

Recorder-Reproducer AN/GNQ-2 is ground equipment which records in a similar manner as associated airborne recorder AN/ANQ-2. In addition, it provides playback by means of a pickup, amplifier and loudspeaker.

Recordings are made by embossing on a cellulose acetate disk with a special wax surface treatment. The disk is 0.010 inch thick by 7 inches in diameter. The disk is driven by an off-center pin which engages a hole in the disk and one of a series of corresponding off-center holes in the turn-table. The drive pin is mounted on a spring-loaded record clamp which holds the disk on the turn-table. The embossing stylus consists of a sapphire point (tip radius 0.0015") on an aluminum alloy shank 3/4 inch long by 0.063 inch diameter. Turntable speed is 11.75 r.p.m., line spacing 210 lines per inch, and recording time 30 minutes on each side of the disk. The outer and inner groove speeds are 4.2 inches second and 2.1 inches second, respectively.

The magnetic recording head is mounted on a short counter-balanced arm which is pivoted at its center of gravity. The recording head arm is spring-loaded, and the vertical force at the stylus is approximately 5 ounces. The recording head carriage is driven by an overhead feed mechanism of conventional design.

The turntable is driven by a rubber-rimmed idler which engages the bottom surface of the turntable. The idler is driven by knurled drive wheel which is driven, through a flexible coupling, by a gear reduction box built into the motor. The motor is a 115 volt induction motor with a rotor speed of 1700 r.p.m.

The turntable consists of two halves joined by a sponge rubber pad. The upper half is supported on a stainless steel shaft which rests in a journal assembly consisting of two Oilite sleeve bearings and a single ball bearing at the bottom.

The pickup is a crystal type cartridge and is mounted on ball pivots on a carriage which is moved by a feed screw which is out on the same shaft as the recorder feed screw. The cartridge mounting is pivoted at its cen-

ter of gravity and spring loaded, with vertical force at the stylus approximately 3/4 oz.

The equipment operates at a nominal voltage of 115 volts, 60 cycles per second and draws approximately 0.6 ampere when the motor is running. Standby current is 0.3 ampere.

AN/GNQ-2A differs slightly from GNQ-2 in that a 6V6GT tube replaces on 6SJ7GT, the radio switch is removed, and includes microphone M-9/V, mounting MT-335/V, cord CV-583/GNQ-2A and case CY-87/GNQ-2.

Test equipment require for maintenance includes general purpose testing equipment, such as multi-meters and tube testers.

Army Supply Program requirements as of 30 November 1944 were for 96 AN/GNQ-2 for the calendar year 1945; and 270 AN/GNQ-2A for 1944 and 100 for 1945.

POWER INPUT	115 VOLTS A.C.
FREQUENCY	AUDIO
TYPE OF SIGNAL	VOICE
RECORDING TIME	30 MINUTES (ONE SIDE).
TURNTABLE SPEED	11.75 R.P.M.
FREQUENCY RESPONSE	WITHIN 3 DB & 12 DB
SIGNAL TO NOISE RATIO	32 DB AT 1000 C.P.S.
LINE SPACING	210 LINES PER INCH

TUBE COMPLEMENT			
NO.	TYPE	NO.	TYPE
2	6SJ7	1	6X5
1	6V6GT/G	1	NE-45 NEON



Recorder-Reproducer Lid



Dynamic Microphone



Recorder-Reproducer

RECORDER-REPRODUCER AN/GNQ-2

TOTAL WEIGHT 79 LBS

Component	Nomenclature	Size	Weight
Recorder-Reproducer Unit	RD-5/GNQ-2	10" x 12" x 11"	27 lbs.
Case	CY-87/GNQ-2	12" x 12" x 13"	18 lbs.
Recording Disc.	MX-119/GNQ-2	0.010" by 7" Diam.	
Loudspeaker	LS-107/GNQ-2	3" x 6" x 9"	3 lb
Mounting	MT-279/GNQ-2		
Microphone	T-17		
Headset	HS-33		

and includes a set of operating accessories

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