

CLASSÉ AUDIO

CAP-80

FULLY REMOTE CONTROL
INTEGRATED AMPLIFIER

CAP-80

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, all amps and integrated amplifier) 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 complement, 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, integrated amplifier, 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 provide Classé owners with years of proven trouble free reliability and musical enjoyment.

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UNPACKING & SET-UP

Your CLASSÉ **CAP-80** integrated amplifier 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) REMOTE CONTROL UNIT (Allen key and Batteries: AAA x 2 included).

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

Place the **CAP-80** at or near its final set-up position, allowing 8 inches (20 cm.) at the rear for tightening the speaker output connectors and inserting the interconnects. For optimum sonic performance, we recommend the optional CLASSÉ REFERENCE A.C. LINE CORD. Consult your dealer regarding this accessory.

The power transformer in the **CAP-80** is located on the left side of the unit. Ideally, a few feet should separate this area from components that are susceptible to pick up hum. These include turntables and interconnect cables. In terms of providing adequate airspace for cooling, a clearance of at least 6 inches (15 cm.) should be left above and on each sides of the unit.

The **CAP-80** has one A.C. line fuse and one auxiliary transformer fuse (see figure 5, page 16). The rating should be as follows:

AC LINE FUSE: 3.15 AMPS, SLOW BLOW.

AUXILIARY TRANSFORMER FUSE: 3/4 AMP, FAST BLOW.

AC LINE POWER

When your new **CLASSÉ CAP-80** is first plugged in it is in “Standby” mode, as indicated by a single red LED in the display. The unit can be turned on by the **POWER** button on the faceplate (see figure 3, page 13) or by the **POWER** button on the remote handset (See figure 1, page 13). When the **POWER** button is pressed, the single LED in the display will flash and the display will show a 20 second count down as the unit powers up. During this period, there will be no response to the selection of any of the functions except **POWER**. When the turn on sequence is completed, the volume level will be at **0**, the unit will be muted, the display will be at Display Full On mode, and REG1 input is selected.

While thoroughly musical shortly after initial turn-on, the integrated amplifier will exhibit "sonic growth" during its first 300 hours of use.

SAFETY FEATURE:

The **CAP-80** integrated amplifier is designed with an auto-shut-down circuit that engages after an AC power failure. When electricity is restored the amplifier will be in “Standby” mode. Merely press the **POWER** switch to re-activate the unit after a power failure. This feature will prevent any turn-on surges or unstable output from reaching the integrated amplifier and possibly the loudspeakers.

CAUTION:

DISCONNECT THE AC LINECORD WHEN MAKING OR CHANGING ANY CONNECTIONS. CONNECT ALL INTERCONNECT CABLES BETWEEN YOUR ELECTRONICS BEFORE CONNECTING THE AC LINECORDS TO THE WALL OUTLETS. THIS WILL REDUCE THE POTENTIAL SHOCK HAZARD. "FLOATING THE GROUND" OR DEFEATING THE GROUND ON THE 3-PRONG LINECORD MAY CREATE A SHOCK HAZARD.

INPUTS:

The input jacks are clearly marked on the back of the **CAP-80** (see figure 4, page 15). The following inputs are provided: REG1, REG2, REG3, REG4, REG5, BAL1, and TAPE.

REGULAR INPUTS: REG1, REG2, REG3, REG4, and REG5:

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 input. See TAPE IN and TAPE OUT below.

BALANCED INPUT: BAL1

BAL1, 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.

Case: Chassis (earth).

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 **CAP-80** integrated amplifier should be connected to the LINE OUT or TAPE OUT of the tape deck. The TAPE input is selected only with the TAPE button. (See FRONT PANEL CONTROLS: TAPE below.)

OUTPUTS

TAPE OUTPUT

The INPUT jacks, (REG1, REG2, BAL1, etc.), selected by the INPUT SELECTOR will always be fed to the TAPE OUTPUT jacks. The TAPE OUTPUT jacks should be connected to the TAPE IN or LINE IN jacks of the Tape Deck.

LOUDSPEAKER OUTPUT

The Classé **CAP-80** is equipped with two pairs of 5 way binding posts (one pair for each channel) for connecting the amplifier output to your speakers. Each pair has a red and a black terminal. The red terminal should be connected, with speaker wire, to the plus, (+) (red) terminal on your speaker, and the black terminal should be connected to the negative (-) (black) terminal on the same speaker.

**BE EXTREMELY CAREFUL. DO NOT SHORT THE WIRES TOGETHER.
ATTEMPTING TO OPERATE THE CAP-80 WITH SHORTED SPEAKER WIRES MAY
CAUSE THE AMPLIFIER TO FAIL.**

FRONT PANEL CONTROLS

POWER

When the unit is first plugged in, a single LED will be lit on the display to show that the unit is plugged in. When the POWER button is pressed, a single LED in the display will flash and the display will show a 20 second count down as the unit powers up. During these 20 seconds, there will be no response to any function selection except the POWER button, which can be pressed again to turn off the unit during this sequence. **Please note that if you turn off the unit during the 20 second power-up sequence, you must wait at least 4 seconds to re-start the power-up sequence.**

INPUT SELECTOR

The input selector 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 is pressed when REG1 is the current input then the BAL1 will be selected. The < and > buttons will select from six input connections on the integrated amplifier, but not TAPE, (see TAPE below.)

TAPE

Pressing the TAPE button selects the signal from the TAPE INPUT jacks to play through the speakers. You can use this function to either listen to pre-recorded tapes or to monitor the quality of a recording you are making of another selected source. The Red LED above the TAPE button will glow to identify that the TAPE input has been selected.

TAPE (Continued)

To Play a Tape press the TAPE button. The LED will light. Press the Play button on the Tape Machine, and set the CAP-80 volume at the level you wish to listen at.

To Record on a Tape, select the source you wish to record (REG1, REG2, BAL1, etc.). Turn on the Tape Recorder and play a short amount of the source you want to record and set the record levels on the Tape Recorder according to the recommendations of the Tape Recorder manufacturer. The CAP-80 VOLUME control has no effect on the signal going to TAPE OUT. Once you start recording you can either monitor the recorded signal by pressing the TAPE button (LED will light) or listen to the source (LED will be out), or turn the VOLUME down to 0 if you want to.

When TAPE is selected, (the TAPE LED is lighted), the other selected input (REG1, REG2, BAL1, etc.) will be lit as well but signals from this selected input will be sent to the TAPE OUTPUT jacks only. If the tape recorder is in Record mode it will record the signals from the selected source, but if the tape machine is in Play mode it will ignore all signals to it.

If you are monitoring the quality of a recording, pressing the TAPE button on and off will alternately play the newly recorded signal from the playback head of the tape recorder when it is on and the source signal when it is off. You will be monitoring when the TAPE LED is lit and listening to source when it is out.

PLEASE NOTE: If you do not intend to ever record a tape it is not necessary to connect TAPE OUTPUT to the Tape Recorder.

VOLUME CONTROL

The VOLUME Control varies the output level of both channels simultaneously. It can be operated remotely by using the VOLUME buttons on the remote handset supplied with the unit (see figure1 page 13) or by turning the VOLUME control knob on the front panel of the unit. 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 powered on, the volume will be automatically at zero (0) and will be muted.
- when you un-mute the volume will return to the same level it was at before you turned on 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 BUTTON:

Press the MUTE button to temporarily set the VOLUME to 0. The LED above the button will light. Switching between PLAY (LED OFF) and MUTE (GREEN LED) can be done by either pushing the MUTE button in momentarily on the **CAP-80** faceplate or pushing the MUTE button 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 turn off mute mode.

PLEASE NOTE: the DISPLAY will change to Display Full Off mode after the unit has been in MUTE mode for an hour. (See DISPLAY below).

DISPLAY

Pressing the DISPLAY button on the remote handset (see figure 1, page 13). allows you to control the brightness of the Display. There are 3 levels of brightness; Display Full On, Display Medium On, Display Low On, plus Display Full Off. Repeated pressing of the DISPLAY button will cycle through the four modes, from Display Full On to Display Full Off. Pressing DISPLAY when the display is at Display 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 the CAP-80 is still turned on and operating. When in Display Full Off mode and any of the 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.

REMOTE HANDSET

The remote handset will permit you to access remotely all the functions found on the front panel of the unit: POWER ON or OFF, 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.

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

PROTECTION CIRCUIT

The Classé **CAP-80** is equipped with rail fuses (GDB4, 4 amps fast-blow) to protect the output drivers and mosfet fuses (2AG 1/2 PT, 1/2 amp fast-blow) to protect the mosfets (see figure 5, page 16), which are used as pre-drivers for the output stage of the amplifier. In the event that a short circuit or other problems occurs at the output of the amplifier, either or both of these fuses may blow in an attempt to protect the amplifier. There is also an AC line fuse protecting the unit and an auxiliary transformer fuse to protect the auxiliary transformer (For fuse values, see page 4).

If any of the fuses have blown, the **SOUND WILL BE DISTORTED OR THERE WILL BE NO OUTPUT FROM ONE OR BOTH OF THE CHANNELS.**

IF THE PROTECTION HAS BEEN TRIGGERED, TURN THE CAP-80 OFF. After the situation which triggered the protection has been clearly identified and corrected, attempt to re-start the unit. **IF THE UNIT STILL HAS NO OUTPUT OR THE SOUND IS STILL DISTORTED IN ONE OR BOTH OF THE CHANNELS, CONTACT YOUR LOCAL DEALER. DO NOT TRY TO CHANGE A BLOWN FUSE. REPLACING FUSES AND RE-STARTING THE UNIT WITHOUT CHECKING FOR COMPONENT FAILURE COULD RESULT IN FURTHER, SERIOUS DAMAGE TO VITAL COMPONENTS IN YOUR INTEGRATED AMPLIFIER. **CONTACT YOUR LOCAL DEALER, or Customer service at the Classé Audio factory---(514) 636 63 84.****

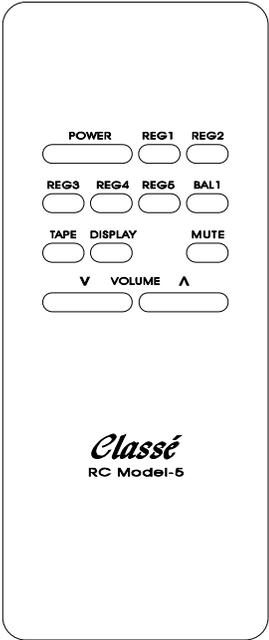


Fig.1: Remote control unit (top view)

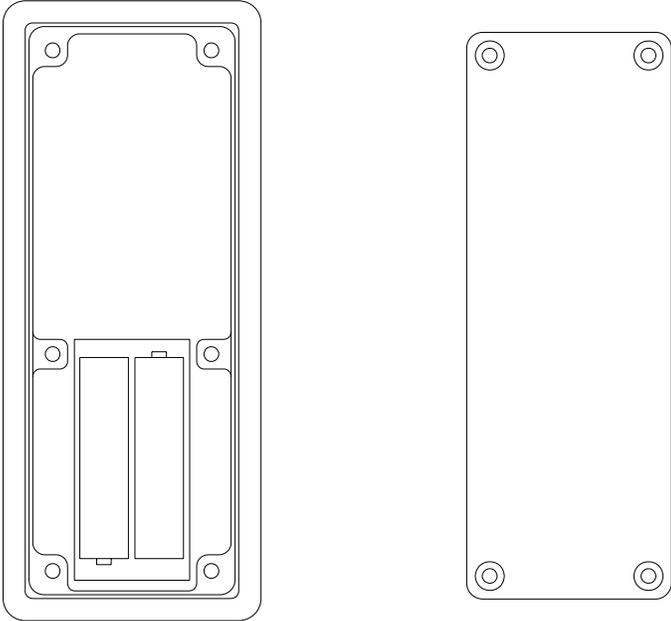


Fig.2: Remote control unit (bottom view)

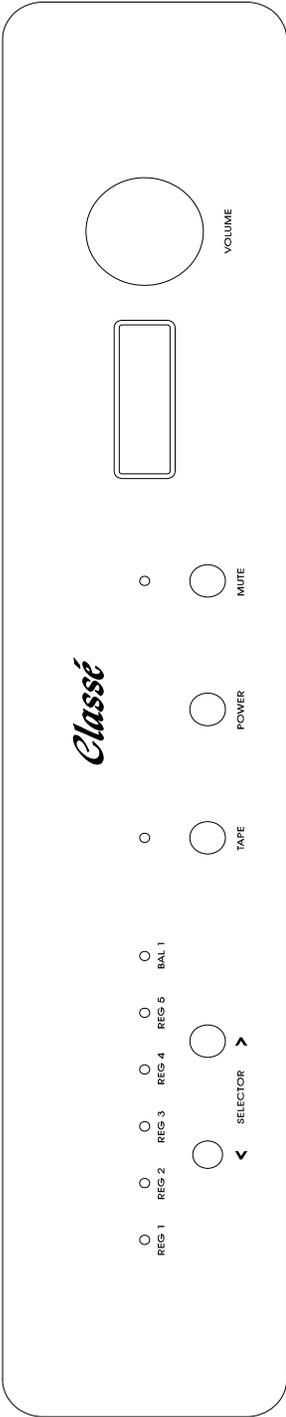


Figure3: CAP-80 faceplate

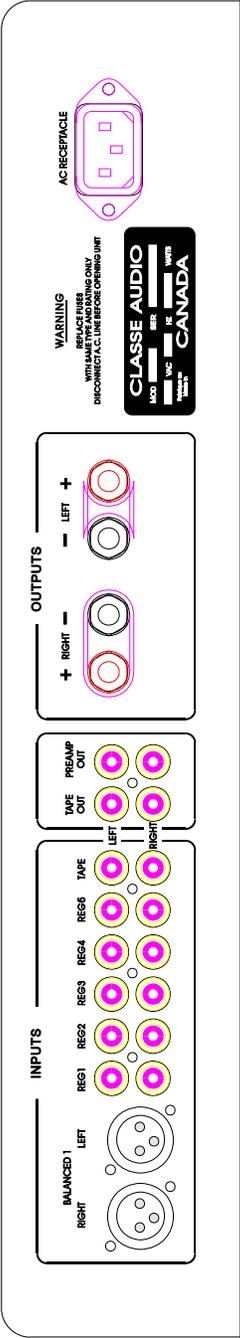


Figure 4 CAP-80 rear panel

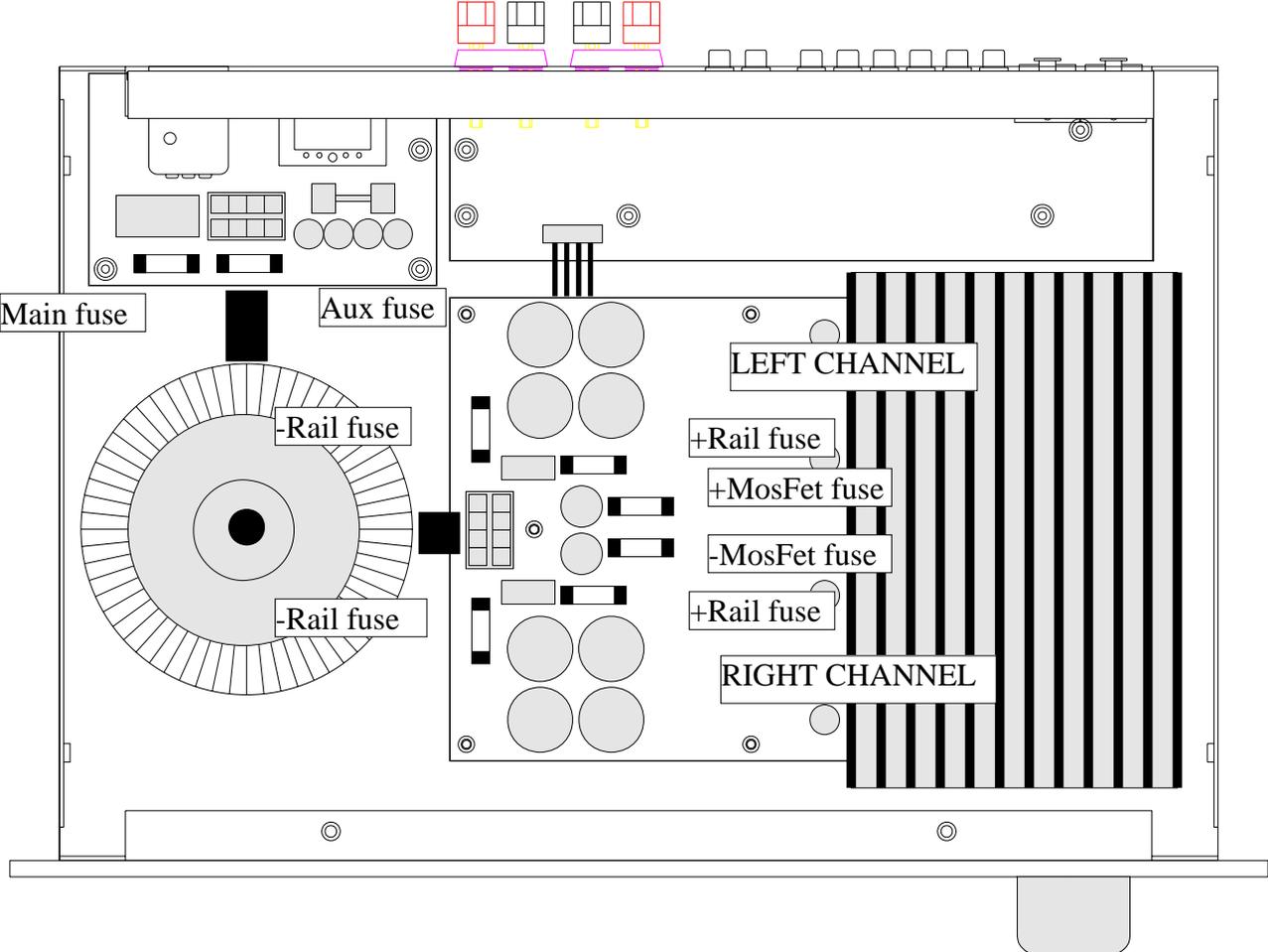


Figure 5 CAP-80 top view

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CLASSÉ CAP-80
FULLY REMOTE CONTROL
BALANCED LINE INTEGRATED AMPLIFIER
FEATURES AND SPECIFICATIONS SHEET

CAP-80 FEATURES

Remote control featuring power on/off, volume, mute, inputs, tape and display. Contoured, slimline chassis. Inputs featuring REG1, REG2, REG3, REG4, REG5 and BAL1 inputs. Front panel controls include INPUT SELECTOR, VOLUME, TAPE, MUTE and POWER. Special Classé front panel in Soft Shadow Silver finish.

CAP-80 SPECIFICATIONS

Frequency response:	20 Hz to 20 KHz, ± 0.1 dB
Output power:	80 Watts per channel into 8 Ohms 140 Watts per channel into 4 Ohms
Maximum Output swing:	± 40 V
S/N Ratio:	-90 dB "A" weighted
THD+N:	0.02%
Input Impedance:	10K Ohms for balanced 33K Ohms for single ended
Output Impedance:	0.17 Ohm
Gain:	29 dB for amplifier section -95.5 dB to +31.5dB for preamp section
Net weight:	25 lbs.
Gross weight:	29 lbs.
Net dimensions:	19" W. 4.375" H. 14.25" D.
Gross dimensions:	24" W. 10.25" H. 21.25" D.