



# ORBIT 11

active coaxial 3-way  
studio monitor

PORBIT11(W)

## 1 INTRODUCTION

### 1.1 YOU MADE THE RIGHT CHOICE!

This product has been developed and manufactured to the highest quality standards to ensure many years of problem-free operation. Find further information about Palmer on our web-site:

<https://www.palmer-germany.com/>

### 1.2 READ THE COMPLETE DOCUMENTATION



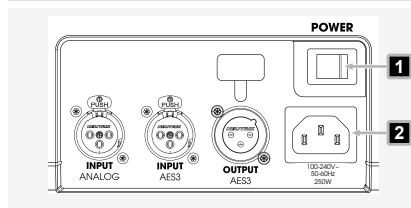
This document is an abridged version of the documentation. Follow the QR code to the complete user manual.

### 1.3 SCOPE OF DELIVERY

- Device
- Mains power cable
- Safety Compliance Information
- Quick Start Guide
- Screws and washers for wall mounting (4x M6 x 10 mm - T30)
- Eyebolt for safety fastening (M8)

## 2 POWER SUPPLY

### 2.1 POWER CONNECTION



**1 POWER** - On / Off switch

**2 C14 Socket** - Device power socket

### 2.2 CONNECTING A MAINS POWER CABLE



**WARNING**

#### Mains voltage

Risk of electric shock

- a. Do not use kinked or damaged mains power cables.

#### Damage to the device

- a. Make sure the mains power voltage matches the device's voltage.
- b. Use the supplied mains power cable.
- c. Do not plug or unplug the device under load.
- d. Power off the device before connecting or disconnecting the mains power cable.

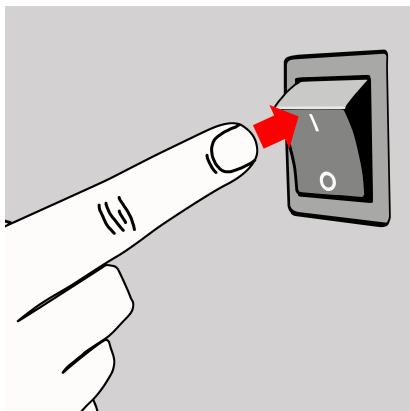


**NOTICE**

- 1 Plug the C13 connector of the mains power cable into the C14 socket on the device.
- 2 Plug the mains connector of the mains power cable into the mains power socket.

### 2.3 TURNING THE DEVICE ON OR OFF

- 1 Flip the switch from the ☉ to the ☐ position.  
⇒ After a few seconds, the device is operational.
- 2 Flip the switch from the ☐ to the ☉ position.  
⇒ The device turns off.



## 3 INSTALLATION



### NOTICE

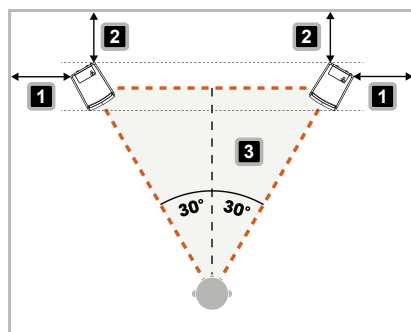
#### Damage to the device

Do not touch the loudspeaker membranes when handling the device.

### 3.1 ABOUT POSITIONING STUDIO MONITORS

Find below basic information on the positioning of studio monitors.

- Place the studio monitors upright.
- Place the studio monitors with distances as symmetrical as possible to the walls at the sides **1** and at the rear **2**.
- Place the studio monitors so that the tweeter is approximately at the same height as your ears at the listening position.
- Place the studio monitors so that the listening position and the two studio monitors form an equilateral triangle **3**.
- **Avoid placing** the studio monitors in a corner of the room.



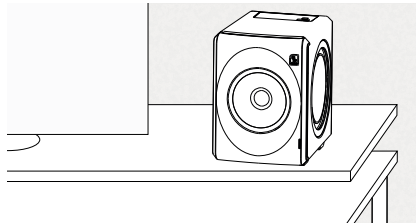
## 3.2 POSITIONING USE CASES

The **ORBIT 11** is designed to create the most neutral listening conditions possible, even in acoustically difficult environments.

*Setting the adaptation filters (p. 8)* of the **ORBIT 11** allows you to partially compensate for less favourable installation conditions.

Find below typical use case examples.

### Positioning on a Desk Board

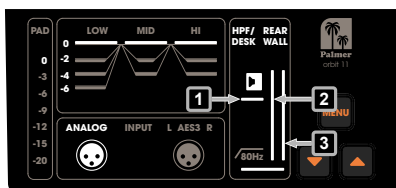


Adaptation filter settings:

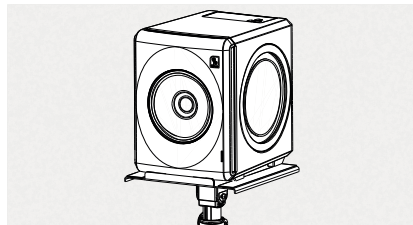
- 1 DESK:** On

#### REAR WALL:

- 2** Small distance to the rear wall (0 cm ... 30 cm)
  - 3** Larger distance to the rear wall (31 cm ... 50 cm)
- Off Distance to the rear wall > 50 cm



### Positioning on a Stand

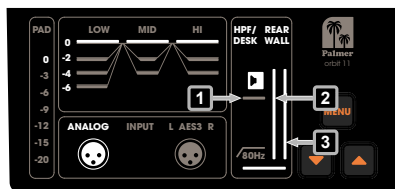


Adaptation filter settings:

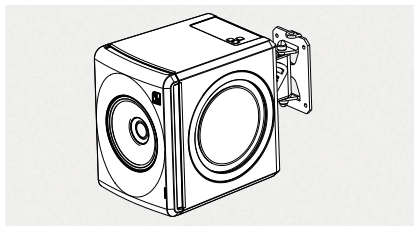
- 1 DESK:** Off

#### REAR WALL:

- 2** Small distance to the rear wall (0 cm ... 30 cm)
  - 3** Larger distance to the rear wall (31 cm ... 50 cm)
- Off Distance to the rear wall > 50 cm

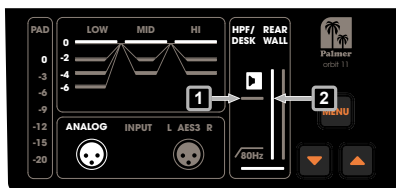


## Mounting on a Wall



Adaptation filter settings:

- 1 DESK:** Off
- 2 REAR WALL:** Small distance to the rear wall (0 cm ... 30 cm)

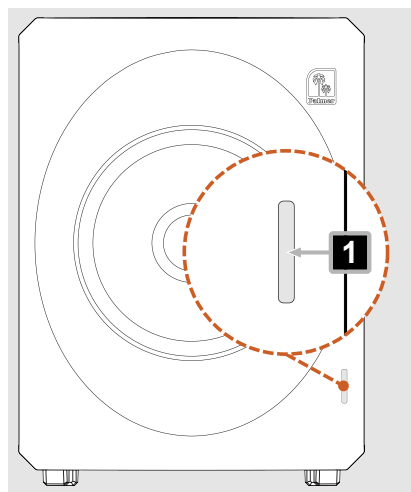


## 4 GETTING STARTED

### 4.1 FRONT LED

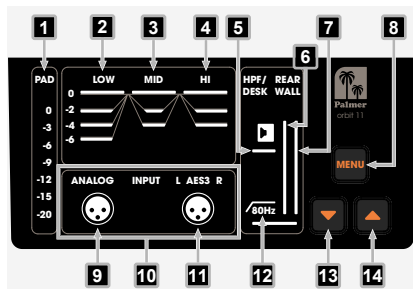
When the **ORBIT 11** is switched on, the front LED **1** can have 2 different states.

- **Power on:**  
Orange
- **Limit:**  
Red





## 4.2 USER INTERFACE

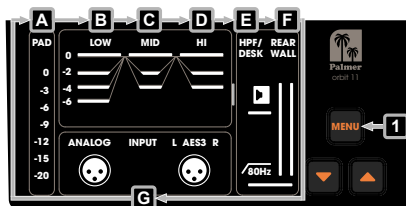


- 1** **PAD** - Indicates the input signal attenuation in dB (**0, -3, -6, -9, -12, -15, -20**).
- 2** **Equaliser LOW** - Indicates the **LOW** band of the equaliser in dB (**0, -2, -4, -6**).
- 3** **Equaliser MID** - Indicates the **MID** band of the equaliser in dB (**0, -2, -4**).
- 4** **Equaliser HI** - Indicates the **HI** band of the equaliser in dB (**0, -2, -4**).
- 5** **Adaptation Filter: DESK** - Indicates whether the **DESK** filter is active.
- 6** **Adaptation Filter: REAR WALL Small Distance** (**0 cm ... 30 cm**) - Indicates whether the adaptation filter **REAR WALL** is set for small distances to the rear wall.
- 7** **Adaptation Filter: REAR WALL Larger Distance** (**31 cm ... 50 cm**) - Indicates whether the adaptation filter **REAR WALL** is set for larger distances to the rear wall.
- 8** **MENU** - Skips through the control panel sections (**PAD, LOW, MID, HI, HPF/DESK, REAR WALL, INPUT**). After reaching the last section, the selection jumps back to the first element.

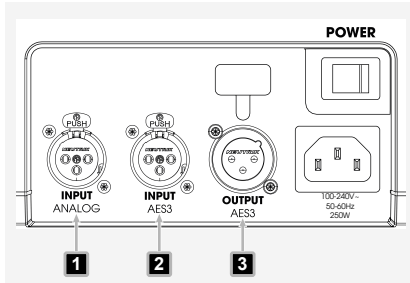
- 9** **INPUT: ANALOG** - Indicates whether the analogue input is active.
- 10** **INPUT Section** - Indicates the active input (**ANALOG, AES3 L, AES3 R, AES3 LR**).
- 11** **INPUT: AES3** - Indicates whether the AES3 input is active.
- 12** **Adaptation Filter: HPF** - Indicates whether the highpass filter (80 Hz) is active.
- 13** ▼ - Changes the value downwards in the selected section.
- 14** ▲ - Changes the value upwards in the selected section.

## 4.3 USING THE MENU BUTTON

The menu sections follow a circular structure. When you have selected the last menu section **G** and press **MENU** **1**, you reach the first menu section **A**.



## 4.4 AUDIO CONNECTIONS



- 1 INPUT ANALOG** - Line input socket (balanced 3-pin XLR)
- 2 INPUT AES3** - AES3 input socket (3-pin XLR for AES3 cable)
- 3 OUTPUT AES3** - AES3 output socket (3-pin XLR for AES3 cable)

## 4.5 CONNECTING AN INPUT SOURCE TO THE ANALOG INPUT

### High Sound Pressure Level

Risk of hearing damage



**CAUTION**

- a. Switch off the device before connecting an input source.
- b. Make sure that the input source volume is turned all the way down before connecting it.

### High Sound Pressure Level

Damage to the loudspeaker



**NOTICE**

- a. Connect line level devices, such as mixing consoles, to the line input only.

✓ 3-pin XLR cable

- 1** Turn down the input source volume.
- 2** Switch off the device.
- 3** Connect the line input source to the **ANALOG INPUT** socket.
- 4** Switch on the device.
- 5** Turn up the input source volume.

## 4.6 CONNECTING AN INPUT SOURCE TO THE AES3 INPUT

### High Sound Pressure Level

Risk of hearing damage



**CAUTION**

- a. Switch off the device before connecting an input source.
- b. Make sure that the input source volume is turned all the way down before connecting it.



**NOTICE**

### High Sound Pressure Level

Damage to the loudspeaker

- a. Connect AES3 devices to the AES3 input only.



The AES3 input supports sample rates up to 96 kHz.

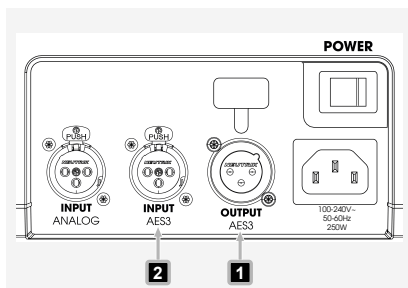
✓ 3-pin XLR cable that complies with the AES3 standard.

- 1** Turn down the input source volume.
- 2** Switch off the device.
- 3** Connect the AES3 input source to the **AES3 INPUT** socket.
- 4** Switch on the device.
- 5** Turn up the input source volume.

## 4.7 CONNECTING A SECOND ORBIT 11 VIA AES3 OUTPUT

 The **AES3 OUTPUT** passes on the signal connected to the **AES3 INPUT**.

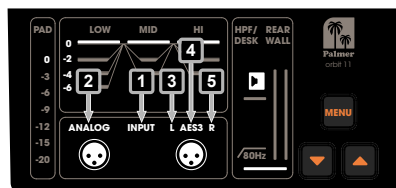
- 1 Connect the **AES3 OUTPUT 1** to the **AES3 INPUT 2** of a second **ORBIT 11** using a 3-pin AES3 compatible XLR cable.  
 ⇒ Both **ORBIT 11** receive the same digital AES3 signal.



## 5 AUDIO PLAYBACK

### 5.1 SETTING THE INPUT SOURCE

- 1 Press **MENU** until **INPUT 1** lights up.
  - Analogue input:**  
Press ▼ or ▲ until **ANALOG 2** lights up.
  - Left channel of the AES3 input:**  
Press ▼ or ▲ until **L 3** and **AES3 4** light up.
  - Right channel of the AES3 input:**  
Press ▼ or ▲ until **R 5** and **AES3 4** light up.
  - Both channels of the AES3 input (Mono summing):**  
Press ▼ or ▲ until **L 3**, **AES3 4**, and **R 5** light up.



### 5.2 SETTING THE PAD

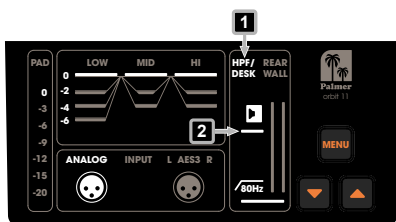
- 1 Press **MENU** until **PAD 1** lights up.
- 2 Press ▼ to increase **2** or ▲ to decrease **3** the attenuation value.



### 5.3 SETTING THE ADAPTATION FILTERS

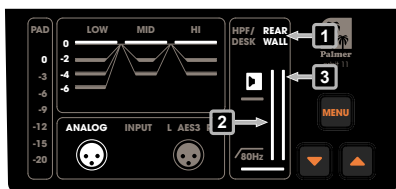
#### 5.3.1 SETTING THE ADAPTATION FILTER DESK

- 1 Press **MENU** until **HPF/DESK** **1** lights up.
- 2 Press **▼** or **▲** until the desk symbol line **2** lights up.



#### 5.3.2 SETTING THE ADAPTATION FILTER REAR WALL

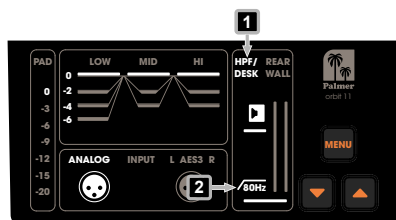
- 1 Press **MENU** until **REAR WALL** **1** lights up.
  - Activating the adaptation filter for small distances to a rear wall:**  
Press **▲** or **▼** until the left wall symbol line **2** lights up.
  - Activating the adaptation filter for larger distances to a rear wall:**  
Press **▲** or **▼** until the right wall symbol line **3** lights up.
  - Deactivating the adaptation filter:**  
Press **▲** or **▼** until both wall symbol lines do not light up.



#### 5.3.3 ACTIVATING THE HIGH-PASS FILTER (HPF)

Activate the high-pass filter (**HPF**) as required to attenuate low-frequency room modes, minimize unwanted acoustic excitation, or when using an external subwoofer.

- 1 Press **MENU** until **HPF/DESK** **1** lights up.
- 2 Press **▼** or **▲** until the high-pass filter symbol **2** lights up.

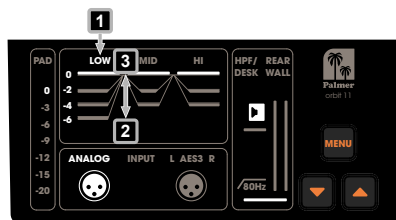


### 5.4 SETTING THE EQUALISER BANDS



The **ORBIT 11** has three adjustable equaliser bands (**LOW**, **MID**, **HI**). Find below the instruction for the **LOW** band as an example.

- 1 Press **MENU** until **LOW** **1** lights up.
- 2 Press **▼** to increase **2** or **▲** to decrease **3** the cut for the equaliser band.



## NOTES

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