

TRC 9710A

Tactical Data Terminal



- Secure transmission of alphanumeric messages over the PR4G VHF or SYSTEME 3000 HF networks
- Remote control of main PR4G VHF or SYSTEME 3000 HF transceiver functions
- Management of initial data (frequencies, keys, ...) required by PR4G networks
- Terminal designed for use with weapon systems and for protected data transmission by specialist units :
 - ✓ portable equipment
 - ✓ highly autonomous operation
 - ✓ compatible with tactical use
 - ✓ secure operation



The TRC 9710A is a military tactical data terminal (TDT) designed for the secure transmission of alphanumeric messages over HF or VHF channels.

In addition to its messaging functions, it can also be used to remote-control the transceivers in conjunction with which it operates as well as manage the initial traffic elements used to set up the VHF networks.

TRC9710A can be used with the PR4G VHF transceivers or the HF stations based on the TRC 3500. It is composed of common basic hardware into which can be loaded VHF software allowing it to be used with the PR4G transceivers and/or HF software allowing it to be used with a TRC 3500.

The TRC 9710A has been designed for daytime or night time operation, under all battlefield environmental conditions, as a portable or installed in a vehicle.

Tactical messaging

The TRC 9710A is used to edit and transmit free text or formatted alphanumeric messages.

Messages are created on the TRC 9710A terminal by the operator through a simplified word processing system. These messages are stored in memory.

Special formats, composed of fixed and variable fields, are typed on the keyboard. They can then be duplicated by cable into another TRC 9710A.

When a formatted message is being created, only the variable parts of the message are entered by the operator, and then transmitted. The entire message is shown on the receiving terminal.

The messages are in plain language or encrypted and are transmitted over HF or VHF networks via the transceiver connected to the TRC 9710A. The messages can be transmitted to a single party in the point-to-point mode or to all stations in the network.

In point-to-point transmission, the TRC 9710A is able to repeat the message as long as an acknowledgement has not been received (limited to three transmits in all). Error correction is achieved by blocks.

When the message is received, the operator is warned by either a buzzer or a visual signal (LED). These signals can be disabled separately.

A file log allows the operator to keep a record of the messages or alerts received or sent.

The TRC 9710A also allows memory zone status to be examined at any time as well as providing for the consultation, modification, printing, or destruction of the memorized messages.

Remote-operation of transceiver connected

TRC 9710A can remote-control the HF or VHF transceiver on which it is connected. This function is particularly useful if the transceiver is inaccessible.

Two types of functions are remote-controllable : access to pre-defined parameters (channel, transmission power ...) and access to services (alert transmission, selective call, authentication, ...)

Management of VHF network initial data

The TRC 9710A can memorize the initial data of up to 250 different networks plus 15 additional networks. It can transmit all or part of these data for use by the connected PR4G transceiver.

Basic unit composition

The unit consists of:

- a TRC 9710A tactical data terminal,
- a carrying harness for portable operation,
- a transceiver connection cable (1.5 meter),
- a Nicad battery pack,
- an operating manual.

Connection to peripherals

A TRC 9710A can be connected to a simple or smart handset (TRC 9750A) to communicate in voice.



Connection to another TRC 9710A allows message, format, or VHF initial data duplication.

Moreover, for VHF initial data loading in the TDT, this one can be connected to a

Frequency and Key Management Unit (TRC 9720), a Frequency and Key Copy Unit (TRC 9722), to a fill gun (TRC 9724) or to another TRC 9710A.

TRC 9710A

Characteristics

Messaging

Message size	1000 characters
VHF memory zones	
Transmit memory	5000 characters
Receive memory	5000 characters
Formats	2000 characters, limited to 100 fields
HF memory zones	
Transmit memory	5000 characters
Receive memory	5000 characters
Formats	2000 characters, limited to 100 fields
Maximum number of messages or formats per zone	50

Operation

Display	Six 16-characters lines + one control line
Keypad	52 alphanumeric keys
Night use	Display and keypad back-lit

Management of VHF initial data

Capability of memorizing initial data of 250 networks + 15 additional networks

Security

Emergency clearing
Anti-tampering switch

Interface

MIL-STD-188-114 or RS 232

Power

Power source	Nicad battery or lithium pack
	Voltage 5.5 V to 12 V
Remote supply	Possible from transceiver
	Remote supply voltage 10.5 V - 33 V
Protection against transients, interference, and current surges	
Backup battery for saving initial data and memory zone contents	

Mechanical characteristics

Dimensions without battery	Height	243 mm
	Width	100 mm
	Depth	50 mm
Weight	1.2 kg	
Volume	1 liter	

Environmental characteristics

Temperature range	Operational between - 40° C and + 70° C
Relative humidity	93 % at + 40° C
Watertight	To up to 1 meter
Shock-resistance	50 g / 11 ms
Vibration-resistance	40 g / 6 ms
Altitude operation	- 40° C at 570 mbar

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