

AT PRC-3088 Tactical VHF Handheld Transceiver

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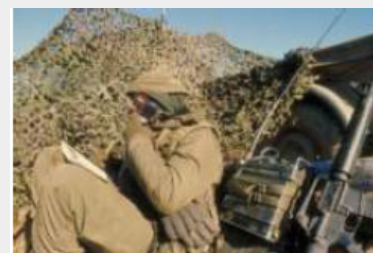
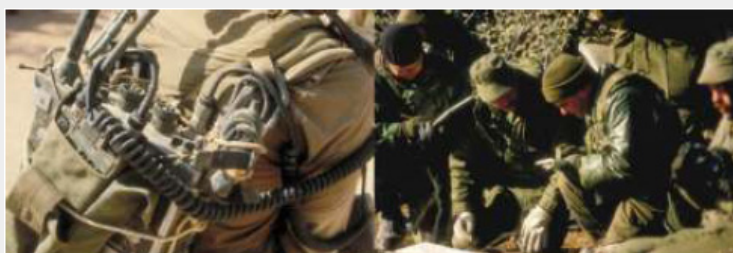
Description

AT PRC-3088 series transceivers are available in two modifications in analogue and digital. AT PRC-3088 is analog radio and AT PRC-3088D is Digital radio with recording/playing function.

AT PRC-3088 VHF Handheld Transceiver is modern tactical radio designed for military environments. The AT PRC-3088 is fully compatible with legacy VHF radios such as the AN/PRC-77 or AN/VRC-12. It provides reliable voice and data communications over the entire military band of 30 to 88MHz in 12 or 25KHz steps. The AT PRC-3088 is capable of communicating in voice and data modes and is able to secure communications with an in-built scrambler. The AT PRC-3088 has selectable tone signaling and contains 3 scanning options. The AT PRC-3088 has passed independent environmental testing to Mil-Std 810 and to Mil-Std-461C to assure reliability and durability.

AT PRC-3088D is the latest generation VHF handheld radio (Analog/Digital Dual Mode) developed in 2005 for tactical environments. It is fully compatible with the old generation radios (in Analog mode) such as AN/PRC-77 or AN/VRC-12 but it provide more reliable services meets MIL-STD requirements and strict environmental standards.

The AT PRC-3088 series transceivers delivers low cost of ownership, and meet the most demanding user requirements. The AT PRC-3088 is backed by worldwide warranty support.





Full Military Band

The AT PRC-3088 offers handheld tactical communications in the full military frequency range of 30-88MHz. There are 2321 available channels with 25KHz steps as well as optional 12KHz step mode offering a total of 4642 available channels

Programmable Channels

Up to 10 channels are can be programmed in to memory. This includes tone, output power and scrambler settingsindividually programmable for each channel.



CTCSS and DCS Tone Signalling

In addition to 150Hz tone signalling there is a built in 38 CTCSS (Continuous Tone Code Squelch System) and 83 DCS (Digital Code Squelch) system available for communications group set up.

Built in flash for recording/playing function (only in PRC-3088D)

Recording is available both in analog and digital mode. Press "1" or "2" to go to play next or previous section. If the section is last one, it will go back to play the first section. The recording time of each section is approximately 1 minute.



Whisper Function

The AT PRC-3088 has a whisper mode which allows amplification of voice input for covert operation

Function Keypad

A convenient front panel keypad allows access to commonly used functions as well as advanced function menus. Frequency can be selected via direct frequency selection.



PC Connection

The AT PRC-3088 is an advanced data radio capable of communications between computers. An RS2323 connection is available between radio and computer.

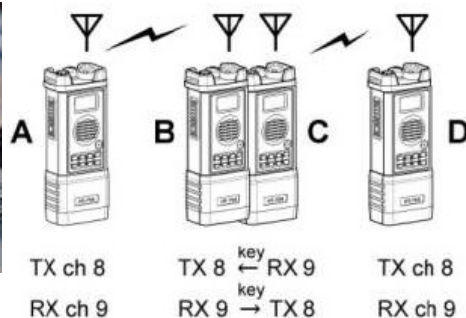


Built in Dynamic Antenna Matching Circuit

Enables various antenna lengths to be deployed on the AT PRC-3088 without tuning for each frequency.

Repeater Mode

The AT PRC-3088 can provide simple field configurable range extension using the repeater capability.





PC Programming

Radios can be conveniently programmed using a PC configuration software module.

LCD Backlight

A programmable LCD backlight is provided for night operations.



PRC-3088 Scrambler

Optional Accessories

Battery

BP-5AA Battery Case: AA(R6) x 5 Alkaline Cells

BP-18L Lithium Ion Battery Pack 7.4V 1850mA. 12Hour (1:1:8)

BP-21L Lithium Ion Battery Pack 7.4V 2150mA. 15Hour (1:1:8)



Rapid Charger

BC-15 Charger and BA-15 Wall Adaptor. Rapid and Slow Charge.
BP-18L in 2 Hour Fast Charge and 5 Hours Slow Charge



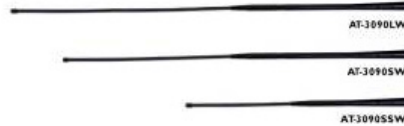
External Speaker Microphone

SM-200WP Water proof speaker microphone



Optional Antenna

AT3090LW 80cm Flexible Whip Antenna 30-88MHz
AT3090SW 70cm Flexible Whip Antenna 30-88MHz
AT3090SSW 45cm Flexible Whip Antenna 30-88MHz



Multi-Function Carry Case

Helps protect the PRC-3088 from scratches, grime and water



Technical Specification

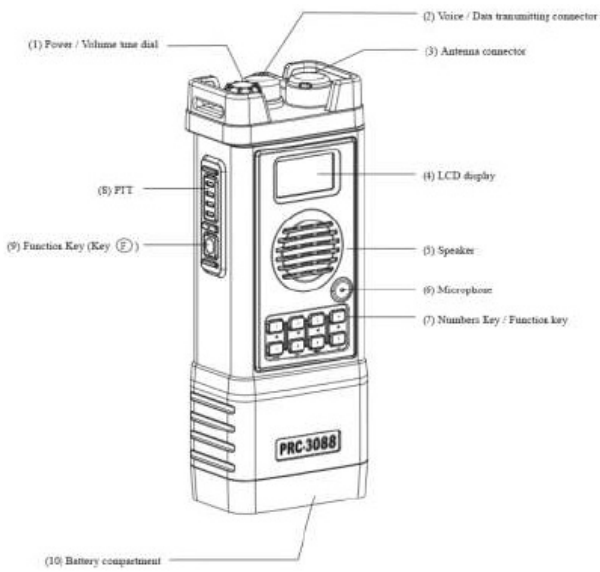
GENERAL		Transmitter	
Frequency coverage	30.000-88.000 (full range)	RF output power	0.5-1.5 Watt, with APC
Channel spacing	25KHz / 12.5KHz (Option)	Modulation system	Variable reactance frequency modulation
Number of channels	2321 74642 (12.5KHz)	Max. permissible deviation	±5KHz / ±2.5KHz (12.5KHz)
Number of preset channels	10	Spurious emissions	63 dBc
Power supply requirements	7.4V DC (supplied battery pack)	Harmonic Radiations	Better than 40 dBc (2nd)
Current drain (approx)	Standby Less than 60mA (Power save model) Less than 140mA (Normal mode) RX (middle volume) Less than 250mA TX (More than 1 Watt) Less than 800mA		Better than 55 dBc (4th and above)
		Audio distortion	5% typical
		Receiver	
		Receive system	Double-conversion superheterodyne
Built-in tone signaling	38 CTCSS, 83 DCS or 150Hz tone	Intermediated frequencies	1st 130.05MHz, 2nd 450KHz

Built in modem	1200/2400bps MSK modem with FEC	Sensitivity (12dB SINAD)	0.4uV (typical)					
Frequency error	±3ppm	Squelch sensitivity IF	0.4uV (at threshold)					
PC Interface	RS232C/E	IF Rejection	Better than 65dB					
Antenna port	Built-in antenna matching network. An extra SOD output provided (For booster or testing use.)	Image Rejection	Better than 70dB					
		Adjacent channel	60dB (typical)					
		Intermodulation	60dB (typical)					
Protection against	Over heat/current of PA	Audio output power	250mW typical at 5% distortion with an 16Ohm load					
Mechanical and Environmental		Applicable U.S. Military Specifications						
Dimensions (with BP-18L)	173 x 63 x 42.5 mm (H x W x D)	AT PRC-3088 meets the MIL-STD requirements and strict standards as below						
Weight (approx.)	480g (with BP-18L)	Standard	MIL810C	MIL 810D	MIL810E			
			Method	Proc. Method	Proc. Method	Proc.		
Usable temperature range	-30°C to +65°C	Low Pressure	500.1	I	500.2	I	500.3	I
		High Temp.	501.1	I	501.2	I, II	501.3	I, II
		Low Temp.	502.1	I	502.2	I, II	502.3	I, II
Environmental	per MIL-STD-810 High Temp, Low Temp, Low Pressure, Immersion, Humidity, Salt fog, Vibration & Drop 1 meter depth of water for 2 hours	Humidity	507.1	I, II	507.2	II, III	507.3	II, III
		Salt Fog	509.1	I	509.2	I	509.3	I
		Vibration	514.2	VIII	514.3	I	514.4	I
		Immersion	—	—	—	—	512.3	I
		Shock	—	—	516.3	IV	516.4	IV
		PRC 3088 also meets RS03 of MIL-STD-461C .						
		Measurements made in accordance with TIA/EIA-603.						
		All stated specifications are subject to change without notice or obligation						
EMI/EMC	Meets MIL-STD-461C							



Display Panel

1. Transmitting Indicator. Indicates PTT is activated and transceiver is transmitting.
2. Receive Indicator. Indicates when receiving signal.
3. Battery capacity display : Indicates the battery capacity, blinks when battery power is low
4. Scramble display : Indicates voice scrambler is on
5. Key lock : Indicates when key lock is enabled
6. Tone Mode : Indicates the tone signalling mode
7. Volume : Indicates volume level
8. Output power : Indicates output power (high or low)



- 9. Data : Indicates data is transmitting
- 10. Channel space : Indicates the channel space (default value is 25KHz)
- 11. Frequency : Indicates frequency
- 12. Channel storage : Indicates the stored channel number

[AT PRC 3088 User Guide](#)

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