



Owner's guide

How to use your new Opalum Furniture Sound System



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1. The Opalum Furniture Sound System

The Opalum Furniture Sound System is a Bluetooth enabled active stereo speaker system consisting of two speaker boxes designed to fit your BoConcept furniture. The speaker box playing the right channel is active. It contains the built-in amplifiers, power supply, input connectors and user controls. The speaker box playing the left channel is passive. The two speaker boxes are interconnected by a specially designed cable to ensure failsafe mounting and good and lasting connectivity.



2. Controls and connectors

1. Status indicator

Indicates the current status using different colors and flash modes. For details see section 3.

2. Standby

Use this button to turn on the system or to put it into standby. This button is also used to enter certain "Programming modes".

3. Volume up

This button can be used to increase the volume offset up.

4. Volume down

This button can be used to decrease the volume offset down.

5. Bluetooth pairing

Use this button to start the Bluetooth pairing process, which link your Bluetooth enabled device to the system. This ensures that only devices linked to the system will actually be able to use the system.

6. IR sensor window

The IR sensor is placed behind this window.

7. Power socket

Mains power connection. Make sure connector is firmly attached.

8. Analog input

Connection for any analog source, like for instance TV (headphone or analog out), MP3 players and similar devices.

9. Digital input, coaxial*

Connection for digital S/PDIF equipment (e.g. computer, CD, DVD™, Blu-ray™, flat screen TV, etc.) using coaxial cabling. (These are trademarks of their respective owners).

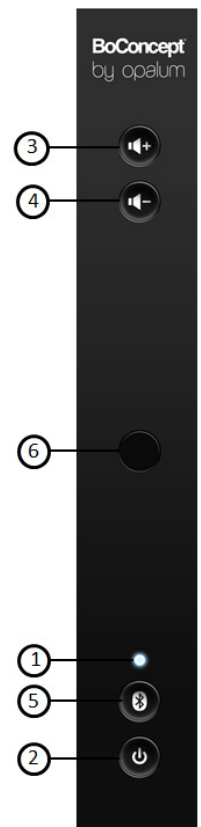
10. Digital inputs, optical*

Connection for digital S/PDIF equipment (e.g. computer, CD, DVD™, Blu-ray™, flat screen TV, etc.) using optical fiber (TOSLINK™). (These are trademarks of their respective owners).

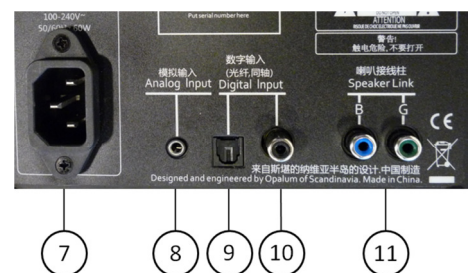
11. Speaker link

Connect the supplied speaker link cable to this connector to connect the two speaker boxes.

Front panel:



Rear panel:



* NOTE:

Use uncompressed stereo PCM audio data only. Data rates of 44.1, 48, 88.2 and 96 kHz are supported in 16 and 24 bits. Both 176.4 and 192 kHz in 16 and 24 bit are also supported using digital coax input. If connecting a multi-channel source (such as a TV, DVD player, computer, etc.) setup this source to output uncompressed two channel (stereo) PCM data.

3. The status indicator

The LED on the front of the system indicates the current system status. Its color indicates the current input source and its intensity the system status.

3.1 Modes of the status indicator

To indicate special events the indicator uses different light modes.

Normal operation

- Dark
 - Stand by or OFF
- Steady
 - White, rear input (coax, optical or analog)
 - Blue, Bluetooth input
- Flashing
 - Red, ERROR (see section 4 Short circuit protection)

Programming mode

- Steady
 - Green, OK response
 - Red, ERROR response
- Flashing
 - White, programming mode
 - Yellow, IR learning
 - Red, factory reset

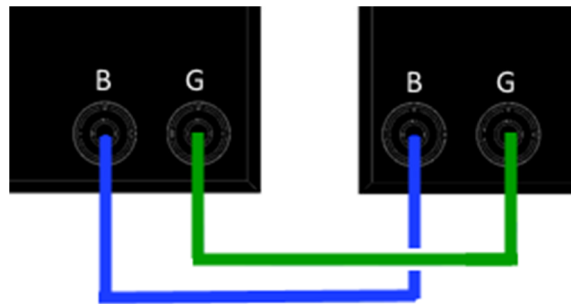
4. Short circuit protection

To protect from shorted or faulty wired speaker cables the system is equipped with short circuit protection. If a problem is detected, the amplifier is automatically turned off and the status indicator starts flashing red. To recover from short circuit mode you may go through the following steps:

- 1 Remove mains power.
- 2 Check the cable and connector for short circuits. When problem is solved reconnect.
- 3 Apply mains power.

5. Connecting the system

The two speaker boxes are connected using the supplied speaker link cable. The speaker link cable is an ordinary stereo cable with RCA plugs in both ends, so it doesn't matter which end of the cable you connect to which speaker box. To ensure polarity you need to mount the plugs correctly however; so that the connectors marked "B" are connected, and the connectors marked "G" are connected.



Then connect the source needed. Three options are available: analog, digital optical and digital coax. If you use analog input, then digital optical and coax are disabled. If you use digital optical and signal is detected, digital coax is disabled. See "1 Controls and connectors" for description of the individual input connector.

Mains power may only be connected after the speaker link cable has been installed. The mains power connected is placed on the back of the right side speaker. There is no mains switch. All daily use is operated through the buttons on the front panel or by using a remote control.

6. Using the Opalum Furniture Sound System

7.1 On/off

The Opalum Furniture Sound System has automatic on/off. This means that whenever a source starts playing the system will switch on. Likewise the system will go to standby automatically if no source is playing for more than 5 minutes. Manual on/off is still possible, just press the Standby button on the front, or use the IR standby command if such has been learned. In this case the automatic on is disabled. In standby the system consumes less than 0.5 watt.

7.2 Volume offset adjustment

Even if the volume is normally controlled by your source, like for instance your TV or mobile phone, the Opalum Furniture Sound System offers a volume offset adjustment feature. This feature allows you to adjust the overall amplification level in the same way as an ordinary AV receiver would do. Increasing the volume offset will make your system play louder, but could also mean that the lowest volume setting on your source still could be too loud for a quiet living room late at night. Decreasing the volume offset will make your system play lower, but could also mean that the highest volume setting on your source isn't enough to get your party rocking. So, either adjust depending on the need of the moment, or find an adjustment that suites your need the best. The adjustment is stored automatically and since it's the amplification that is adjusted, it will affect all sources.

7.2 Bluetooth

To connect your mobile device or PC to the Opalum Furniture Sound System using Bluetooth you first need to pair the devices. The Opalum Furniture Sound System will only pair if it is put into pairing mode. Do this by pressing the "Bluetooth pairing" button on the front. While the status indicator flashes blue, the system is in pairing mode. The pairing mode will terminate automatically when a device pairing is completed, or after a timeout of 5 minutes. Please see the user guide of your device for how to pair. The Opalum Furniture Sound System is identified by the name "Opalum FSS xx:xx", where xx:xx is a unique number. After pairing is completed the Opalum Furniture Sound System remembers the device, and vice versa – so next time you just simply connect, no pairing needed.

7.4 IR learning

The Opalum Furniture Sound System can learn to understand IR commands from most remote controls. You decide which buttons to use for which function and simply use the IR learning function to teach the Opalum Furniture Sound System. These are the functions that you can assign buttons to:

Sequence number	Button name	Function
1	Volume up	To increase the volume. This is basically the same as pressing the volume offset button on the front of the speaker.
2	Volume down	To decrease the volume. This is basically the same as pressing the volume offset button on the front of the speaker.
3	Power on/off	To control the power state.

The buttons are learned in sequence starting from 1 in above list. You don't need to learn buttons for all functions as the learning function can be deactivated at any time.

The IR learning function is activated this way:

1. Make sure the unit is ON
2. Now press and hold the Standby button for more than 2 seconds
3. The LED now flashes white.
4. Now press the BT pair button for less than 2 seconds. When IR learning is activated the status LED starts flashing yellow.

Learn a command:

5. Point your remote toward the IR eye. It's in the center of the control panel on right side speaker (above the LED).
6. Press the button you want to learn once and observe the LED:
 - a. Steady green -> OK.
 - b. Steady red -> Command was NOT learned.
7. Wait until the LED flashes yellow again and then repeat for next button to be learned or retry the learning of the button which just failed. In either case repeat from step 5.

Done learning:

8. If buttons for all 3 functions was learned the system will automatically reboot and return to normal operation mode. If you only want to learn some commands, you simply terminate the learning function by pressing the BT pair button for less than 2 seconds when done learning the commands you need.

7.5 Source select

The Opalum Furniture Sound System doesn't require any source select. Instead sources are priorities and will start playing accordingly. The priorities are as follows:

1. Bluetooth
2. Analog
3. Digital optical (will only play if nothing is connected to the analog input)
4. Digital coax (will only play if nothing is connected to the analog input and no signal on digital optical input).

7.6 Audio profiles

The Opalum Furniture Sound System is built for use in BoConcept furniture's, for instance a cabinet or in a bookshelf. Some cabinets have cloth cabinet doors, some doesn't. To give the optimum, the system has been equipped with profiles to match these different usages. To select the right profile do the following:

1. Make sure the system is ON
2. Now press and hold the Standby button for more than 2 seconds
3. The LED now flashes white
4. Now press the either VOL+ or VOL-
 - a. VOL+ if the speakers are placed behind cloth cabinet doors
 - b. VOL- if the speakers are NOT placed behind cloth cabinet doors
5. The profile has been set when LED turns green
6. The system returns to normal operation and LED turns white

7.7 Factory reset

The factory reset function is to bring the unit back to the initial settings set by the factory. All learned IR commands are erased. Profile for placement below TV will be selected. Master volume will be set to 60%.

The reset function is activated by:

1. Make sure the unit is ON
2. Now press and hold the Standby button for more than 2 seconds
3. The LED now flashes white.
4. Now press the BT pair button for more than 5 seconds. When Factory reset is performed the LED starts flashing red.
5. Reset has been completed when the control hub reboots (LED turns OFF and then ON white).