

OCTAVE

JUBILEE Pre

FOREWORD

I wish to personally thank you for choosing OCTAVE products and congratulate you on your purchase of your new

Jubilee Preamp

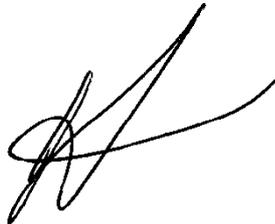
Here at our head office in Karlsbad, right on the edge of the Black Forest, we have been designing and building high quality, long-lasting hi-fi equipment for over 20 years that will – quite literally – provide you with hours of musical pleasure for many years to come.

Today's loudspeakers and high-resolution source equipment continue to be very

demanding of amplifiers. As a result, achieving improved amplifier sound quality requires greater levels of technical innovation than ever before.

OCTAVE specializes in the ongoing development of upgradeable circuit designs and has earned a reputation over recent years as a world leader in the field of high-end tube amplifier design. Thanks to our years of experience and our in-depth understanding of amplifier technologies and their side effects, OCTAVE is able to achieve a musical quality and degree of reliability that seemed impossible or unaffordable only a few years ago.

I trust that you will enjoy many hours of wonderful music with your OCTAVE amplifier.



Andreas Hofmann
Chief Designer and Owner of OCTAVE Audio

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1. INTRODUCTION

1.1 WHAT MAKES OCTAVE AMPLIFIERS SPECIAL

Technology

Tubes themselves do not themselves guarantee high quality sound. Only by partnering them with innovative electronics designed to create the optimum conditions for the tubes you can achieve consistently high sound quality.

OCTAVE amplifiers are equipped with a power management system whose design is unique. This electronic monitoring and protection system is comprised of a soft-start control and a protection system. An electronic control module regulates and controls all the functions of our amplifiers. When you switch it on, the soft start circuit ensures that the tube heaters and operating voltages are ramped up gently. If a fault should occur, the protection system steps in to switch the power off virtually instantaneously. This intelligent power management system guarantees total protection against all conceivable faults.

An optimized power supply, sophisticated power supply circuitry and the high load stability of the output stages ensure that every power amp and integrated amp bearing the OCTAVE name is capable of developing its full sonic qualities with virtually any loudspeaker.

Together, these measures deliver a supremely consistent sound quality and a dependability that is recognized as world class.

Manufacturing

Every OCTAVE amplifier is 100 percent "made in Germany". Our products are built individually by hand and thoroughly tested before they leave the factory. We design and make our own custom transformers. We maintain extremely high quality standards through close cooperation with specialist suppliers and by insisting on producing mechanical components in house on the latest CNC machines. The most important contributing factor, however, is the highly qualified and enthusiastic team working here at OCTAVE. The company owner, Andreas Hofmann, retains ultimately responsibility for the design and development of all OCTAVE products.

Sound

OCTAVE is fully convinced of the musicality and sonic superiority of tubes. But our experience tells us that using tubes does not automatically lead to audiophile sound quality. We appreciate that the sound characteristics of an amplifier are a result of the interaction of its component parts. This means that a high degree of technical skill must be applied to optimizing every detail in order to design a reliable amplifier that will maintain its characteristics over time and that will convince the critical listener over the long term that its reproduction of music is both honest and natural

1. INTRODUCTION

1.2 DESCRIPTION OF THE JUBILEE PREAMPLIFIER

Circuit design

OCTAVE has designed its reference amplifier – the Jubilee preamp – as a *two-stage hybrid amplifier*. Tube circuitry manages the high precision *balanced stage* and amplifies the signal. The *high output current* requirements are satisfied by an output impedance converter implemented with semiconductors. The unique combination of tubes and transistors allows the Jubilee to do without overall negative feedback and thus deliver the undeniable sonic benefits of a *zero feedback design*. However, any amplifier that dispenses with negative feedback also dispenses with the corrective mechanism provided by negative feedback circuitry. In the Jubilee preamplifier, we solve this problem through the extremely high specification of the output stages and power supply section, creating virtually perfect conditions for achieving *perfectly accurate amplification* – without the need for corrective mechanisms.

Whether the source equipment is connected via the RCA / CINCH phono or XLR inputs, the Jubilee tube preamp always produces a *perfectly balanced output signal* and delivers an optimum sonic performance independent of the source type. The XLR inputs are fitted with step-up transformers that have no sonic signature of their own. Because they introduce no noise or phase shifts, step-up transformers are the technology of choice for this application in professional recording studios. What is more, they also perform the function of a ground lift circuit, eliminating the risk of interference and hum that is particularly critical when dealing with complex multi-amp rigs connected via balanced inputs.

The *low impedance output* is yet another feature designed to enhance the sound quality and versatility of the Jubilee preamplifier.

Only a semiconductor-based output stage is able to cope with long cable runs and integrate perfectly with low impedance power amplifiers. It would be impossible to implement such an uncritical output using tubes alone without sacrificing accuracy in the low bass and extreme high frequencies.

Outboard power supply

The outboard power supply, which was developed exclusively for the Jubilee preamplifier, substantially enhances the sound quality of the preamp by separating the preamplifier from the mains (simulated battery operation). The *separate power supply* stops noise pollution from entering the preamp's signal processing circuitry. It also provides highly accurate and stable electronic voltage regulation, which is one of the ways we ensure this product's consistent performance over time.

Power management system

The Jubilee's sophisticated power management system guarantees a long and reliable life and incorporates highly refined soft-start technologies that help the tubes achieve their theoretical maximum service life of up to 50,000 hours.

Build quality

The volume control with its precision ball bearings is centrally placed within a polished Labrador natural stone slab, flanked by two, three-centimetre thick, solid aluminum panels. The extremely stable, low resonance, all-aluminum casing eliminates any possibility of magnetic distortion. Before leaving the factory, each hand-built Jubilee preamplifier is thoroughly inspected and subjected to a 48-hour soak test.

2. SAFETY PRECAUTIONS

2.1 BEFORE YOU BEGIN

Read the instructions before switching the unit on.

Please read through this manual carefully before switching on your amplifier and pay particular attention to the safety instructions. Please keep this manual safe for future reference and retain the original packing to use whenever your amplifier is transported.

In case of emergency: disconnect the plug from the mains supply

Never use an amplifier that is damaged or faulty. Make sure that it cannot be used until it has been repaired by a qualified service engineer. You should also remove the mains plug if you expect not to use the amplifier for a long period.

Do not open the case

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

Servicing and maintenance

To avoid the risk of any other hazards, servicing, repairs and other modifications to this OCTAVE equipment should only be carried out by qualified personnel. Always replace fuses with ones of the same type and rating. If your amplifier requires servicing, please ship or take your equipment directly to OCTAVE or to one of our authorized service centres.

Explanation of the symbols



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated 'dangerous voltages' within the product's enclosure that may be sufficient to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to im-

portant operating and maintenance instructions.

The CE mark certifies that this electrical equipment complies with current European Union product safety regulations such as the Low Voltage Directive and the Electromagnetic Compatibility Directive.



Before connecting up

The Jubilee preamplifier is designed to operate exclusively with the power supply supplied. Make sure before connecting the power cord that your amplifier is suitable for your local supply voltage.

Protection class

In Japan this amplifier is a protection class 2, no earth connector. In other countries it is a protection class 1 device (with protective earth conductor).

Adjusting the volume

While you are setting your amplifier up, turn the volume control anticlockwise, close to the minimum setting. High sound pressure levels can damage to your hearing as well as your loudspeakers.

Safety warning: Hot tubes

Tube equipment gets very hot and takes about 20 minutes to cool down after you have switched it off. The exterior of the case, which can also heat up during normal operation, and the protective grill fitted over the external tubes are designed to protect children and others from being burned should they ever touch the hot tubes. Warning: Remove the protective grill at your own risk. OCTAVE accepts no responsibility for injuries caused by the removal of this grill.

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. SAFETY PRECAUTIONS

2.2 POSITIONING

1. Location

OCTAVE equipment is designed strictly for use in a *dry domestic environment* and should never be used in the open air or in damp rooms.

Never place plants or liquid filled objects such as bottles or glasses on your OCTAVE equipment. Take care that objects do not fall or liquids are not spilled into the enclosure. Should this happen, remove the mains plug immediately and have your amplifier checked by a qualified service technician.



Condensation may form if the equipment is taken from a warm environment into a cold one. In this case, wait until the room has warmed up before switching the amplifier on.

Avoid installing the unit close to sources of heat such as radiators or anywhere that it may be in direct sunlight. Do not operate the unit near flammable materials, gases or vapours. Avoid areas where there may be heavy accumulations of dust or where the unit may be subject to mechanical vibration.

2. Level, stable base

Place your OCTAVE amplifier on a stable, even surface. Special hi-fi equipment supports can be beneficial.

3. Good ventilation

Make sure that your amplifier has a *good flow of air around it*. If you intend to install your equipment in a cupboard or a shelf, ensure that there is at least a two centimetre gap between the ventilation slots and the bottom of the shelf and a 20 centimetre gap between each of the walls. The rear panel of cupboards should have ventilation holes to prevent heat buildup. The equipment should not be placed on a soft surface such as carpet or foam sheeting.

4. Hum

Encapsulated transformers reduce the effect of magnetic interference on cables and other hi-fi components such as CD players or tuners. Nevertheless, *you should not place any other electronic components directly on or below your OCTAVE equipment*.

You should always keep sensitive input circuitry well away from amplifier power supplies. The mains transformer is located on the left hand side of most audio equipment. The input circuitry on OCTAVE amplifiers is located directly behind the inputs.

5. Power supply

Do not position the Jubilee's power supply directly on or next to the preamplifier. You should also avoid placing any equipment containing sensitive input circuitry, such as a phono preamp, close to the power supply (see Section 4. Hum)

Power supplies in hi-fi equipment

3. INSTALLATION

1. In your own interest, please observe the Safety Precautions in Section 2.1 and the Positioning advice in Section 2.2.

2. Before connecting your OCTAVE amplifier, switch off all other hi-fi equipment. This will avoid possible problems when you connect your other components to the pre-amp.

3. Connect your source components such as CD player, a phono preamplifier, a tuner and one or two recording devices. You will find advice on connecting your source components and information on pin connections in Section 4.1.

Connect the cables from your signal sources such as CD player to the appropriate inputs (XLR or RCA / CINCH phono) on your Jubilee preamplifier. Also, connect the Record Out of recording equipment to the tape inputs on your Jubilee preamplifier.

4. Connect the leads from your Jubilee pre-amplifier (XLR or RCA / CINCH) to the appropriate inputs on your power amplifiers.

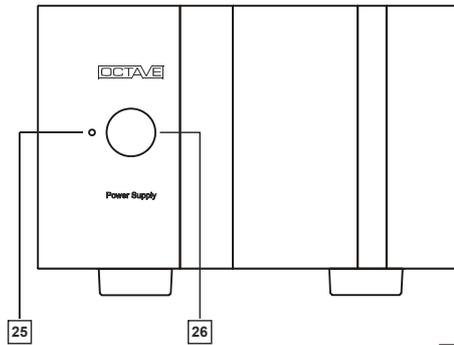
Make sure that the power supply is switched off before you connect the power supply cable.

When inserting the connector, observe the anti-rotation lug and take care not over tighten the coupling ring.

5. Turn the volume control anticlockwise close to the minimum setting. Remember that high sound pressure levels can damage to your hearing as well as your loudspeakers.

6. Connect the power supply to the wall socket. Plug the power cord **24** of the Jubilee power supply into the special socket on the preamplifier. **19**

Jubilee power supply front:



7. Switch the power supply on (switch **26**). LED **25** on the front panel of the power supply will illuminate

Wait until the Muting LED **1** on the Jubilee preamplifier goes out. The unit will be ready for use in about six minutes.

8. Now you can adjust the settings (GAIN, PHA-SE etc.) as described in Section 3.

9. Switch your other components on.

10. Select a source using input selector knob **3** and adjust the volume to your normal listening level.

11. Running in
Tube equipment generally takes about three months to run in and start sounding its best. Daily use is useful during this period but it is not necessary to leave the equipment on continuously, as this does not greatly reduce the running-in time.

12. Please keep this manual safe for future reference and retain the original packing for use whenever your amplifier is transported.



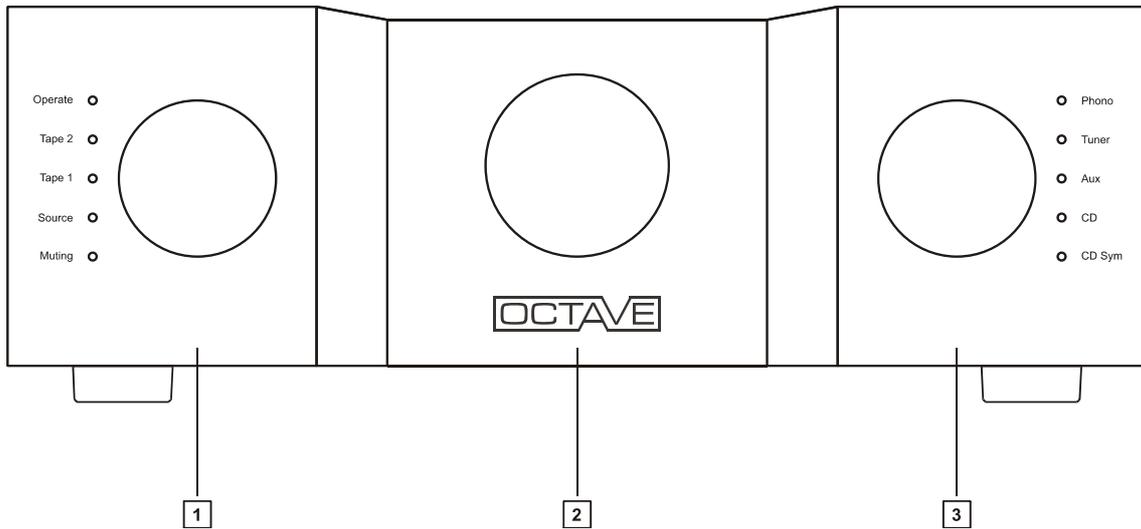
Connecting the power supply

Reduce volume

Running in

4. OPERATION

4.1 JUBILEE PREAMPLIFIER FRONT PANEL



Switch-on
delay timer

The Jubilee preamplifier is equipped with a delay timer function that helps conserve tube life. The output is muted (muting LED illuminates) for six minutes during the start phase. The muting function is also activated when the gain switch [4] is used (See Sec. 3.2.)

1 MODE SELECTOR KNOB

Operate

Is the outboard power supply switched on, the Operate LED illuminates the correct work of the power supply. This LED needs 2 minutes delay. When the Muting LED switches off, the amplifier is ready for use.

Tape 2

Playback of recorder connected to the Tape 2 input

Bypass

In this position the play input of tape 2 is bypassing the volume regulator. This is indicated by lighting up the bypass and the tape 2 LED. The unity gain is set when the gain switch on the top of the preamp is set to gain low.

Tape 1

Playback of recorder connected to the Tape 1 input

Source

Playback of the source that has been selected with the input selector knob [3]. When the Mode Selector is set to Source, you can record the source you are listening to via the two tape outs (Tape 1, Tape 2). To do this, Tape Copy [6] must be switched off (see Section 3.2).

Muting

You should mute the preamplifier outputs by *Connecting* turning the knob to the Muting position (LED illuminates) before connecting or disconnecting source equipment. The muting switch allows you to do this without having to switch the Jubilee preamplifier off.

2 VOLUME CONTROL

Turn the volume control anticlockwise near to its zero position (close to 8 o'clock) before switching on. High sound pressure levels can damage your hearing as well as your loudspeakers

3 INPUT SELECTOR KNOB (SOURCE)

Selects the input sources **Phono**, **Tuner**, **Aux**, **CD** and **CD Sym** (balanced XLR input). See also Connections on page 10.

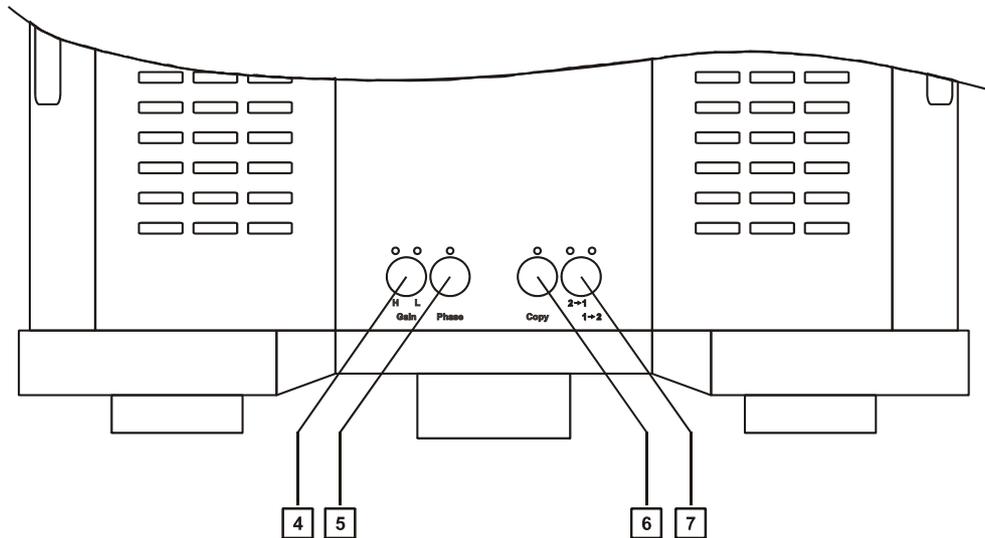
Connecting
components



Turn the
volume control
down before
using the
preamplifier

4. OPERATION

4.2 JUBILEE PREAMPLIFIER TOP VIEW



4 GAIN

Facility for switching between high (H) and low (L) gain. The appropriate LED illuminates to show which position is active.

H (HIGH) position:

This is the standard position for the majority of power amplifiers and loudspeakers.

L (LOW) position:

A lower gain setting is recommended only when high efficiency speakers such as horns are being used.

When switching between gain settings, the muting function is activated to prevent switching noises being sent to your amplifier and loudspeakers. The outputs are restored after a short time. (The muting LED turns off.) The gain and phase switches should not be operated at the same time or immediately after each other, as this could cause cracking noises through your system.

Gain selection

5 PHASE SWITCH

Phase switching of the output signal (0 and 180 degrees) applies to both the balanced

XLR and the RCA / CINCH phono outputs.

LED on: 180 degrees phase shift

LED off: 0 degrees phase shift

6 COPY (tape copy function, tape to tape)

LED on: Tape Copy on

LED off: Tape Copy off

Copying can be carried out from Tape 1 to Tape 2 and vice versa. Select the copy direction with pushbutton switch **7** (2->1 or 1->2).

7 Tape Copy direction

2 → 1 (LED illuminated)

Tape 2 is the source; Tape 1 is recording

1 → 2 (LED illuminated)

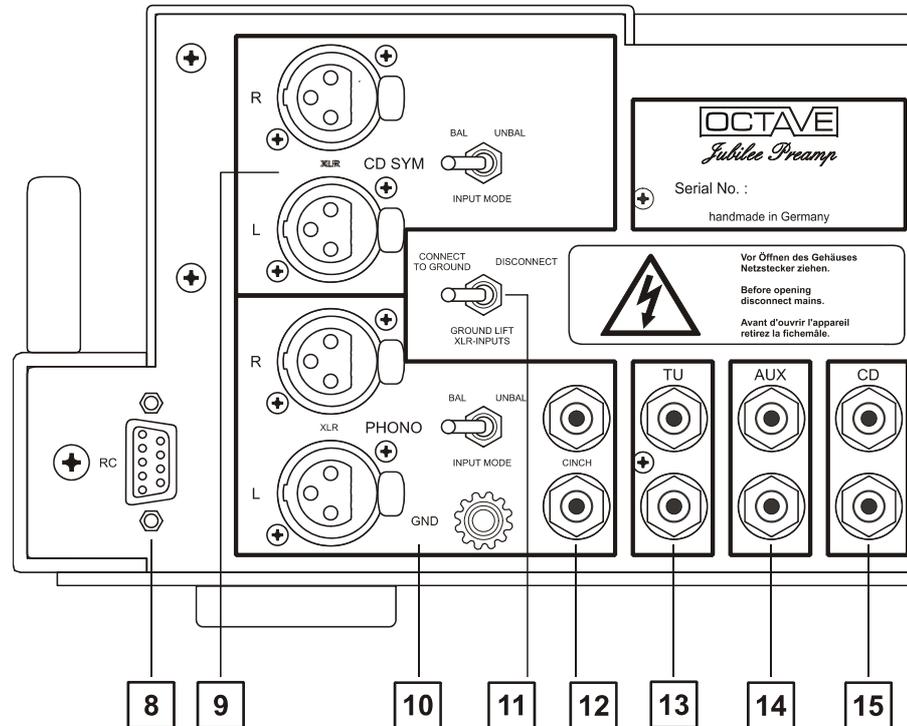
Tape 1 is the source; Tape 2 is recording

You can monitor your recordings (off-tape) with the mode selector knob **1** in positions Tape 1 or Tape 2

Off-tape monitoring

5. CONNECTIONS

5.1 REAR PANEL JUBILEE PREAMPLIFIER



Channel orientation

General points: The following applies to all connections:
 L (LEFT): left stereo channel, R (RIGHT): right stereo channel
 XLR pin connections: 1: GROUND, 2: + (hot) 3: — (cold)

8 RC

Connector for the infrared receiver. The remote control is standard,

9 CD SYM Section

Line level XLR input for sources with balanced outputs (CD player)

The **INPUT MODE switch** CD SYM allows to switch the CD XLR input between balanced (XLR) and unbalanced mode.

10 PHONO Section

An additional line level input with the option of XLR or RCA / CINCH inputs that you can use to connect sources such as an external phono preamplifier.

The **INPUT MODE switch** allows to switch from balanced (XLR) to unbalanced (RCA / CINCH) mode. Both of these inputs are wired in parallel.

Please note that only one line level phono input (either XLR or RCA / CINCH) can be used at a time.

Phono input

The PHONO inputs are not suitable for use with a turntable without an external phono preamplifier.

GND (GROUND)

Additional ground connection for external units like phono preamp and so on

11 GROUND LIFT XLR-INPUTS

Ground lift switch for XLR inputs

Switch position: CONNECT TO GROUND: Connects the XLR ground to chassis ground (see Section 7.1 Troubleshooting: hum on XLR input)

Switch position: DISCONNECT

Disconnects the XLR input ground from the output ground

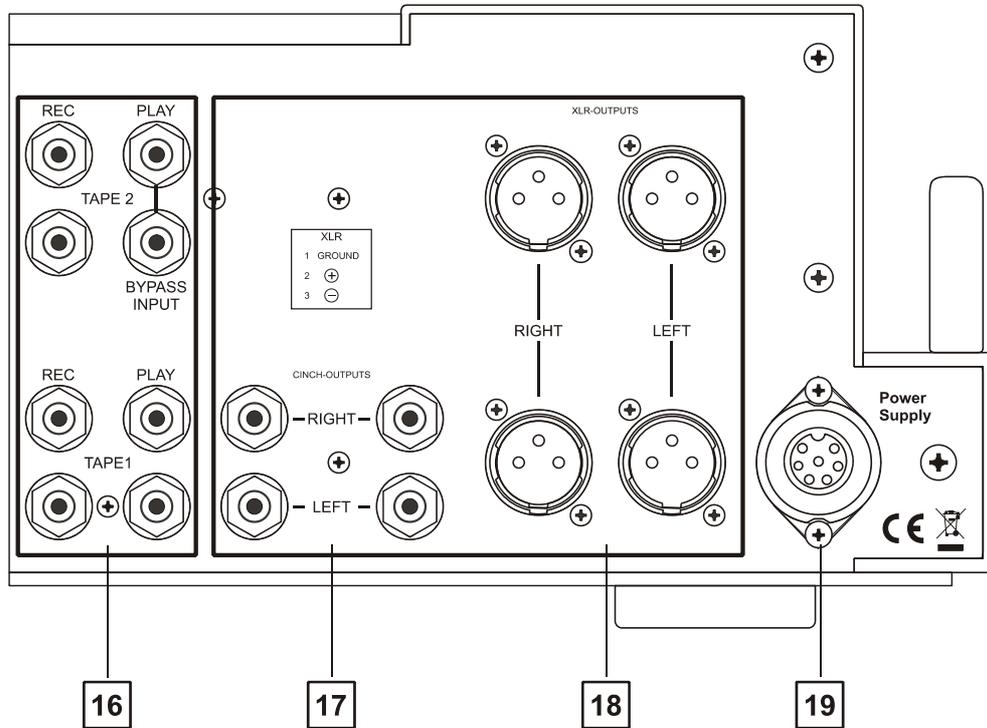
In true balanced operation, the ground connection is not necessary, since it does not carry a signal. Lifting the ground will help keep out unwanted noise and interference in balanced operation. If you have source equipment fitted with a separate earth, you should also use the DISCONNECT position to avoid ground loop problems.



Ground connections in balanced operation

5. CONNECTIONS

5.1 REAR PANEL JUBILEE PREAMPLIFIER



(Power amplifiers are also normally grounded.) If the INPUT MODE switch is in the ASYM position, XLR inputs are connected by default; GROUND LIFT does not work for this input.

12 Phono preamp inputs (RCA/CINCH)
These inputs are active in the PHONO INPUT MODE ASYM setting. The RCA / CINCH inputs are wired in parallel to the balanced (XLR) inputs. You can therefore use either the RCA / CINCH or the XLR sockets to connect a phono preamplifier.

13 Tuner input (RCA / CINCH)
Additional line level input for a radio tuner

14 AUX input (RCA / CINCH)
Additional line level input for other sources such as a video recorder or a television.

15 CD input (unbalanced RCA / CINCH)
Additional input for CD player

16 Tape inputs/outputs
Analogue inputs/outputs for two recording devices (cassette, DAT or CD recorder)

Tape 2 REC
Output (record) Tape 2

Tape 2 PLAY
Input (replay) Tape 2. With option BYPASS tape 2 play is the bypass input. Gain from bypass to RCA out is 0 dB for gain low and + 6 dB for the balanced outputs.

Tape 1 REC
Output (record) Tape 1

Tape 1 PLAY
Input (replay) Tape 1

Outputs (2 x RCA / CINCH / XLR)
Output to power amplifiers in unbalanced mode via the RCA / CINCH sockets or in balanced mode via the XLR sockets.

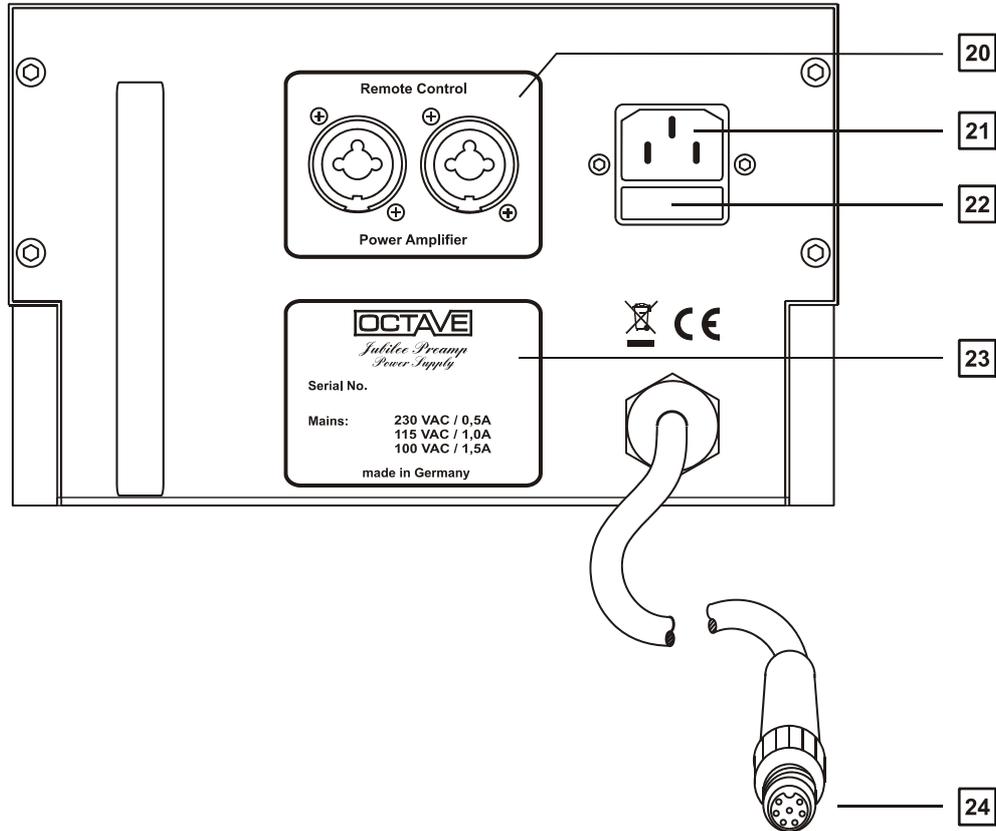
17 RCA / CINCH outputs
Two sets of output sockets for connecting to two separate power amplifiers with unbalanced inputs (RCA / CINCH)

18 XLR outputs
Two sets of XLR output sockets for connecting to two separate power amplifiers with balanced inputs.

19 Special power connector for the out-board power supply

5. CONNECTIONS

5.2 REAR PANEL JUBILEE POWER SUPPLY



20 Remote control for the Jubilee power amplifiers

Remote switching of the mains power of the Jubilee amps.
Connector: 6,3 mm jack plug (mono)

5 x 20 mm IEC standard; Slow blow, type H
230 V 0.8 A
115 V 1.6 A
100 V 1.6 A



Mains connection

21 Mains Power connection

Before plugging the power cord into the wall socket, make sure that your amplifier is suitable for your local supply voltage. Check the information on the rear of the Jubilee power supply **23**.

To exclude the risk of electric malfunction, connect the power supply with the Jubilee preamp **24** before you connect the power supply to the mains.

Fuses must be replaced with ones of the same type and rating (refer to markings on original fuse) You will find further information in the Specifications section 8.3. or on the rear of the power supply

23 Serial number and mains

24 Connecting cable from the power supply to the Jubilee preamplifier

Please switch off the power supply before connecting this cable to the preamp. Observe the anti-rotation lug and take care not over tighten the coupling ring.



replacing fuses

22 Fuse holder

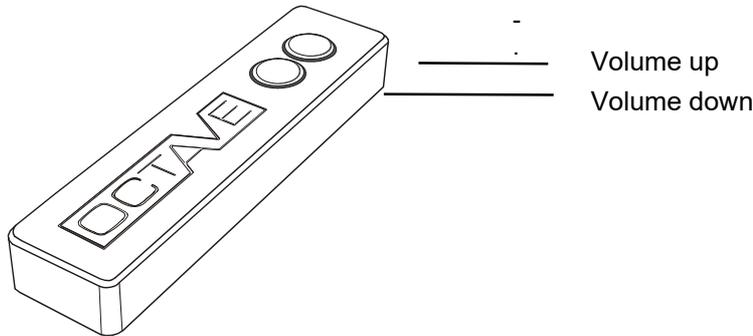
Warning: Fuses should be changed only by a qualified technician.



Before connecting up: switch off the power supply

6. REMOTE CONTROL FOR VOLUME

6.1. REMOTE CONTROL TRANSMITTER



Changing the batteries

1. Take off the bottom plate (three screws size Phillips 1)
2. Change the batteries.
Type: 2 x Type AAA 1.5 V
Please take care not to push the buttons of the remote control while inserting the new batteries: Please take care not to push the buttons of the remote control while inserting the new batteries. If it still happens that the remote control does not work after changing the batteries, remove the new batteries and wait for the minimum of 2 hours.

- After 2 hours you can insert the new batteries again and the remote control should work.
3. Mount the bottom plate again, tighten the screws not too hard.

Please don't trash the old batteries. Batteries must be disposed of as special waste. Stores that sell batteries should provide containers for the collection of used batteries

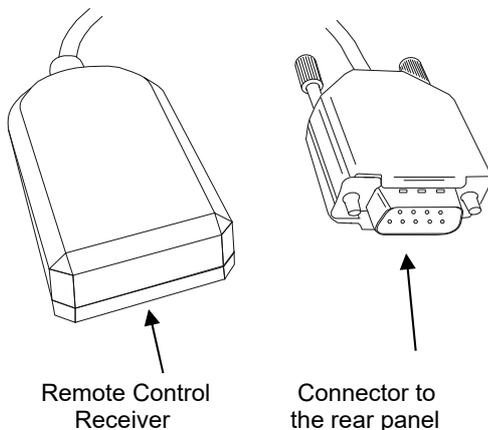
Specification:

Weight: 0,256 kg
Dimensions: 15,6 x 3,5 x 2,3 cm
(L x W x H)



You cannot control the volume with the remote control in case of the option stepped attenuator

6.2. REMOTE CONTROL RECEIVER



Because it would not be very aesthetic to drill a hole in the Jubilee front panel, we decided to use a solution with an external receiver.

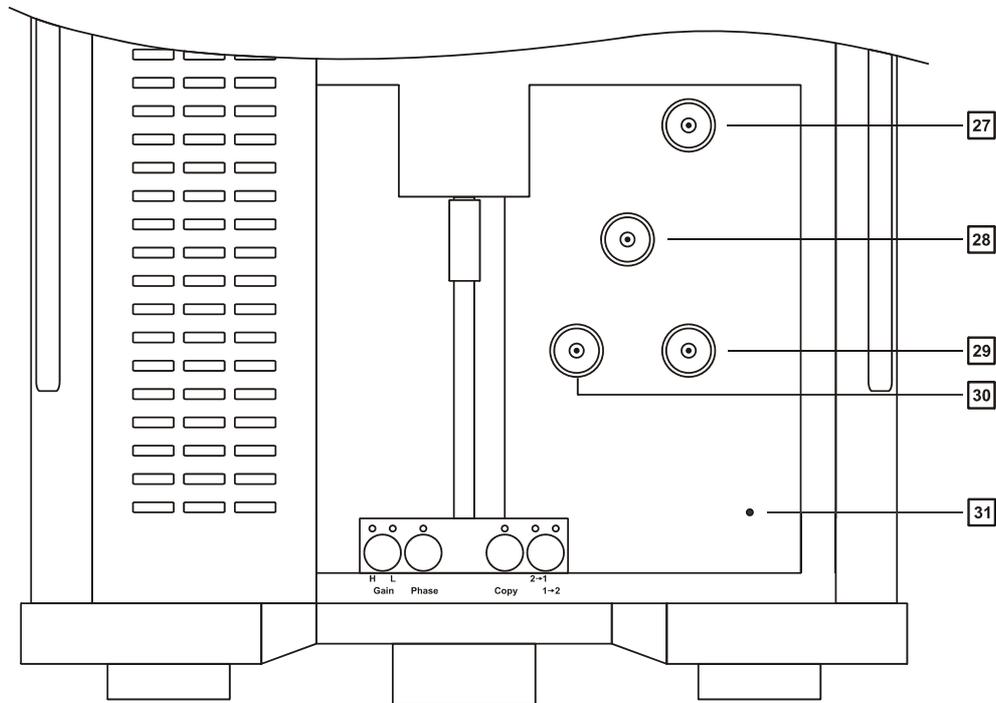
1. Connect the receiver with the plug on the rear panel ⁸
2. Put the receiver wherever you want
The receiver must be in optical reachability

Specification

Weight: 0,08 kg
Dimensions receiver: 5,5 x 3,2 x 2,0 cm
(L x W x H)
Cable length: 110 cm

7. TUBES

7.1 TUBE LAYOUT



Tube complement

27, **28**, **29** **30** sockets:

All sockets are fitted with

ECC 82 family

tubes.

The ECC 82 tube is also known as:
E82CC,
ECC802S, 12AU6, 5814, 6189W

Sockets **29** and **30** require selected, matched tubes with equal systems. The systems of tube **27** + **28** must be matched to less than 5%

In position **27** the use of the genuine special tube E80CC is allowed. The use of this tube is only in this position practical !

31 Automatic discharge LED (red)

LED on:

When the amplifier has been switched off, this LED remains lit until the power supply capacitors have been discharged.



LED off

The power supply capacitors are discharged. If disconnected from the mains supply, there are no dangerous voltages present inside the equipment

7. TUBES

7.2 GENERAL INFORMATION

Tube life

Thanks to the protection circuits and soft-start electronics, you can expect your output tubes to last for an average of five years.

Differences in tube service life

Faulty tubes can be replaced individually. It is not necessary to replace an entire set.

Running in

New tubes can require a relatively long time

(up to 300 hours) to achieve their optimum sound quality.

Faulty tubes

Manufacturing faults in tubes may only become evident after about 100 hours of use. You should therefore be wary of installing untested tubes. However, faulty tubes or tubes of the incorrect type will normally not damage the amplifier. Nevertheless, they may cause loud crackling noises in your loudspeakers.

7.3 REPLACING TUBES



1. For safety reasons, only qualified personnel should open the amplifier and replace the tubes.

2. Switch off the preamplifier, unplug the power cord from the wall socket and allow the unit **10 minutes to cool down**.



3. The Jubilee's automatic discharge system will discharge the power supply capacitors. The red LED ^[31] will be lit during this time (see Tube Layout, Section 6.1). To avoid an electric shock, wait until this LED has extinguished before opening the case.

4. Remove the acrylic cover and the right stainless steel lid above the input selector knob ^[3].

5. Take out the old tubes

Carefully remove the tubes from their sock-

ets, taking care not to exert sideward-pressure on the sockets.

6. Fit new tubes

Please only use original OCTAVE replacement tubes. These have been tested and selected for use in our amplifiers.

Please ensure that the tube pins are all perfectly straight before inserting your new tubes. Straighten any bent pins very carefully by hand if necessary. No adjustments are necessary to your amplifier after fitting new tubes.

7. Cleaning tips

Cleaning agents and contact cleaners are not recommended for tube sockets. Clean dirty sockets with compressed air and clean dirty tube pins carefully using a wire brush. A toothbrush dipped in isopropyl alcohol also works well.

8. OPTIONS

8.1 OPTION STEPPED ATTENUATOR FOR VOLUME

The volume control is an important component of a preamplifier. The demands placed on the controls are very high. The control range must encompass at least the range of 1:3000 (or 1:0.00033) to ensure fine adjustment appropriate for human hearing.

At the same time, the channel deviation within this range must not exceed 1 dB. The transfer resistance should remain constant during and after adjustment to prevent control noises. Rotary controls with a resistance track sensed by a slide meet these requirements to a large extent with our strict selection, but spring-guided sensing of the resistance track can result in undesired resonance effects that negatively affect the transfer resistance and impair the signal in the micro range. As a result of this design, the frequency bandwidth, i.e. the speed, may also be limited, depending on the control setting.

The control concept can only be improved with a stepped attenuator. In this complex process, the resistance track is reproduced by a series circuit consisting of individual resistors. The stepped attenuator now senses the connecting points of the resistor ladder.

The advantages of this solution are obvious: thanks to the low-tolerance fixed resistors, the channel tolerance across the entire control range remains under 0.1 dB. The hard gold plated contacts on the switch have an extremely low transfer resistance and thus do not generate micro-fluctuations in the signal level caused by mechanical resonances.

The switch has 47 settings. This uncommonly high number of settings allows for finely incremented, reproducible volume adjustment.

Equipped with this unique switching layout, the OCTAVE stepped attenuator functions as an ideal control. The sound characteristics are constant across the entire control range, while the center position also remains stable across the entire range thanks to the negligible channel tolerance. The sound pattern gains depth and the finest subtleties are audible in the layers of sound

However, as a result of the mechanical design of the stepped attenuator, the switch positions cannot be controlled using the remote control

8.2 OPTION HT BYPASS

A Bypass of the volume control is normally needed in case of using the preamp in a Home Theatre combination. Usually the volume is set at the Home Theatre Master Unit. We can add the Home Theatre Bypass on request.

The HT Input is than the TAPE 2 Play RCA Input. Gain of the Jubilee in HT setting is 0db. The function and the input is activated in the position TAPE 2 of the mode selector

9. TROUBLESHOOTING

Amplifier will not switch on

POSSIBLE CAUSES

- > The Jubilee power supply power cord is loose or not connected correctly
- > No or faulty power connection between preamp and power supply
- > Blown fuse in the Jubilee power supply

REMEDY

- > Connect power cord and check the wall socket and power connections
- > Check the connection of the power cord to the wall socket and the power cord between the Jubilee power supply and preamp
- > Have a qualified service engineer check your equipment and replace the fuses (identical rating and type!)



Preamp turns on, but no sound

POSSIBLE CAUSES

- > Amplifier has only recently been switched on or the gain switch has been operated
- > The Jubilee preamplifier has muted (Muting LED illuminated) or the volume control is turned down
- > Input selector knob or mode selector knob not set correctly
- > Power amplifiers or source equipment not switched on or not in play mode
- > Problem with the installation: faulty leads between source equipment and/or power amplifier and the Jubilee preamplifier

REMEDY

- > Wait until the preamplifier has warmed up (about. 6 minutes) and the Operate LED is lit
- > Deactivate Muting on the Mode Selector knob **1** (LED will extinguish) or slowly turn up the volume with volume knob **2**.
- > Check the setting of the Input Selector **3** and Mode Selector knob **1**.
- > Switch on power amplifiers. Switch on source equipment and play some music
- > Check leads and connections and correct faults

Humming and crackling

POSSIBLE CAUSES

- > The connecting lead phono plugs are not making a proper connection to ground
- > Inadequate contact between the phono plug's signal pin and the phono socket
- > Hum on XLR input

REMEDY

- > Check your interconnect cables and make sure that phono plugs are a tight fit. If the plugs appear loose, you can try bending the ground contacts (on the outside of the plug) in slightly.
- > Try another interconnect or, if necessary, have the RCA / CINCH phono sockets replaced by the OCTAVE service department.
- > **GROUND LIFT XLR INPUTS **11**** (See Connections in Sect. 4.1) in DISCONNECT position. Lifting the ground helps to prevent unwanted noise in balanced operation.

9. TROUBLESHOOTING

Cracking noises when switching on and off

POSSIBLE CAUSES

> Household electrical equipment such as older refrigerators or 12-volt halogen lighting systems can generate strong radio interference when they switch on and off. This electrical interference can cause an audible crack or pop through the speakers.

REMEDY

> Connect your hi-fi system to a central mains distribution board plugged into a wall socket. Do not connect any other electrical equipment either to the board or socket.

Volume imbalance between the left and right channels

POSSIBLE CAUSES

> Damaged cables and poorly fitting phono plugs can create resistance in the signal path, which can cause one channel to sound louder than the other.

> Recording equipment (reel-to-reel, cassette, CD or DAT recorder) with a faulty input or lead can overload the output and cause an imbalance between the left and right channels.

REMEDY

> Change the lead, clean plugs and sockets with isopropyl alcohol.

Warning: Do not use contact cleaning sprays.

> To isolate the cause of the problem, disconnect your recording device(s) one at a time. Check the interconnect cables used for recording and renew them if necessary. If you still have not alleviated the cause of the problem, have your recording equipment checked for faults.

Increased hiss on one channel

POSSIBLE CAUSES

> Hiss that varies in level is a sign of a faulty or worn driver tube.

REMEDY

> You must replace the tube that is causing the problem. Return the amplifier to us. We will also gladly ship replacement tubes. You will find important instructions on replacing tubes in Section 6.1.

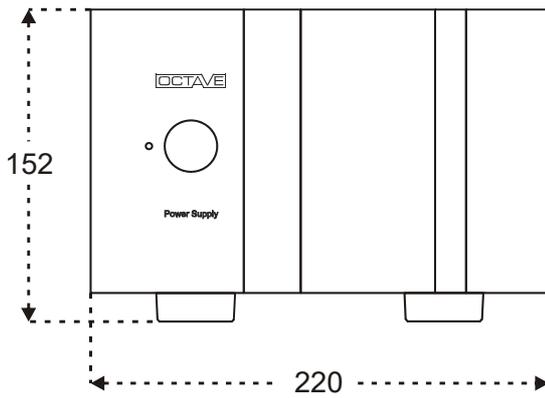
Please note:

OCTAVE offers a 12-month warranty on tubes.

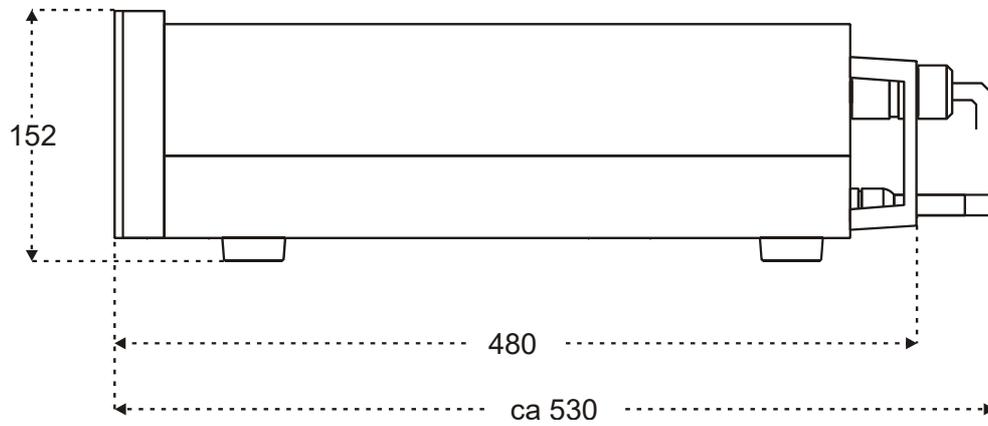
10. SPECIFICATION

10.1 DIMENSIONS OF CASE IN MM

POWER SUPPLY, FRONT VIEW



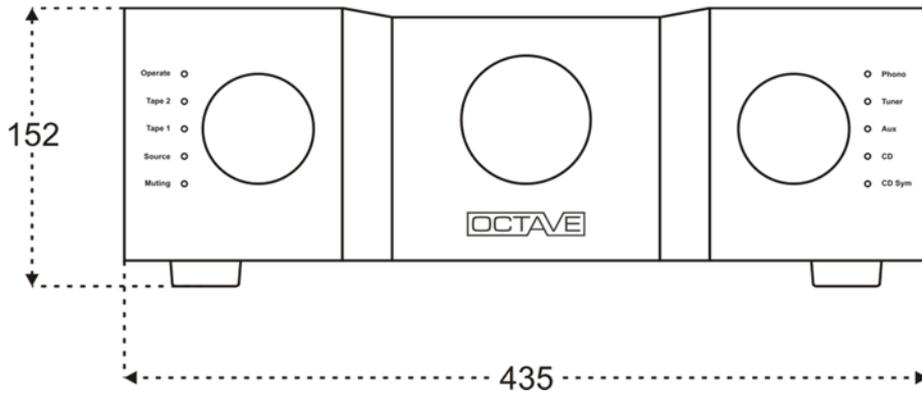
POWER SUPPLY, SIDE VIEW



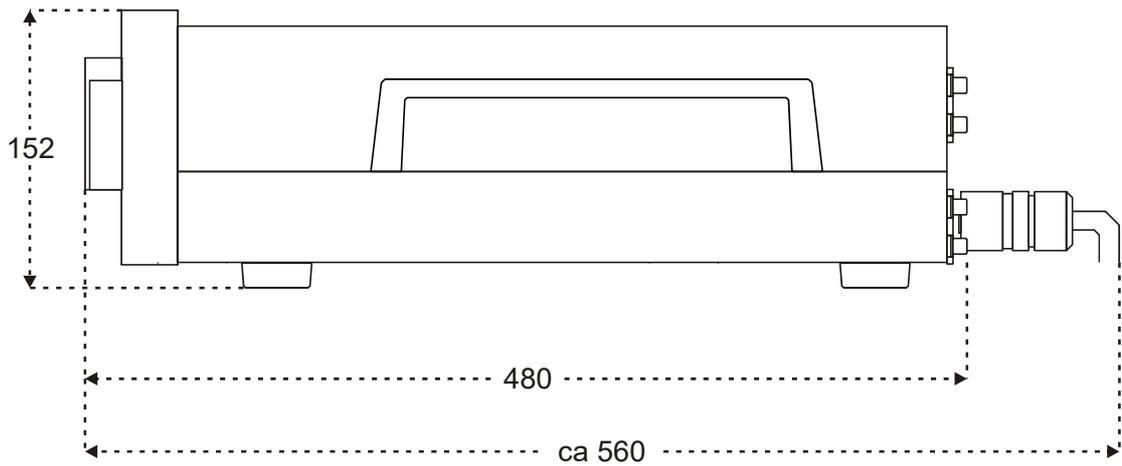
10. SPECIFICATION

10.1 DIMENSIONS OF CASE IN MM

JUBILEE PREAMPLIFIER, FRONT VIEW



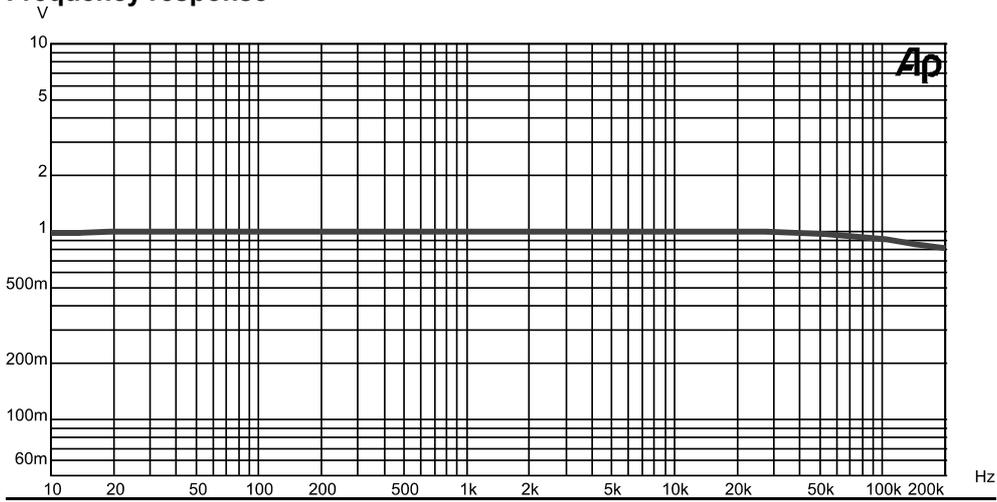
JUBILEE PREAMPLIFIER, SIDE VIEW



10. SPECIFICATION

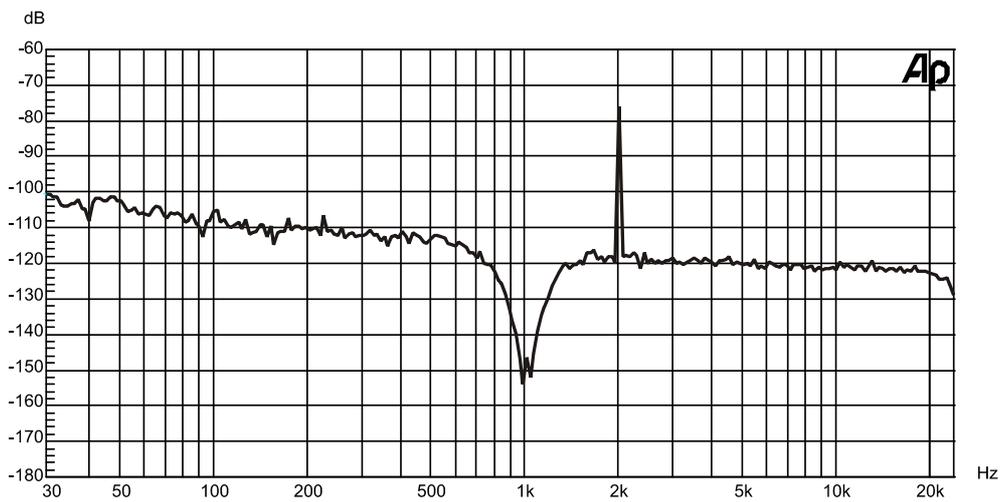
10.2 DIAGRAMS

Frequency response



Extremely linear frequency response. No fall in level at lowest bass frequencies.

Distortion spectrum



Distortion spectrum at 1 kHz: only second harmonic k_2 is discernible; no residual hum at 50/100Hz.

10. SPECIFICATION

10.3 TECHNICAL SPECIFICATION

In- and Outputs

Inputs	6 x RCA, 2 x XLR Home Theatre Bypass function on request (only RCA)
Outputs	2 x RCA, 2 x XLR, 2 x Tape Record (RCA)

Specifications

Frequency response (RCA / CINCH)	3 Hz – 500 kHz 1.5 dB
Total harmonic distortion	< 0.1% @ 3 V / 7.5 kOhm
Signal-to-noise ratio (weighted)	90 dB (Gain High) / 98 dB (Gain Low)
Maximum output voltage	8 V
Gain low/high RCA / CINCH	10 dB / 17,5 dB
Gain low/high XLR	16 dB / 23,5 dB
Channel separation	65 dB 1 kHz
Crosstalk rejection between inputs	86 dB 10 kHz
Crosstalk rejection, tape play/record	98 dB 10 kHz
Input impedance RCA / CINCH	100 kOhm
Input impedance XLR	2 kOhm
Output impedance	33 Ohms (RCA / CINCH) 2 x 33 Ohms balanced
Channel tracking of volume control	0.5 dB (-70 dB)

General data

Power consumption	60 W
Fuses: 5 x 20 mm IEC standard	230 V → 0.8 A
Slow blow, type H	115 V → 1.6 A 100 V → 1.6 A
Weight, preamplifier / power supply	17.2 kg / 11.5 kg
Dimensions preamplifier	43.5 x 15.2 x 48.0 cm (W x H x D)
Dimensions power supply	22.0 x 15.2 x 48.0 cm (W x H x D)
Supplied accessories	Power cable, remote control



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