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Thank you for choosing a GENESIS Project 15 limited Edition Tube amplifier.

By doing so you are one of the select few who own one of these individually hand crafted amplifiers.

The design of the Project 15 is unique and special in many ways as described below:

Tube preamp stage - this provides warmth and 'musicality'

Class A+G Technology Power Amplifier, giving total control of the speaker system

The very best componentry throughout, including Mundorf Capacitors, Beyschlag and Welwyn resistors, OnSemi Thermaltrak transistors, Sovtek tubes and Neutrik connectors.

The casing is CNC machined from solid aluminum plates and billet, then wet blasted, polished and assembled by hand.

A plexiglass window allows viewing of all the internal circuitry and is laser engraved with the serial number of the amplifier. Edge lighting illuminates the lettering when the amplifier is operating.

Every amplifier is run in for at least 24 Hours after testing, then re-tested to ensure specifications are met.

The production of these exclusive amplifiers is limited to 100 units, each individually numbered.

Guarantee:

Your Genesis amplifier is guaranteed for life if dealer fitted.

Should you experience any problems, please return it to your dealer with a clear description of the fault, and proof of purchase.

Installation:

Take some time to plan the installation carefully. Find a location for the amplifier where it will get adequate ventilation without being exposed to damp or excessive vibration. An airspace of at least 10 centimetres on all sides of the amplifier is recommended.

Avoid mounting the amplifier upside down.

Class A amplifiers dissipate heat even at idle. Check the amplifier temperature after 1 hour at idle. If it is more than 50 degrees above ambient, consider an additional fan to provide air circulation around the amplifier.

The internal fans will provide sufficient cooling up to an ambient temperature of 45 degrees providing there is sufficient air flow around the amplifier.

Check that there are no cable looms or brake lines behind the surface where you intend mounting the amplifier.

If the amplifier is being mounted in the boot check where the petrol tank is located, as this is often behind the rear seats, particularly on German cars.

If it is not possible to mount the amplifier using the holes provided in the pillars, consider fitting a plywood or MDF mounting board and fasten the amplifier to this.

Six fastening locations are built into the pillars. These have M6 threads in the pillars to receive the M6 cap head screws fitted to the amplifier, and all six should be used to fasten the amplifier to the mounting surface. Ensure cutouts are provided to allow the fans to draw in cool air.

M5 screws can also be used to fasten the amplifier onto the mounting surface from the top.

If fastening to a wooden mounting plate T nuts are recommended as the amplifier is heavy and will require secure mounting.

Wiring:

Power:

All power wiring should be kept as short and direct as possible to reduce voltage drop.

The terminals on P15 will take 2 gauge directly and this should be used for all power feeds.

We recommend separate power cables for each channel to ensure maximum separation between the channels.

Ground cables should also be 2 gauge.

Mount an 80 amp ANL fuse in the positive line as near to the battery as possible. This fuse is to protect the cable from catching fire in case of a short circuit.

The cable between the battery and fuse pass must never pass through any holes or brackets in the body of the car.

If any cables need to be run through the metalwork of the car, drill the hole, remove any sharp edges, and fit a grommet or plastic cable gland to prevent the cable insulation chafing. Existing cable grommets can be used if space is available.

When making the connection to the positive terminal of the battery, disconnect the negative terminal first. Connect the fuseholder to the battery terminal, but leave the fuses out until the system is fully wired. Reconnect the negative terminal once the wiring to the positive terminal is complete.

Remote and preheat:

A light gauge wire can be used for the remote and preheat feeds.

The preheat feed is designed to warm the tubes so the amplifier powers up more quickly. Triggering the terminal with a positive pulse or trigger will activate the internal timer. This switches on the power supply to the tube heaters for 1 minute. If the remote is then activated 15 seconds or more after the preheat, the tubes are already warm and the amplifier will power up in 2-3 seconds.

If the amplifier is not switched on within a minute the tubes will have cooled and the amplifier will operate 20 seconds after the remote is activated.

This timer is set at 1 minute to minimise drain on the battery.

Signal:

The speakers should be connected with a good quality OFC cable of 14 Gauge or heavier, or dedicated silver cable. Route the speaker wiring separately from any of the internal wiring looms in the car.

The speaker terminals are large enough to take several cables to facilitate bi or tri wiring of crossovers.

All signal cabling should be the best available quality to minimise signal degradation.

Good quality cables will either have several shielding layers, or be wired in quasi-balanced mode as shown on the supplementary sheet.

Balanced cables should be constructed using top quality microphone cable wired as in the supplementary sheet.

System setup.

Project 15 is designed to be used purely as a Front Stage amplifier due to its exceptional sound quality.

The power delivery to the front system will be around 34 watts per channel in Class A mode at 4 ohms, and around 280W in class G mode.

The power figures in Class A mode for 2 ohm and 4 ohm might seem to be reversed but this is not so.

The Class A power levels are limited by the peak current the amplifier can deliver while still remaining in Class A mode.

The peak output current in Class A mode is 4.5 amps.

The voltage developed at 4.2 amps is more into 4 ohms ($4.2^2 \times 4 / 2 = 34W$) than 2 ohms ($4.2^2 \times 2 / 2 = 17W$) so the power is higher in 4 ohm mode.

Powering up.

When all the wiring is completed, ensure the head unit is switched off. Fit the fuse to the cable fuseholder. A small spark will be seen, but the fuse should not blow.

Check the preheat function is operating by triggering the unlock function on the remote. The tubes should illuminate for around 60 seconds after the interior light illuminates then extinguish.

The preheat feed requires a positive going edge or trigger. A relay may need to be fitted depending on the wiring of the car locking and interior light systems.

Switch the head unit on without triggering the preheat function. The system should begin operating after 15-20 seconds.

Switch the head unit on 20 seconds after triggering the preheat function, while the tubes are still illuminated. The amplifier should play after 2-3 seconds.

The same feed can be used for both remote terminals without affecting the separation. The preheat terminals can also be fed from a single feed without affecting the separation.

Level setting.

The correct setting of the level controls is the point where the system will give full output on all sources. Simply turning all of the gains fully clockwise will usually mean that the volume is hard to adjust at low levels, and the system balance between the sub, rear fill and front stage speakers will be all wrong, giving poor reproduction.

Begin with a 12 O'clock setting on all of the gain controls. If the sub is too loud or quiet, adjust the level to suit.

Check the operation of the volume control. Full volume should be reached near the maximum setting. If it occurs at a much lower setting, back off each of the level controls slightly. Check, and adjust further until the setting is correct.

If it is too quiet, advance the level control & check as above.

The individual level controls can also be used to assist in setting system balance from the listening position.

CMRR control.

The CMRR control is provided to assist in eliminating noise from balanced systems. The factory setting is at the centre position and should not need adjustment. Should a long cable run be used the CMRR can be set by sending a single mode signal down the cable and adjusting the control for minimum output. An adapter will need to be made at the send end of the cable, to feed the same signal to both the + and - inputs. This will provide a single mode signal. See the supplementary sheet for wiring details.

Fault finding.

Cable fuse blows on insertion: Ground and +12V terminals on amplifier not wired correctly.

Amplifier shuts off after 45-60 minutes, then on & off in 5-10 minute intervals. The amplifier is overheating due to inadequate ventilation. Either fit an external fan, or move amplifier to a location with better ventilation.

Front soundstage not imaging, with a strange hollow sound:
 Front speakers out of phase. Check connections at amplifier and at speakers and crossovers.
 One balanced cable wired out of phase

Amplifier fuse blows on insertion: The amplifier has an internal fault. Return it to your dealer for servicing.

Amplifier fuse blows as soon as the head unit is switched on: Disconnect all speakers and inputs. If the fault remains, the amplifier has an internal fault. Return it to your dealer for servicing.

Noise pickup: Check the CMRR control is in the central position, also check the bal / unbal switch setting is in the correct position for the input being used.

Specifications:

All measurements are made at a supply voltage of 14.4v, into resistive loads.

Rated Power:	4 Ω :	2 x 30 W RMS
Class A mode	2 Ω :	2 x 15 W RMS (This is not a misprint !)

Typical Power:	4 Ω :	2 x 34 W RMS
Class A mode	2 Ω :	2 x 18 W RMS

Rated Power:	4 Ω :	2 x 200 W RMS
Class G Mode	2 Ω :	2 x 300 W RMS

Typical Power:	4 Ω :	2 x 290 W RMS
Class G Mode	2 Ω :	2 x 430 W RMS

Frequency response: +0,-1dB , 20Hz to 20kHz, ref 1 kHz

S/N Ratio : > 100dB A weighted ,Typ > 105dB

Channel separation: >100dB @ 20kHz

CMRR (Balanced input) > 60db, typically > 75 dB (20Hz - 20kHz)

Input Sensitivity : 0.5 - 5.0 Volts 8.5 Volt pre-out compatible

Idle current: 8 amps per channel

Maximum current draw : 53 Amps per channel (at 2 ohm sinewave)

Fuses: 2 x 40 Amps

Size: 625 x 325 x 100 mm

Weight: 17Kg

Warranty: Lifetime if dealer fitted.

Origin: Designed and hand - built in our factory in Essex, England.