



# **NAGRA V**

Order # 70 31001 000

# 24 bit Linear Location Recorder

### Features -

2 channels (24 bit, 96 kHz AD / DA) Post-production compatible (BWF files) SMPTE Time Code Affordable medium (2.5" Hard drive disk) Built-in matrix and MS decoder Pre-recording buffer LCD display Self-contained Lightweight Reliable

# **Applications** -

The NAGRA V is designed as the successor to the NAGRA IVS-TC and a replacement for R-DAT. NAGRA V is a light, compact and reliable recorder manufactured to suit on-the-shoulder / on-location engineer needs. Its high quality also makes it a good alternative for music recordings.

### Recording Medium —

The removable 2.5" hard drive allows more than 20 hours of 48 kHz 24-bit recording (for a 20 GB, price around 100 €). The hard drive drawer can simply be connected to a PC or a Mac using: USB2 / PCMCIA / Firewire adapter. They also can be plugged into a 3.5" IDE bay. Transfer is made easy, fast and at an affordable price.

### **Broadcast Wave Format** —

BWF is a Wav file that includes information such as Time Code. BWF is normalized by the EBU (European Broadcast Union) and recommended by the AES31 (AES 31-3-1999).

While BWF is recognized by both PC and Mac as a standard WAV a professional software and workstation will see the TC related information (compatible with: AATON Indaw ver 6 under NT, Digidesign Protools since version 5, Merging Technologies Pyramix, Fairlight MFX and QDC, Sadie). For more information, please download our Nagra V post-production document "Nagra V post".

# Time Code option —

The TC option (Order # 70 31120 000) offers both a synchronizer and a generator. Fully SMPTE compatible, it includes all current frame rates. The TC card can be installed at any time by a Nagra certified technician.

### Special features —

M/S decoder Available on the headphone as well as the analogue outputs

Limiter Optional limiter board on microphone preamplifier (Order # 70 31113 000)

Dithering On the AES output, dithering from 24 to 16 bits for back-up on a DAT or a CD recorder

Pre-recording User programmable up to 20 sec Camera return Stereo monitoring on a ¼" jack plug

### **Specifications**

General

Data storage medium 2.5" hard drive disk, Fat 16 / 32 formatted

Recording format Linear PCM
A/D and D/A conversion 24 bit Sigma-Delta

Sampling frequency 44,1 – 96 kHz (optional 88,2 and 96 kHz Order # 70 31145 000))

File format BWF (Broadcast Wave Format)

Filters "LFA" and "SPEECH"

**Inputs** 

Mic inputs 2 x XLR (Dynamic, "T" Powering and +48V Phantom)

Sensitivity 2, 10 and 40 mV/Pa Line input 15 pin SUB "D" connector

Line input sensitivity 1.5V to 4.4V for 0 dB recording 0.44 V to 4.4 V for 0 dB recording

Digital input Using special cable on 15 pin SUB "D" connector

External reference 15 pin SUB "D" connector or BNC. (Word clock, video etc)

**Outputs** 

Analogue line outputs 2 x XLR (4,4V max)

THD at 1 kHz 0.1 %

Frequency response 30 - 20 kHz (-3 dB in EE mode) 30Hz to 20 kHz (+0 dB -1 dB) at 48 kHz

Total dynamic range Typical 98dB

Headphone Stereo ¼" Jack Stereo with level adjustment

Digital output AES 3 pin XLR
Time Code In / Out 5 pin LEMO

Power supply

Li-ion pack 7 hours of operation (also works 5 hours on 8 "D" cells)

DC Power 6-13.8 V on 4 pin XLR's

Physical

Dimensions 290 x 220 x 115mm (11.4 x 8.6 x 4.5")

Weight 2.75 kg (6 lb) without battery box (3.5 kg with Li-ion battery / 7.6 lb) Quality control Every machine is tested:  $1 \text{ cycle} - 10^{\circ}\text{C to} + 60^{\circ}\text{C for } 12 \text{ hours}$ 

Humidity From 10% to 99% (non condensing)

# **Optional accessories** -

#### **External accessories**

| 70 19111 000 | NA-BB8B  | Battery Box for 8 "D" cells  |
|--------------|----------|--|
| 70 31110 000 | NV-LIB   | Battery box with Lithium ion battery pack 65W                      |
| 20 31150 000 | NV-PSU   | Mains power supply for NAGRA V and charger for NV-LIB              |
| 20 99190 000 | NA-SCC4  | Soft carrying case for ARES-C with Li-ion battery box              |
| 20 99197 000 | NA-SCCXL | Extra large Soft carrying case for ARES-C with 8 cells battery box |
| 70 31150 000 | HD-20G   | Removable drawer equipped with a 20 GB IDE Toshiba hard disk       |
| 70 31152 000 | HD-40G   | Removable drawer equipped with a 40 GB IDE Toshiba hard disk       |
| 70 31153 000 | HD-60G   | Removable drawer equipped with a 40 GB IDE Toshiba hard disk       |
| 20 97937 000 | HD-USB   | Adapter IDE drawer / USB2  |
| 20 97939 000 | HD-FW    | Adapter IDE drawer / FireWire (IEEE 1394)                          |
| 70 31100 000 | NV-COM   | PC software for NAGRA V (Windows version)                          |
| 70 10540 000 | ND-PCA   | RS232 / 422 adapter for linking PC to NAGRA recorder               |
|              |          |  |

#### Cables

| 20 95970 000 | CXLR-FM  | 3-pin XLR Cable male-female 1.5 m (5 ft)                             |
|--------------|----------|--|
| 20 95974 000 | C-LIN-FF | Line input adapter (15-pin mini "D" 2 XLR 3-pin female 1.5m - 5 ft)  |
| 70 31114 000 | NV-CDI   | Digital input adapter (15-pin mini "D" XLR 3-pin female 1.5m - 5 ft) |

Nagra Office

Nagravision SA

Route de Genève 22 1033 Cheseaux Switzerland

Tel + 41 21 732 01 01 Fax + 41 21 732 02 12 audio@nagra.com www.nagra.com

NAGRA V October 02 Copyright Nagravision SA