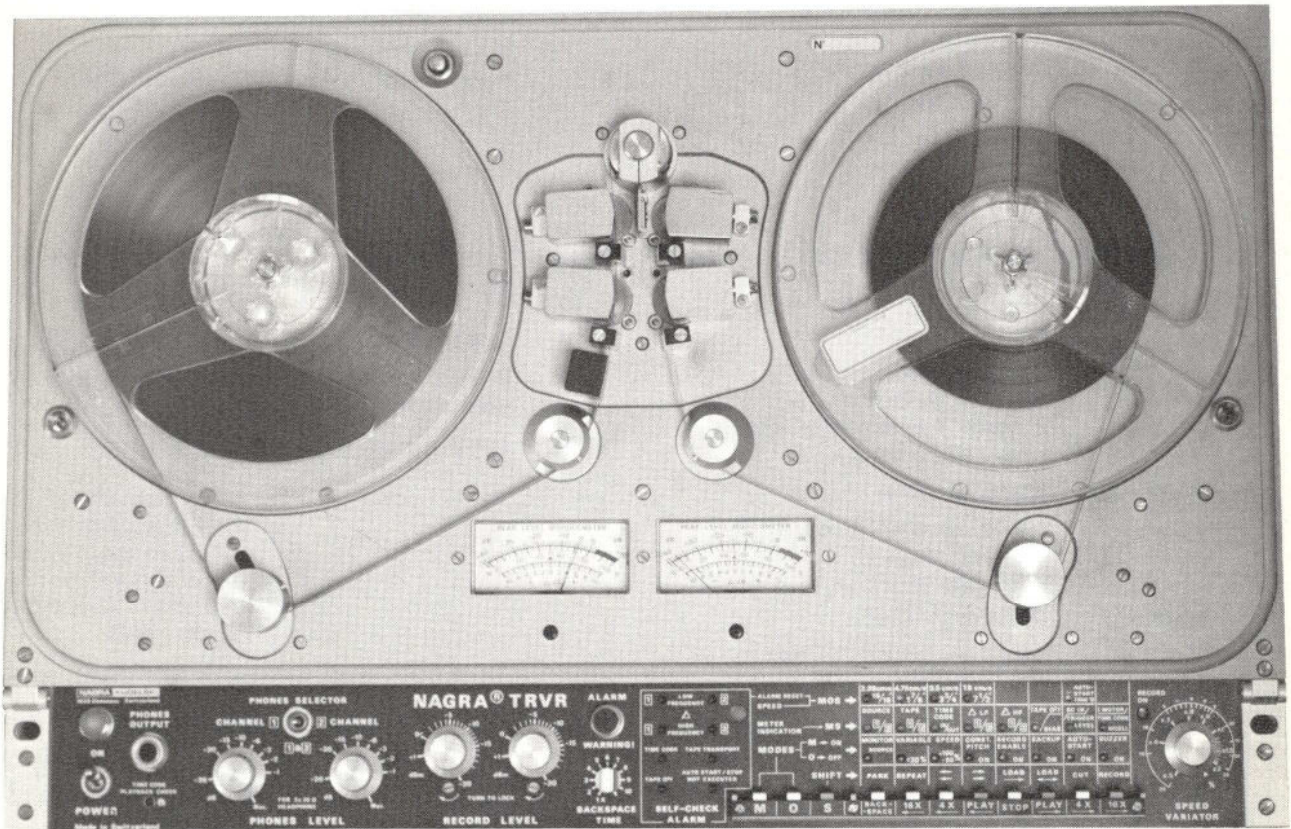


NAGRA TRVR

reel-to-reel tape recorder
for automatic long recording



- * Rack mounted
- * Two channels plus one reference track, four speeds
- * AC / DC operation
- * Excellent signal to noise ratio and response curve at lowest speed
- * Long recording time (more than 12 hours)
- * Continuous recording self-check by comparison of input signal and playback signal
- * Tape transport designed to protect and handle tape gently
- * Autostart by input signal
- * Full remote control with positive operation display facilities
- * High working security due to keyboard locking device
- * Bi-directional servo-controlled tape drive
- * End of tape sensing
- * Multiple tape processing facilities
- * Built-in time compressor / expander
- * Built-in time code generator (IRIG B)
- * Cascade starting of supplementary stand-by recorders on alarm signal
- * Numerous maintenance facilities

NAGRA KUDELSKI

provisional sheet

KUDELSKI S.A.

Nagra Tape Recorder Manufacture

CH-1033 Cheseaux-sur-Lausanne

SWITZERLAND

SPECIFICATIONS

GENERAL CHARACTERISTICS

Size	19 ins x 12.25 ins x 12.5 ins
Mounting	standard 19ins rack
Weight	16 kg
Power supply	20 to 30V DC
Power consumption	about 800mA (without accessories)
Operating temp.	-20 to + 70° C

TAPE TRANSPORT CHARACTERISTICS

Tape transport	single capstan without pinch-wheel
Heads	2 stereo heads for audio record and playback 2 heads for reference signal record and playback
Audio track width	2 mm. (0.08ins)
Tape speed	4 bi-directional speeds, 2.38 cm/s to 19cm/s (15/16ips to 7½ips)
Tape width	6.25mm (1/4ins)
Tape thickness	18μ to 50μ (0.5mil to 1.5mil base)
Recording time	up to 12h 30min at 2.38 cm/s, 18μ tape on 17.8 cm reel
Max. reel diam.	17.8cm (7ins)
Speed accuracy	better than ±0.1%
Start time	less than 0.1sec. at all speeds
Winding time	about 10 minutes for 1'100m. (3'600 ft)
Wow and flutter (peak flutter)	at 3 3/4ips < 0.07% at 1 7/8ips < 0.09 % at 15/16ips < 0.15 %

LINE INPUT

Sensitivity	77.5mV
Input impedance	AC > 1,5M Ω 250Hz DC > 39MΩ

Autostart activation characteristics :

- DC signal, by threshold level adjustment from 0 to 60V
- AC signal, by internal adjustment from 7 to 200 mV, adjustable stop time delay (0.5 s. to 4 min)

Common rejection mode ratio: 60dB at 60Hz

OUTPUTS

Assymetrical line	0.775V on 600 Ω load
Headphones	Adjustable 0,3V max on 2 x 25 Ω 2V max on 2 x 400 Ω

RECORD / PLAYBACK

Reference level	0dB = 250nWb or 25mM
Response curve	± 3dB at -20dB
at 15/16ips	from 170Hz* to 5'000Hz
at 1 7/8ips	from 170Hz* to 10'000Hz
at 3 3/4ips	from 170Hz* to 15'000Hz
at 7 1/2ips	from 170Hz* to 17'000Hz *can be extended to 30Hz
Distortion	H3 < 2% at 0dB H3 < 3% at +2dB
Built-in compressor	accomodating peaks of 8dB over +2dB
Erase efficiency	better than 75dB
Signal to noise ratio	
ASA A weighted	50dB at 15/16ips 55dB at 1 7/8ips 58dB at 3 3/4ips
Crosstalk at 3 3/4ips	
	at 1 kHz > 50dB at 10 kHz > 40dB

THIRD TRACK

Input sensitivity adjustable from 25mV to 10V
Built-in time code clock in accordance with IRIG B standard optional

SELF - CHECK ALARM FEATURES

Audio tracks	by comparison of record and playback signal levels over two frequency ranges, LF centered on 1kHz and HF on 3 kHz. Alarm is given if the difference is outside ± 5dB
Third track	alarm is given if the playback signal level is outside +10dBm, -20dBm
Tape transport	capstan servo-motor out of its capture range or tape slippage exceeding ± 4%
Tape quantity	by comparison of supply spool speed and counter roller speed. (internal adjustment from 4% to 86 %)

Autostart not executed: Autostart function failure
Alarms condition or failure of main functions automatically initiates start code to back up TRVR.

METER FUNCTIONS

Two meters give the following indications:

- input and output signal level (dB)
- time code input or output signal level (dB)
- difference between recorded and playback signal
- HF bias level (for bias adjustment)
- Remaining tape quantity on supply spool (%)
- Chosen DC start level and effective DC input level (V)

KUDELSKI S.A.

Nagra Tape Recorder Manufacture
CH-1033 Cheseaux/Lausanne
Switzerland

phone (021) 91.21.21. telex 24392 nagrach

NAGRA KUDELSKI