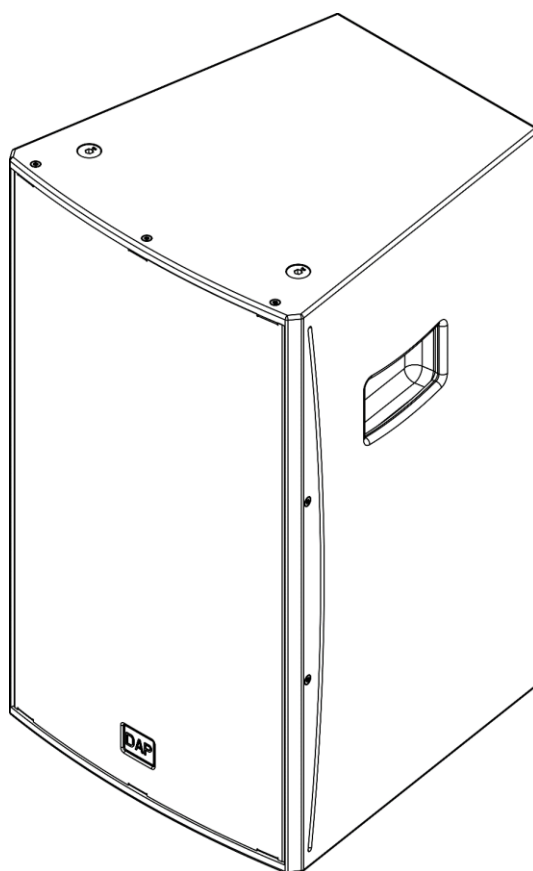


DAP

USER MANUAL



ENGLISH

NRG-12A

V1

Product code: D3655

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.

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

Your shipment includes:

- DAP NRG-12A
- Schuko to Power Pro cable (1,5 m)
- User manual

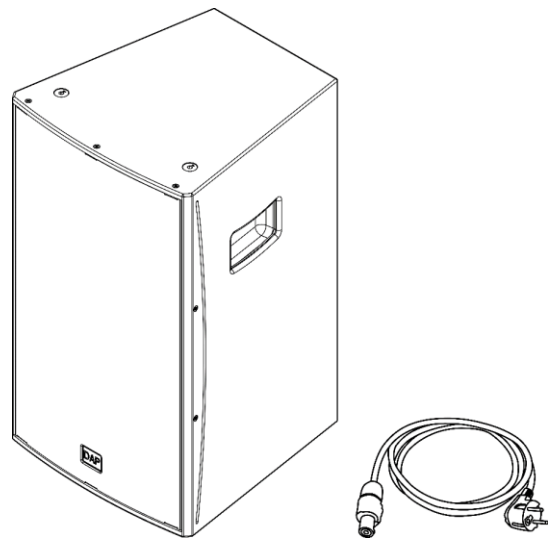


Fig. 01

1.2. Intended Use

This device is designed to be used as an active full-range 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 backside 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.
	This device falls under IEC protection class I.
	Read and follow the instructions in the user manual before installing, operating or servicing the device.
 	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.



WARNING
Stability hazard

The device may fall if it is mounted on a distance pole, causing personal injury or death. The device is for use only with the stands that are recommended in this user manual.

- Make sure that the device is safely mounted on a distance pole.
- Do not place objects on the top of the device when it is mounted on a distance pole. These objects may fall and cause injury.



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 an active full-range 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 out 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.

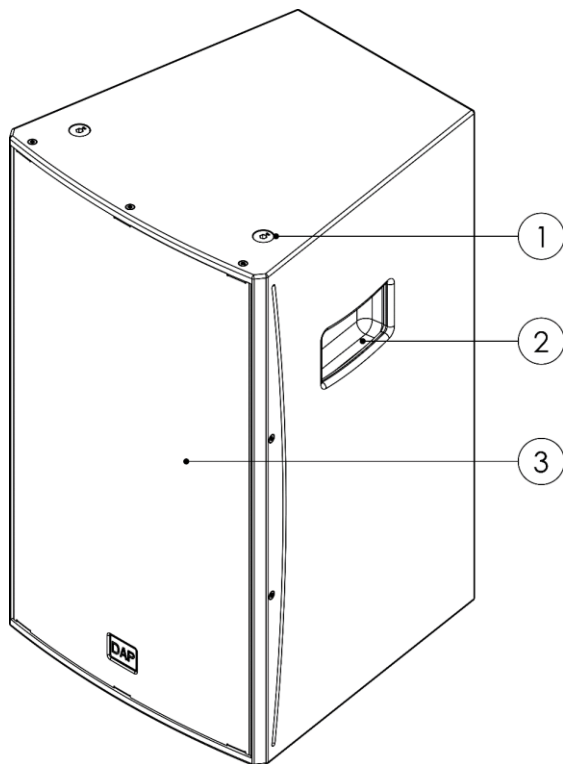
Skilled persons have training or experience, which enables them to recognize risks and to avoid hazards associated with the installation, service and maintenance of this product.

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 NRG-12A is a 180 W RMS active full-range speaker. It has dedicated line and microphone inputs and is equipped with Bluetooth 5.0 with TWS (True Wireless Stereo). The device has an internal DSP with 4 modes. The device can be used with an audio mixer, as well as without an audio mixer.

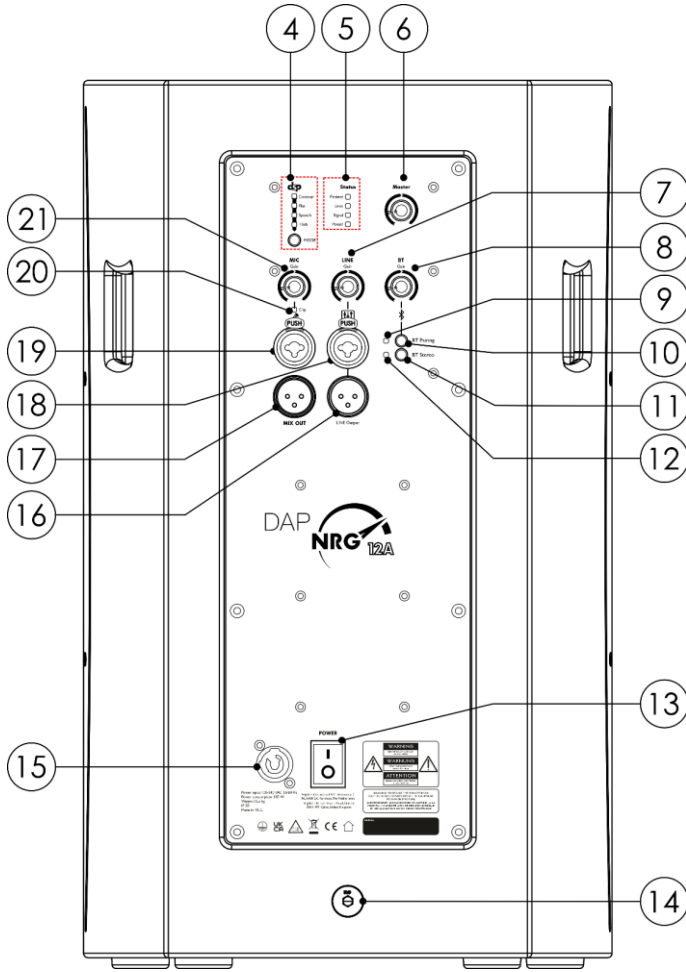
3.1. Front View



- 01) 2 mounting openings (M10) with hex screws
- 02) 2 carrying handles
- 03) Speaker grill

Fig. 02

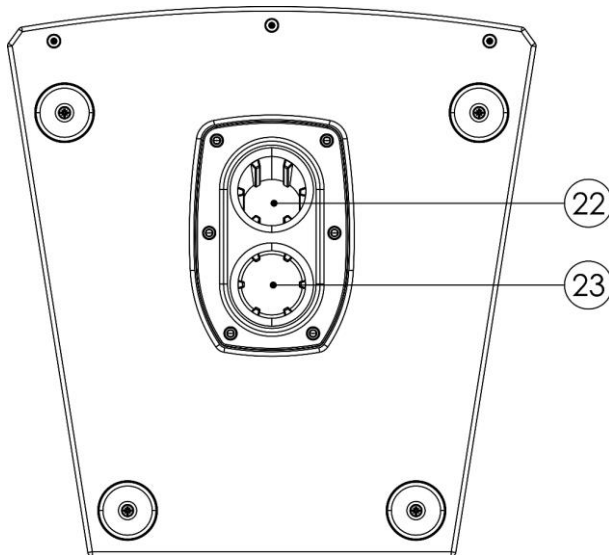
3.2. Back View



- 04) DSP button and selector with LED indicators
- 05) Status LED indicators
- 06) Master gain control
- 07) Line-level gain control
- 08) Bluetooth signal gain control
- 09) BT pairing LED indicator
- 10) BT pairing button
- 11) BT stereo button
- 12) BT stereo LED indicator
- 13) Power switch (on/off)
- 14) Mounting opening (M10) with a hex screw
- 15) Power Pro connector IN (Blue)
- 16) 3-pin XLR line-level connector OUT
- 17) 3-pin XLR mix connector OUT
- 18) Combined (3-pin XLR/6,3 mm jack) line-level connector IN
- 19) Combined (3-pin XLR/6,3 mm jack) microphone connector IN
- 20) Clip LED indicator
- 21) Microphone gain control

Fig. 03

3.3. Bottom View



- 22) Mounting opening 5° (Ø 35 mm)
- 23) Mounting opening 0° (Ø 35 mm)

Fig. 04

3.4. Product Specifications

Model:	DAP NRG-12A
Physical:	
Dimensions:	345 x 575 x 360 mm (W x H x D)
Weight:	15,5 kg
Outputs:	
Power amplifier RMS output:	180 W
Power amplifier peak output:	360 W
Main outputs:	1
Audio Specifications:	
THD level:	< 0,3 %
Signal-to-noise ratio:	> 95 dB
AD/DA converter sample rate:	48 kHz
Audio latency:	1,2 ms
Amplifier technology:	Class D
Speaker system:	2-way
Speaker sensitivity (1 W/1 m):	96 dB
Maximum SPL at 1 m:	117 dB
Frequency response (-6 dB):	60–20000 Hz
Woofers diameter:	12 "
Woofers voice coil:	2 "
Woofers magnet type:	Ferrite
Compression driver diameter:	1 "
Compression driver voice coil:	1,4 "
Compression driver magnet type:	Ferrite
Dispersion angle (horizontal):	90°
Dispersion angle (vertical):	60°
Internal Storage:	
User preset capacity:	4
Electrical:	
Input voltage:	100–240 V AC, 50/60 Hz
Power consumption:	180 W
SMPS:	Yes
Construction:	
Housing:	Plywood
Color:	Black
IP rating:	IP20
Connections:	
Main output connection:	3-pin XLR connector
Mono input connection:	2 x 3-pin XLR/6,3 mm jack connector
Power connection:	Power Pro connector (Blue)
Product Properties:	
Speaker adapter diameter:	Ø 35 mm
LED indicators:	BT pairing, DSP mode, Limit, Power, Protect, Signal
Speaker grill material:	Steel
Rigging eye thread:	M10
Thermal:	
Maximum ambient temperature t_a :	40 °C
Minimum ambient temperature t_a :	0 °C

3.5. Optional Accessories

You can additionally purchase the following accessories:

- [D8600](#) Speaker Stand
- [D8601](#) Speaker Stand 35mm Alu
- [D8602](#) Speaker Stand with Baseplate
- [D8436](#) Speaker hanging eye/ring 10mm (Black)
- [D8610](#) Distance Tube 35 mm
- [D8611](#) Distance Tube M20
- [75133](#) Spigot for Multigrip M10 x 25
- [75132](#) Multigrip Clamp Black

3.6. Dimensions

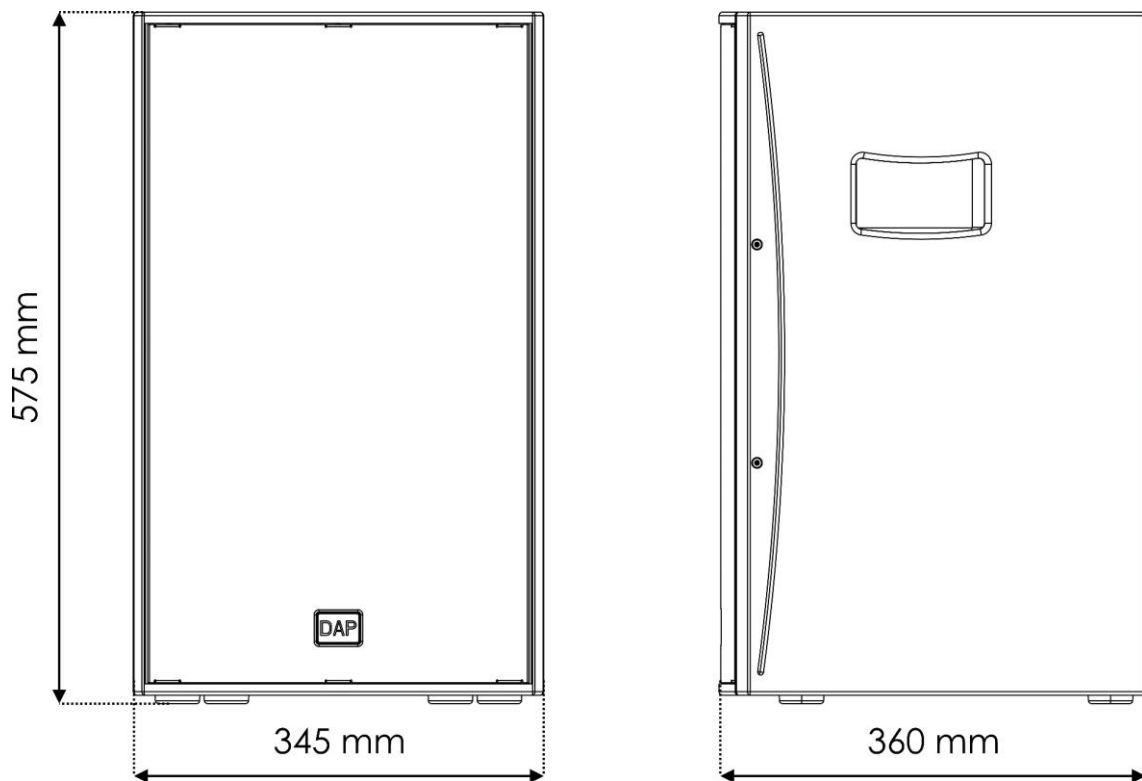


Fig. 05

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 distance pole, on a speaker stand or suspended from 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. Mounting Options

The device can be mounted on a pole, on a speaker tripod, suspended from an overhead structure with cables/chains, or mounted to a truss with a clamp. See **3.5. Optional Accessories** on page 12.

The device has 2 mounting openings on the bottom for upright (0°) or inclined installation (5°) on a pole and 3 rigging points (on the top and at the back) for suspended installation.

4.4.1. Installation on a Speaker Stand



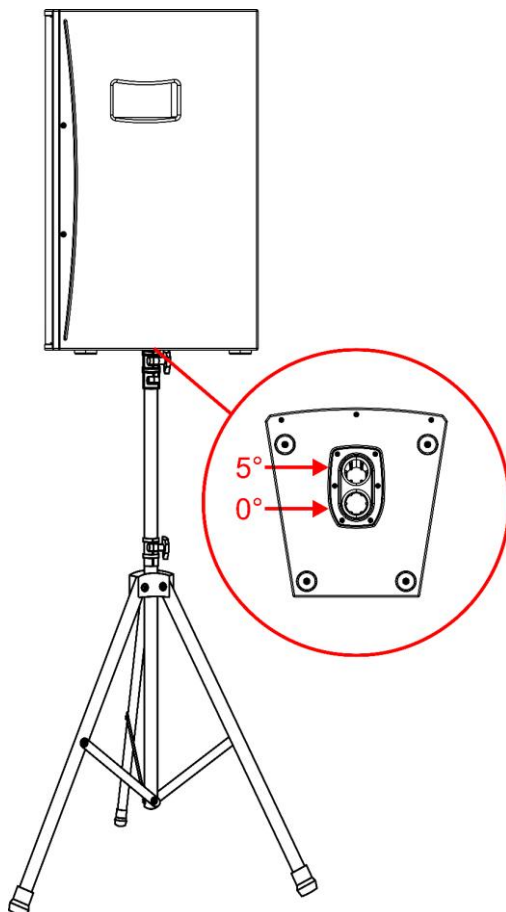
WARNING
Stability hazard

The device may fall if it is mounted on a speaker stand, causing personal injury or death. Make sure that the device is safely mounted.

Make sure that the speaker stand can support the weight of the device.

You can mount the device on a tripod stand or on a speaker stand with a baseplate. See **3.5. Optional Accessories** on page 12.

To mount the device on a tripod stand:



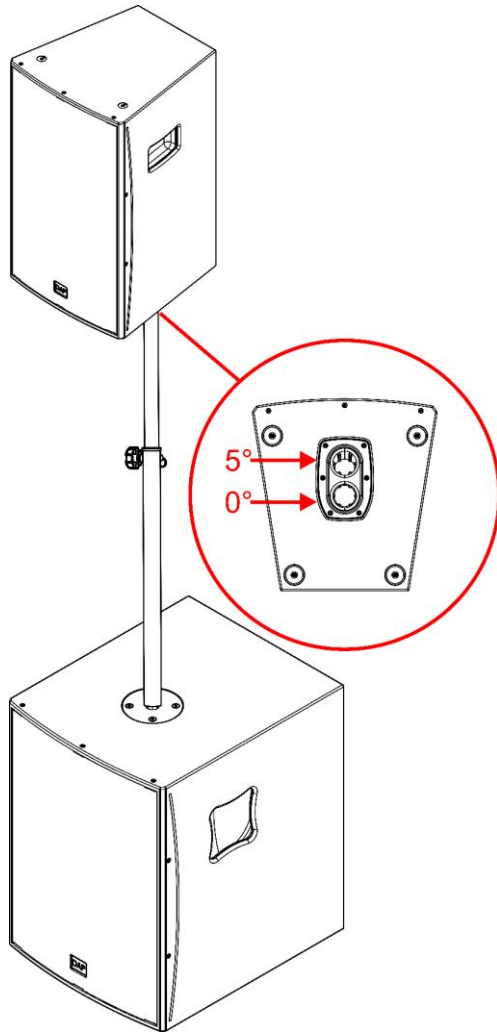
- 01) Place the tripod stand on a level stable surface.
- 02) Fully extend the legs of the tripod stand.
- 03) Lift the device above the tripod stand.
- 04) Place the device on top of the stand so that the tube of the tripod fits in one of the 2 **mounting openings (22)/(23)**.

Fig. 06

4.4.2. Installation on a Distance Pole

You can stack the device on top of a subwoofer with a distance pole. See **3.5. Optional Accessories** on page 12.

To mount the device on a distance pole:



- 01) Place the subwoofer on a level stable surface.
- 02) Insert the distance pole into the threaded mounting opening on the top of the subwoofer.
- 03) Turn the distance pole clockwise to secure the distance pole to the subwoofer.
- 04) Lift the device above the tripod stand.
- 05) Place the device on top of the distance pole so that the tube of the distance pole fits in one of the 2 **mounting openings (22)/(23)**.

Fig. 07

4.4.3. Overhead Suspension

**CAUTION**

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

You can suspend the device on an overhead structure from the 3 rigging points with 3 rigging eyes (M10, thread length: min 15 mm, max 30 mm). See **3.5. Optional Accessories** on page 12.

To suspend the device, follow the steps below:

- 01) Use a hex key to remove the 3 hex screws from the 3 **mounting openings (01)** and **(14)**.

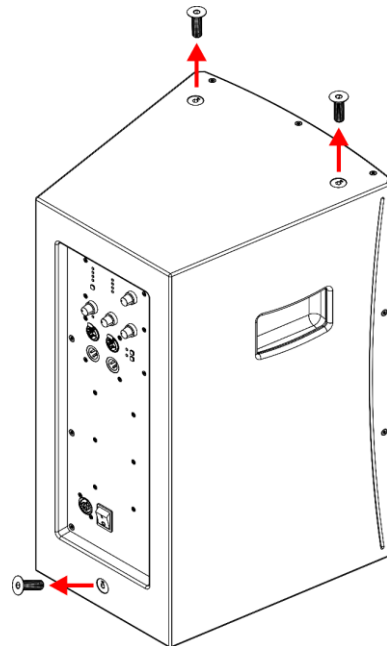


Fig. 08

- 02) Insert the 3 rigging eyes (M10, thread length: min 15 mm, max 30 mm) in the 3 **mounting openings (01)** and **(14)**.

Note:

It is recommended to use a fender washer under the rigging eye to distribute the load on the enclosure.

- 03) Turn the 3 rigging eyes clockwise to tighten them.

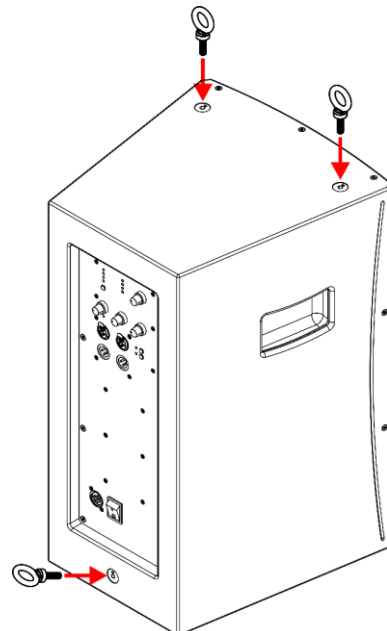


Fig. 09

- 04) Make sure that the 3 rigging eyes are fully seated and oriented in the plane of pull.
- 05) Suspend the device on the overhead structure with suitable suspension cables/chains.

Note:

If the rigging eyes are removed, reinstall the hex screws in the 3 **mounting openings (01)** and **(14)**. If the screws are not installed in the 3 **mounting openings (01)** and **(14)**, air leaks occur in the enclosure. This results in undesirable performance of the device.

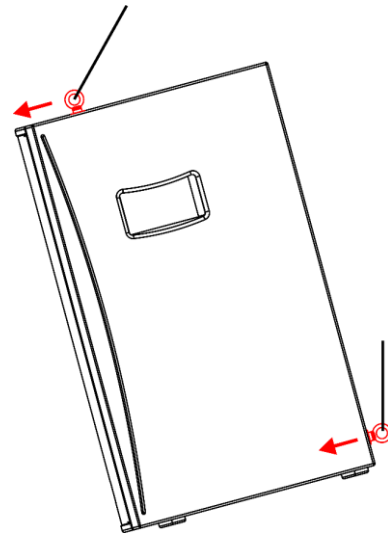


Fig. 10

4.4.4. Overhead Mounting with a Clamp

**CAUTION**

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

You can mount the device with 2 clamps to a truss. See **3.5. Optional Accessories** on page 12.

To mount the device, follow the steps below:

- 01) Use a hex key to remove the 2 hex screws from the 2 **mounting openings (01)**.

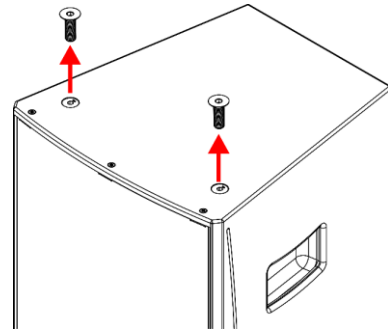


Fig. 11

- 02) Insert 2 spigots (M10, thread length: min 15 mm, max 30 mm) in the 2 **mounting openings (01)**.
03) Turn the 2 spigots clockwise to tighten them.

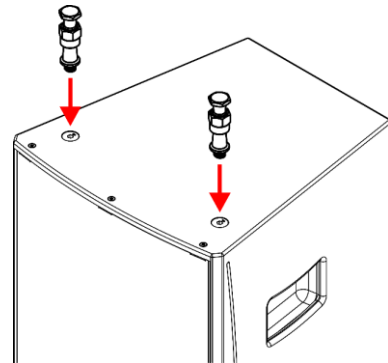


Fig. 12

- 04) Attach 2 clamps to the overhead structure.
05) Lift the device under the clamps and insert the spigots into the sockets on the base of the clamps.

Note:

If the spigots are removed, reinstall the hex screws in the **mounting openings (01)**. If the screws are not installed in the **mounting openings (01)**, air leaks occur in the enclosure. This results in undesirable performance of the device.

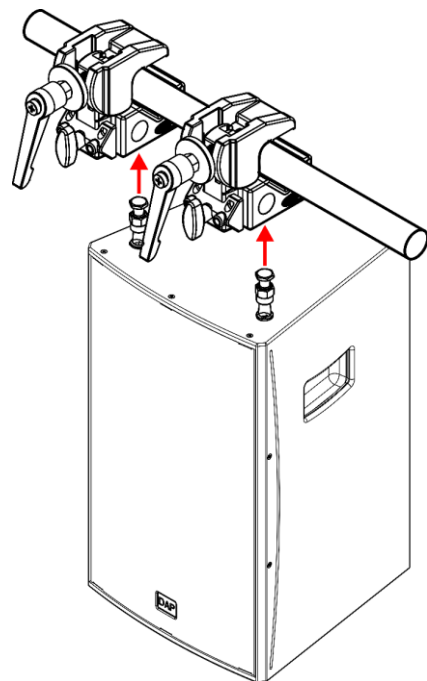


Fig. 13

5. Setup

5.1. Warnings and Precautions



Attention

Connect all cables before supplying power.

Disconnect power supply before connecting or disconnecting cables.

5.2. Connecting Multiple Devices

You can connect 2 or more active full-range speakers in a daisy-chain.

- 01) Use a 3-pin XLR cable to connect the **3-pin XLR mix connector OUT (17)** of the 1st active full-range speaker to the **combined line-level connector IN (18)** of the 2nd active full-range speaker.
- 02) Repeat step 1 to connect more active full-range speakers in one setup.

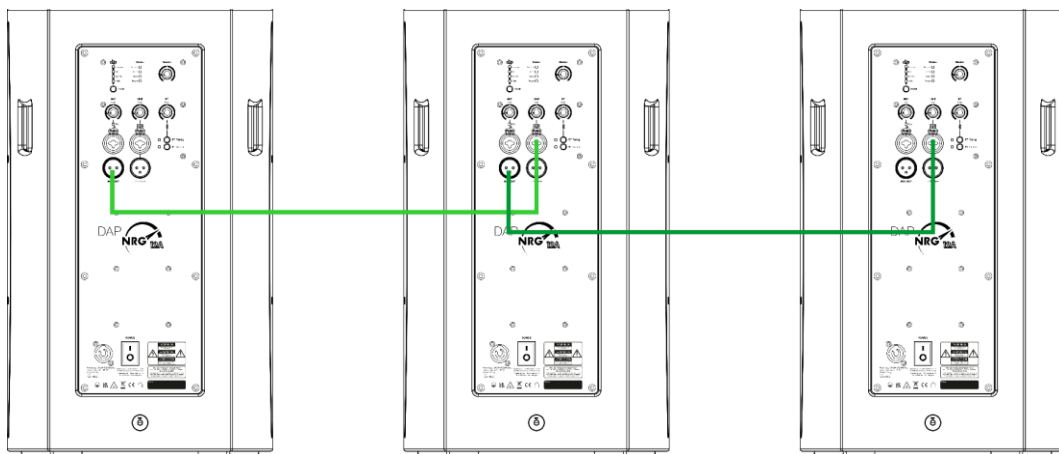


Fig. 14

5.3. Setup with an Audio Mixer

You can use the NRG-12A in a setup with an audio mixer. In this setup you can connect 2 active full-range speakers NRG-12A to 1 or 2 active subwoofers (NRG-12SA/15SA/18SA).

To complete the setup, follow the steps below:

- 01) Make sure that all devices are switched off.
- 02) Connect the active full-range speakers and the active subwoofers. See **5.3.1. Setup with 2 Active Subwoofers** on page 20 and **5.3.2. Setup with 1 Active Subwoofers** on page 21.
- 03) Set the DSP of the active full-range speakers to +SUB with the **DSP button (04)**. See **6.5. DSP Settings** on page 26.
- 04) Set the DSP of the subwoofer(s) to NRG-12A/15A.
- 05) Connect the active full-range speakers to the power supply. See **5.6. Connecting to Power Supply** on page 24.
- 06) Connect the rest of the devices to the power supply.
- 07) Switch on the audio mixer.
- 08) Switch on the active full-range speakers. See **6.2. Switching On/Off** on page 25.
- 09) Switch on the active subwoofer(s).
- 10) Adjust the gain controls of the active full-range speakers. See **6.4. Adjusting the Gain** on page 26.

5.3.1. Setup with 2 Active Subwoofers

To connect 2 full-range speakers to 2 subwoofers (NRG-12SA/15SA/18SA), follow the steps below:

- 01) Use a 3-pin XLR cable to connect the **combined line-level connector IN (18)** of the 1st active full-range speaker to the 3-pin XLR connector THRU A of the 1st active subwoofer.
- 02) Repeat step 1 to connect the 2nd active full-range speaker to the 2nd active subwoofer.
- 03) Connect the active subwoofers to the audio mixer.

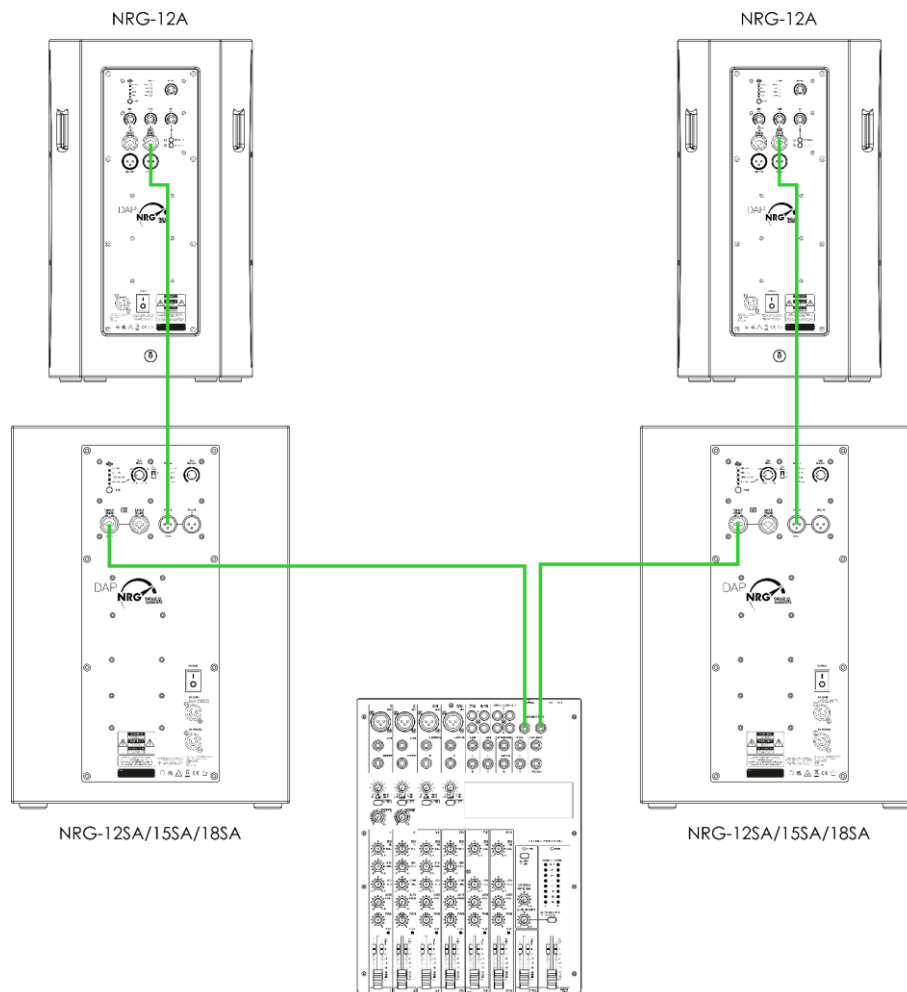


Fig. 15

5.3.2. Setup with 1 Active Subwoofer

To connect 2 full-range speakers to 1 subwoofer (NRG-12SA/15SA/18SA), follow the steps below:

- 01) Use a 3-pin XLR cable to connect the **combined line-level connector IN (18)** of the 1st active full-range speaker to the 3-pin XLR connectors THRU A of the active subwoofer.
- 02) Use a 3-pin XLR cable to connect the **combined line-level connector IN (18)** of the 2nd active full-range speaker to the 3-pin XLR connector THRU B of the active subwoofer.
- 03) Connect the active subwoofer to the audio mixer.

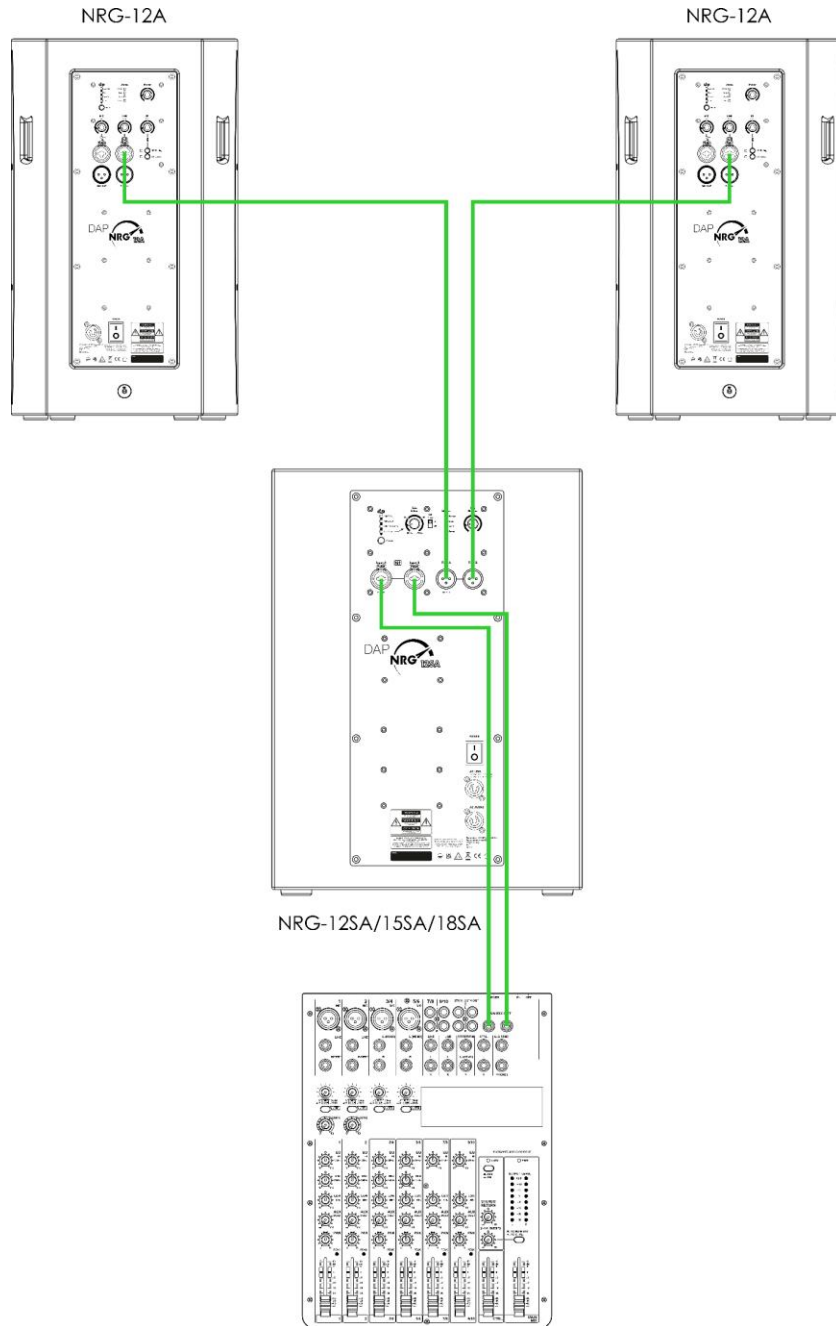


Fig. 16

5.4. Setup without an Audio Mixer

You can use the NRG-12A in a setup without an audio mixer and connect it to a 2nd active full-range speaker NRG-12A. In this setup the device functions as a mixer, combining all input signals.

You can connect a microphone and a musical instrument, as well as stream a signal via the Bluetooth as necessary and output all signals together.

To complete the setup, follow the steps below:

- 01) Make sure that all devices are switched off.
- 02) Connect a microphone to the **combined microphone connector IN (19)** as necessary.
- 03) Connect a musical instrument to the **combined line-level connector IN (18)** as necessary.
- 04) Connect a streaming source device via the Bluetooth as necessary. See **6.3.1. Pairing with a Streaming Source Device** on page 25.
- 05) Connect a 2nd active full-range speaker. See **5.2. Connecting Multiple Devices** on page 19.
- 06) Connect the active full-range speakers to the power supply. See **5.6. Connecting to Power Supply** on page 24.
- 07) Connect the rest of the devices to the power supply as necessary.
- 08) Switch on the active full-range speakers. See **6.2. Switching On/Off** on page 25.
- 09) Switch on the rest of the devices as necessary.
- 10) Adjust the gain controls of the external devices as necessary.
- 11) Adjust the gain controls of the active full-range speakers. See **6.4. Adjusting the Gain** on page 26.

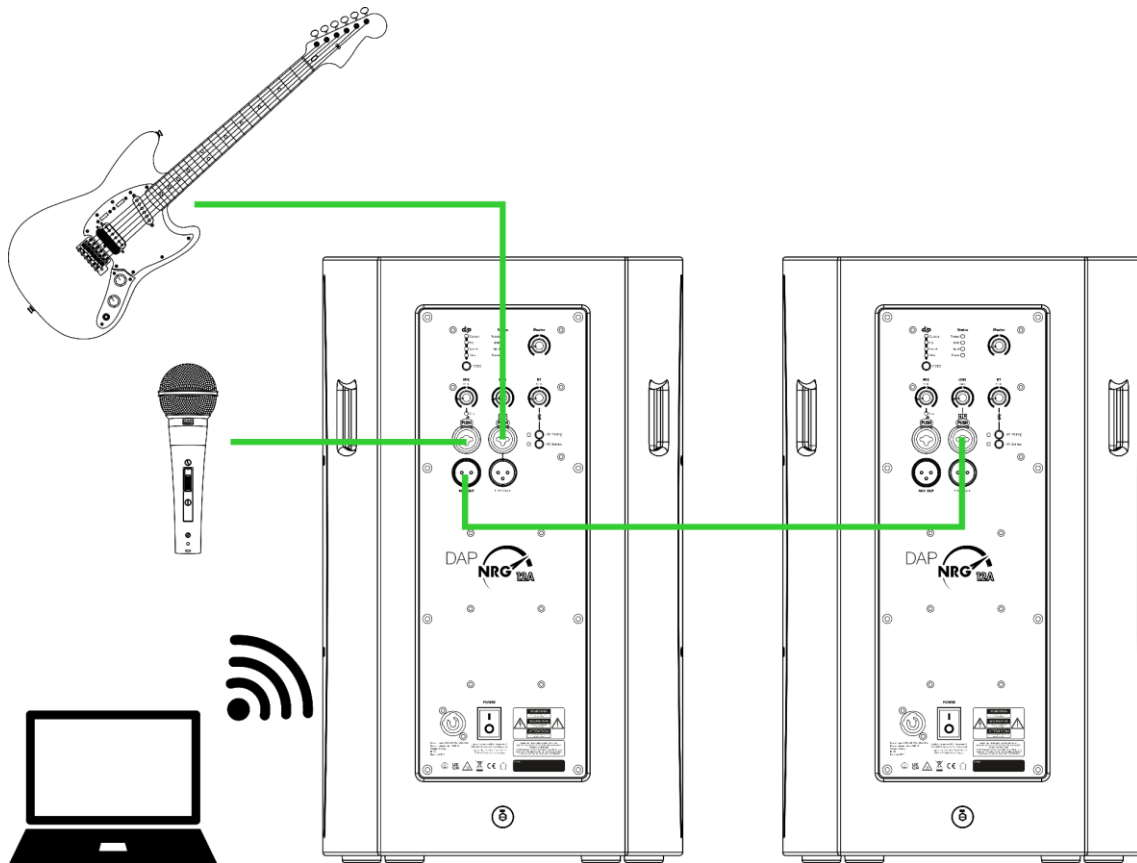


Fig. 17

5.5. Setup with a Streaming Source Device

The NRG-12A has an integrated Bluetooth receiver with TWS (True Wireless Stereo). You can pair the NRG-12A with a personal computer or a smartphone with Bluetooth (a streaming source device) to stream sound.

There are 2 setups via Bluetooth possible:

- Mono mode setup – See **5.5.1. Mono Mode** on page 23
- Stereo mode setup – See **5.5.2. Stereo Mode** on page 24

Note:

Make sure that there is clear line of sight between 2 Bluetooth devices.

The average effective range between Bluetooth devices is 10–30 m. The effective range depends on the receiver sensitivity, the transmit power, the antenna gain and the path loss. Path loss occurs over distance and is impacted by the environment in which the signal is being transmitted. Sources of interference between the transmitter and the receiver deteriorate the signal.

5.5.1. Mono Mode

In mono mode 1 active full-range speaker is paired with the streaming source device. The active full-range speaker outputs only the left channel (mono signal). You can connect more active full-range speakers to the 1st active full-range speaker in a daisy-chain.

To complete the mono mode setup, follow the steps below:

- 01) Connect 2 or more active full-range speakers in a daisy-chain as necessary. This step is optional. You can complete the setup in mono mode without connecting other active full-range speakers.
- 02) Connect the active full-range speaker(s) to the power supply. See **5.6. Connecting to Power Supply** on page 24.
- 03) Switch on the active full-range speaker(s). See **6.2. Switching On/Off** on page 25.
- 04) Pair the 1st active full-range speaker with the streaming source device. See **6.3.1. Pairing with a Streaming Source Device** on page 25.
- 05) Adjust the gain controls of the active full-range speaker(s). See **6.4. Adjusting the Gain** on page 26.

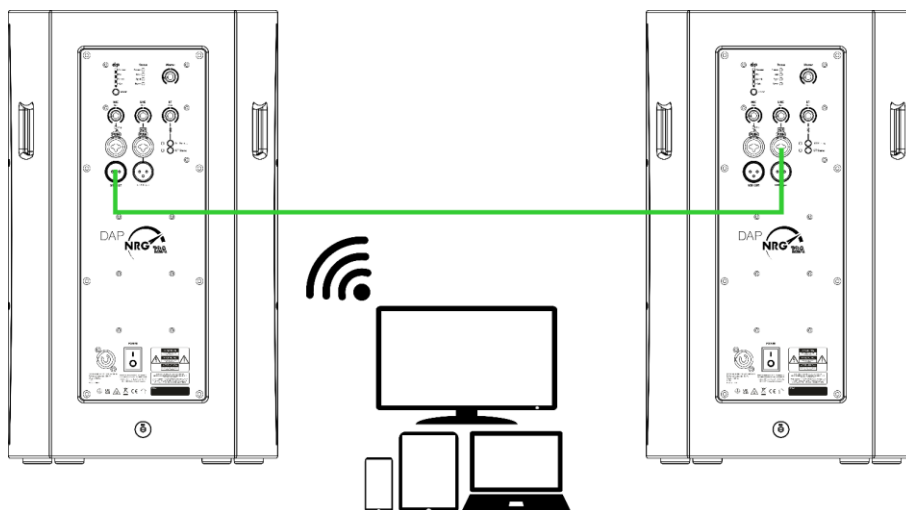


Fig. 18

5.5.2. Stereo Mode

In stereo mode 1 active full-range speaker is paired with the streaming source device and a 2nd active full-range speaker is linked to the 1st active full-range speaker. The 1st active full-range speaker, connected to the streaming source device, outputs the left channel of the stereo signal and the 2nd active full-range speaker outputs the right channel of the stereo signal.

To complete the stereo mode setup, follow the steps below:

- 01) Connect the 2 active full-range speakers to the power supply. See **5.6. Connecting to Power Supply** on page 24.
- 02) Switch on the 2 active full-range speakers. See **6.2. Switching On/Off** on page 25.
- 03) Pair the 1st active full-range speaker with the streaming source device. See **6.3.1. Pairing with a Streaming Source Device** on page 25.
- 04) Link the 2nd active full-range speaker to the 1st active full-range speakers. See **6.3.2. Linking to Another Device** on page 26.
- 05) Adjust the gain controls of the 2 active full-range speakers. See **6.4. Adjusting the Gain** on page 26.

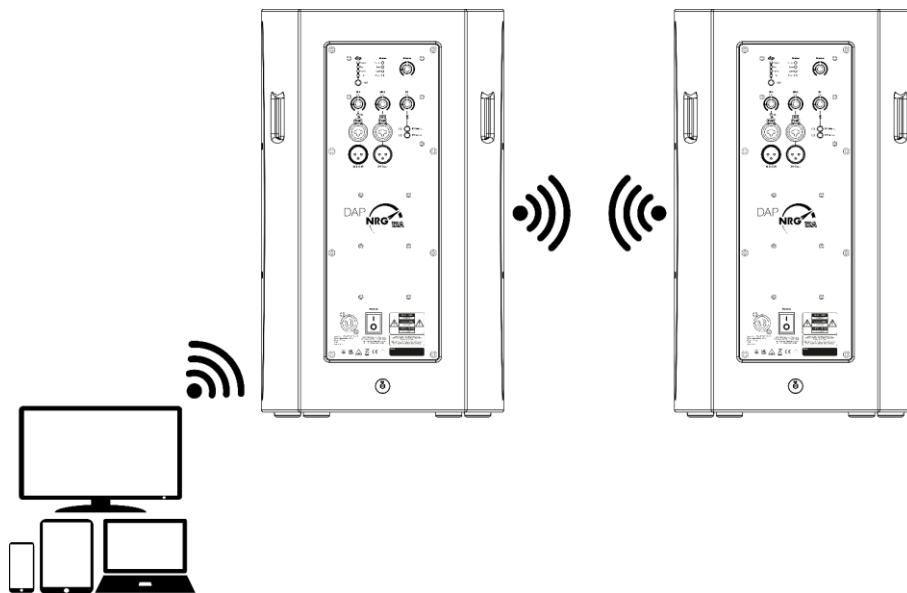


Fig. 19

5.6. Connecting to Power Supply



DANGER
Electric shock caused by short-circuit

The device accepts AC mains power at 100–240 V and 50/60 Hz. Do not supply power at any other voltage or frequency to the device.

This device falls under IEC protection class I. Make sure that the device is always electrically connected to the ground (earth).

Before connecting the device to the socket-outlet:

- Make sure that the power supply matches the input voltage specified on the information label on the device.
- Make sure that the socket-outlet has ground (earth) connection.

Connect the device to the socket-outlet with the power plug.

6. Operation

6.1. 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 an active full-range 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.

6.2. Switching On/Off

The device has a power switch.

- To switch the device on, press the **power switch (13)** in ON position.
- To switch the device off, press the **power switch (13)** in OFF position.

6.3. Bluetooth Connection

The NRG-12A has an integrated Bluetooth receiver with TWS (True Wireless Stereo). You can pair the NRG-12A with a personal computer or a smartphone with Bluetooth (a streaming source device) to stream sound. You can also link 2 NRG-12A devices to use them in stereo mode. See **5.5. Setup with a Streaming Source Device** on pages 23–24.

6.3.1. Pairing with a Streaming Source Device

You can pair the NRG-12A with a streaming source device via Bluetooth.

To pair the devices, follow the steps below:

- 01) Press and hold down the **BT pairing button (10)** until the **BT pairing LED indicator (09)** starts flashing.
- 02) Switch on the Bluetooth functionality on the streaming source device and scan for available Bluetooth devices.
- 03) Select the NRG-12A from the list of available Bluetooth devices and pair the devices. When pairing is completed and the devices are connected the **BT pairing LED indicator (09)** turns on.

To terminate the connection with a streaming source device via Bluetooth, press and hold down the **BT pairing button (10)** until **BT pairing LED indicator (09)** starts flashing. When the connection is terminated, the **BT pairing LED indicator (09)** turns off.

Note:

If you switch the device off and on again, the device automatically reconnects to the last connected Bluetooth source device. If you want to pair the device to a different streaming source device, you need to terminate the current Bluetooth connection.

6.3.2. Linking to Another Device

You can link one NRG-12A to another NRG-12A via Bluetooth to stream sound in stereo mode.

Press and hold down the **BT stereo button (11)** until the **BT stereo LED indicator (12)** starts flashing to link the devices. When linking is completed and the devices are connected the **BT stereo LED indicator (12)** turns on.

To unlink a device, press and hold down the **BT stereo button (11)** until the **BT stereo LED indicator (12)** turns off.

Notes:

- If you switch the device off and on again, the device automatically reconnects to the last linked device. If you want to link the device to a different device, you need to terminate the current Bluetooth connection.
- If you unlink a device in stereo mode, the device connected to the streaming source device continues the streaming in mono mode.

6.4. Adjusting the Gain

The device has 3 gain controls for each input channel and 1 master gain control for overall balance.

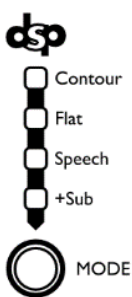
Turn the controls to the left/right to respectively increase/decrease the output volume per input channel for the connected signal sources.

- Use the **microphone gain control (21)** to adjust the microphone volume.
- Use the **line level gain control (07)** to adjust the line signal volume.
- Use the **Bluetooth signal gain control (08)** to adjust the Bluetooth signal volume.
- Use the **master gain control (06)** to adjust the overall sound balance.

6.5. DSP Settings

The NRG-12A has an internal DSP (Digital Signal Processing) which optimizes the output sound depending on the type of the input sound source.


Press the **DSP button (04)** repeatedly to select one of the 4 options. The LED indicator of the selected option lights up.



- **Contour:** Use this setting with streaming services where the source signal is highly compressed. This setting enhances the low and high tones which makes the source signal sound full
- **Flat:** Use this setting to output a linear sound not adjusted by the DSP
- **Speech:** Use this setting in combination with a microphone. This setting enhances the mid tones and activates the high-pass filter, which makes the human voice sound open and crisp
- **+Sub:** Use this setting when a subwoofer is connected to the device. The crossover point and the phase behavior are set to suit the subwoofers from the NRG range

6.6. LED Statuses

The device has 4 **status LED indicators (05)** and a **clip LED indicator (20)**. The LED indicators have the following statuses:

- | | |
|---|---|
| <p>Status</p> <p>Protect <input type="checkbox"/></p> <p>Limit <input type="checkbox"/></p> <p>Signal <input type="checkbox"/></p> <p>Power <input type="checkbox"/></p> | <ul style="list-style-type: none"> • Protect: Illuminates when the amp is overloaded. This can happen when the input signal is too high or when the ambient temperature is too high. Decrease the volume of the connected device • Limit: Illuminates prior to the amp clipping and distorting. Adjust the input levels so that this LED indicator illuminates only briefly during the highest peaks. If you operate the device with this indicator continuously on, this will result in degraded sound quality and could damage or reduce the service life of the components • Signal: Illuminates when signal is present • Power: Illuminates when the device is powered on |
|---|---|
-
- | | |
|---|---|
|  | <ul style="list-style-type: none"> • Clip: Illuminates when the input signal from the connected microphone is too high. Adjust the microphone gain |
|---|---|

7. 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	No power to the device	<ul style="list-style-type: none"> • Make sure that the device is connected to the power supply and switched on
No sound	Devices are not paired	<ul style="list-style-type: none"> • Make sure that the device is paired with any external device
	Bad connections	<ul style="list-style-type: none"> • Make sure that the connections between the device and the external devices are correct
The device does not stream sound	There is no connection to the streaming source device	<ul style="list-style-type: none"> • Make sure that the Bluetooth functionality on the streaming source device is turned on
	The device is still paired to a different streaming source device	<ul style="list-style-type: none"> • Terminate the previous connection and pair the device with the current streaming source device. See 6.3. Bluetooth Connection
	The streaming source device is out of range	<ul style="list-style-type: none"> • Move the streaming source device closer or remove any obstructions between the device and the streaming source device

8. Maintenance

8.1. Safety Instructions for Maintenance



DANGER
Electric shock caused by dangerous voltage inside

Disconnect power supply before servicing or cleaning.

8.2. 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.

8.2.1. 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.

8.3. 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.

9. Deinstallation, Transportation and Storage

9.1. 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.

9.2. 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".

9.3. Storage

- Clean the device before storing. Follow the cleaning instructions in chapter **8.2.1. Basic Cleaning Instructions** on page 28.
- Store the device in the original packaging, if possible.

10. 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.

11. Approval



Hereby, Highlite International declares that the device NRG-12A, product code D3655, is in compliance with Directive 2014/53/EU (RED – Radio Equipment Directive).

The full text of the EU declaration of conformity is available at the respective product page on the website of Highlite International (www.highlite.com).

DAP

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