REVIEW

Grace Design Lunatec V2

These American microphone preamps have been aimed at the studio. But Tim Goodyer finds this model delivering quality on location

MOVING OUT of the studio and into the field, Grace Design has come up with the Lunatec V2 location mic preamplifier. Quality is the name of the game here, as evidenced by a quoted frequency response of 6Hz-250kHz and phase deviation of <8°. Certainly, there is little doubt that adding the Lunatec to any of the popular location DAT recorders would bring it into line with the performance of a studio-based system. And for that matter, the half-rack Lunatec would serve the studio equally well where rack-readiness is not the primary consideration and where there is a need to strike camp for a session once in a while.

Building on the success of the earlier Model 801 and 201 (Studio Sound, September 1997) the twin-channel Lunatec uses the same trans-impedance amplifier technology that serves its sisters so well, and adds an onboard M-S decoding matrix. Two identical channels follow the earlier models' schema, offering individually switched 48V phantom power (or alternatively 12V parallel power); 2 l2-step Gain controls (lOdB-6OdB in 5dB steps); Trim controls (1OdB continuous attenuation); peak LEDS showing green at -14dBu and red at +16dBu; and switchable high-pass filtering. A mains switch, and LEDS indicating power on and low battery condition complete the front panel. The only apparent omission here is a phase reverse switch. Power (at either 6V or 12V) comes either via a wall wart or a battery pack, through a single 4-pin XLR on the rear panel, the rest of which carries balanced input XLRs, balanced output XLRs and unbalanced output phonos that are active simultaneously.

The filters use a transitional Thompson-Butterworth response in 12dB/octave configuration as designer Michael Grace believes this to give the best combination of pass-band flatness and phase accuracy. Each has a 3-position toggle switch on the front panel giving either 50Hz and 100Hz or 75Hz and 125Hz cut-off frequencies as determined by the position of a pair of internal jumpers. Further internal jumpers are used to set the filter slopes to 6dB/octave or 12dB/octave and to enable the M-S decoder.

In operation, the Lunatec feels sturdy without being unnecessarily over engineered or overweight at 1. lkg. The hooding around the front panel offers a useful degree of protection to the front panel controls and also maximises the usefulness of the LEDS by keeping the direct light falling on the panel to a minimum. You could be forgiven for believing that the use of jumpers is a clever device to draw your attention to the standard of internal construction, but to preset aspects of the preamp's operation keeps the panels clean and operation simple. Admittedly, it presupposes that you will not want to make hurried changes during a session but this is a fair assumption-particularly for location work at which the unit is primarily targeted. Incidentally, access to the jumpers is via four screws in the top panel, and the jumpers themselves can be readily moved with a pair of long-nosed pliers. Although not distinctively marked, even remembering which jumpers are which is fairly easy.

The manual is comprehensive and accessible, if not glossy and glamourous-1 know which I would prefer to need to read-and covers everything from gain adjustment through internal jumper settings to M-S operation, and battery life. The review model came with an Eco Charge sealed lead-acid battery capable of giving in excess of 10 hours operation that worked perfectly once charged overnight. It is worth noting that certain prestige location recordists prefer to use separate power supplies for mic phantoms from the rest of their setup on the grounds that audio transients are better handled when the mics are not in competition for current. While the Lunatec does not isolate the power demands of your mics from their preamps it does offer to make the package independent of all other equipment, and is certainly a step in this direction.

In use, the Lunatec V2 exhibits the same clean and open qualities that separated the Model 801 and 201 from the crowd. Noise is very low (-130dB at 6OdB gain ref to input quoted) and the transparent quality of the circuit topology lends a sense of ease to the sound. Of course, some preamps are chosen for their 'sound' in particular application and if that's your requirement, you should pass the Lunatec over. In M-S mode, Channel 1 provides the 'sum' signal and so provides the central element of the stereo image and Channel 2 provides the 'difference', thus the Channel 2 Gain control controls the image width-more difference signal to the decoder matrix giving a wider image. Again, the Lunatec could not be easier to use.

While the merits of the Lunatec's performance and the thoroughness of its design speak for themselves, it is worth pointing out that the older Model **201** offers two channels of mic preamplification ideally suited to a studio outboard rack, while the new unit adds M-S decoding, filters, battery operation and knocks some $400 off the asking price (at $1495 US). It is still not cheap, but nor does it sound or perform as if it were. ■

Contact
Grace Design, PO Box 204
Boulder, Colorado 80306-0204, US.
Tel: +1 303 443 7454
Fax: +1 303 444 4634
Net: www.gracedesign.com

SPECIFICATION

EIN
@60dB gain <130dB

FREQUENCY RESPONSE
+/- 3dB @60dB gain: 6Hz-250kHz

THD+N
+20dBu out @20dB gain 0.0011%
+20dBu out @40dB gain 0.0011%
+20dBu out @60dB gain 0.0046%

INTERMODULATION DISTORTION
@40dB gain +25dBu out <.0025%

NOISE - REFERRED TO INPUT
@60dB gain 50 Ohm source <-130dB

PHASE DEVIATION
50-20Khz <8°

CROSSTALK
Either Channel -109dB

CMRR
@60dB gain, 3.5Vcm, 1KHz 65dB
@60dB gain, 3.5Vcm, 10KHz 96dB
Output CMRR 55dB

MAXIMUM OUTPUT LEVEL
Balanced +27dBu
Unbalanced +21dBu

IMPEDANCE
Input 1600Ohms
Output 150Ohms
Minimum Load Impedance 600Ohms

WEIGHT
2.4lbs

DIMENSIONS
L5.5" x W8.3" x H1.6"

POWER CONSUMPTION
500mA DC 6-12V

Reprinted from **Studio Sound** *August 1999*