

Classé

OWNER'S MANUAL
Omega Super Audio
Compact Disc Player



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SAFETY PRECAUTIONS

WARNING: failure to comply with these safety instructions can cause serious injury or death, or cause your Classé Omega SACD Player to be severely damaged or destroyed.

Do not operate the Classé Omega SACD Player with any portion of the chassis removed or open. Dangerous voltages and laser radiation may be encountered.

Connecting this unit to AC voltages other than that specified on the rear of the unit may cause extensive damage and increase risk of shock. Check to make sure your local AC voltage matches the voltage specified on the rear of your Classé Omega SACD Player power supply unit.

Do not operate this product near sources of heat such as radiators, fireplaces, or heat registers. Extreme heat may damage this unit.

To reduce the risk of electric shock or fire do not expose this unit to water or moisture.

Use only the correct size fuse:

- 100-110 Volts
1.25 Amp, 3AG Slo-Blo
- 220-240 Volts
0.5 Amp, 5 mm x 20 mm Slo-Blo

Do not open this unit. There are no user-serviceable parts inside. Please refer service to an authorised service technician.

Unplug this unit when unused for long periods or during lightning storms.

INTRODUCTION

Congratulations

Congratulations on your new purchase. From all of us at Classé, we hope you enjoy many years of musical satisfaction from your new Classé Omega SACD Player.

How to use this manual

The symbol to the right of the page indicates a section of the manual that is of particular importance for safety or to prevent damage to your Omega SACD Player.

Please make note of all safety precautions described in the previous section of this manual.

It is highly recommended that you familiarize yourself with all aspects of the operation of your Omega SACD Player. However, if you want to begin listening to your Omega SACD Player immediately, skip to the section titled Controls and Operation.

Classé Omega SACD Player: Design Overview

The Classé Omega SACD is the result of many years of digital-audio design expertise. It is an exciting development, the first high-end audio implementation of Sony's new digital audio format.

Transport

The transport mechanism in the Omega SACD Player is Sony's new reference-level SCD-1 Super Audio CD mechanism. This mechanism uses Sony's now familiar method of holding the laser optics stationary while moving the spinning disc as the data is retrieved. The stationary laser assembly provides reduced error and jitter, and greater stability while reading the disc.

In addition, this advanced mechanism uses two laser assemblies, a long wavelength (780 nanometers) laser for CD playback, and a short wavelength laser (680 nanometers) for Super Audio playback.

Digital Filtering Section

The digital filter is a flexible and elegant design that provides the optimum filter for all of the digital audio formats the Omega SACD can process. The Omega SACD automatically selects the optimum filter for standard CD, HDCD and SACD. In addition, the user can select a 96 kHz sample-rate converter filter when processing PCM data.



DAC Section

The digital to analog conversion circuitry is a completely new design by Classé Audio. This unique design utilizes six channels of the Crystal CS4397 delta-sigma converter. For each of the Omega SACD balanced outputs, two channels of this DAC are used, one for the positive signal and one for the negative. For the single-ended outputs, the remaining two channels are used, one for the right and one for the left. This unique arrangement allows for full balanced operation and uncompromised single-ended operation as well. In addition, it means that the balanced and single-ended outputs produce the same output level.

Power Supply

Classé engineers have long recognized the importance of pure power for high-performance digital designs. The Classé Omega SACD player has the most sophisticated power supply of any Classé digital product. The Classé Omega SACD Player uses a massive regulated outboard power supply. This chassis houses two transformers, one for digital circuitry, and one for analog, as well as active pre-regulation. This arrangement assures that the audio circuitry is provided with a power source completely free of digital noise. In addition, the power supplies for each section of circuitry are double- or triple-regulated within the main chassis. Again, this ensures not only complete rejection of AC line noise, but prevents noise from being transmitted between sections within the main chassis.

UNPACKING AND POSITIONING

Unpack your Omega SACD Player carefully. If you notice any shipping damage, contact your dealer immediately. Saving the packaging material is advised in case the unit needs to be shipped for service. If you choose to dispose of the packaging, please recycle.

Contents

Included in the carton should be the following items:

1. Main unit
2. Power supply unit
3. Power supply umbilical cord
4. AC mains cord
5. Remote control and 2 AAA batteries
6. Disc stabilizer
7. Warranty card
8. This manual

If any of these items is missing, contact your dealer immediately.

Installing batteries in the remote control

To install the batteries in the remote control, remove the screws that hold the battery cover to the back of the remote. Install the two AAA batteries as indicated on the plastic battery holder inside and replace the cover.

Positioning the Omega SACD Player and Power Supply

For best performance, place your Omega SACD Player on a solid, non-resonant surface. Do not place the Omega SACD Player directly on top of another component.

Place the Omega SACD Power Supply close enough to the main unit so that the umbilical cord can be connected to both units. Do not place the power supply in direct contact with the main unit.

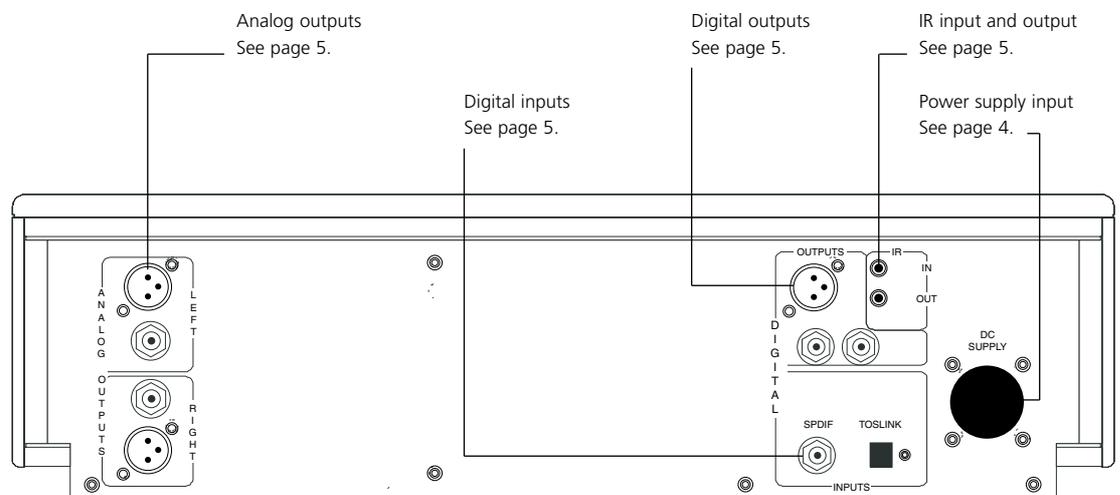
CONNECTIONS

Pictured here is the rear of the Omega SACD main unit showing all input and output connections. Refer to the page number indicated for more information on these connections.

Connecting the Power Supply to the Main Unit

Before connecting the AC mains, you must connect the power supply to the main unit. Using the umbilical cord included in the carton, connect the power supply to the main unit. Align the connectors on either end of the umbilical and firmly press them into the sockets labeled DC SUPPLY on the power supply and main unit. Rotate the collar on the umbilical connectors to secure the connection.

Never disconnect the umbilical cord without first disconnecting the AC mains from the wall outlet.



AC power

Check that the AC voltage for which this unit is configured matches your local AC line voltage. The correct operating voltage is indicated on the rear of the power supply chassis, adjacent to the AC power inlet. Operating this unit on AC voltage other than that specified on the rear of the unit can damage or destroy this unit and increase the risk of electric shock.

Connect the AC power cord to the rear of the power supply unit and directly to an AC outlet. For best results, do not use extension cords or multiple-outlet "power strips". Also, do not disable the ground pin as this can increase the risk of electric shock.

Digital inputs

The Omega SACD Player is equipped with two digital inputs, which accept any standard PCM digital audio format from 32 kHz to 96 kHz sampling rate. One input uses an SPDIF (RCA) connector and the other uses TOSLINK.

Digital outputs

The Omega SACD Player is equipped with three digital outputs: one AES/EBU (XLR connector), one SPDIF (RCA connector) and glass optical fiber (ST connector). These can be connected to a digital recorder or other digital audio component.

The sampling rate of the digital outputs depends on the source being fed to the output and on the digital filter used. When using the internal transport to play a standard CD, the digital output will be 44.1 kHz if the standard filter is selected, and 96 kHz if the sample-rate converter is selected. When a digital input is selected, the digital outputs will either pass the signal through at the same sample rate if the standard filter is selected, or produce a 96 kHz signal if the 96 kHz sample-rate converter is selected.

The digital outputs are disabled when using the internal transport to play a Super Audio CD.

Selecting Analog outputs

The Omega SACD Player has both balanced (XLR) and single-ended (RCA) outputs. Both types of outputs have been carefully optimized to give best possible performance. However, the most realistic and natural sonic quality is obtained by connecting the balanced outputs to a balanced input on your preamplifier.

The balanced output is derived from a balanced digital signal, which is converted to analog using two DACs per channel followed by differential output circuitry. The unbalanced output is converted by a separate DAC followed by dedicated single-ended circuitry.

Both the balanced and single-ended outputs can be used simultaneously, and both have the same output voltage.

Infrared (IR) input and output

The Omega SACD Player is equipped with 1/8" mini-plug connectors that allow the unit to directly receive and transmit remote IR commands. These connectors can be used with equipment that receives IR commands and converts them for transmission on copper wire. This is especially useful for situations where the Omega SACD Player is outside of the line-of-sight of your listening location. Contact your Classé dealer for information on installing and using remote IR repeating equipment.

CONTROLS AND OPERATION

This section describes all of the controls, front panel display, and operation of the Omega SACD Player.

Turning on AC power

The Omega SACD is turned on by means of a power switch located on the power supply unit. Do not turn the AC power on until all connections have been made.

Standby mode

If the Omega SACD Player is left idle for more than five minutes, it will automatically enter Standby mode. In this mode, the front panel display and transport power supplies are turned off, saving power. However, the low-level analog power supplies remain on for maximum sonic performance. When the Omega SACD Player is in Standby mode, a single LED indicator on the main-unit front panel will illuminate. In addition, the power indicator on the power supply will remain illuminated. The Omega SACD Player will automatically return to regular operation when any key on the front panel or remote control is pressed.

Top panel controls

Below is an illustration of the Classé Omega SACD Player and brief descriptions of the top panel controls.

STOP

Pressing STOP will cause the Omega SACD to stop playing.

PLAY

Pressing the PLAY key will begin playing. If the drawer is open, PLAY will cause the drawer to close.

SKIP FORWARD/SKIP BACK

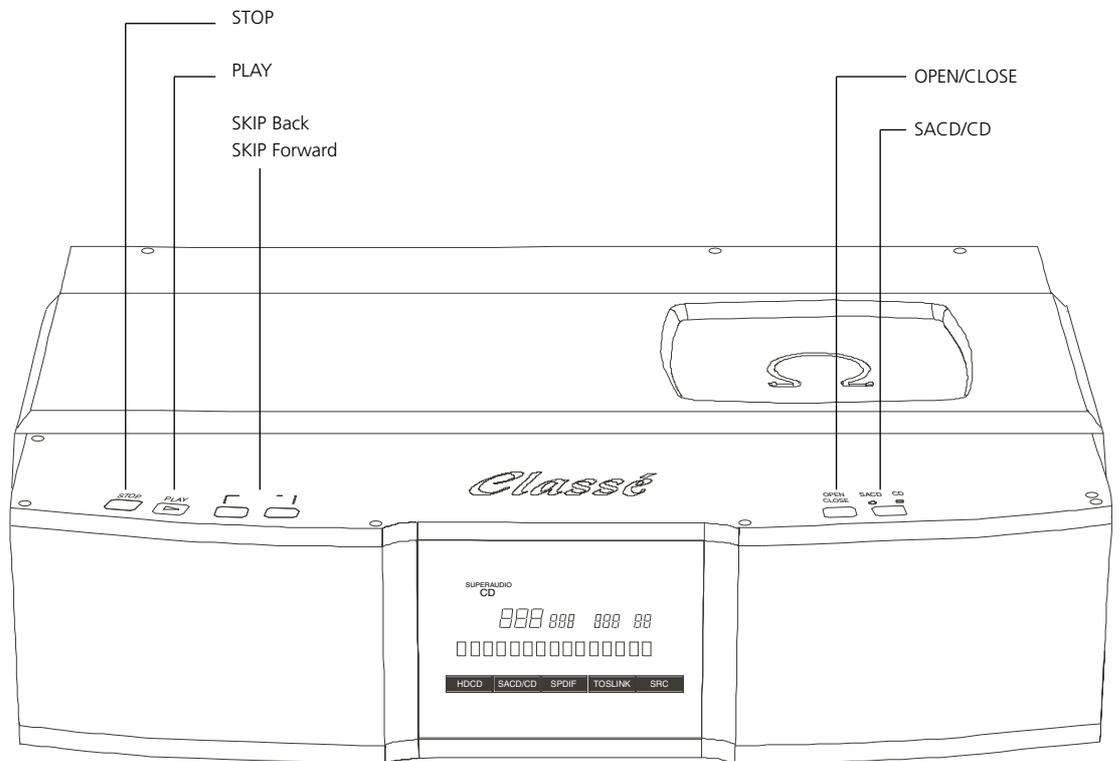
Use these keys to select a track on a disc. You can select a track while the Omega SACD is reading a disc and searching for the Table of Contents.

OPEN/CLOSE

This key opens and closes the disc-loading door. Pressing PLAY will also cause the door to close. Note that the loading door will close automatically if left open for over one minute.

SACD/CD

This key allows the user to select which layer of a multi-layer hybrid SACD disc is played. Pressing this key toggles back and forth between SACD and CD playback. The switch setting is indicated by the LEDs above the key on the top panel, and also on the front panel display. Note that the SACD/CD key only works when the unit is not playing. When using a single layer disc – either SACD or standard CD – the Omega SACD player automatically selects the appropriate layer and the SACD/CD key is disabled. In addition, the Omega SACD automatically defaults to the SACD layer when playing a dual-layer hybrid SACD/CD disc. Thus, the only time the SACD/CD key is used is to select the CD layer on a dual-layer SACD/CD recording.



Front panel display

Below is an illustration of the Omega SACD front panel display and a description of each indicator.

The remote control

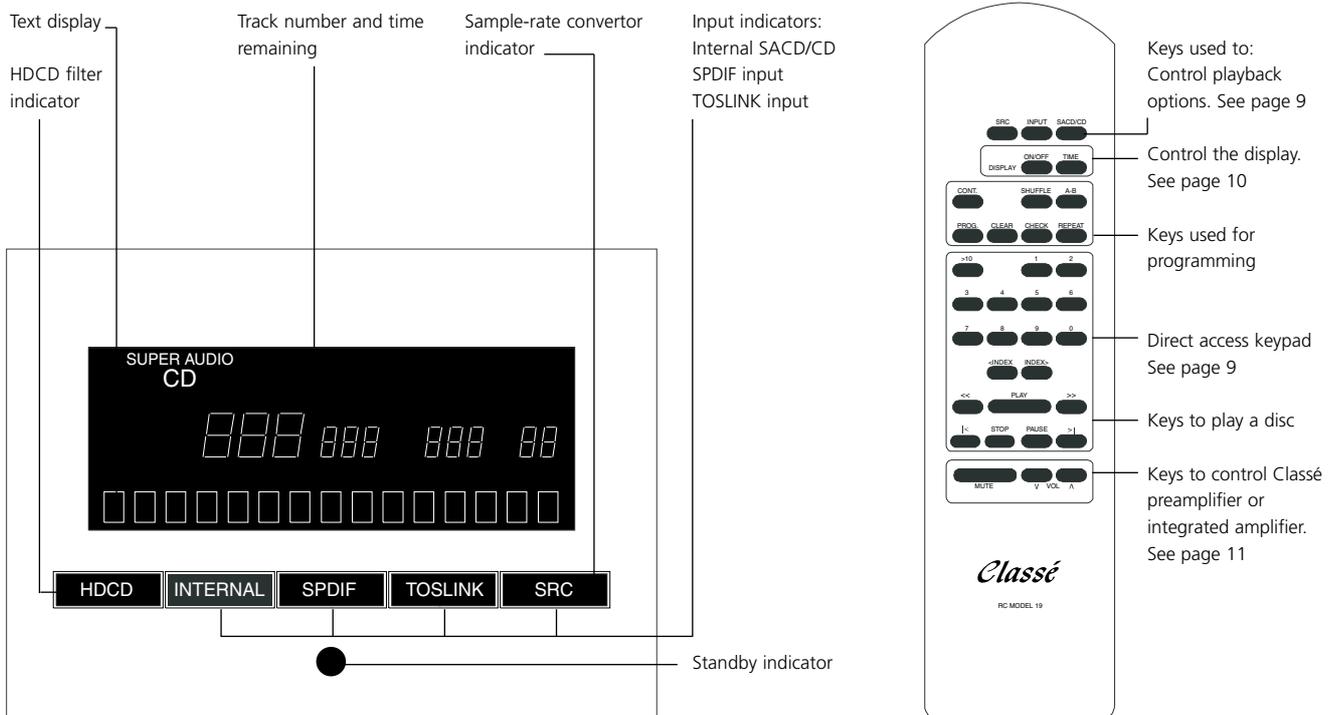
The remote control provides access to all functions available on the front panel. In addition, several functions can only be accessed from the remote control. For instructions on how to use keys that are duplicated on the main-unit top panel, see the instructions in the previous section. For other functions, see complete descriptions on the page number indicated.

Loading or unloading a disc

To load a disc, follow these steps:

1. Press the OPEN/CLOSE key on the top panel to open the loading door.
2. Once the loading door is opened, remove the disc stabilizer weight and place the disc (with the label facing up) on the spindle.
3. Place the stabilizer weight on top of the disc (felt side facing down).
4. Press the OPEN/CLOSE, PLAY, or SKIP keys to close the loading door.

To unload a disc, press OPEN/CLOSE, then remove stabilizer and disc. The loading door will close automatically if left open for more than one minute.



Playing a disc

After the disc is loaded and the drawer closed, the Omega SACD Player will begin to detect which type of disc has been loaded and read the table of contents.

Note that the Omega SACD player takes longer to start playing after the disc is loaded compared to conventional CD players. This is normal operation. Unlike a conventional player, the Omega SACD must identify the type of disc, activate the appropriate laser, adjust the servo tracking system, and verify the copyright information on the disc. Here is a summary of all play functions:

TO	PRESS	KEY LOCATION
Begin playing	▷	Top panel and remote
Pause playing	PAUSE	Top panel and remote
Resume playing	▷	Top panel and remote
Resume playing	PAUSE	Remote
Stop playing	STOP	Top panel and remote
Skip to next track	▷	Top panel and remote
Skip to beginning of current track	◁	Top panel and remote
Skip to previous track	◁ (repeatedly)	Top panel and remote
Move forward within current track	>>>	Remote
Move back within current track	<<<	Remote
Skip to next index	INDEX ▷	Remote
Skip to previous index	INDEX ◁	Remote

Using the direct access keypad

The ten-digit keypad on the remote control can be used to directly access any track on the disc. Press the digits of the track you wish to access.

To access a track number greater than 11, press the >10 key, and then enter the two digit track number.

Selecting inputs

Press the INPUT key on the remote control to select between either of the digital inputs and the internal transport. As shown in the illustration below, each time the INPUT key on the remote control is pressed the Omega SACD advances to the next input. The front panel display shows the selected input by illuminating INTERNAL, SPDIF, or TOSLINK indicators on the front panel display.

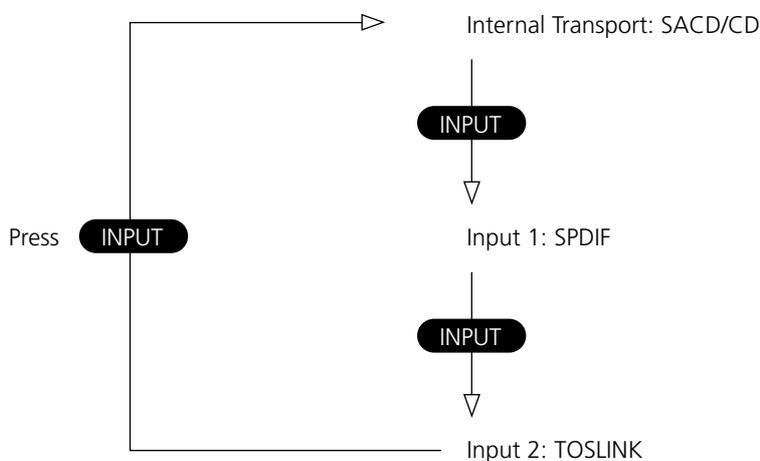
When any external input is selected, the internal SACD/CD mechanism will automatically power off after approximately 60 seconds, saving power and improving sound quality.

SRC (Sample-Rate Converter)

The Sample-rate converter will convert PCM (Pulse Code Modulated) signals from the digital inputs or from a CD playing on the internal transport, to 96 kHz sample rate. The signal is then processed by a 4-times over-sampling filter before it is fed to the internal DAC section. In addition, the 96 kHz signal is routed to all digital outputs.

Note that if the Sample-rate converter is selected, the HDCD decoding filter will be disabled – even if the signal being processed was recorded using HDCD. Also, the Sample-rate converter works only on PCM (Pulse Code Modulated) signals and will therefore not operate when playing Super Audio CDs on the internal transport. Lastly, note that the Sample-rate converter will disable the de-emphasis flag from the signal at the digital output. If an emphasized signal is connected to an outboard converter while using the Sample-rate converter, the outboard unit will not recognize the emphasis flag and will not engage de-emphasis filters. The result will be slightly elevated high-frequency response.

To select the 96 kHz Sample-rate converter, press the SRC key on the remote control. To return to the Standard filter, press the SRC key again. When the Sample-rate converter is engaged, the display will illuminate "SRC".



Controlling the display

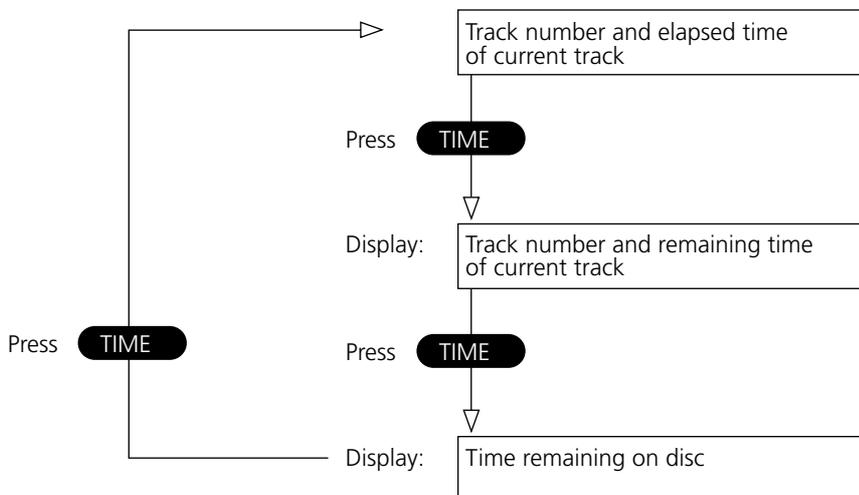
The Omega SACD Player display function can be changed using keys on the remote control as follows:

ON/OFF

Pressing the ON/OFF key will cause the display toggle between ON mode and OFF mode. In OFF mode, the display will remain off unless a key on the top panel or the remote control is pressed. In ON mode, the display remains illuminated during operation.

TIME

The TIME key changes how the front panel display indicates time. The display can show elapsed time for the current track, time remaining for the current track, or time remaining for the entire disc. Pressing the TIME key scrolls through the three options as shown below:



Programming

Several programming features allow you to listen to tracks in a particular order or repeat tracks. All keys for programming are on the remote control.

SHUFFLE

Press the SHUFFLE key to hear tracks in a random order. Pressing CONTINUE will resume normal playing.

REPEAT

Use the REPEAT key to hear a single track or the entire disc repeated. Pressing REPEAT once will cause the Omega SACD to repeat the entire disc. This is indicated by the word "Repeat" illuminated on the front panel display.

Pressing REPEAT a second time will cause the Omega SACD to repeat the current track. This is indicated by the word "Repeat1" illuminating on the front panel display.

Pressing REPEAT a third time will revert to normal play.

A – B Repeat

This function allows you to repeat one section of a track or disc. Pressing the A – B key on the remote sets the beginning of the section to be repeated. Pressing the A – B key a second time will set the end point for the repeating section. When the A – B key is pressed the second time, the Omega SACD Player will begin to repeat the selected portion of the disc.

To resume normal play, press REPEAT or STOP.

Creating your own program

To program the Omega SACD to play tracks in a specific order, follow these steps:

1. If the disc is playing, press STOP.
2. Press the PROGRAM key.
3. Use the 10-digit keypad to enter the track number of the first track in the program. For more information, see Using the Direct Access Keypad. If you entered the wrong track, press CLEAR.
4. Enter the next track number in the same manner. Each time you enter a track number, the total program time appears in the display.
5. When you are finished, press PLAY to hear the program.
6. The program will be erased if you turn the AC power off or press the OPEN/CLOSE key.

CHECK

To check the order of the program, use the CHECK key. Each time you press CHECK, the number of the next track in the program appears on the display.

CLEAR

When the player is stopped, you can use the CLEAR key to delete tracks from the program. Press the CHECK key repeatedly until the track number that you want to delete appears on the display, then press CLEAR to delete that track.

Using the Omega SACD remote control with other Classé products

The Omega SACD Player remote control can be used to control all Classé pre-amplifiers and integrated amplifiers.

VOLUME UP/DOWN

Pressing these keys will raise or lower the pre-amplifier or integrated amplifier volume level.

MUTE

Pressing MUTE will cause the pre-amplifier or amplifier output to mute. Pressing either VOLUME UP or DOWN will cause the unit to un-mute. See the owner's manual for your Classé product for more detailed information.

SPECIFICATIONS

Main Unit Dimensions

Width:	19"	48.3cm
Height:	5-3/8"	13.7cm
Depth:	15"	38cm
Weight:	23kg	50.7lbs

Power Supply Dimensions

Width:	9.5"	24cm
Height:	3.75"	9.5cm
Depth:	15"	38.1cm
Weight:	4.5kg	10lbs

Analog Output Voltage (Full scale)

Balanced:	2.5Vrms
Un-balanced:	2.5Vrms

Digital Inputs:

1 – SPDIF
(RCA connector)
1 – TOSLINK
Inputs can accept any standard digital audio PCM signals from 32 to 96 kHz.

Digital Outputs:

1 – SPDIF
(RCA connector)
1 – AES/EBU
(XLR connector)
1 – Glass Fiber Optic
(ST connector)
Outputs can sample rate convert to 96 kHz.
Outputs do not function when playing a Super Audio CD.

CE CERTIFICATION

As of July 18, 1996, Classé Audio has been granted:

Certificate Number: C401CLA1.MGS

This indicates CE approval for all models of the Classé product line.

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



WARRANTY AND SERVICE

For warranty service, contact your Classé dealer
or Classé Audio directly at:

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