NAGRA EMP portable dual microphone preamplifier

The Nagra EMP is a custom built external stereo microphone preamplifier. Using principally the same electronic circuits as the renowned preamplifiers of the Nagra VI, it runs of 4 AA batteries, or can be directly powered from the Hirose connectors of the NAGRA VI. Equipped selectable sensitivities, limiters, phantom +48V powering and vortex filters, this extremely high quality preamplifier can be used in numerous recording environments.

The Nagra EMP is a stereo / 2 channel portable preamplifier designed to give two additional preamplifier stages to the inputs of the NAGRA VI. All controls as audio limiters, filters, Phantom power, record are controlled from the front.

The front panel, chassis and features were designed using the experience of previous NAGRA recorders and render the Nagra EMP very user-friendly and comfortable to operate even in harsh environmental conditions. It is powered by a 4 AA cells giving a running time of approximately 4 hours. It is equipped with one Hirose connector allowing external power to be supplied from the NAGRA VI.

The Nagra EMP has two analogue inputs on XLR connectors, equipped with NAGRA manufactured transformers offering an improvement of +6 dB in the noise floor when set to the 2 mV/Pa (for dynamic microphones) position. These transformers are bypassed when using condenser microphones (10 and 30 mV/pa positions)

Also fitted with limiters, a low cut filter and a powerful Vortex filter which considerably improves recordings made in windy conditions.
In addition a small 2-track solid-state digital audio recorder is built-in. Equipped with a fixed 2 GB flash memory, offers a security back-up recording in-the-field. The recorder will offer about 3 hours of recording and audio files can be transferred to a PC from the miniature USB port.

Audio Technology Switzerland SA, Chemin de l'Orio 30A, 1032 Romanel-sur-Lausanne, Switzerland.
Tel : +41 21 643 7240
www.nagraaudio.com
info@nagraaudio.com

Technical specifications

Inputs

Analogue inputs	2 x symmetrical XLR Microphone (Dynamic, +48V Phantom)
Microphone input sensitivity	2.8, 10 and 30 mV/Pa selectable
Limiters	Selectable on microphone inputs, individual or in pairs. Active at -9.5dBFS, max +40dB for -2 dBFS
THD at 1 kHz	<0.15 % Mic, <0.01% line
Frequency response	10Hz - 48 kHz ± 0.5 dB
Input noise with condenser mic	0.88 µV (-119 dBm)
Noise figure	4 dB (measured ASA "A" loaded 200Ω)
Signal-to-noise ratio	>114 dB
Input level adjustment range	50 dB Mic
Input filters	LFA (with vortex filtering), Low cut
External power	Hirose 4 pin connector (9 to 13 V, 3.5W)

Outputs

Analogue line output	2 x XLR 4.4V max. , selectable 0 dBm, +6 dBm or +15 dBm
Headphones	Stereo 6.3mm (¼") Jack 50 Ω

Recorder

File type	PCM BWF or MPEG 1 L II, 16 bit, 32 to 48 kHz, Mono / Stereo
Memory size	2 GB (corresponds to 2 h 53 min in PCM BWF 48 kHz stereo)

Other

USB Host	USB 2.0 connector type "mini USB"

General

Dimensions	190 x 50 x 175 mm (W x H x D) 7.5 x 2 x 6.9 " (W x H x D)
Weight	1 Kg (2.2 lbs), including batteries
Power supply	4 Dry cells / NimH cells "AA" type or external 9 - 13V
External power consumption	Approximately 2.8 W (2 Phantom mic. & record)
Battery consumption	Approximately 2.6 W (2 Phantom mic. & record) Approximately 1.5 W at 6 V (no Phantom, no record)
Battery autonomy	Approximately 2 hours (2 Phantom mic. & record) Approximately 4 hours (no Phantom, no record)
Relative humidity	From 10% to 99% (non condensing)

Specifications are subject to modification without notice.

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