

CLASSÉ AUDIO

C-103

REMOTE CONTROL
BALANCED LINE PREAMPLIFIER

C-103

OWNER'S MANUAL

CLASSÉ DESIGN PHILOSOPHY

1. REPEATED LISTENING DESIGN SESSIONS:

Fine tuning of sound by exchanging and mixing of parts (transistors, capacitors, wiring, PCB boards etc.), and adjusting many specific operating voltages within proper engineering ranges, producing an overall sonic recipe giving the most natural harmonic realism of music typical of instruments in a live performance.

2. UPGRADABLE SINGLE CIRCUIT DESIGNS:

All Classé products (all preamps and all amps) share exactly the same circuit design philosophy (excluding moving coil and moving magnet phono circuits). This means all amplifiers and all high level circuits of the preamps benefit from the same design goals. Similar circuits are then tailored to different power levels etc. Differences between less expensive models and more expensive models are parts quality and compliment, power supply extravagance and the amount of filtering etc., as well as features and packaging.

This means that for years Classé has been constantly sonically fine tuning and technically upgrading this circuit design and its application, thus reaching a very high level of natural musical enjoyment, as well as excellent reliability which benefits all models - least expensive, most expensive, preamps and amplifiers alike.

3. EXTREME LONG LIFE IN REAL WORLD CONDITIONS:

Choosing the best attainable quality parts and materials combined with the advantages of the two above-mentioned areas provides Classé owners with years of proven trouble free reliability and musical enjoyment.

C-103

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UNPACKING & SET-UP

Your **CLASSE C-103** preamplifier has been carefully wrapped in heavy gauge plastic, packed in semi-rigid foam and contained in a special box. To remove the unit, open and spread the top flaps of the box. By its sides, lift out the entire unit with foam pieces intact. Remove each foam side by pulling straight out. Remove the plastic wrap and inspect the unit for any concealed damage. Apart from this owner's manual, please ensure the following has also been included:

- 1) DETACHABLE LINECORD.
- 2) ALLEN KEY FOR TOP COVER.
- 3) REMOTE CONTROL UNIT (Allen key and Batteries: AAA x 2 included).

Please report any damage or missing parts to your dealer promptly.

This preamplifier, being capable of very high gain, must be located in a position free of any hum-inducing magnetic fields. (This also applies to turntables and interconnect cables.) Positions adjacent to power amplifiers, A.C line filters, or regulation devices should be avoided. Ideally, a few feet should separate the preamplifier from the power amplifier. As well, keep low-level interconnect cables away from the power amp and separate from A.C. linecords.

Heat generated by the preamplifier is negligible. Air space around the unit need not be a concern.

Check the Serial Number sticker on the back of the unit for the correct operating voltage. Regardless of voltage, the internal fuse rating should be 1 AMP SLO-BLO.

A.C. LINE POWER

The Classé **C-103** preamplifier has no power switch. Its low power consumption and improved sonics from always being ON led to the omission of an ON/OFF switch. In fact, while thoroughly musical shortly after turn-on, the preamplifier will exhibit "sonic growth" during its first 300 hours of use.

For optimum sonic performance, you should consider the use of the optional CLASSÉ REFERENCE A.C. LINECORD. Consult your dealer regarding this accessory.

SAFETY FEATURE:

The **C-103** preamplifier is designed with an auto-muting circuit which engages during the initial 20 seconds count down and is indicated by MUTE at the right of the display when the unit is first connected, or after an AC power failure. After the 20 seconds countdown, the MUTE signal at the right of the display will be ON thus showing that the unit is in MUTE mode.

This feature will prevent any turn-on surges or unstable output from reaching the power amplifier and possibly the loudspeakers. Similarly, make sure the MUTE is ON again when removing A.C. line power.

CAUTION:

DISCONNECT AC LINE CABLE WHILE MAKING ALL CONNECTIONS. "FLOATING THE GROUND" OR DEFEATING THE GROUND ON A 3-PRONG LINECORD MAY CREATE A SHOCK HAZARD. CONNECT ALL INTERCONNECT CABLES BETWEEN THE ELECTRONICS BEFORE CONNECTING THE A.C. LINECORDS TO THE WALL OUTLETS. THIS WILL REDUCE THE POTENTIAL SHOCK HAZARD. SEE ALSO THE WARRANTY SECTION OF THIS OWNER'S MANUAL.

INPUTS:

The input jacks are clearly marked on the back of the **C-103**. The following inputs are provided: REG 1, REG 2, REG 3, REG 4, BAL 1 and TAPE (see fig. 3, page 14).

REGULAR INPUTS REG 1, REG 2, REG 3 , and REG4:

These are all high level inputs sharing exactly the same characteristics, and may be interchanged if so desired. A tape machine should only be connected to the **TAPE IN** and **TAPE OUT** below. The **REG 1** input could also be fitted with an **OPTIONAL PHONO BOARD** plug in module installed in the unit. A ground screw is provided adjacent to the **REG 1** input jack.

INSTALLATION OF THE PHONO BOARD

- 1) Disconnect the A.C. line cord from the wall outlet.
- 2) Remove the top cover with the supplied Allen key.
- 3) Locate and replace the two mounting screws (see Fig.5, page 17) with the supplied stand-offs.
- 4) Remove jumpers J5, J6, J13 and J14 (see fig. 5, page 17). **Check if extension sockets are in place on the reverse side of the phono board.**
- 5) Install and secure the phono board using the screws removed previously in step 3, **make sure all the connectors are properly aligned.**
- 6) Set MM/MC (see page 18) jumpers to the desired position. All six of these jumpers are located at the far right of the phono board (see fig .5, page 17). **Please note that for ALL HIGH OUTPUT MC Cartridges, the jumpers have to be SET AT MM.**
- 7) Replace the top cover.

REMOVAL OF THE PHONO BOARD

- 1) Disconnect the line cord from the wall outlet.
- 2) Remove the top cover with the supplied Allen key.
- 3) Remove the screws securing the phono board, remove the phono board and the stand-offs, replace the screws where the stand-offs were removed (see fig. 5, page 16) to secure the main board.
- 4) Replace jumpers J5, J6, J13 and J14 (see fig. 5, page 16) on the main board. Jumpers from the phono board can be used for that purpose.
- 5) Replace the top cover.

BALANCED INPUT BAL 1:

The BALANCED INPUT is a true differential high level input, wired as follows:

PIN 1: GROUND

PIN 2: POSITIVE (NON-INVERTED) SIGNAL

PIN 3: NEGATIVE (INVERTED) SIGNAL

It may be used with CD players that have a balanced output, or any other high level balanced sources.

TAPE IN

The TAPE IN of the **C-103** preamplifier should be connected to the LINE OUT or TAPE OUT of the tape deck. The TAPE input does not appear on the selector switch. It is activated by the TAPE switch. (See FRONT PANEL CONTROLS: TAPE BUTTON.)

IR IN (and OUT)

This will permit you to install an outboard infra-red sensor and therefore be able to control the **C-103** remotely from another room where the outboard IR sensor has been installed. These connections will be found below the AC power inlet at the back of the unit (see fig.3, page 14).

OUTPUTS

The Classé **C-103** preamplifier has both regular (single-ended) and balanced outputs (see fig. 3, page 14). Both are working at all times, and may be used separately, or simultaneously.

TAPE OUTPUT

Whatever input is selected by the INPUT SELECTOR will be fed to the TAPE OUTPUT jacks. This should be connected to the TAPE IN or LINE IN of the tape deck.

REGULAR OUTPUTS

Simply connect your regular interconnects to the RCA output jacks marks REGULAR OUTPUT on the back of the **C-103**.

BALANCED OUTPUTS

A balanced power amplifier and balanced interconnects are also required. For use with a balanced power amplifier other than Classé, the wiring of the 3-pin XLR connectors must be wired as follows:

PIN 1: GROUND

PIN 2: POSITIVE (NON-INVERTED) SIGNAL

PIN 3: NEGATIVE (INVERTED) SIGNAL

If the pin configuration of the power amplifier differs from above, the balanced interconnects must be modified to accommodate the different power amp.

Having confirmed the correct connections, plug the XLR connectors of the balanced interconnects into the locking XLR connector on the rear of the **C-103** marked BALANCED OUTPUT. (To remove the connectors, press the tab above the connector.)

FRONT PANEL CONTROLS

INPUT SELECTOR:

The input selector (see fig.4, page 15) has two buttons for selecting the inputs; (<) and (>). Pressing the < button selects the input to the left of the currently selected input, and pressing the > button selects the input to the right of the currently selected input. If the > button is pressed when BAL1 is the current input then the REG1 input will be selected, and if the < button when REG1 is the current input then the BAL1 input will be selected. The < and > buttons will select from five input connections on the preamplifier, but not the TAPE, (see TAPE below).

TAPE

In the SOURCE position (TAPE LED OFF), the preamp will process the signal as chosen by the INPUT SELECTOR. In the TAPE position (TAPE LED ON (RED)), the preamp will process the TAPE INPUT signal, overriding the INPUT SELECTOR.

VOLUME CONTROL

The VOLUME CONTROL varies the output level of both channels simultaneously. It can be operated by remote using the hand held control unit (see fig.4, Page 15) or manually turning the control knob at the preamp. The volume control has a total of 120 steps of level adjustments from 0 to 60 in 0.5 stepped increments. When the unit is plugged in, the display will count down from 20 to 0. When the countdown has resumed, the volume will be

VOLUME CONTROL (CONTINUED)

Automatically at zero (0) and the preamp will be muted and therefore show MUTE at the right of the digit display. When you un-mute, the volume will return to the same level it was at before you turned on the mute mode.

PLEASE NOTE: It is normal for the volume to stay at the same level if you turn the VOLUME knob extremely slowly.

MUTE

Press the MUTE button (see fig. 4, page 15) to temporarily set the VOLUME to 0. When activating the MUTE function, MUTE will light up at the right of the volume display digits. Switching can be done by either pushing the MUTE button momentarily on the **C-103** faceplate or on the remote handset. The volume setting is memorized when the unit is in mute mode; thus Volume will return to the same level it was playing at prior to muting when you turned off MUTE mode. (See DISPLAY on next page)

PLEASE NOTE: The display will change to Display Full Off mode after the unit has been in MUTE mode for an hour

NOTE: WHEN THE **C-103** IS IN THE MUTE POSITION, AND THE VOLUME CONTROL IS TURNED UP USING THE VOLUME CONTROL ON THE UNIT OR THE REMOTE CONTROL, THE PLAY MODE IS AUTOMATICALLY SELECTED.

CAUTION: Make sure the preamp is in MUTE (ON) when making or changing any connections. This includes all inputs and outputs, as well as A.C. linecord.

REMOTE HANDSET

The remote handset will permit you to access remotely all the functions found on the front panel of the unit: VOLUME UP or DOWN, MUTE ON or OFF, DIRECT ACCESS for all the INPUTS and TAPE monitor. In addition to all these functions, the button marked DISPLAY will permit you to select through the four Display modes on the unit.

PLEASE NOTE that the DISPLAY function can only be activated through the remote handset.

To access the batteries, unscrew the back plate of the remote handset (see fig. 2, page 13)

BALANCE CONTROL (ON REMOTE HANDSET ONLY):

The balance control found on the remote handset only permits equal output of each channel in the center (00.0) position without additional loading to the signal. When shifted to the left or right, it merely attenuates the opposite channel. When operating the balance control, the right of the display will show BALANCE. By shifting the balance to either sides (left or right) one of the two LEDs located on either sides of the DIGIT display will light accordingly to the side on which the balance is shifted. The amount of attenuation will be show on the DIGIT display in increments of 0.5 up to 19.5. If the balance control is shifted to the maximum (19.5) on either sides, the digit display will show OFF which means that the opposite channel now gives out no signal since the balance is completely shifted to one side.

DISPLAY (ON REMOTE HANDSET ONLY)

Pressing the DISPLAY button on the remote handset (see fig. 1, page 13) allows you to control the brightness of the display. There are 3 levels of brightness; Display On, Display Medium On, Display Low On or Display Full Off. Repeated pressing of the DISPLAY button will cycle through

DISPLAY (CONTINUED)

the four modes, from Display Full On to Display Full Off. Pressing DISPLAY when the display is at Full Off will cause the display to go back to Display Full On.

NOTE: Three (3) LEDs will continue to be lit on the display when it is in Display Full Off mode to let you know that the **C-103** is still on and operating. When in Display Full Off mode and any other functions are used, such as changing volume or selecting a new source, the display will light at Display Full On mode for five seconds and then go back to Display Full Off mode. The display will automatically go to Display Full Off mode after the MUTE mode has been activated for an hour.

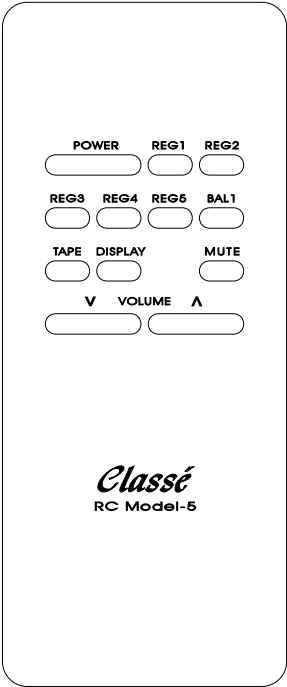


Fig.1: Remote control unit (top view)

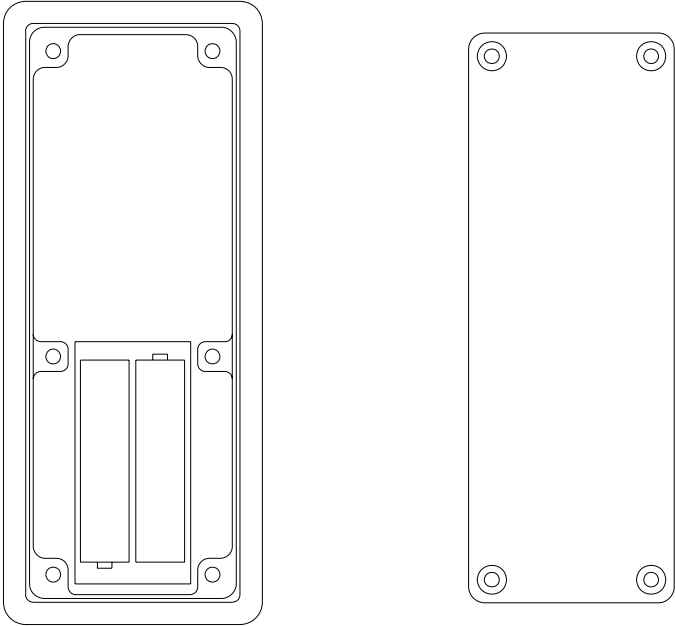


Fig.2: Remote control unit (bottom view)

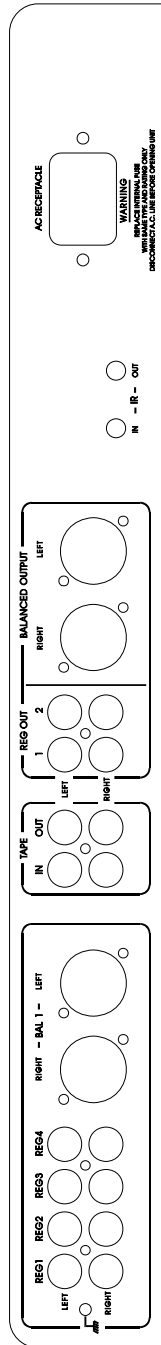


Fig 3: C-103 back view

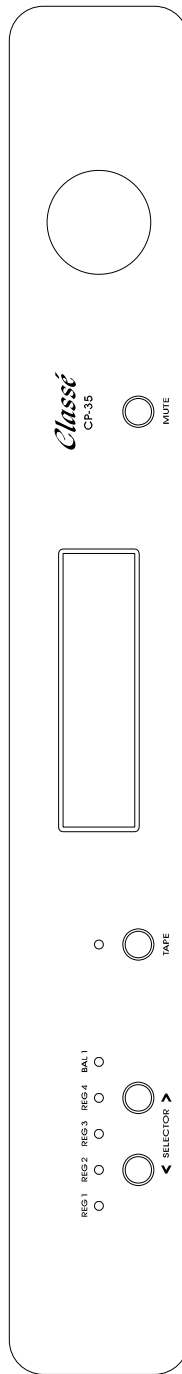


Fig 4: C-103 faceplate

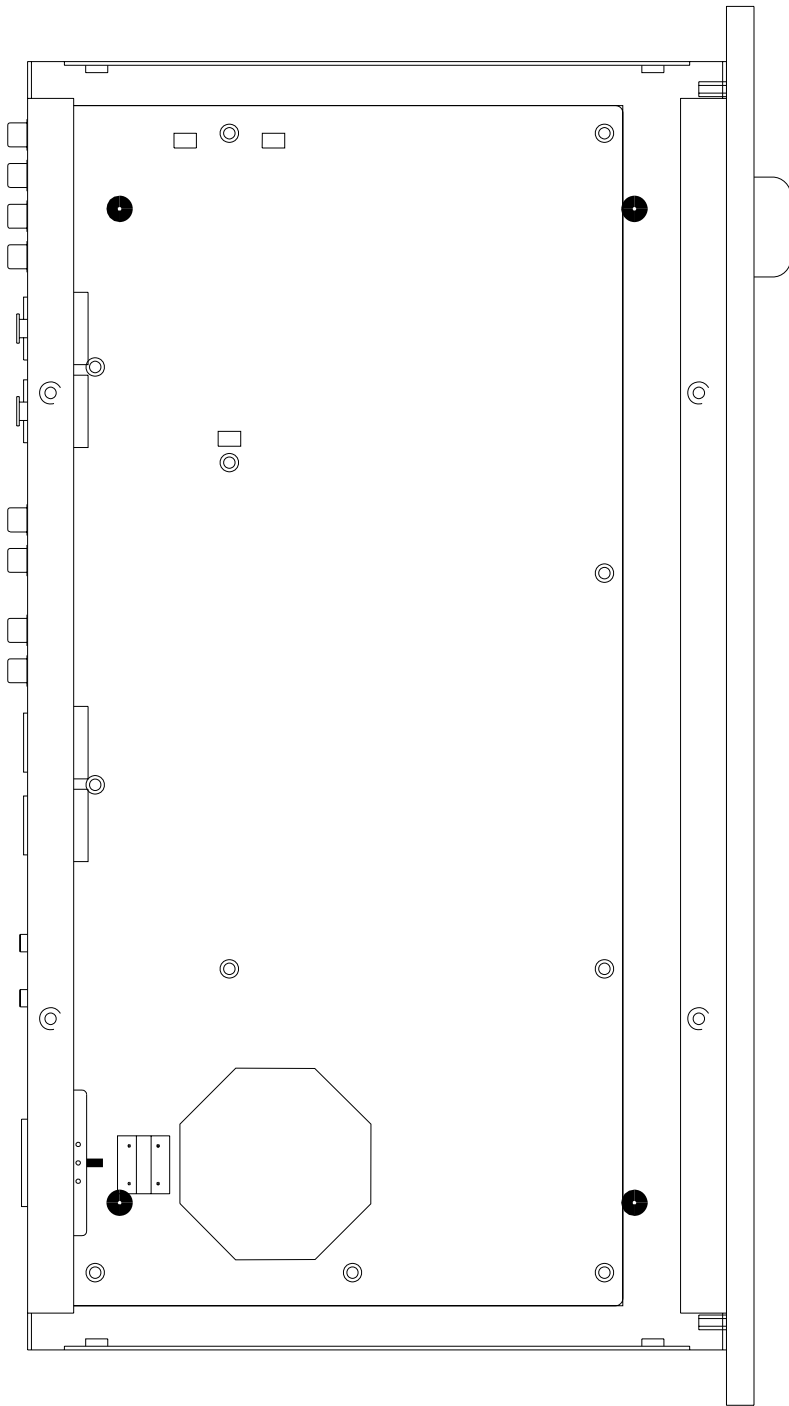
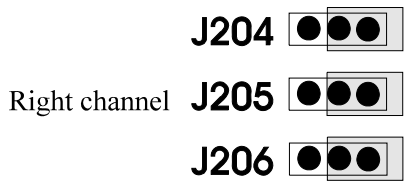
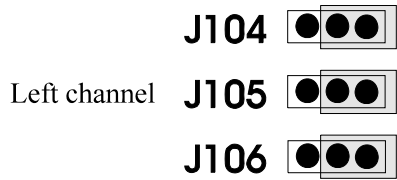
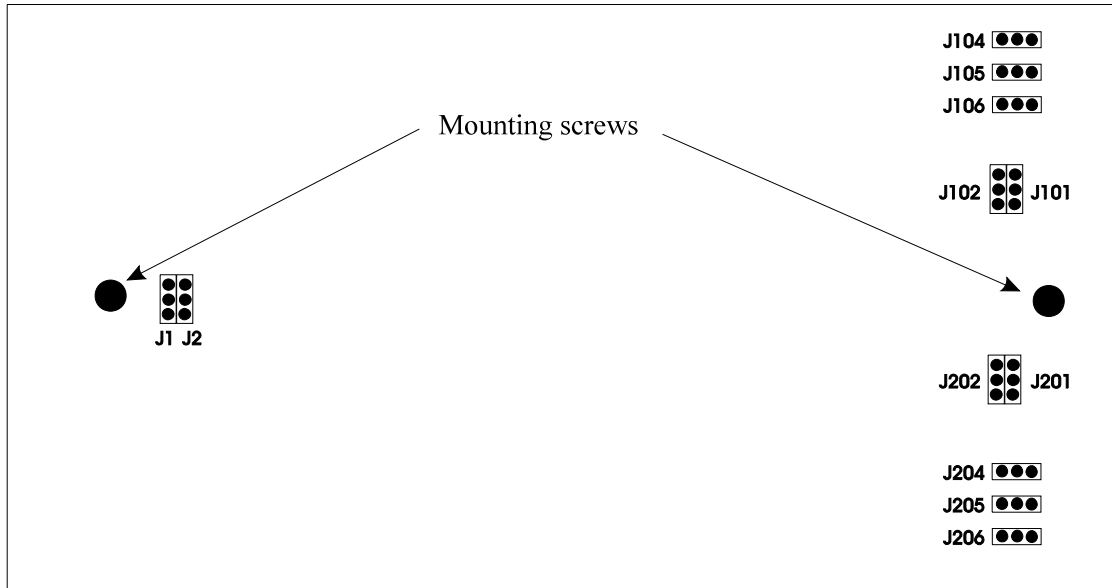
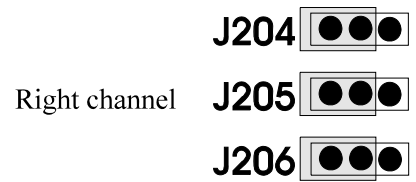
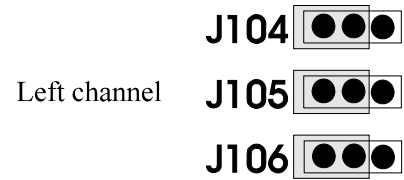


Fig 5: C-103 top view



Jumper setting for MM



Jumper setting for MC

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**CLASSÉ C-103
REMOTE CONTROL
BALANCED LINE PREAMPLIFIER**

**FEATURES
AND
SPECIFICATIONS SHEET**

C-103 FEATURES:

Remote control featuring adjustments for volume, direct access input selection, tape, display and mute. Contoured slimline chassis. Inputs featuring REG1, REG2, REG3, REG4 and BAL1 inputs. Both balanced and regular outputs. Front panel adjustments include input selection, volume and mute. Special Classé front panel in Soft Shadow Silver with Satin Black display panel plate.

C-103 SPECIFICATIONS:

Frequency response:	20 Hz to 20 kHz, \pm 0.1 dB
Maximum Output:	24 Volts Peak to Peak
Sensitivity:	120 mV
S/N Ratio ("A" Weighted):	95 dB
THD+N:	0.05%
Input Impedance:	33 Kohms
Output Impedance:	50 ohms
Gain:	18 dB
Power Consumption:	25 Watts
Dimensions: Gross:	22 1/2" x 14 1/2" x 7 1/2"
Net:	19" x 10 1/4" x 2 1/2"
Weight: Gross:	15 lbs.
Net:	11 lbs.



Notice to all Classé Product owners:

Thank you for your purchase of a Classé Audio component.

All of us at Classé have taken extreme care to ensure that your purchase will become a prized investment. We are proud to inform you that all Classé Audio components have been officially approved for the European Community CE mark.

This means that your Classé product has been subjected to the most rigorous manufacturing and safety tests in the world, and have proven to meet or exceed all European Community CE requirements for unit to unit consistency and consumer safety.

All of us at Classé Audio wish you many years of musical enjoyment.

As of July 18, 1996, Classé Audio has been granted Certificate No: C401CLA1.MGS, which indicates CE approval for all models of the Classé Audio product line.