CA-01 Connection Adapter.

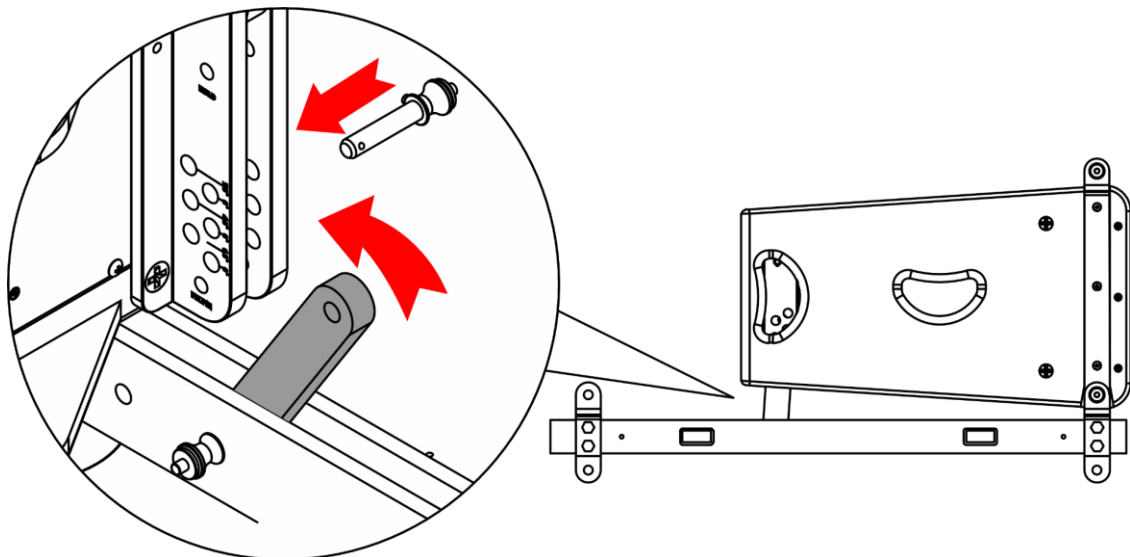


Fig. 15

5. Setup and Operation

5.1. Safety Instructions for Operation

**Attention**

This device must be used only for the purposes it is designed for.

This device is designed to be used as a passive satellite loudspeaker. It is suitable only for indoor use.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

**Attention**

Power supply

Before connecting the device to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device.

5.2. Setup

You can combine the Odin devices and connect an audio mixer and an amplifier.

To connect the devices, follow the steps below:

- 01) Connect the Odin devices and the amplifier. See **5.2.1. Connecting the Amplifier** on page 18.
- 02) Connect the audio mixer to the amplifier.
- 03) Switch on the audio mixer and the amplifier.

After use:

- 01) Disconnect the Odin devices.
- 02) Switch off the audio mixer and the amplifier.

5.2.1. Connecting the Amplifier

**Attention**

Speaker load

Before connecting the amplifier to the power supply, make sure that the total load of all connected speakers is below the maximum rating of the amplifier. If the total load is higher, it may cause damage to the amplifier and to the speakers.

To determine if the settings are correct:

- 01) Add up the wattage settings of all connected speakers.
- 02) Compare the value with the maximum rating of the amplifier. If necessary, disconnect speaker(s).

To connect the device to a conventional amplifier and connect multiple speakers to each other:

- 01) Connect the **speaker connector IN (10)** of the first device to the output of the amplifier.
- 02) Connect the **speaker connector THRU (09)** of the first device to the **speaker connector IN (10)** of the second device.
- 03) Repeat step 2 to connect multiple devices as shown in Fig. 16.

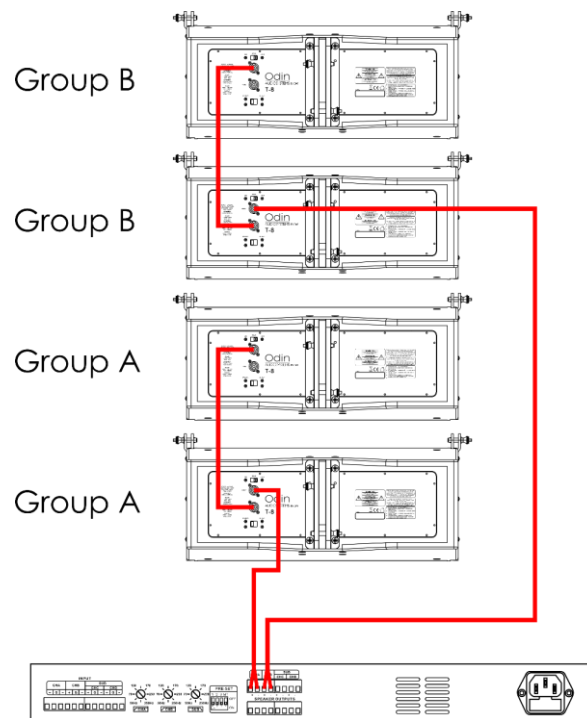


Fig. 16

5.3. Setting the Crossover Filter

You can activate or bypass the internal crossover filter with the **passive/bi-amp switch (08)**.

Move the **passive/bi-amp switch (08)** to one of the 2 positions:

- **PASSIVE:** The internal crossover filter is active. It splits the audio input signal and filters it to the woofer and the high driver. The woofer receives all frequencies up to the crossover point. The high driver receives all frequencies from the crossover point and higher. It means that a full-range audio signal can be supplied to the 1+ / 1- input pins.
- **BI-AMP:** The internal crossover filter is bypassed. The woofer and the high driver are both available on the input (woofer: 1+ / 1-, high driver: 2+ / 2-). You need to filter the signal and set the crossover point of the amplifiers (with an active crossover or a DSP speaker manager).

5.4. Setting the Signal Boost

You can boost the input signal by 3 dB for a larger throw of the high tones.

Move the **boost switch (11)** to the '+3 dB' position to activate a signal boost of the high tones.

6. Troubleshooting

This troubleshooting guide contains solutions to problems which can be carried out by an ordinary person. The device does not contain user-serviceable parts.

Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.

Refer servicing to instructed or skilled persons. Contact your Highlite International dealer in case the solution is not described in the table.

Problem	Probable cause(s)	Solution
The device does not function at all	Bad connection	Make sure that the connections between the devices are correct
	No power to the amplifier	Make sure that the amplifier is on
	Incorrect settings	Examine if the amplifier is compatible with the device
No sound	Incorrect polarity of the connections	Examine if the polarity of the connections between the devices is correct

7. Maintenance

7.1. Preventive Maintenance



Attention

Before each use, examine the device visually for any defects.

Make sure that:

- There are no deformations on the housing.
- The power cables are not damaged and do not show any material fatigue.

7.1.1. Basic Cleaning Instructions

To clean the device, follow the steps below:

- 01) Switch off the device.
- 02) Clean the device with a soft, lint-free cloth.



Attention

- Do not immerse the device in liquid.
- Do not use alcohol or solvents.

7.2. Corrective Maintenance

The device does not contain user-serviceable parts. Do not open the device and do not modify the device.

Refer repairs and servicing to instructed or skilled persons. Contact your Highlite International dealer for more information.

8. Deinstallation, Transportation and Storage

8.1. Instructions for Deinstallation



WARNING

Incorrect deinstallation can cause serious injuries and damage of property.

- Disconnect power supply before deinstallation.
- Always observe the national and site-specific regulations during deinstallation of the device.
- Wear personal protective equipment in compliance with the national and site-specific regulations.

8.2. Instructions for Transportation

- Use the original packaging to transport the device, if possible.
- Always observe the handling instructions printed on the outer carton box, for example: "Handle with care", "This side up", "Fragile".

8.3. Storage

- Clean the device before storing. Follow the cleaning instructions in chapter **7.1.1. Basic Cleaning Instructions** on page 20.
- Store the device in the original packaging, if possible.

9. Disposal

Correct disposal of this product



Waste Electrical and Electronic Equipment

This symbol on the product, its packaging or documents indicates that the product shall not be treated as household waste. Dispose of this product by handing it to the respective collection point for recycling of electrical and electronic equipment. This is to avoid environmental damage or personal injury due to uncontrolled waste disposal. For more detailed information about recycling of this product contact the local authorities or the authorized dealer.

10. Approval



Visit the respective product page on the website of Highlite International (www.highlite.com) for an available declaration of conformity.

DAP

©2023 DAP