



MODEL TNC-506 5 WATT 6 CHANNEL TRANSCEIVER

USES

- INVENTORY CONTROL • PORTABLE INTERCOM SURVEYING • SECURITY GUARDS • STOCKYARDS CONSTRUCTION • EXPLORATION • CIVIL DEFENSE • DETECTIVES • POLICEMEN • FIREMEN
 - MINING
 - FARMING

OPERATING INSTRUCTIONS

- 1. Open back cover and insert 8 penlite batteries, carefully observing polarities. Check to see that batteries are firmly seated.
- 2. Extend the telescopic antenna to its full length for maximum distance.

CAUTION: Failure to extend the antenna fully for all operations could result in eventual damage of the output power transistor.

- 3. Turn the "ON OFF & VOLUME" switch to "ON" position. Your transceiver is now ready to operate. Adjust volume to desired level.
- 4. The variable squelch control reduces background noises and keeps interference at a minimum between calls. Caution should be taken in setting squelch control so as not to reduce receive signal.
- This transceiver is equipped for six channel operation. One set of crystals are installed in the unit. Additional crystals may be installed for the other open channels. Make sure the switch is set to desired channel.
- 6. Press the "PUSH-TO-TALK" switch for transmitting.
- 7. Release the "PUSH-TO-TALK" switch for receiving.
- 8. When transmitting, speak clearly in normal voice, holding the transceiver about 3 inches from your mouth.
- 9. When receiving, adjust the volume control and squelch control for best reception and desired listening level. For private listening, or when receiving in noisy locations, use the earphone.
- 10. For best transmission and reception, antenna should be held in vertical position.

OPERATION RANGE

Your TNC-506 is a fine piece of high frequency equipment. The operating range can be several miles, depending upon terrain, obstacles, climatic conditions and the type of equipment used with this unit.

By using this model with a base station or mobile unit, this range can be greatly increased.

Your TNC-506 is completely transistorized and crystalcontrolled portable transmitter and receiver.

It is designed to operate in the 27 MHz. citizens band.

BATTERY SAVER SWITCH

TO extend battery life, use unit with battery saver switch to the "LOW" position (2 Watt) for short range communications. For long range use, move switch to the "HIGH" position (5 Watt).

CHARGE POWER SWITCH

This must be kept on the "PWR" position for normal use. Only when you desire to recharge nickel-cadmium batteries should the switch be moved to the" CHG" position. CAUTION : The TNC-506 will not operate if the "CHARGE-POWER SWITCH" is in the "CHG" position.

EXTERNAL MICROPHONE

This is provided so you may use an external microphone. Any (200 ohms) microphone can be used by plugging its terminal into this jack.

P. A. JACK & SWITCH

A "PUBLIC ADDRESS SYSTEM" is available on your TNC-506 transceiver. Connect any standard 8-ohm PA speaker to the PA jack and move the PA switch to the "PA" position. You are then ready to broadcast over the PA speaker by simpply depressing the "PUSH-TO-TALK SWITCH" NOTE: Your TNC-506 will not transmit if the PA switch is in the "PA" position.

After use, always return this switch to the "OFF" position.

SPEAKER JACK

This is provided so you may use an external speaker or private earphone.

Any 8-ohm speaker can be used by plugging its terminal into this jack.

The built-in speaker in the unit is then automatically disconnected when using an external speaker or earphone.

ANTENNA JACK

External Antennas, either mobile or base antennas may be plugged into this jack and will increase the unit's range. The built-in antenna is not extended when an external antenna is being used.

CHARGE/POWER JACK

This jack allows charging of rechargeable batteries without removing the batteries from the unit.

This jack allows the use of an external 12 volt DC power source such as a 12 VDC adapter or your car battery.

BATTERY METER

Your TNC-506 is equipped with a 3-way meter. It automatically monitors (a) battery condition, (b) incoming signal levels in 0-10 range, and (c) power output. To use as a battery meter simply abvance the "ON-OFF VOLUME CONTROL" to the "ON" position. If the meter remains in black area, the batteries are in good condition. To monitor incoming signal levels simply advance the "VOLUME CONTROL" to the desired level. The meter will now indicate from 0-10 depending on the strength of the incoming signal. To read power output, simply depress the "PUSH-TO-TALK SWITCH"

SPECIFICAT IONS

A. Semiconductor Complement	: 14 Transistors, 6 Diodes, 3 Varistors.
B. Frequency	6 Channels. 27 MHz Citizen's Band.
C. Input power	: High power position-5.0 Wattes. Low power position-2.0 Wattes.
D. Output Power	: High power position 2.8 Wattes. Low power position 1.0 Wattes.
E. Transmitter	3 stage with crystal controlled oscillator high efficiency modu- lation, RF power metering.
F. Frequency Tolerance	:± 0.005 %.
G. Receiver	Crystal controlled superhete- rodyne type with tuned RF, 3 IFT's, ANL, AGC, variable squelch, push pull audio, signal level metering.
H. Intermediate Frequency	: 455 KHz.
I. Receiver Sensitivity	: 1 uV for 10 dB S/N.

J. Selectivity	: 30 dB at \pm 10 KHz.
K. Squelch Sensitivity	: 1.5-100 uV.
L. Controlled	 On/Off volume, variable squelch, push-to-talk, power/chage, P.A, battery saver, channel selector.
M. Accessory Jacks	: External microphone(200 ohms), earphone/ external speaker(8 ohms), external antenna (50 ohms), external power/charge. (12 V DC.)
N. Isolated Chassis	: Yes.
O. P.A Output Power	: 4.0 Wattes at maximum.
P. Power Sourth	: (8) 1-1/2 Volt pen light cells, external power. 12 Volts DC,
Q. Antenna	: 13 Sections-60" Telescopic, external antenna.
R. Speaker / Microphone	:2-1/4" Dynamic (8 ohms)
S. Unit Size	: 9-1/4"(H)x3-1/8"(W)x2-1/2"(D).
T. Unit Weight	:2 1bs. 2 ozs(approximately).
U. Accessories	: Texon carrying case, shoulder strap, earphone with pouch.

