

CLASSÉ AUDIO
OMICRON
POWER AMPLIFIER

OMICRON
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. CIRCUIT DESIGN:

The **OMICRON** is based on Classé's whole history of designing and building High End amplifiers. The **OMICRON** is an Ultra- High performance amplifier of incredible sonic realism capable of transmitting to the listener the emotional essence of the music. The **OMICRON** is actually two completely separate amplifiers with two massive toroidal transformers totalling 3.6 KVA, each with their own power cords and a huge storage capacity which totals over 80000 uF per channel. The **OMICRON** has fourteen high voltage/current Bi-Polar output devices per channel. Discrete high voltage/current voltage regulation for the pre-driver and input sections. Also featured are heavily gold plated bars connecting supplies of the output devices. Gold plated input and output connectors. Oxygen free copper wiring. All signal carrying cables are shielded and have Litz type configuration. The **OMICRON** is symmetrical from input to output

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.

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UNPACKING & SET-UP

Your CLASSÉ **OMICRON** power amplifier is packed in high density, semi-rigid foam placed in a special Fibreglas case. To remove the unit, put the fibreglass case with the Classé lettering right side up. Unlock the four (4) case locking devices by first lifting the tabs, and turning them fully counter clockwise. Then, pull the tabs; the locking devices will pivot downwards. You can now remove the large top portion of the case. Take the unit out of the base of the case and remove the plastic bag and inspect the unit for any concealed damage. Apart from the owner's manual, please ensure the following has also been included:

- 1) Two (2) detachable A.C. linecord
- 2) Nut driver for output connectors

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

Place the **OMICRON** at or near its final set-up position, allowing 8 inches at the rear for tightening the speaker output connectors.

The power transformers in the **OMICRON** are located at the front-center of the unit. Ideally, a few feet should separate this area from components which potentially could pick up hum. These include preamplifiers, turntables, and interconnect cables. In terms of providing adequate airspace for cooling, a good rule of thumb is to allow 6 inches above and 3 inches on each side of the unit.

Check the Serial Number sticker on the back of the unit for the correct operating voltage. The **OMICRON** has two external AC fuses, the rating of which should be as follows:

<u>LINE VOLTAGE</u>	<u>FUSE RATING</u>
100 or 120 V.A.C.	2X 15 AMP SLOW BLOW, 125 or 250 volts
220 or 240 V.A.C	2X 12 AMP SLOW BLOW, 250 volts

GENERAL CONNECTIONS

A.C. LINE

Insert the 2 linecords into the A.C. receptacle on the rear of the unit. **PLEASE MAKE SURE YOU HAVE PREVIOUSLY HOOKED UP THE SPEAKERS AND PREAMPLIFIER TO YOUR AMPLIFIER BEFORE CONNECTING THE AC POWER CORD TO THE AMPLIFIER.**

IMPORTANT NOTE

CAUTION: SAFETY INSTRUCTIONS

DISCONNECT THE 2 AC LINE CABLES BEFORE MAKING ANY OTHER 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.

STEREO

Input and output connectors are clearly marked on the back of the amplifier. Left/Right connections are oriented from the front of the unit. Stereo output connections are marked above the connectors. Switch stereo/mono switch to STEREO position. (The OMICRON is preset at the factory for STEREO.)

Use only high quality interconnect and loudspeaker cables, and make all connections tight. If the RCA input plugs are loose, remove them and pinch down the ground leaves slightly with pliers. Observe correct phasing of the loudspeaker connections, and tighten.

STEREO (CONTINUED)

DO NOT OVERTIGHTEN the output connectors. When powering up the **OMICRON** in stereo mode, the left channel LED will blink for approximately 20 seconds, when the sequence is completed, the LED will turn SOLID RED. Then, the right channel LED will also blink for approximately 20 seconds and will also turn solid red once it has completed its turn on sequence.

MONO

Please read through the previous Stereo section for general notes on securing good connections, and safety tips. If the unit has been previously used in stereo, make sure it is OFF, and remove all connections, including the AC line cable. Make sure the STEREO/MONO switch is switched to the MONO position. NOTE: The Stereo-Mono switch will not operate if the amplifier is turned on, you will NOT be able to change from one mode to the other, as the mode is "locked" while the amplifier is on.

When the turn on sequence has been completed with the unit set for MONO operation, only the CENTER LED will light up.

The MONO "Input" is the "left channel input", as marked. The unused right channel input is automatically disconnected. Correct output phase MONO connections are marked below the connectors.

Repeat the above MONO settings and connections on the second **OMICRON** to be used for the other channel.

Please remember that the negative output connection of a bridged amplifier is NOT a ground. Do not use a "common ground" switch-box set-up. Do not use with electronic crossovers which have a common ground. Connecting two bridged amplifiers to a common ground device of any sort will cause the amplifiers to fail.

MONO OPERATION

As stated above, either the regular or balanced inputs can be used in stereo or mono. Connect a single interconnect, either regular or balanced, to the left channel input of each amplifier. See the "Mono" section above for complete details. NOTE: Neither the Stereo-Mono switch nor the REGULAR/ BALANCED switch will operate while the amplifier is turned on. You will NOT be able to change from one mode to the other, as these modes are "locked" while the amplifier is on. To activate the circuit, turn off the unit and engage the STEREO/MONO switch to REGULAR. If the unit has not been turned off before engaging the switch, turn off the unit, wait for about 10 seconds, and turn the unit on again, the circuit will then engage.

CONNECTIONS FOR REGULAR OR BALANCED INPUTS:

The CLASSÉ **OMICRON** power amplifier is equipped with both regular and balanced inputs. Either one may be used **SEPARATELY, BUT NOT SIMULTANEOUSLY**. The balanced inputs must be connected to a preamplifier which has balanced main outputs. Balanced interconnects with "XLR" connectors are also required. Regardless of the amplifier inputs used, stereo or mono operation is possible on the **OMICRON**.

REGULAR INPUTS

Engage the REGULAR/BALANCED switch to the position marked "REGULAR". (The amplifier is factory set for "REGULAR".) **NOTE:** The REGULAR/ BALANCED switch will not operate if the amplifier is turned on; you will NOT be able to change from one mode to the other, as the mode is "locked" while the amplifier is on. To activate the circuit, turn off the unit and engage the REGULAR/BALANCED switch to REGULAR. If the unit has not been turned off before engaging the switch, turn off the unit, wait for about 10 seconds, and turn the unit on again, the circuit will then engage. Connect the regular interconnects to the RCA input jacks on the rear panels of the **OMICRON**. The balanced connectors are automatically disabled.

BALANCED INPUTS

Switch the REGULAR/BALANCED switch to the position marked "BALANCED". A balanced preamplifier and balanced interconnects are also required. **NOTE:** The REGULAR/ BALANCED switch will not operate if the amplifier is turned on; you will NOT be able to change from one mode to the other, as the mode is "locked" while the amplifier is on. If the unit has not been turned off before engaging the switch, turn off the unit, wait for about 10 seconds, and turn the unit on

BALANCED INPUTS (CONTINUED)

again, the circuit will then engage. For use with balanced preamplifiers other than Classé, the wiring of the 3-pin XLR connectors must be matched to that of the CLASSÉ **OMICRON** which is wired as follows:

PIN 1: GROUND

PIN 2: POSITIVE (NON-INVERTED) SIGNAL, "HOT"

PIN 3: NEGATIVE (INVERTED) SIGNAL

All Classé preamplifiers and amplifiers are configured as above. Some preamplifiers from other manufacturers have PIN-3 set as the positive or "HOT" side. If this is true of your preamplifier, and you wish to maintain absolute phase throughout your system, the interconnects must have the wire which is connected to PIN-3 at the preamplifier output end switched to PIN-2 at the amplifier input end and the wire which is connected to PIN-2 at the preamplifier output switched to PIN-3 at the amplifier input end.

Having confirmed the correct connections, plug the XLR connectors of the balanced interconnects into the locking XLR connectors on the rear panel of the **OMICRON**. Push the connectors in until the locking mechanism clicks. (To remove the connectors, press the tab above the connector while pulling gently on the connector body.)

PROTECTION CIRCUIT

A special circuit in the Classé **OMICRON** continuously monitors the output audio signal to detect output overload, clipping or DC content. In addition, each channel has two front end supply voltage fuses, located on the front end voltage regulation board, to protect the input circuitry from damage due to overload. There is a green LED for the negative voltage supply and a red for the positive. If a fuse fails, the corresponding LED goes out, alerting you of the fact. (These fuses are 1 amp fast blow).

There are also line AC fuses, located at the rear of the amplifier immediately above each IEC receptacle. There are no LEDs monitoring the condition of these fuses.

If the protection circuit of the unit is triggered or any of the fuses has blown, the FRONT PANEL POWER LED(S) will go to BLINKING GREEN, indicating a “fault” condition. If the left LED is BLINKING GREEN, the fault condition should be located at the left channel, if the right channel LED is BLINKING GREEN, the fault will be located to the right channel regardless if the unit is used in mono or stereo.

IF THE PROTECTION CIRCUIT HAS BEEN TRIGGERED, TURN THE OMICRON OFF. .After the situation which has triggered the protection circuit has been clearly identified and corrected, attempt to re-start the unit. IF THE UNIT STILL GOES INTO PROTECTION MODE, OR IF IT APPEARS THAT PROTECTION FUSES DID BLOW, CONTACT YOUR LOCAL DEALER. DO NOT TRY TO CHANGE A BLOWN FUSE. REPLACING A FUSE WITHOUT CHECKING FOR COMPONENT FAILURE COULD RESULT IN FURTHER, SERIOUS DAMAGE TO VITAL COMPONENTS IN YOUR AMPLIFIER. CONTACT YOUR LOCAL DEALER or Customer Service at the Classé Audio, Inc --- (514) 636-63 84.

IR OUT and IN:

The **OMICRON** may also be turned on and off using our **SSP-75** Surround Sound Processor, utilising the IR OUT and IN jacks. Several amplifiers may be turned on automatically in sequence or all at once, depending upon the configuration of the jumper settings in the amplifier. Please contact your dealer for set-up specific to IR operation.

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CLASSÉ OMICRON

DUAL MONO BALANCED POWER AMPLIFIER

OMICRON FEATURES:

Newly developed special Classé symmetrical circuitry from input to output. Current capacity increased above standard units. Two 1800 VA toroidal transformers totalizing 3.6 KVA. Over 80000 uF storage capacity for each channel. Fourteen high current/voltage Bi-Polar devices per channel. Discrete high voltage/current regulation for the pre-driver and input sections. Metalized polypropylene capacitors bypassing each output device. Heavily gold plated bars connecting all supplies for the output devices. Heavily gold plated input and output connectors. All signal carrying cables are shielded and have Litz type configuration. All other wiring is oxygen free copper.

OMICRON SPECIFICATIONS:

Frequency response:	20 Hz to 20 KHz +/- 0.1 dB	
Sensitivity:	1.3 Volts in for rated output	
Input Impedance:	16 K ohms	
Output Impedance:	0.017 Ohm	
Gain:	29.02 dB	
S/N Ratio:	135 dBR	
THD+N:	0.002%	
Rated Output:	Stereo	Mono
8 Ohms:	350	1250 Watts
4 Ohms:	700	2350 Watts
2 Ohms:	1150	4700 Watts
Dimensions: Gross:	28" x 26" x 18"	
Net:	22" x 20.5" x 12.25"	
Weight:	262 lbs. gross, 212 lbs. net	



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.