

OCTAVE

Black Box  
Super Black Box

Owner's Manual  
English

**CONTENT**

<b>1.</b>	<b>UNIT DESCRIPTION</b>	<b>1</b>
<b>2.</b>	<b>SAFETY INSTRUCTIONS</b>	<b>1</b>
2.1.	Before you begin	1
2.1.1.	In case of emergency: disconnect the plug from the mains supply	1
2.1.2.	Do not open the case	1
2.1.3.	Service and maintenance	2
2.1.4.	Before connecting	2
2.1.5.	Placement	2
2.2.	Warranty	2
2.3.	Special cases Super Black Box	2
<b>3.</b>	<b>MODEL OVERVIEW</b>	<b>3</b>
3.1.	Black Box	3
3.2.	Super Black Box	4
<b>4.</b>	<b>OPERATION</b>	<b>5</b>
4.1.	Connecting to the amplifier	5
<b>5.</b>	<b>TECHNICAL DATA</b>	<b>5</b>
5.1.	Black Box	5
5.2.	Super Black Box	5

## UNIT DESCRIPTION

**Note** This instruction you can also find in the owner's manual of your amplifier.

### 1. UNIT DESCRIPTION

With the **Black Box** technology OCTAVE offers an instrument to optimizing the OCTAVE amplifier in respect to the speaker. This flexibility is a unique feature of the OCTAVE brand.

The dynamic and tonal stability of an amplifier is strongly dependent upon the stability and capacity of the power supply, therefore the **Black Box** and **Super Black Box** were developed as external upgrades to the OCTAVE amplifiers' power supply storage capacitors by increasing their capacitance by a factor of 4 (**Black Box**) or 10 (**Super Black Box**), respectively. This is a tremendous benefit if the speaker is difficult to drive. Loudspeaker efficiency is made less critical, while the amplifier is enabled to handle speakers with minimum impedances as low as 2 Ohms.

The power supply capacitance increase realized via use of the **Black Box** or **Super Black Box** stabilizes current delivery and reduces the impedance interaction of the load. This improves dynamic range, separation, depth, soundstage size and articulation, rendering the musical reproduction clearer throughout the entire frequency range. The amplifier remains unaffected by mains variations and interferences due to the noise filtering characteristics of the capacitors.

### 2. SAFETY INSTRUCTIONS

#### 2.1. Before you begin

##### 2.1.1. In case of emergency: disconnect the plug from the mains supply

Never use an amplifier that is damaged or faulty. Make sure it has been labeled as defective and that it cannot be used until it has been repaired by a qualified service engineer.

Make sure that there is easy access to the IEC socket and power cable.

##### 2.1.2. Do not open the case

There are dangerously high voltages and hot tubes inside this unit. To avoid a burn or the risk of electric shock, never allow anyone except qualified personnel to open the case or remove the grill.

## SAFETY INSTRUCTIONS

### 2.1.3. Service and maintenance

For reasons of safety, please ensure that servicing, repairs and other modifications to OCTAVE unit are carried out only by a qualified technician. Defective fuses should also only be re-placed by a qualified technician. Always replace fuses with ones of the same type and rating. If your amplifier requires servicing, please ship or take your unit directly to OCTAVE or to one of our authorized service centers.

### 2.1.4. Before connecting

Make sure that the voltage of your amplifier matches your local supply voltage.

### 2.1.5. Placement

- The unit is designed strictly for use in a dry domestic environment. Do not use it in open air or in damp environments!
- Never place plants or liquid-filled containers on your unit. Take care that objects do not fall or liquids are not spilled into the enclosure. Should this happen, disconnect the mains plug immediately and have your unit checked by a qualified service technician.
- Condensation may form if the unit is taken from a cold environment into a warm one. In this case, wait until the unit has reached room temperature and is dry before switching it on.
- Avoid installing the unit close to sources of heat, such as heaters, or anywhere that it may be in direct sunlight.
- Do not operate your unit near flammable materials, gases, or vapors. Avoid areas where there may be heavy accumulations of dust or where the amplifier may be subject to mechanical vibration.
- Place your unit on a stable, even surface.

## 2.2. Warranty

OCTAVE can only guarantee the safety, reliability and performance of this unit if modifications and repairs are carried out by specialized personnel and if the amplifier is operated in accordance with the instructions contained in this manual.

## 2.3. Special cases Super Black Box

The black boxes are equipped with integrated discharge electronics which discharge the power supply electrolytic capacitors within two seconds of shutting off the main device to prevent noise interference after shutdown.

Because the discharge feature is not compatible with older OCTAVE products, the Unload LED will not illuminate.

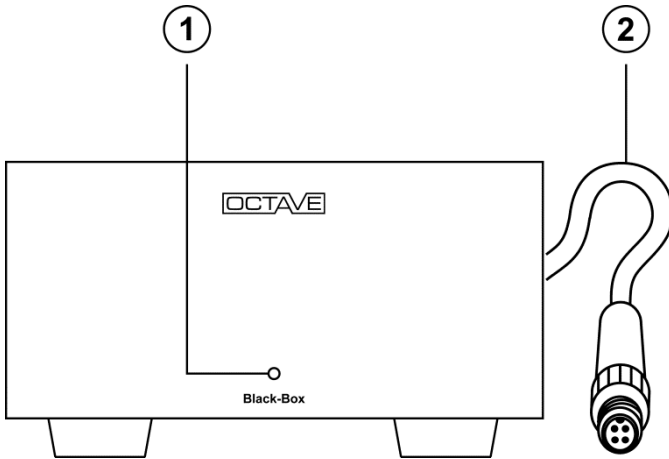
## MODEL OVERVIEW

Furthermore, you may hear a “pop” through the loudspeakers 30 or 40 seconds after switching off. Both of these occurrences are normal and present no danger to persons, amplifiers or speakers. Should you accidentally disconnect the **Super Black Box** while the amplifier is on, do not touch the pins on the connecting plug, as these will remain live for approximately 30 minutes!

Older V 70, V 50, MRE 120, RE 280, or RE 280 MKII must be upgraded with the ESB upgrade (ESB = inrush current limitation) before they can be used with the **Super Black Box**. The presence of the upgrade is denoted by the code “ESB” below the serial number.

### 3. MODEL OVERVIEW

#### 3.1. Black Box

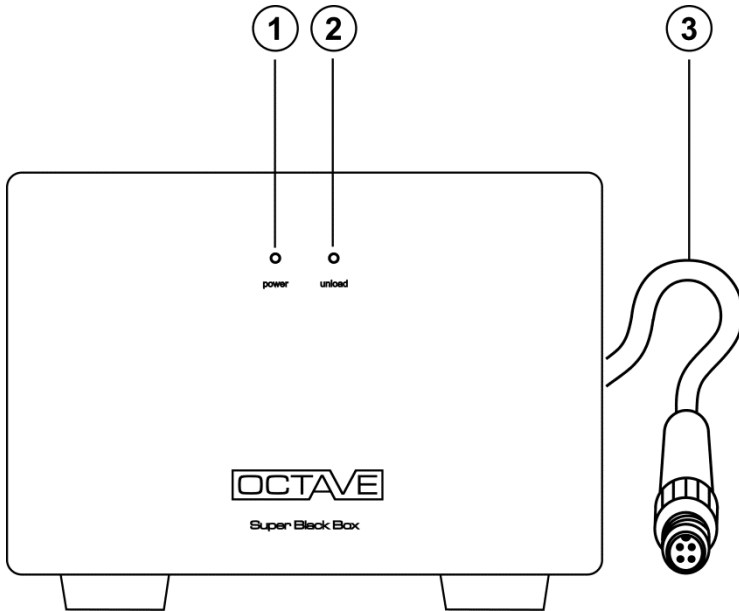


#### Legend

- |     |                          |   |
|-----|--------------------------|---|
| (1) | <b>Indicator LED</b>     | The LED illuminates continuously when the power amplifier is on. The LED goes out when the protection circuitry trips. This is normal, as the protection circuitry cuts the power to the amplifier. |
| (2) | <b>High-current plug</b> |   |

## MODEL OVERVIEW

## 3.2. Super Black Box



## Legend

- |                              |  |
|------------------------------|--|
| <b>(1) Blue power LED</b>    | The blue “power” LED illuminates when the power amplifier (or integrated amplifier) is switched on via the amplifier’s power on/off switch.  |
| <b>(2) Yellow unload LED</b> | The yellow “unload” LED (discharge control circuit) illuminates for approximately two seconds after switch-off, and also when the electronic protection is activated and when the V 40 SE is powered down with Ecomode on. The <b>Super Black Box</b> is equipped with a rapid discharge circuit, which discharges the unit’s electrolytics. The yellow LED indicates that that this procedure is taking place. The discharge circuit also activates if the <b>Super Black Box</b> connecting cable is accidentally re-moved. This is to prevent the <b>Super Black Box</b> maintaining its charge when it has not been properly disconnected. |
| <b>(3) High-current plug</b> |  |

## OPERATION

## 4. OPERATION

## 4.1. Connecting to the amplifier

- ▶ Please observe the safety instructions and positioning information (see chapter 2, page 1)
- 1. Before connecting the unit, make sure that the power amplifier is switched off via its on/off switch or disconnect the plug from the wall outlet.
- 2. When inserting the connector, guide the anti-rotation lug carefully into the mating recess in the socket.
- 3. Switch on the amplifier.  
*The LED on the front panel of the unit will illuminate.*

- Note** The LED on the unit goes out when the amplifier's electronic protection circuitry is activated, as the protection circuitry shuts off the power to the amplifier.
- 4. Should you wish to disconnect the **Black Box / Super Black Box**, switch the amplifier off first and wait until the LED on the front panel has gone out.

## 5. TECHNICAL DATA

## 5.1. Black Box

General Data	
<b>Dimensions</b>	Width x height x depth = 178 x 98 x 300 mm
<b>Weight</b>	3.1 kg
<b>Connection cable length</b>	90 cm (with plug) Longer lengths available upon request

## 5.2. Super Black Box

General Data	
<b>Dimensions</b>	Width x height x depth = 203 x 149 x 360 mm
<b>Weight</b>	7.5 kg
<b>Connection cable length</b>	90 cm (with plug) Longer lengths available upon request

The logo for OCTAVE, featuring the word "OCTAVE" in a stylized, outlined font within a rectangular border.

We reserve the right to alter and improve the specifications in pursuit of better. OCTAVE is a registered trademark of Andreas Hofmann Octave Audio. This manual is the copyright of Andreas Hofmann.

Reproduction in whole or part is prohibited.

EN2015.02

OCTAVE AUDIO  
Germany  
[www.octave.de](http://www.octave.de)

A solid dark grey horizontal bar at the bottom of the page.







ANDREAS HOFMANN  
OCTAVE AUDIO  
INDUSTRIESTR. 13  
76307 KARLSBAD  
GERMANY  
TEL +49 72 48 / 32 78  
FAX +49 72 48 / 32 79  
HOFMANN@OCTAVE.DE  
WWW.OCTAVE.DE

