NAGRA Seven
Two channel on-the-shoulder recorder

Swiss Made

NAGRA Seven — SWITZERLAND

Screen 1 — Audio menu

Audio menu

- Inputs
- Filters
- ALC / Lim.
- Outputs
- Ref. gen.
- Meters

MIC · REC · TEST · OFF · STOP · PLAY

Screen 2

20:48:20   Int:Nagra_Seven   R 3:02:54   Ext

078   0:00:00

Scene name/15
That's just a little note
24b/48kHz Stereo (1 file)

AL: M 48V Nor Lim Fil L R
AR: L 48V Inv Lim Fil L R
DL: L R
DR: 10V   L R

48 42 36 30 24 18 12 6 0

L
R

MIC · REC · TEST · OFF · STOP · PLAY

Screen 3

ALC / Limiter | Settings | Graphic left | Graphic right

Out [dB FS]

0
-6
-12
-18
-24
-30
-36
-42

A in: 81.5 dB SPL
A out: -6.6 dB

B in: 110.1 dB SPL
B out: -2.0 dB

C in: 112.1 dB SPL
C out: 0.0 dB

In [dB SPL]
54 72 90 108 126

MIC · REC · TEST · OFF · STOP · PLAY

As simple as a smartphone
As capable as a studio recorder

Extreme quality in a compact package

The NAGRA Seven is a revolution in portable two-channel recording. The challenge was to build an extremely high quality machine that offers modern features not otherwise seen in battery operated on-the-shoulder type recorders.

At the same time, the NAGRA Seven is an easy-to-use device with next generation technology aboard. It is designed as a flexible recorder able to slide into many different applications. Thanks to a choice of different options, the modular conception of the recorder adapts it to specific user requirements.

Touchscreen, bright display, ergonomic menus

The NAGRA Seven operates using a powerful system of menus. The navigation of which is based upon that of the legendary NAGRA VI. The unit is thus driven in a tactile manner, just like a smartphone or a tablet device. Its 4" color TFT anti-reflection display is readable even in bright sunlight. Clear programmable icons render navigation particularly comfortable.

Primary functions have dedicated traditional controls: main function selector for record and replay, input level controls and headphone output. This ergonomy offers a perfect balance between hardware and software controls, minimizing the risks of manipulation errors.

New concept for the inputs: a clarity never seen before

The audio inputs are designed using an entirely new concept, equipped with fully user programmable audio limiters and AGC system and digital filters. This concept allows not only cleaner ALC and Limiters, but also simplifies the design of the preamplifiers, with two major advantages regarding the quality: a more direct audio path and thus, a clarity within the microphone preamplifiers never seen before.

Extensive features

The NAGRA Seven is certainly a compact device, yet it offers features normally only found in a studio environment. It has excellent characteristics in terms of frquency response, distorsion and signal-to-noise ratio. Standard on-board features include full iXML metadata, AES inputs equipped with a sample rate converter, AES-42 for digital microphones, 24 bit 192 kHz recording, analogue and digital inputs and outputs, Ethernet, USB 2.0 ports and an internal monitoring loudspeaker.

Nagra is one of the most recognised brands in the world with, amongst other awards, three Oscars and one Emmy. Winner of TEC award for Outstanding Technical Achievement

L   LINE OUT   R   OUT   GND 1 ⊙ HI. 3   3 Lo.   GSM / 3G
     FLOATING 4,4 V
     TIME CODE
     4   3
WCK IN   5 OUT   2 IN   WCK OUT   WIFI
          1 GND

START / STOP   ETHERNET
          GND 1 ⊙ HI. 2   USB   SD ACT.   SD CARD
          3 Lo.
          AES IN   L   MIC / LINE IN   R
─CHG
MADE IN SWITZERLAND
NAGRA TECHNOLOGIE GMBH SWITZERLAND S.A.
CH-1033 ROMANEL
CE
DC IN ─ 15V

Time Code, GSM, ISDN, WiFi, on-board editor
Everything you need to be efficient on the go

Unbeatable in-the-field
Assuring the best recordings in-the-field is only a part of what the NAGRA Seven offers. The unit has the ability not only to edit material but also to transmit files across the globe irrespective of the network types available.

A selection of internal options can be added to the base recorder adapting it to different working environments and applications.

Full time code system
A full SMPTE/EBU time code system can be installed giving all current frame rates, including the possibility to lock the clocks to all external references including HDTV rates for all modern film and television work.

Broadcast version
In the broadcast version, the Time Code slot can be changed to an ISDN board for connection to existing digital phone networks, audio compression in MPEG formats and a powerful on-board audio editor. A GSM and WiFi circuit can also be added for additional communication possibilities across the mobile phone network or direct connection to the Internet, as well as tablet control possibilities.

Extendable memories
The NAGRA Seven has two recording media. The primary is an internal micro SD card and the second an extractable standard SD card which is located on the left side of the device. There is no limit to the capacity so both cards can be changed by the user according to needs.
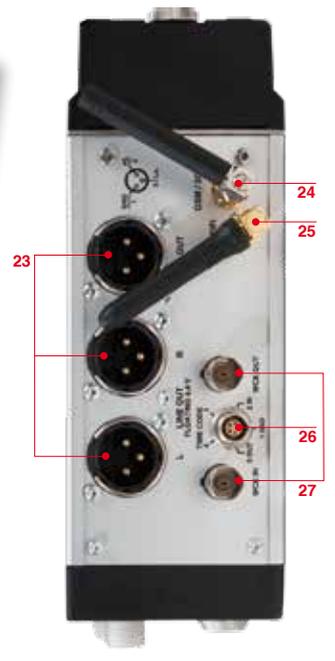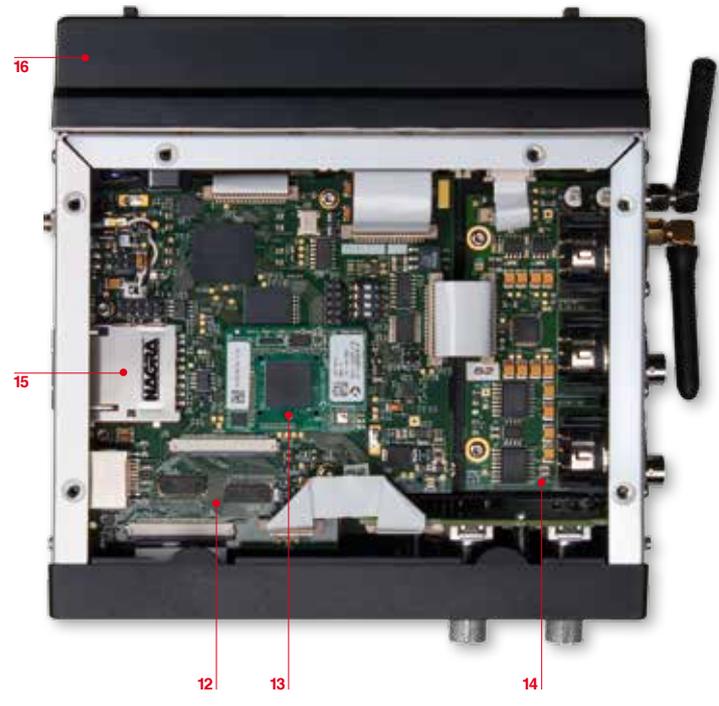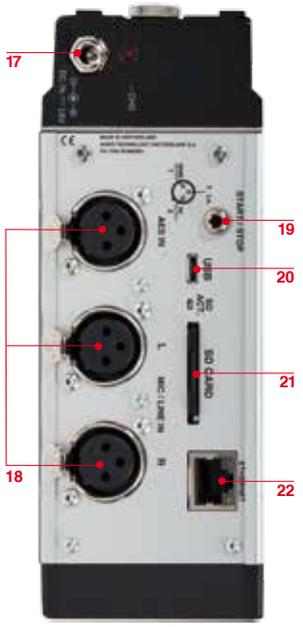
Comfortable autonomy
Powered by either rechargeable NiMh cells or the optional Lithium-Polymer battery pack the NAGRA Seven will run for 6-8 hours (depending on options used) in a small lightweight and traditionally rugged shoulder-hung format.

Environmentally friendly
All NAGRA recorders meet the stringent RoHS (anti-lead) requirements as well as the CE norms. Certification of both is available upon request. Entirely Swiss made, the design avoids unnecessary dedrimental effects on the environment.

CE ☑ RoHS

Practical quick-to-swap battery module

9

10

11

8

17

16

19

20

21

15

22

18

12   13   14

23

24

25

26

27

A faithful and reliable companion
The Swiss Nagra quality you can rely upon

1	**Display screen** 4" TFT screen. Wide viewing angle, sunlight readable, usable under a wide temperature range.	**6**	**Internal "slate" microphone**
2	**Main function selector** On/off, record, play, test	**7**	**Record LED**
		8	**Audio input circuit**
		9	**GSM/WiFi communication option**
3	**Headphone level control**	**10**	**GSM SIM card location**
4	**6.3 mm Stereo headphone jack**	**11**	**Time Code option or ISDN**
5	**Input level controls** Push to display level meter on the screen	**12**	**Digital board**
		13	**Processor board**

14	**Audio output board**
15	**SD slot**
16	**Removable battery compartiment/module**
17	**External DC supply connector with LED**
18	**Digital/Analog input connectors**
19	**Remote start/stop**
20	**Micro A/B USB port**
21	**Standard SD card slot**

22	**Ethernet port**
23	**Analog/Digital outputs**
24	**GSM antenna**
25	**WiFi antenna**
26	**Time Code in/out**
27	**Word clock in/out**

technicalspecifications

Recording

Data storage medium	Internal micro SD card
Removable media	SD card (Hot Swappable)
Disk format	FAT 16/32
Recording method	Linear digital PCM (optional MPEG 1 layer II)
File type	16/24 bit Broadcast Wave File BWF (WAV) with iXML, AES 31 compatible
A/D & D/A conversion	24-bit Sigma-Delta
Tracks	2 – individual
Sampling rate	44.1, 48, 88.2, 96, 176.4 and 192 kHz (with 0.1% pull up/down)
Recording capacity	1 hour, stereo @ 24 bit 48 kHz per GB of disk/memory
Mono/polyphonic	Selectable
Pre-recording buffer	Up to 20 seconds @ 48 kHz
Display	4" color LCD touchscreen TFT anti reflection/sunlight readable
Level meters	On color display

Inputs

Inputs	XLR AES-3/AES 42, SRC (Sample Rate Converter)
Analogue inputs	2 symmetrical XLR microphone (Dynamic, +48 V Phantom)/line
Microphone input sensitivity	2.8, 10 and 40 mV/Pa selectable
Limiters	User programmable on microphone inputs
Line input sensitivity	Adjustable from -6 dBm up to +24 dBm for 0 dBFS recording
THD at 1 kHz	<0.2% microphone, <0.01% line (measured on AES out)
Frequency response	Microphone, 10Hz – 21.8 kHz @ 48 kHz, 10 Hz – 43.5 kHz @ 96 kHz and 10 Hz – 70 kHz @ 192 kHz ± 0.5 dB; line ±0.2 dB (measured on AES out)
Input noise (condenser mic)	0.73 µV (10 mV/Pa)
Input noise (dynamic mic)	0.55 µV (measured ASA «A» loaded 220 Ω) 2.8 mV/Pa
Signal-to-noise ratio	>114 dB line
Input level adj. range	45 dB microphone and from -6 to +24 dB line
Input filters	Fully programmable frequency and slope
Slate microphone	Electret behind the front panel

Outputs

Analogue line output	XLR 4.4 V max (+15 dBm)
Digital output	XLR AES-3 (24 bit or 16 bit dithered)
Headphones	Stereo 6.3 mm (¼") Jack 50 Ω
Internal speaker	0.5 W

Other

USB port	USB 2.0 connector type micro "A/B"
Time code IN/OUT	5 pin LEMO (SMPTE / EBU)
M/S decoder	Switchable
External reference	Word Clock, video and HDTV on BNC with TC Option
Dither	Menu selectable 24/16-bits on inputs and/or outputs

General

Dimensions	175 x 65 x 185 mm (6.9" x 2.6" x 7.3 ") (W x H x D), including battery box
Weight	1.2 kg (3 lbs), without battery box
Power supply	8 X NiMh "AA", Lithium-Polymer, or external DC
Power consumption	Approximately 5 W
Charge time	3.5 hours (Lithium-Polymer pack)
Relative humidity	From 10 to 99% (non condensing)

NAGRA