



AN/TRC-3(x)

Figure 23. Radio Terminal Set AN/TRC-3, components.

Status: Standard. *Stock No.:* 2S5002-3. *Reference:* TM 11-2601.

Radio Terminal Set AN/TRC-3(*) represents Radio Terminal Sets AN/TRC-3, -3A, -3B, -3C, -3D, -3E, -3F, and -3G.

Radio Terminal Set AN/TRC-3(*) consists of two Radio Receivers R-19/TRC-1(*) (one in use, one spare), two Radio Transmitters T-14/TRC-1(*) (one in use, one spare), three Antenna Systems AS-19/TRC-(*) (two in use, one spare), four Power Units PE-75 (two in use, two spare), and accessory components and spare parts for maintenance.

The components of Radio Set AN/TRC-3(*), except in quantity, are identical with those used in Radio Sets AN/TRC-1, -1A, -1B, -1C, -1D, -1E, -1F, and -1G.

This equipment is intended for operation at the terminals of single or multichannel radio-relay systems when continuous operation is required.

Components not in use are running spares which are supplied to insure uninterrupted service in case of failure of a major component.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: 70 to 100 mc (300 channels).
NUMBER OF CRYSTALS: 964. (Bank of 900 on 300 frequencies, plugs 64 crystals on 16 *basic* frequencies.)
PRESET FREQUENCIES: 1 receiving and 1 transmitting.
ANTENNA: 3-element directional array (included in Antenna System AS-19/TRC-1(*). Normally mounted 40 ft above ground.
TYPE MODULATION: Frequency.
FREQUENCY CONTROL: Crystal (receiver and transmitter).
POWER SOURCE: 115-v, 60-cyc a-c commercial power of Power Unit PE-75. Test Set I-56-K: 1 each Batteries BA-2, BA-30, and BA-31. Telephone EE-8: 6 Batteries BA-30.
POWER OUTPUT: High power: 50 w. Low power: 10 w.
RANGE: 25 mi per link (line of sight).
NUMBER OF TUBES:
 Radio Receiver R-19/TRC-1(*): 17 (in each).
 Radio Transmitter T-14/TRC-1(*): 11 (in each).

GENERAL APPLICATION

USE: To provide a single or multichannel *terminal* of radio-relay system when continuous operation is required.
TO COMMUNICATE WITH: Radio Set AN/TRC-1(*), Radio Terminal Set AN/TRC-3(*), Radio Relay Set AN/TRC-4(*).
INSTALLATION: Transported by vehicle. Installed and operated on ground.
TYPE OF SIGNAL: Voice (f-m)

PRINCIPAL COMPONENTS

Name	Dimensions (in.)	Weight (lb)
2 Radio Receivers R-19/TRC-1(*) (1 in use, 1 spare).	8 x 19 $\frac{1}{8}$ x 12 $\frac{3}{4}$	43 ea
2 Radio Transmitters T-14/TRC-1(*) (1 in use, 1 spare).	10 $\frac{3}{4}$ x 19 $\frac{1}{8}$ x 12 $\frac{3}{4}$	66 ea
1 Antenna System AS-19/TRC-1(*) packed in:		
3 Cases CY-29/TRC-1(*) (2 in use, 1 spare)	13 $\frac{1}{4}$ x 72 x 17 $\frac{1}{2}$	380 ea
3 Cases CY-30/TRC-1(*) (2 in use, 1 spare)	13 $\frac{1}{8}$ x 33 $\frac{1}{2}$ x 16	90 ea
(Radio Terminal Sets AN/TRC-3F and -3G use a directional antenna packed in Case CY-443/TRC-1(*), Bag BG-102. and Carrying Frame CY-445/TRC-1(*)).		
4 Power Units PE-75 (2 in use, 2 spare)	26 $\frac{1}{2}$ x 36 x 19 $\frac{1}{2}$	330 ea

WEIGHT AND VOLUME

	Unpacked	Export pack
Total weight (lb)	2,560	3,150
Total volume (cu ft)		132
Ship tons		3.3