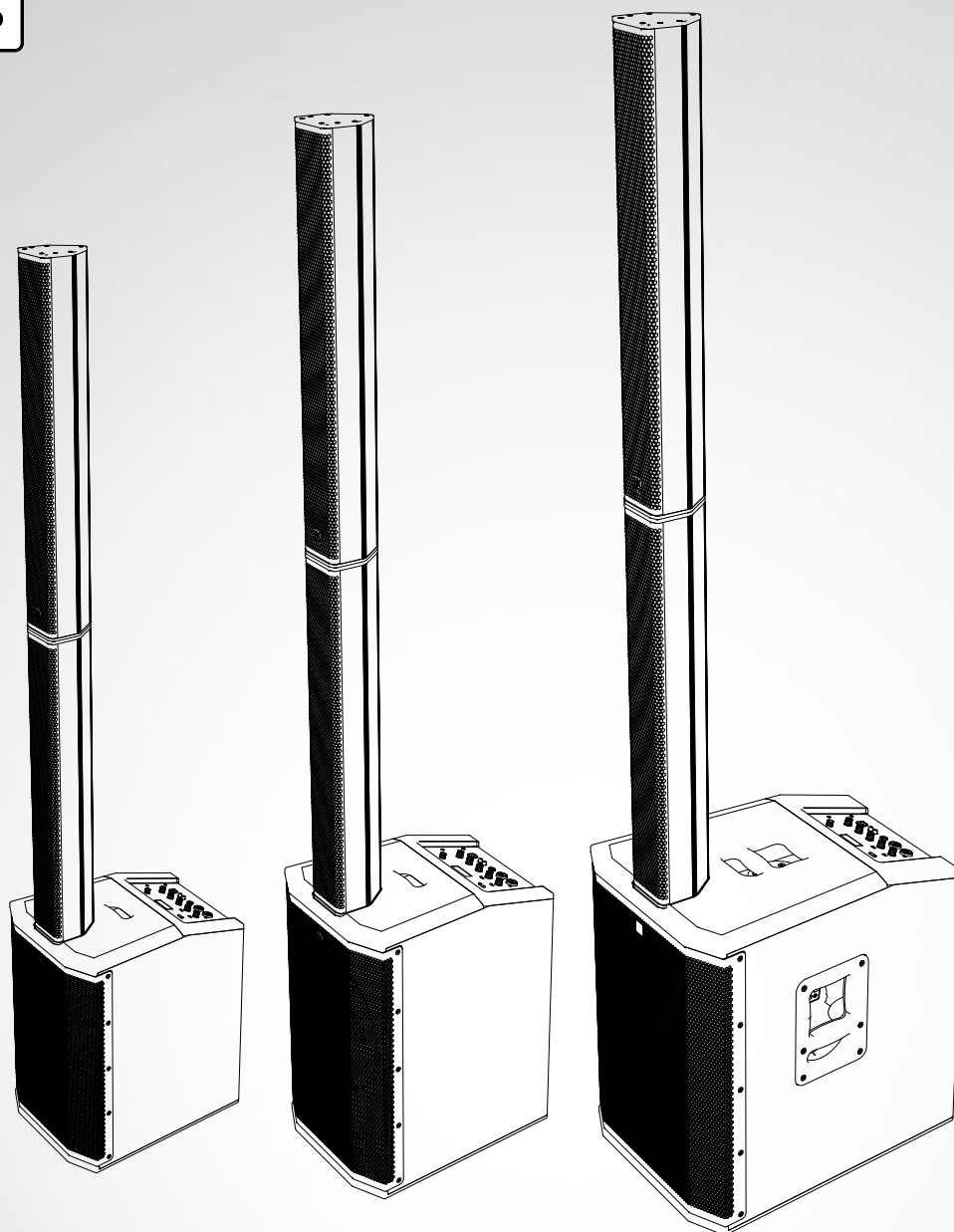




POLAR 10/12/15 MK2

Manual 1.0

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Information

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

ISED Statement

English: This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

The digital apparatus complies with Canadian CAN ICES-3 (B)/NMB-3(B).

French: Cet appareil contient des émetteurs/récepteurs exempts de licence qui sont conformes aux RSS exemptés de licence d'Innovation, Sciences et Développement économique Canada.

L'exploitation est soumise aux deux conditions suivantes :

- (1) Cet appareil ne doit pas provoquer d'interférences.
- (2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

l'appareil numérique du ciem conforme canadien peut - 3 (b) / nmb - 3 (b).

This device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

cet appareil est conforme à l'exemption des limites d'évaluation courante dans la section 2.5 du cnr - 102 et conformité avec rss 102 de l'exposition aux rf, les utilisateurs peuvent obtenir des données canadiennes sur l'exposition aux champs rf et la conformité.

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment.

Cet équipement est conforme aux limites d'exposition aux rayonnements du Canada établies pour un environnement non contrôlé.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

Important Safety Instructions! Read before connecting!

This product has been built by the manufacturer in accordance with IEC 62368-1 and left the factory in safe working order. To maintain this condition and ensure non-risk operation, the user must follow the advice and warning comments found in the operating instructions. If this product shall be used in vehicles, ships or aircraft or at altitudes exceeding 2000 m above sea level, take care of the relevant safety regulations which may exceed the IEC 62368-1 requirements. **WARNING:** To prevent the risk of fire and shock hazard, do not expose this appliance to moisture or rain. Do not open case – no user serviceable parts inside. Refer service to qualified service personnel.



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure – voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to the presence of externally accessible hazardous voltage. External wiring connected to any terminal marked with this symbol must be a "ready made cable" complying with the manufacturers recommendations, or must be a wiring installed by instructed persons only.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Read the manual.



This symbol, wherever it appears, tells you: Take care! Hot surface! To prevent burns you must not touch.



All electrical and electronic products including batteries should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.



Read these instructions. Keep these instructions. Follow all warnings and instructions marked on the product and in this manual.

- Do not use this product near water. Do not place the product near water, baths, wash basins, kitchen sinks, wet areas, swimming pools or damp rooms.
- Do not place objects containing liquid on the product – vases, glasses, bottles etc.
- Clean only with dry cloth.
- Do not remove any covers or sections of the housing.
- The set operating voltage of the product must match the local mains supply voltage. If you are not sure of the type of power available consult your dealer or local power company.
- Before connecting the device, please ensure that the mains supply you are using is equipped with adequate protection against short circuiting and grounding faults when the device is plugged in.
- To reduce the risk of electrical shock, the grounding of this product must be maintained. Use only the power supply cord provided with this product, and maintain the function of the center (grounding) pin of the mains connection at any time. Make sure the mains outlet used provides a proper protective ground connection.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the device! Power supply cords should always be handled carefully. Periodically check cords for cuts or sign of stress, especially at the plug and the point where the cord exits the device.
- Never use a damaged power cord.
- Unplug this product during lightning storms or when unused for long periods of time.
- This product can be fully disconnected from mains only by pulling the mains plug at the unit or the wall socket. The product must be placed in such a way at any time, that disconnecting from mains is easily possible.

- Fuses are to be replaced exclusively by qualified personnel, and then only with fuses of the proper type and rating.
- Refer all servicing to qualified service personnel. Servicing is required when the unit has been damaged in any way, such as:
 - When the power cord or plug is damaged or frayed.
 - If liquid has been spilled or objects have fallen into the product.
 - If the product has been exposed to rain or moisture.
 - If the product does not operate normally when the operating instructions are followed.
 - If the product has been dropped or the cabinet has been damaged.
- Do not connect external speakers to this product with an impedance lower than the rated impedance given on the product or in this manual. Use only cables with sufficient cross section according to the local safety regulations.
- Keep away from direct sunlight.
- Do not install near heat sources such as radiators, heat registers, stoves or other devices that produce heat.
- This apparatus is for moderate climates areas use, not suitable for use in tropical climates countries.
- Do not block any ventilation openings. Install in accordance with manufacturer's instructions. This product must not be placed in a built-in installation such as a rack unless proper ventilation is provided.
- Always allow a cold device to warm up to ambient temperature, when being moved into a room. Condensation can form inside it and damage the product, when being used without warming up.
- Do not place naked flame sources, such as lighted candles on the product.
- The device must be positioned at least 20 cm/8" away from walls.
- Use only with the cart, stand, tripod, bracket or table specified by the manufacturer or sold with the product. When a cart is used, use caution when moving the cart/product combination to avoid injury from tip-over.
- Use only accessories recommended by the manufacturer, this applies for all kind of accessories, for example protective covers, transport bags, stands, wall or ceiling mounting equipment. In case of attaching any kind of accessories to the product, always follow the instructions for use, provided by the manufacturer. Never use fixing points on the product other than specified by the manufacturer.
- This appliance is NOT suitable to be used by any person or persons (including children) with limited physical, sensorical or mental ability, or by persons with insufficient experience and/or knowledge to operate such an appliance. Children under 4 years of age must be kept away from this appliance at all times.
- Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in risk of fire or electric shock.
- This product is capable of delivering sound pressure levels in excess of 90 dB, which may cause permanent hearing damage! Exposure to extremely high noise levels may cause a permanent hearing loss. Wear hearing protection if continuously exposed to such high levels.
- The manufacturer only guarantees the safety, reliability and efficiency of this product if:
 - Assembly, extension, re-adjustment, modifications or repairs are carried out by the manufacturer or by persons authorized to do so.
 - The electrical installation of the relevant area complies with the requirements of IEC (ANSI) specifications.
 - The unit is used in accordance with the operating instructions.
- This product is optimized for use with music and speech signals. Using this product with sine wave, square wave or other kind of measuring signals at higher level may lead to severe damage of the product.

General Notes on Safety for Loudspeaker Systems



Mounting systems may only be used for those loudspeaker systems authorized by the manufacturer and only with the mounting accessories specified by the manufacturer in the installation instructions. Read and heed the manufacturer's installation instructions. The indicated load-bearing capacity cannot be guaranteed and the manufacturer will not be liable for damages in the event of improper installation or the use of unauthorized mounting accessories. The system's load-bearing capacity cannot be guaranteed and the manufacturer will not be liable for damages in the event that loudspeakers, mounting accessories, and connecting and attaching components are modified in any way. Components affecting safety may only be repaired by the manufacturer or authorized agents, otherwise the operating permit will be voided.



Installation may be performed qualified personnel only, and then only at pick-points with sufficient load-carrying capacity and in compliance with local building regulations. Use only the mounting hardware specified by the manufacturer in the installation instructions (screws, anchors, etc.). Take all the precautions necessary to ensure bolted connections and other threaded locking devices will not loosen.



Fixed and portable installations (in this case, speakers and mounting accessories) must be secured by two independent safeties to prevent them from falling. Safeties must be able to catch accessories or parts that are loose or may become loose. Ensure compliance with the given national regulations when using connecting, attaching, and rigging devices. Factor potential dynamic forces (jerk) into the equation when determining the proper size and load-bearing capacity of safeties.



Be sure to observe speaker stands' maximum load-bearing capacity. Note that for reasons of design and construction, most speaker stands are approved to bear centric loads only; that is, the speakers' mass has to be precisely centered and balanced. Ensure speaker stands are set up stably and securely. Take appropriate added measures to secure speaker stands, for example when:

- the floor or ground surface does not provide a stable, secure base.
- they are extended to heights that impede stability.
- high wind pressure may be expected.
- there is the risk that they may be knocked over by people.

Special measures may become necessary as precautions against unsafe audience behavior. Do not set up speaker stands in evacuation routes and emergency exits. Ensure corridors are wide enough and put proper barriers and markings in place when setting speaker stands up in passageways. Mounting and dismounting are especially hazardous tasks. Use aids suitable for this purpose. Observe the given national regulations when doing so.



Wear proper protection (in particular, a helmet, gloves, and safety shoes) and use only suitable means of ascent (ladders, scaffolds, etc.) during installation. Compliance with this requirement is the sole responsibility of the company performing the installation.



WARNING! After installation, inspect the system comprised of the mounting fixtures and loudspeakers to ensure it is properly secured.

The operator of loudspeaker systems (fixed or portable) must regularly inspect or task a third party to regularly inspect all system components in accordance with the given country's regulations and have possible defects repaired immediately.

We also strongly recommend maintaining a logbook or the like to document all inspections.

Also be sure to provide sufficient safety margins for the rigging points used for flown systems. Observe the given national regulations when doing so.



Professional loudspeaker systems can produce harmful volume levels. Even prolonged exposure to seemingly harmless levels (starting at about 95 dBA SPL) can cause permanent hearing damage! Therefore we recommend that everyone who is exposed to high volume levels produced by loudspeaker systems wears professional hearing protection (earplugs or earmuffs).

Manufacturer: Stamer Musikanlagen GmbH, Magdeburger Str. 8, 66606 St. Wendel, Germany

POLAR 10/12/15 MK2

Welcome to the HK Audio family!

Thank you for choosing a brand-name product made by our company. It was engineered and built with the greatest care so it will serve you well for many tomorrows to come.



Even if you already have extensive experience with sound systems, there will still be some things that are new to you about this product. So be sure to read these operating instructions carefully and keep them for future reference.

Here's wishing you the best sound at every occasion!

Your HK Audio Team



Note: This product's performance may be affected by strong electromagnetic fields or electrostatic discharges. If this occurs, its functionality can be restored by switching it off and on again. If this does not help, you will need to move the device away from the source of interference.

Warranty

Register online with ease at www.hkaudio.com.



<http://warranty.hkaudio.com>

The warranty registration is only valid if made within 30 days of the date of purchase.

HK Audio

Technical service
info@hkaudio.com
Postfach 1509
66595 St. Wendel, Germany
Fax: +49 6851 905 100

1 General Information

1.1 Unpacking and Inventory

Please check that all items are included in the delivery when unpacking the system. POLAR comes in two cartons and consists of a subwoofer, a columnar mid/high unit and a spacer. The subwoofer box also contains a padded protective cover for the subwoofer and a mains cable. The box with the column components contains the mid/high unit and the spacer, packed in a transport bag.

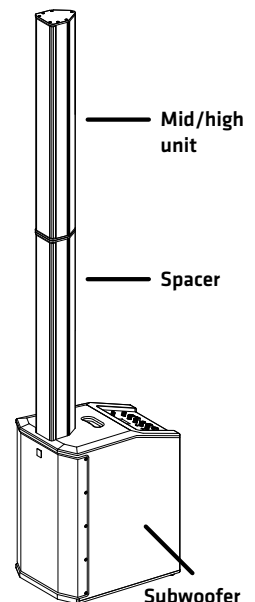
1.2 The Components

The Subwoofer

The active system subwoofer houses the woofer and the system electronics including power amplifiers. The signal-carrying plug-in base for connecting the column elements as well as a carrying handle are located on the top. Another handy grip routed into the bottom panel lets you comfortably carry the subwoofer with one or two hands. The integrated control panel with the display, control features and connectors slopes slightly toward the rear to protect the controls against damage. The bass reflex ports are located at the bottom of the front panel. The power off/on switch and mains socket are on the rear panel.

The Column

- The column consists of a mid/high unit and a spacer.
- The spacer is plugged into the subwoofer's plug-in base using the integrated signal-carrying connector. The mid/high unit is then attached to the spacer using the same connector system.
- This coupler provides a mechanical and electrical connection between the mid/high unit and spacer, so you do not need speaker cables to connect the two.

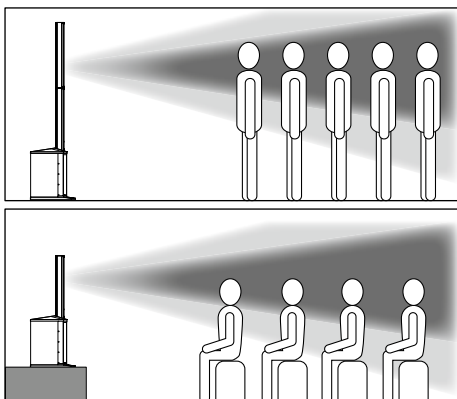


1.3 Setting up the System

Connecting Components

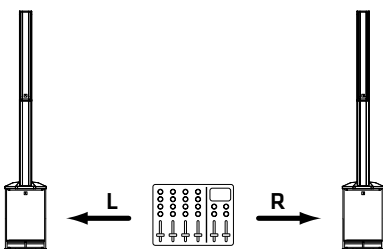
- Place the subwoofer on a level, stable surface.
- Connect the spacer and the mid/high unit to the subwoofer as described in section 1.2 above.
- Make sure the elements are firmly connected to each other.
- Plug the power cord into the rear mains socket.

Good to know: Feel free to set the system up without a spacer if you wish to place it on a high stage, table or the like.



Heads up! Do not transport or move the POLAR when it is assembled. This could damage the system or cause damage to property or personal injury!

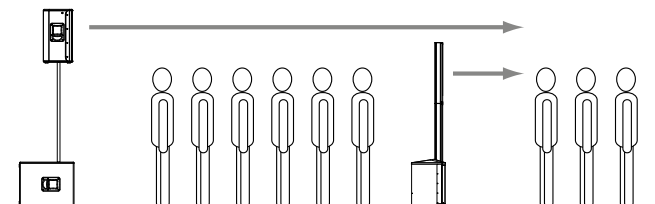
Stereo Setup



If you wish to run two POLAR 10 MK2 or Polar 12 MK2 in stereo, route the mixing console's left channel to the system on the left and its right channel to the system on the right. Make sure the DSP settings for Mode, EQ, Delay, and so on are identical for both systems. See chapter 3 for more on this.

Good to know: You can also operate a POLAR 10 MK2 and a POLAR 12 MK2 in stereo. Use the two Sub **10** knobs and the respective DSP settings (system EQs; see section 3.2 for more on this) to compensate for the differences in the two systems' bass response.

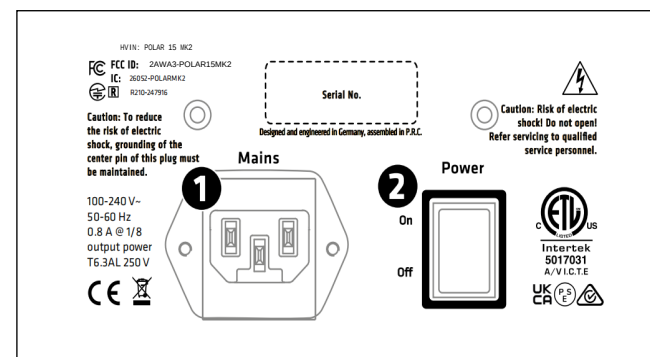
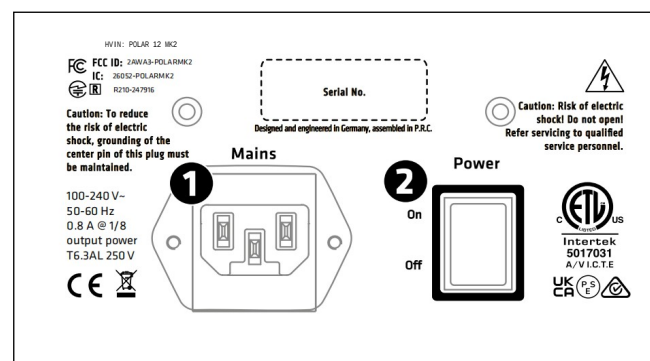
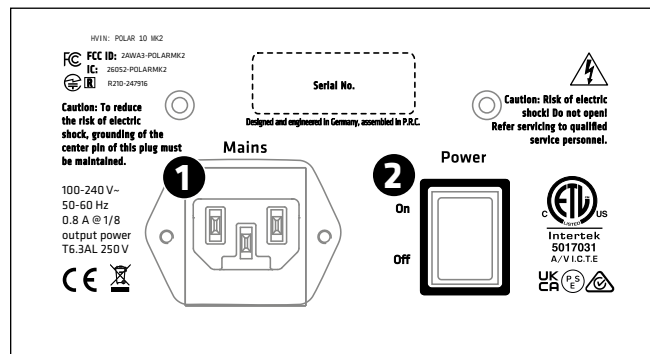
Delay Line for Distributed Systems



POLAR's Delay function lets you use it for a delay line. See section 3.2, Delay, to learn more about this. All you have to do is measure the distance between the main speaker and POLAR in meters, and enter that number to "Delay" in the DSP menu. POLAR factors the main speaker's delay into the equation, automatically calculates the delay time, and renders the signal with the proper delay.

2 Connections and controls

Rear



1 Mains

IEC mains socket for connection to the power supply. Please use the mains cable supplied.

Heads up! The set operating voltage of the product must match the local mains supply voltage. Connecting the enclosure to the wrong mains voltage may destroy its electronic components.

2 Power

Mains switch for switching the power supply on and off. When you switch POLAR on, it loads the most recently used DSP settings and will be ready to operate within seconds when the four channels' level indicators and the Master volume setting appear in the display.

Channel 1 and Channel 2 (Line/Mic)

Channels 1 and 2 are identically equipped and are used to connect microphones as well as instruments with a line output such as a keyboards.

3 Input

Balanced XLR/jack combo input socket. Connection is possible via XLR plug or 6.35 mm jack plug (balanced or unbalanced).

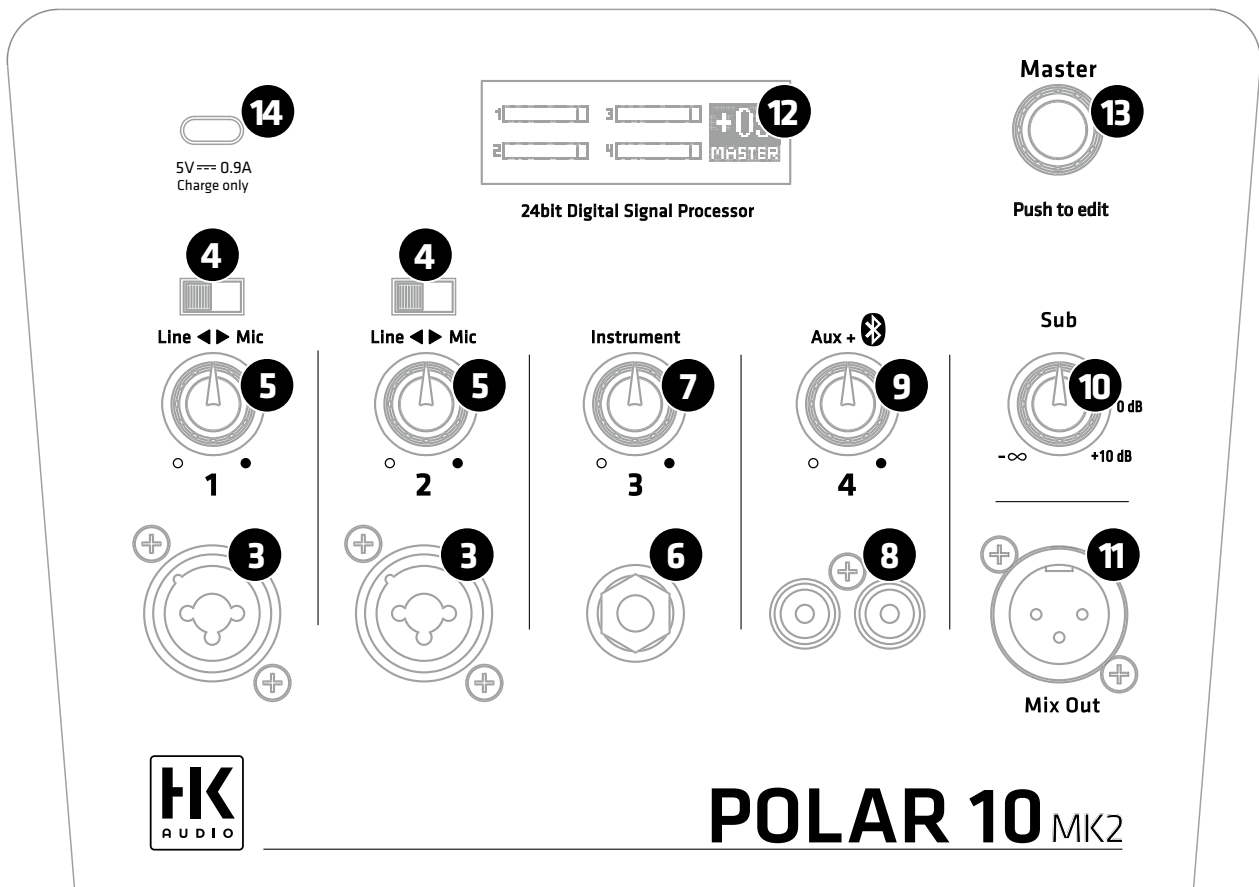
Good to know: A balanced signal is always preferable because it is less susceptible to HF and other interference.

4 Line/Mic

Selector switch for adjusting the sensitivity and impedance of the preamplifier. Set it to "Line" to connect a line-level device such as a mixing console, keyboard or the like. Set it to "Mic" to connect a dynamic microphone.

5 Volume

Turn this knob to adjust the signal level. In the full left position, the signal is muted; in the full right position, the maximum volume is reached.



Channel 3 (Instrument)

Use this input to connect an instrument with high-impedance (Hi-Z) output signals such as an electric or acoustic guitar or bass or an electric piano. The high-impedance input stage renders the instrument's full tonal and dynamic range.

6 Input

Connect instruments to this unbalanced 1/4" (6.35 mm) jack.

7 Volume

Turn this knob to adjust the signal level. In the full left position, the signal is muted; in the full right position, the maximum volume is reached.

Channel 4 (Aux + Bluetooth)

Connect stereo sources such as DJ consoles, CD/MP3 players or mixing consoles to Channel 4 and use it to stream audio via Bluetooth. Channel 4 accepts and renders Aux and Bluetooth signals at the same time.

8 Input

Unbalanced input (2x RCA jack) for connecting high-level audio sources such as CD/MP3 players, smartphones, DJ mixers or computers.

9 Volume

Turn this knob to adjust the signal level. This volume control affects both the Aux input and the Bluetooth input. In the full left position, the signal is muted; in the full right position, the maximum volume is reached.

Good to know: When using the Aux input while streaming audio via Bluetooth, balance the two signal levels by adjusting the Bluetooth player's volume to match that of the incoming Aux signal.

10 Sub

Rotary control for adjusting the bass level of the system. In the full left position, the subwoofer is muted; in the full right position, the maximum subwoofer volume is reached. The subwoofer level can be adjusted separately using the Sub knob. Turn the control to 0 dB for a balanced volume ratio between the column and the subwoofer.

Good to know: It is often a good idea to back off the bass slightly when placing the subwoofer in a corner or in very small venue. Reducing the amount of bass also increases the system's peak volume without triggering its limiter circuits.

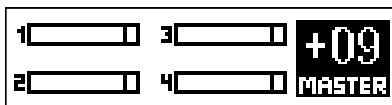
11 Mix Out

This balanced XLR output provides a summed signal – that is, a mix of all input channels' signals.

Good to know: The Mix Out output is used to “pass on” the sum signal, for example to an FoH mixer, or to feed an additional speaker (monitor box) or a recording device. You can also send it another powered subwoofer if the unit has a high-cut or low-pass filter to suppress high frequencies.

12 LCD Display

In normal operating mode, this display indicates the input channels' levels and the Master volume.



In DSP mode, it shows the parameters of the currently selected DSP menu (see section 3.2, DSP Settings, for more on this).

Level Indicators

The four level indicators show the input channels' levels. The Overload section tells you the incoming signal is saturating the input because its level is too high. If Overload lights up, turn down the channel's input gain and/or the connected device's output level.

Good to know: POLAR has sufficient headroom to cope with occasional signal peaks. However, if an Overload indicator lights up continuously or it sounds like the signal is clipping, turn the given channel's volume down to prevent the distortion produced by an overloaded system.

Good to know: It is important to dial in the proper signal levels to minimize noise. The best way to do this is by maxing out the channel levels: turn up the input channels' volume until the Overload indicator lights up at the loudest signal peak, and then back it off just enough so the Overload indicator no longer lights up. Then turn the Master knob up only as far as you need it to go.

13 Master (push to edit)

The Master knob on the right of the display serves primarily to adjust the system's overall volume. The current value is shown on the display. Control range: -60 to +10 in 1 dB steps. Pressing and holding the Master button locks the display and access to the DSP. Locked appears on the display. Press and hold again to unlock the display and regain access.

14 USB-C port for charging mobile devices

This USB-C port is used to maintain the charge of mobile devices such as mobile phones or tablets. It can also be used to charge small wireless systems with plug-on transmitters.

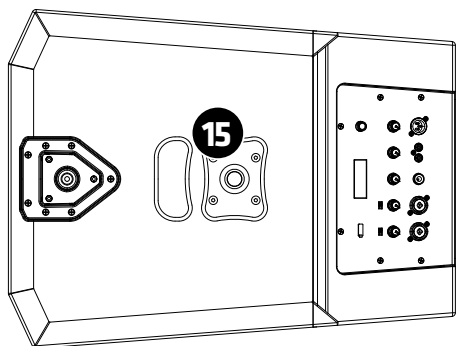
Note: No media can be played via the USB-C port and the port is not a service socket.

15 M20 FlexMount (only POLAR 15 MK2)

Enables the secure mounting of spacer bars for accessories such as compact lighting systems or other show components directly onto the subwoofer.

Note! Always ensure the unit is stable and follow the manufacturer's specifications regarding the maximum load capacity of the stands. Care must be taken not to exceed the central load capacity of the stands. The maximum extension height must be limited so that the combination of the stand and the mounted show effects or equipment does not tip over. This applies when set up on a flat, horizontal surface.

Furthermore, when setting up on an uneven or sloping surface, care must be taken to ensure that the structure remains stable and does not tip over.



3 DSP Menu

Press the Master knob (push to edit) to access and edit various DSP parameters listed in a menu. The display shows the currently selected parameter.

- Turn the Master knob to navigate the menu. Press it to select the current menu option or confirm your entry.



Heads Up: POLAR will exit the selected menu option and automatically return to the main Master Volume window if you do not make or confirm an entry within eight seconds. It does this to prevent inadvertent operating errors.

Good to know: The system's memory stores all current DSP settings when you power it down and reloads those settings when you power the system back up again.

The following functions are available:

3.1 Bluetooth

BT ON/OFF

Establish Bluetooth connection (press again to select between ON, OFF and TWS. Selecting ON makes POLAR visible to other Bluetooth devices).

POLAR can stream audio via Bluetooth, which is a wireless way of rendering music on mobile Bluetooth-enabled players such as smartphones and tablet PCs.

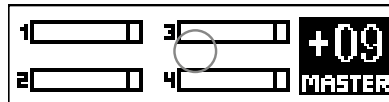
Connecting to a Bluetooth device

- Press the Master knob once. The display will show the menu option "BT ON/OFF".
- Press the Master knob again and the menu option "BT ON/OFF" will be selected. By turning the Master knob, you can select between OFF, ON and TWS. Selecting ON and pressing the Master knob starts the Bluetooth setup. Bluetooth-enabled devices should now be able to discover POLAR MK2. The Bluetooth icon in the display flashes slowly for 120 seconds, indicating that you can pair the system with a Bluetooth-enabled device during this two-minute window.
- Go to the Bluetooth menu of your player and select "HK Audio POLAR 10/12/15 MK2" to pair the two devices.
- The Bluetooth icon lights up continuously in the POLAR MK2 display as soon as the two are properly paired.

The display indicates the Bluetooth status:

• No Bluetooth icon

Bluetooth is off

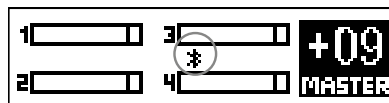


• Icon flashes slowly

You have 120 seconds to pair devices

• Bluetooth icon lights up continuously

Bluetooth successfully connected



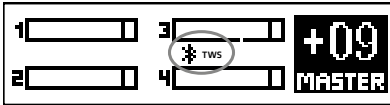
• Icon flashes quickly

Bluetooth pairing failed or the connection dropped out (e.g. out of Blue-

tooth range)

• Activate Bluetooth True Wireless Stereo TWS

First establish a Bluetooth connection to a POLAR MK2 system as described in section 3.1. Now select TWS under BT ON/OFF in the DSP menu on the POLAR MK2 connected via Bluetooth and confirm by pressing the Master button. You will now see the Bluetooth icon on the display of this POLAR MK2 and the word TWS will also flash. The POLAR MK2 will now search in its vicinity for another POLAR MK2. Now activate TWS on the second POLAR MK2 under the menu option BT ON/OFF by pressing and turning the Master button. If you have selected TWS, confirm by pressing the Master button. The two devices will now connect. This process can take approximately 15 seconds for the first TWS connection. The successful connection is indicated by TWS lighting up continuously on the display of both POLAR MK2 devices. Make sure the channel inputs and the Master are at the same level.



Good to know: If the Bluetooth icon flashes quickly, check if your Bluetooth device is within range, Bluetooth is enabled, and POLAR is selected in the list of Bluetooth devices. If POLAR does not appear in the list of Bluetooth devices, try Bluetooth Pairing again to reconnect.

The audio signals from the Bluetooth device are output via channel 4. Adjust the level with channel 4's Volume knob or with the control on the Bluetooth device. We strongly recommend turning channel 4's volume down before you hit the play button on your Bluetooth device.

Automatic connection to Bluetooth devices

When you switch POLAR back on again, it automatically searches for the most recently connected device for 120 seconds.

Once it finds that device, POLAR connects to it so you do not have to launch the BT ON/OFF function manually. If the device fails to connect after 120 seconds, you can either trigger an automatic search again by switching POLAR off and back on again, or launch the search manually via BT ON/OFF.

Switching Bluetooth Devices

You cannot switch to another device while a Bluetooth device is paired or POLAR is searching for the most recently connected device. You will have to launch the BT ON/OFF function to disconnect the currently paired device and connect another Bluetooth device.

Heads Up: BT ON/OFF always triggers a new attempt to pair a Bluetooth-enabled device and disconnects any current Bluetooth connection.

Range

POLAR supports Bluetooth 5. Bluetooth 5-enabled devices' range can extend up to 40 meters. Devices that do not support Bluetooth 5 typically run up to 10 meters, but that depends on factors such as the given device's quality, transmission power and current environment. For example, walls obstructing the transmission path or a protective cover on the Bluetooth device impede radio communication.

The sound drops out if the device moves out of range or behind walls that interfere with the signal. In this case, the Bluetooth icon in the POLAR display will flash quickly.

The connection re-establishes automatically if you bring the Bluetooth device back in range within 120 seconds, and the Bluetooth icon in the POLAR display will light up continuously.

Bluetooth Audio Stream Stutters or Drops Out

Audio streaming via Bluetooth is, by its nature, more susceptible to interference than a cable connection, as a constant data stream without interruption is required during music playback.

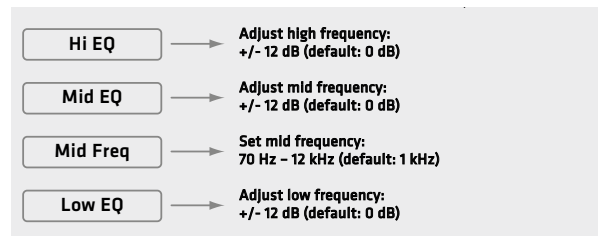
Ideally, there needs to be direct line-of-sight contact between POLAR and the Bluetooth device to enable interference-free playback without dropouts.

Good to know: When connected via Bluetooth, system sounds, notification sounds and ring tones from the Bluetooth device may also be played. You will need to deactivate these functions on your Bluetooth device if you wish to avoid unwanted interference during audio playback.

For more information on Bluetooth, please visit www.bluetooth.org.

3.2 Settings

System EQ



POLAR's three-band EQ serves to tune the system's overall sound. Hi EQ and Lo EQ are shelving filters; Mid EQ is semi-parametric.

Good to know: Use the 3-band EQ to adjust the overall sound depending on the application and personal taste. It is often a good idea to dial down the bass a bit in small rooms with short distances between the system and walls and audiences. The same goes for high frequencies when a sensitive microphone or highly reflective surfaces such as glass walls or windows increase the likelihood of feedback. Use the semi-parametric midrange band to cut a specific frequency that is interfering with your sound or boost a frequency range that sounds a little thin.

Hi EQ: Use this parameter to boost or cut high frequencies. Control range: +/-12 dB • Frequency: 12 kHz

Mid EQ: Use this parameter to boost or cut midrange frequencies. Control range +/-12 dB

Mid Freq: Use this parameter to select and adjust the midrange center frequency. Frequency range: 70 Hz - 12 kHz

Low EQ: Use this parameter to boost or cut low frequencies. Control range: +/-12 dB • Frequency: 70 Hz

Good to know: The EQ settings only affect the speaker output, they have no effect on the Mix Out.

Mode



Three preprogrammed modes let you tune the system's sound to suit the application.

Music: This mode is your go-to choice for live applications and playing all kinds of music, apart from electronic music.

Voice: Optimized for the human voice, this mode is good for speaking