

Mystère ca21 User manual

mystère
MUSIC



Mystère ca21 Description



The **ca21**'s full-size chassis provides a much larger playground for **Mystère**'s European engineers. It gives them space, a tremendous advantage for less restrictive designs, for more and improved power supplies, and for the most advantageous wiring positions.

It takes a lot of trial and error to find the best route for wires; the more space, the more options - but ultimately, the better the result. With these separates, the results are phenomenal.

Like the **ca11**, the **ca21** uses an SRPP (Series Regulated Push-Pull) circuit for high gain, low distortion and very low output impedance by using a variation of the White Cathode Follower. The circuit uses no negative feedback for more natural tonality.

It uses a single 5AR4 for rectification followed by a massive pi network consisting of a big inductor, separate left and right channel capacitors, regulator circuits and DC filament supplies.

Further improvements are realized by using a larger power transformer and increased power supply filtration. Add this together with high quality, heavy duty, 24-step volume attenuator and fast, wide-band polypropylene caps, point-to-point wiring with rigid copper wire, loosely insulated with silk tubing and you have a linestage preamp second to none.

Specifications

Bandwidth	8Hz-200kHz @ 47K load
Noise	104dB wtd-a ref 1V
Gain	9x = 19dB
Distortion	0,03% @ 100mV output 0,03% @ 1V output
Input imp.	150 kOhm
Output imp.	592 Ohm
Max. headroom	25dB rel to 1V output = 19V
Crosstalk	-94dB 20Hz – 20kHz
Net weight	20 kg
Dimensions	430x420x200 mm (lxwxh)

Websites



www.mystere-eu.com



www.mystere-usa.com

Mystère ca21 Thank you



We would like to thank you for choosing our **Mystère** ca21 preamplifier as an important part of your music system.

Working with components across the spectrum day in and day out for more than 30 years led us to adopt an unassailable philosophy: the only acceptable level of quality for the products we produce is the highest quality, regardless of price point.

We have staked our reputation on this and are certain that the products we've already brought to market reflect this principle. We feel comfortable in stating that our standing in the audio community is of the highest order and we're certain that **Mystère** will only serve to enhance that standing.

We hope that the **Mystère** ca21 preamplifier will make you want to follow our next steps in expanding this new range of products. If you have any questions or comments, don't hesitate to contact us. You can also share your thoughts with others at www.audioreview.com or other review sites. On the www.mystere-eu.com website you will find links to these and other websites. Our prices are kept low by using word-of-mouth and customer feedback, and we would appreciate hearing what you have to say about our product. If you need service during or after the warranty period, please contact us.

Thanks again for your support!

Herman van den Dungen - DUROB AUDIO BV

Table of Contents

Description	2
Specifications	2
Thank you	3
Warning - Setup - Contents	4
Inputs - Controls	5
Protection	5
Tube Basics	6
Troubleshooting	7
Warranty Info	8
Story - Contact	9
Copyright - Durob Audio B.V. 2009	

Mystère



To prevent serious injury, electrical shock or fire:

- Do not operate with bottom plate removed.
- Keep away from rain and moisture.
- Disconnect all cable connections before changing fuses and/or tubes.
- Do not replace tubes without reading instructions.
- Do not replace fuses or tubes if you have any doubt about your ability to do so. We accept no responsibility for any personal or material damage due to incompetent use or users.
- Remove the **Mystère** ca21 from its packaging. Use the white gloves.
- Remove tube cage. Carefully pull it up and away from the preamplifier.
- Remove the protective foam surrounding the tubes.
- Check that each tube is firmly seated in its socket. Use gloves.
- Replace cage back in its place if desired.
- Check to see the power switch is off (down).
- Connect each source to the corresponding plugs.
- Connect output of preamp with input of poweramp.
- Your **Mystère** preamp inverts phase. Connect positive (+) to positive and negative (-) to negative at your poweramp, then positive to negative, and negative to positive at your speaker. Do so for both speakers.
- Plug powercords into pre- and power amplifier, then into wall sockets.
- Switch the preamplifier on and wait for 30-60 seconds to warm up.
- Switch the poweramplifier on after the preamplifier has been on for 30-60 seconds.
- The tubes will be warmed up and ready to use in about 30 seconds.

Contents

1x Mystère ca21
Preamplifier

1x Power Cord

1x Owner's Manual

1x White Gloves

Tubes 4x 6SN7
1x 5AR4

Fuses Littelfuse Series 218 or 219
1 x 0,63AT (100-120VAC)
1 x 0,315AT (200-240VAC)

Warning

Do not replace fuses with any fuse other than the same type and rating as used by the factory.

ca21 Front panel - Rear panel



The front panel and the chassis of the **Mystère** models are finished in high gloss piano lacquer. The volume is controlled in pre-defined steps with the knob on the right, source selection is on the left. Your sources are labelled 1, 2, 3 and 4 (no functional differences between these). The power switch is located on the right side of the amp, just behind the front plate.

Looking at the rear panel, you will note you have 4 pairs of stereo inputs, 1 set of preamp outputs terminal.



Fuse Protection

A note on fuses: Fuses are safety valves. They should always be replaced with the exact same value and type.

Warning: Never attempt to check or replace a fuse while the amplifier is plugged in. Turn off the amplifier. Unplug all speakers, components and AC cords. Wait 10 minutes to let tubes cool down and the circuit to fully discharge.

Mains Fuse:

The mains fuse is located on the rear of the amplifier, at the top of the power cord socket. The fuse holder can be snapped out using a small slotted flat blade screwdriver.

Mystère ca21 Tube basics



The 6SN7 and 5AR4 tubes will have a life of about 10,000 hours.

Here are some tips on using tubes:

- Do not use treatments on tube pins or in sockets.
- If you decide to experiment with other tube types, it's best not to swap tubes in and out repeatedly, as you never want to cycle (pre)amplifiers on and off rapidly. They should be left off for at least five minutes. Further, every time you insert a tube, you stand a chance of loosening the tube sockets. It's okay to have fun, and we support that, but don't go crazy and swap tubes in and out twenty times in a day.
- Some tubes and tube sockets have a "center key" which must correspond! If you use "brute" force and misalign, you will damage important and expensive parts of your preamplifier!!
- The **Mystère ca21** has a warm-up time of just a few minutes. While it is not wise to leave tube power amplifiers on 24 hours a day, you may leave this preamplifier on though it will result in more frequent tube replacement. Through experimentation come to a conclusion that fits comfortably with your lifestyle.
- Break-in yields improvements. Every tube, when new, needs to be left alone for a little while. So, when your preamplifier is new, or when you re-tube it, it may take a little time to settle in. There is however no fixed "time rule" for break-in.
- Please note that tubes can vary electrically, and by plugging in the wrong type of tube you can damage the preamplifier, and void your warranty.

Tube Tip

Some 6sn7 tubes are more microphonic than others. In your ca21 the 6sn7 positions most sensitive to this are the input tubes V1 and V2.



Experiment if you want with different 6SN7 tubes in the market to get your optimal sound. You also may experiment with the different tube-dampers available in the market to fine-tune your amplifier.

Mystère ca21 Troubleshooting



Some tips:

- No output. Power is on, but power LED is off and tubes do not light up. AC cable makes bad connection in IEC connector. Please check.
- No output. Power is on, but power LED is off and tubes do not light up. Mains fuse is out. Replace fuse as per instructions on page 5.
- No output. Power is on, but power LED is off and tubes do not light up. Mains fuse is not out. Thermal protection may have switched off power transformer. If so, the preamplifier will switch on again after internal temperature of power transformer returns to normal. Overheating might be caused by higher environment temperature than normal or heavy use.
- No output. Power LED is on and tubes do light up normally. Check input selector setting, input and output wiring; if all seems to be OK check power amplifier.
- Hum or noise coming from one channel. Noisy tube. First swap the 6SN7 tubes left to right. If noise follows tube swap, then you have found the problem tubeset. Now swap one by one from left to right. If noise follows, you have found the problematic tube.
- Hum or noise coming from one channel or two channels. Check rectifier tube 5AR4: swap with new 5AR4 tube, if hum disappears then replace faulty 5AR4 tube.
- Noise/distortion coming from both channels. Tubes may be in need of replacement. Read page 6 for tube basics and replacement options.

Maintaining tube equipment can be easy if you have spare tubes. At least one tube of each type.

If you try these possible solutions and problems persist, contact us or your local distributor for further investigation.

Mystère ca21

Warranty Information - Terms & Conditions



Two-year limited warranty.
Six-month warranty on stock vacuum tubes

- 1. Limited to original purchaser.* This warranty is for the sole benefit of the original purchaser of the covered product, and may not be transferred to a subsequent owner.
- 2. Conditions & Limitations.* This warranty is subject to conditions and limitations, as follows. This warranty is void and inapplicable if the product has not been used in accordance with the instructions found elsewhere in this manual, or if it has been misused, abused, damaged by accident or neglect, or in transport once in possession of purchaser. The warranty is also void if the product has been tampered with or has been repaired or modified by anyone other than Durob Audio BV or its specifically authorized representatives.
- 3. Remedy.* If this product contains material, manufacturing, or workmanship defects, it must be packed in original packaging and returned to Durob Audio BV or its authorized representative via insured freight, at the owner's expense. Returned products must be accompanied by written description of the defect, and a return authorization number (available from Durob Audio BV or the authorized representative via e-mail). Upon receipt of the defective product, Durob Audio BV or the authorized representative agrees to repair the product without charge for parts (except vacuum tubes if the unit is more than 6 months old), or labor. The product will then be returned via prepaid, insured freight, with carrier at the sole determination of Durob Audio BV or the authorized representative. This constitutes the purchaser's sole remedy.
- 4. Design change.* Durob Audio BV and its partners reserve the right to modify their products or change specifications at any time without obligation or liability to previous purchasers.
- 5. Miscellaneous.* Any implied warranties relating to the above product shall be limited to duration of this warranty. This warranty does not extend to any incidental or consequential costs or damages to purchaser or third-parties. Our liability will be no more than the amount you paid for the product that is the subject of a claim. This is the maximum amount for which we are responsible. This warranty gives you specific legal rights. You may also have other rights which vary from country to country and state to state.

The Mystère Story

It's midnight and the year is 1,500 BC. An eerie wind is blowing across the Salisbury Plain in southern England and the flat, green ground is bathed in the moon's ghostly light. A faint orange glow can be seen in the distance, seemingly coming from a huge circle of majestic stones that stand out in solitary grandeur against the barren landscape. As one draws closer, dark figures dancing around the wooden fire that smoulders at the centre of the great circle of stones become visible. Strangely, not a sound can be heard. The whole place is shrouded in mystery.

I am, of course, referring to the world-famous Stonehenge, which stands to this day as a powerful tribute to the people of the late Stone and Bronze Ages and consists of a ring of extremely large stones and while modern techniques in archaeology have helped shape new theories about these stones, their ultimate purpose nevertheless remains a fascinating and enduring mystery.

Whatever their exact purpose was, recent research has revealed that the stones at Stonehenge are able to contain and amplify sounds. Furthermore, most sounds made in the centre are not clearly transmitted beyond the rings of stone.

Almost all of the stones at Stonehenge were shaped, with the inner surfaces of many stones being dressed to be either flat or concave and their outer surfaces irregular or convex. The contrasting acoustic experiences between the inside and outside of the stone circle that result from the shaping and placement of these stones may have been utilised by the ancient builders to isolate people on the outside from the activities at the centre. An audience occupying the inner circle of Stonehenge would have heard amplified sounds. In contrast, no-one outside the monument could have clearly seen or heard events within, thus creating a sense of mystery!

Recent research suggests that the original Stonehenge probably had an almost concert-like acoustic that our ancestors developed and perfected over many generations. While undertaking a series of tests, one researcher commented, "A simple drum beat sounded incredibly dramatic. It felt special!"

Similarly, we want to invite you to join our select inner circle of audiophiles to sample the delights of the Mystère series. Be enticed towards the faint orange glow of the tubes that peer out from between the vertical slots of the sleek cover. Marvel at the realism and joy of music that has been perfected over many generations of equipment design, resulting in the Mystère range of audio products. **Now your search for the ultimate experience is over!**



Sales & Support

Mystère - Durob Audio BV

P.O. Box 109
5250 AC Vlijmen
The Netherlands
+31 73 511 2555

www.mystere-eu.com

info@mystere-eu.com



Email us for your local distributor