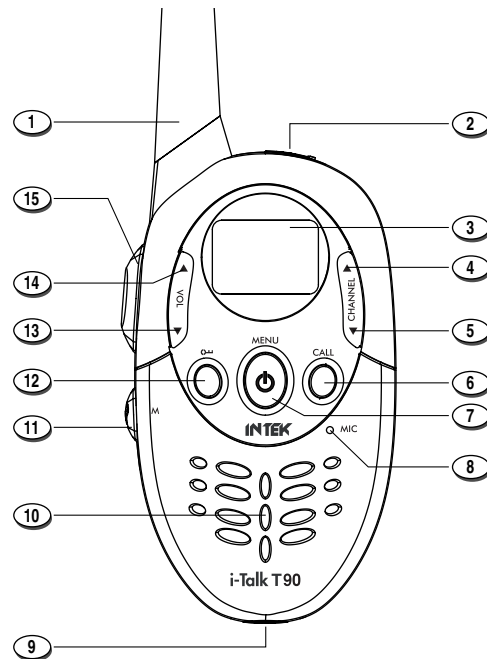


# INTEK

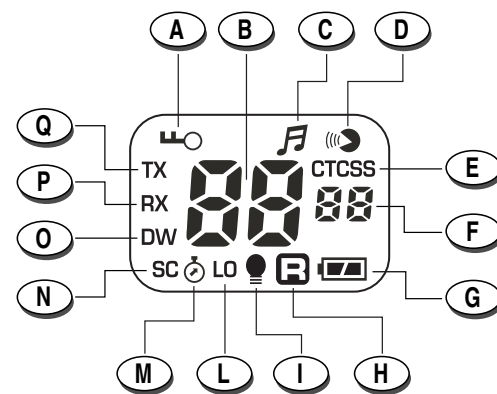
## i-Talk T90

### WALKIE-TALKIE PMR446 8 CHANNELS



#### KEYS AND CONTROLS

- High efficiency antenna
- External earset-microphone jack
- Backlight LCD display, with indication of used Channel, CTCSS tone and all enabled functions
- UP Key
- DOWN Key
- CALL Tone Key
- ON-OFF / MENU Key
- Built-in Microphone
- 230VAC Charger Jack
- Built-in Speaker
- LAMP/MONITOR Key
- Keypad LOCK Key
- Volume Down Key
- Volume UP Key
- PTT (Push-To-Talk) Key



#### LCD DISPLAY

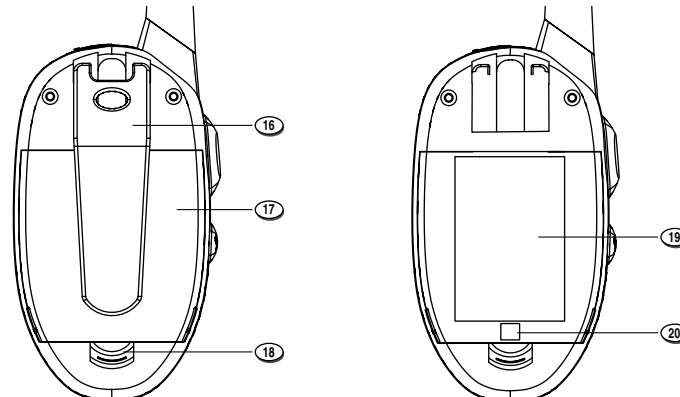
- Keypad LOCK Icon
- Selected Channel Indication (1-8)
- Keypad Beep Tone Icon
- VOX (handsfree use) icon
- CTCSS Icon (this feature is not available on this model)
- CTCSS Code number (1-38)
- Battery Status Indicator
- R Icon - Roger Beep function
- Power Save function Icon
- LO Icon - Transmitter Low Power Icon
- Stop Watch function Icon
- SCAN Icon - automatic channels or CTCSS Code scanning
- DW Icon - Dual Watch function
- RX Icon - is lighted when the radio is in receive mode
- TX Icon - is lighted when the radio is in transmit mode

#### CONTENTS OF THE PACKAGE

Please carefully check that the package contains the following items :

- 2 x i-Talk T90 Walkie-Talkie
- 2 x Li-Ion rechargeable Battery Pack
- 1 x 230VAC double charger
- 2 x Belt Clip
- 2 x Earsets-microphones
- 1 x User Manual

#### INSTALLING AND CHECKING THE BATTERY



- Remove the belt clip (16).
- Remove the battery door (17), by sliding the lock tab (18).
- Insert the battery connector in the connector (20) located inside the battery compartment and install the battery pack (19).
- Re-install the battery door (17) and press it downward until the block system (18) make a click.
- Re-install the Belt Clip.

When the battery capacity is low, the **bA Lo** indication and the battery status icon (G) will flash on the LCD display (3). Recharge the battery pack at this time. Please refer to the following item "BATTERY CHARGING".

#### Battery Charging

When the battery capacity is low, switch OFF the radio and connect the supplied battery charger to the CHARGE jack (9), then plug it into the 230VAC outlet; the battery status icon (G) will show the charging process. To obtain the maximum performance from the battery, recharge it only when it is fully discharged. The charging time is around 6 hours. When the charging time has expired, the battery status icon (G) will not flash. **Unplug the charger from the AC outlet and then disconnect it from the radio when the charging time is expired.**

#### Warning :

- If you're not going to use the unit for a long period of time e.g several weeks, please take out the battery.
- Please dispose of old and defective batteries in a safe & environmentally friendly manner.
- Do not dispose of batteries in fire.
- Only replace batteries with the same or equivalent type recommended by the manufacturer.

#### Belt Clip

- To install the belt clip (16), slide it down into the special slot situated in the rear side of the unit, until the block system make a click.
- To remove the clip, pull the block tab toward exterior and slide the clip toward the up side of the unit.

#### BASIC OPERATION

##### Power ON-OFF

- To power on the unit, press and hold the ON-OFF/MENU key (7), the LCD display (3) will show the channel number (B) and the CTCSS code number (F).
- To power off the unit, press and hold again the ON-OFF/MENU key (7).

##### Using the radio

The unit has 8 main channels and 38 CTCSS codes. You can communicate with any other PMR that is using the same main channel & CTCSS code.

##### Speaking to other radios

- Press and hold the PTT key (15), the TX Icon (Q) will be lighted on the LCD display (3).
- Hold the unit in a vertical position with the Microphone at 5-8 cm from the mouth and then speak.
- When you have finished speaking, release the PTT key (15).
- Now you are ready to receive incoming transmission. Adjust the volume to the desired level if necessary.

#### Using the supplied Earset-microphone (for PTT use only)

- Plug the supplied Earset-Microphone into the earphone Jack (2).
- Press the PTT key on the earphone to speak and release it to listen.
- Adjust volume control if necessary.

#### WARNING !

**Use only original accessories. Connecting and using accessories other than the original ones, may cause serious damage to the radio and will void the warranty.**

**Always set the volume to minimum before connecting an external earset, in order to avoid damaging the earset or the user's ear.**

#### Channel Selection

Press the CH UP (4) or CH DOWN (5) to select the desired channel (1-8).

#### Adjusting speaker volume (8 Levels)

- Press the VOL UP (14) to increase the volume.
  - Press the VOL DOWN (13) to decrease the volume.
- The **LE** (B) icon and the selected volume level (01-08) (F) will appear on the LCD display (3).

#### ADDITIONAL FUNCTIONS

##### Menu Operation

Press ON-OFF/Menu (7) several time to select the Menu functions.

**Menu --> CTCSS - TX Power selection --> VOX --> VOX sensitivity --> Channel SCAN --> CTCSS tone SCAN --> Dual Watch --> CALL Tone --> Roger Beep --> Keypad Beep Tone --> Stop Watch**

##### CTCSS Code Selection

The radio has 38 CTCSS private codes available. Different CTCSS tones may be associated to different channels. To choose the desired CTCSS code, please proceed as follows :

- Press the ON-OFF/MENU (7) until the CTCSS code number (F) blinks on the LCD display. The CTCSS code **00** (F) indicates that no CTCSS tone is programmed on that channel.
- Press the CH UP (4) or CH DOWN (5) keys to select the desired CTCSS code number. Pressing and holding the CH UP (4) or CH DOWN (5) keys, the selection will move quicker.
- To confirm the selection and exit the Menu Mode, press the LOCK key (12) or press the ON-OFF/MENU (7) key to move to the next function.

Selecting a CTCSS code of **00** will disable the CTCSS feature. To communicate between two or more radios, both the channel and CTCSS code selections must be the same. To communicate with other models and brands of radios, the actual radio frequency and CTCSS frequency must be matched. The frequency chart and CTCSS Code chart are included to help with this selection.

##### Transmitter RF Power Setting

Your radio has a HI/LOW Power selection function. This function is very convenient to reduce the current drain and extend battery life when communicating within short distance. To select the output power proceed as follow :

- Press the ON-OFF/MENU (7) 2 times, until the **HI** or **Lo** (F) icons will blink on the LCD display (3).
- Press the CH UP (4) or CH DOWN (5) keys to select the desired power level HI (high power) or LO (low power).
- To confirm the selection and exit the Menu Mode, press LOCK key (12) or press the ON-OFF/MENU (7) key to move to the next function.

##### VOX (Handsfree use) Function

Your radio is equipped with a user selectable Voice Operated Transmitter function (VOX), that is used for automatic voice transmission (handsfree use or baby room monitor use). In this mode, transmission is automatically initiated by speaking into the microphone (8) and there is no need to push the PTT key (15). To enable the VOX function, please proceed as follows :

- Press the ON-OFF/MENU (7) three times, until the **VOX** icon (D) and the **OFF** indication appear on the LCD display (3).
- Press the CH UP (4) or CH DOWN (5) keys to enable the VOX function; the **On** indication will appear on the LCD display (3).
- To confirm the selection and exit the Menu Mode, press LOCK key (12) or press the ON-OFF/MENU (7) key to move to the VOX sensitivity level selection function.

##### VOX SENSITIVITY LEVEL SELECTION

- Press the ON-OFF/MENU (7) four times, until the **LE** indication, the **VOX** icon (D) and the selected VOX level will blink on the LCD display (3).
- Press the CH UP (4) or CH DOWN (5) keys to select the level of sensitivity (from 01 to 05). The VOX level **05** indicates the highest VOX sensitivity.
- To confirm the selection and exit the Menu Mode, press LOCK key (12) or press the ON-OFF/MENU (7) key to move to the next function.
- When VOX feature is on, the VOX icon (D) will appear on the LCD display.

##### Automatic Channel Scanning

To start the automatic channel SCAN function proceed as follows :

- Press the ON-OFF/MENU (7) five times, until the channel number (B) and the SC Icon (N) will blink on the LCD display (3).  
Press the CH UP (4) or the CH DOWN (5) keys to start the automatic channel scanning. SCAN will automatically stop when a signal is detected on one channel, in order to listen to the communication and SCAN will re-start when no more signal is detected on that channels.
- If you press the PTT (15) or LOCK (12) keys during the SCAN operation, SCAN will stop automatically and radio will set the last used channel.



### Automatic CTCSS tone Scanning

This function allows automatic CTCSS tone scanning on the selected channel. Please proceed as follows :

1. Select the desired channel number; the CTCSS tone scanning will be activated on this channel.
2. Press the ON-OFF/MENU (7) six times, until the CTCSS tone number (F) and the SC Icon (N) will blink on the LCD display (3).
3. Press the CH UP (4) or the CH DOWN (5) keys to start the automatic CTCSS tone scanning on the selected channel; the SC Icon (N) will be lighted on the LCD display. SCAN will automatically stop when a signal is detected on the active channel, in order to listen to the communication and SCAN will re-start when no more signal is detected on that channel.
4. If you press the PTT (15) or LOCK (12) keys during the SCAN operation, SCAN will stop automatically and radio will set the last used channel.

### Dual Watch Function

The radio is equipped with a Dual Watch function that allows to monitor 2 differents channels without the CTCSS code. To set the Dual Watch function, please proceed as follows :

1. Select the first channel to be monitored.
2. Press the ON-OFF/MENU (7) seven times, until the DW (O) icon and the selected channel will blink on the LCD display (3).
3. Press the CH UP (4) or the CH DOWN (5) keys to select the second channel to be monitored.
4. Now the radio will start monitoring the two channels and will stop when a signal is received on one of the two stored channels.
5. To disable the Dual Watch function and return to Stand-by mode, press the LOCK key (12).

### Call Tone Setting

The radio is equipped with 5 user selectable Call tone melodies. To set the desired Call tone melody, please proceed as follows :

1. Press the ON-OFF/MENU (7) eight times, until the **C** (B) indication and melody number (F) will blink on the LCD display (3).
2. Press the CH UP (4) or the CH DOWN (5) keys to set the desired melody, between the 5 available melodies.
3. To confirm the selection and exit the Menu Mode, press LOCK key (12) or press the ON-OFF/MENU (7) key to move to the next function.
4. Press the CALL key (6) to transmit the Call Tone Melody.

### Roger Beep Tone Setting

The radio is equipped with a user selectable Roger Beep Tone feature, which enables you to send a Beep Tone at the end of each transmission after every release of the PTT key (15). This will prompt any receiving unit that your transmission has ended. To enable or disable this function, please proceed as follows :

1. Press the ON-OFF/MENU (7) nine times, until the Roger Beep icon (H) and the **On** or **OFF** indications will blink on the LCD display (3).
2. Press the CH UP (4) or the CH DOWN (5) keys to set the desired selection **on** (Roger Beep tone enabled) or **off** (Roger Beep tone disabled). If the Roger Beep function is enabled, a beep tone is heard to confirm the selection.
3. To confirm the selection and exit the Menu Mode, press LOCK key (12) or press the ON-OFF/MENU (7) key to move to the next function.
4. When the Roger Beep tone is enabled, the tone icon (H) appears on the LCD display (3).

### Keypad Program Tone Setting

When a key is pressed, a beep tone is heard to confirm your command. The user may enable or disable this keypad program tone.

1. Press the ON-OFF/MENU (7) ten times, until the keypad tone icon (C) and the **On** or **OFF** indications will blink on the LCD display (3).
2. Press the CH UP (4) or the CH DOWN (5) keys to set the desired selection **on** (keypad tone enabled) or **off** (keypad tone disabled). If the keypad tone is enabled, a beep tone is heard to confirm the selection.
3. To confirm the selection and exit the Menu Mode, press LOCK key (12) or press the ON-OFF/MENU (7) key to move to the next function.
4. When the Keypad tone is enabled, the tone icon (C) appears on the LCD display (3).

### Stop Watch function

This function will enable a timer function.

1. Press the ON-OFF/MENU (7) ten times, until the Stop Watch Icon (M) and the **00:00** indication will blink on the LCD display (3).
2. Press the CH UP key (4) to start counting and press the CH DOWN key (5) to stop the function. The radio can still operate in this mode.
3. Press the CH UP key (4) again to re-start.
4. To reset the timer press the CH DOWN Key (5) two times.
5. To exit to Stand-by mode press the LOCK Key (12).

### ADDITIONAL FUNCTIONS

#### Keypad Lock

To avoid entering unwanted command, press and hold the LOCK Key (12) for about 2 seconds. The Lock Icon (A) will appear on the LCD Display (3). When the keypad is locked, the PTT (15), CALL (6) and LAMP/MONITOR (11) keys are enabled. To unlock the keypad press and hold the LOCK key (12) for about 2 seconds.

#### LCD Backlight

Shortly press the LIGHT/MONITOR key (11) to backlight the LCD display. Press this key again to turn OFF the LCD backlight.

#### Monitor Function

Press and hold the LAMP/MONITOR key (11) for about 2 seconds to activate the Monitor function. This function opens temporary the Squelch in order to listen to the background noise and weak signals. Press and hold this key for about 4 seconds to activate the Auto Monitor function in order to activate the Auto Squelch function.

To disable the Auto Monitor function, shortly press the LAMP/MONITOR key (11).

#### Automatic Power Save

The radio has a Automatic Power Save circuit designed to extend battery life. If it senses no transmission within 10 seconds, it automatically switches to the Power Save mode. The Power Save icon (I) will appear on the LCD display. The Radio can still receive transmissions in this mode.

### SPECIFICATIONS

Channels	8 PMR Channels with 38 CTCSS Codes
Channel Spacing	12.5 KHz
Operating Frequency	446.00625 - 446.09375 MHz
Power Source	3.7V (rechargeable Li-Ion battery pack)
RF Output Power	0.5W ERP
Dimensions	H152 x W60 X D34 mm
Weight	gr. 100 (with battery Pack)

### CHANNELS FREQUENCY TABLE

FREQ.	CH	FREQ.	CH	FREQ.	CH
446.00625	1	446.04375	4	446.08125	7
446.01875	2	446.05625	5	446.09375	8
446.03125	3	446.06875	6	-	-

CTCSS - TONE FREQUENCY CHART					
No	Freq. (Hz)	No	Freq. (Hz)	No	Freq. (Hz)
OF	CTCSS OFF	08	88,5	16	114,8
01	67,0	09	91,5	17	118,8
02	71,9	10	94,8	18	123,0
03	74,4	11	97,4	19	127,3
04	77,0	12	100,0	20	131,8
05	79,7	13	103,5	21	136,5
06	82,5	14	107,2	22	141,3
07	85,4	15	110,9	23	146,2
				24	151,4
				25	156,7
				26	162,2
				27	167,9
				28	173,8
				29	179,9
				30	186,2
				31	192,8
				32	203,5
				33	210,7
				34	218,1
				35	225,7
				36	233,6
				37	241,8
				38	250,3
				-	-

### IMPORTANT INFORMATIONS

#### Important !

Changes or modifications to this product could void your authority to operate this unit. Your radio is produced and factory set to transmit a regulated signal on an assigned frequency. It is against the law to alter or adjust the settings inside the radio to exceed those limitations. Any adjustment to your radio must be made by a qualified authorized technician or service.

#### To be safe and sure :

Never open the cabinet of your radio.

Never change or replace anything in your radio (except the battery).

Your radio might cause TV or radio interference even when it is operating properly. To determine whether your radio is causing the interference, turn it off. If the interference goes away, your radio is causing it. Try to eliminate the interference by moving your radio away from the receiver. If you cannot eliminate the interference, stop using the radio.

#### Hazardous Environments :

Do not operate the radio in hazardous environments.

#### Care and Safety :

To clean the radio, use a soft cloth dampened with water. Do not use cleaners or solvents because they can harm the body of the unit and leak inside, causing permanent damage. Use a dry, lint-free cloth to clean the battery contacts. **Do not submerge the unit in water or use it on a wet environment.** If the unit gets wet, turn it off and remove the battery immediately. Dry the battery and the battery compartment with a soft cloth to minimize potential water damage. Leave the battery compartment cover off overnight to ensure complete drying. Do not use the radio until it is completely dry.

#### Battery Operation - Important Information

Dispose of battery in the proper manner, according to federal, state and local regulations that apply in your area. A battery may leak electrolyte if it is mixed in a set with different battery types, if inserted incorrectly, if disposed of in fire, or if an attempt is made to charge a battery not intended to be charged. Discard leaky batteries immediately. Leaking batteries can cause skin burns or other personal injury.

### Notice ! Use of PMR446 Transceivers

This transceiver may be used in all the European countries and in some other countries as well, according with the regulation of the country where the product is used.

**PMR446 (8 channels) :** Austria, Belgium, Czech Rep., Denmark, Finland, France, Germany, Greece, Island, Irland, Italy, Luxembourg, Norway, Holland, Poland, Portugal, Spain, Sweden, Switzerland, UK, Turkey

### User Information

in accordance with art. 13 of the Legislative Decree of 25th July 2005, no. 15 "Implementation of Directives 2002/95/EC, 2002/96/EC and 2003/108/EC, relative to reduction of the use of hazardous substances in electrical and electronic equipment, in addition to waste disposal".



The crossed bin symbol shown on the equipment indicates that at the end of its working life the product must be collected separately from other waste.

The user must therefore take the above equipment to the appropriate differentiated collection centres for electronic and electro technical waste, or return it to the dealer when purchasing a new appliance of equivalent type, in a ratio of one to one.

Appropriate differentiated waste collection for subsequent recycling, treatment and environment-friendly disposal of the discarded equipment helps to prevent possible negative environmental and health effects and encourages recycling of the component materials of the equipment.

Illegal disposal of the product by the user will be punished by application of the administrative fines provided for by the legislative decree no. 22/1997 (article 50 and following of the legislative decree no. 22/1997).

### DECLARATION OF CONFORMITY

EC Certificate of Conformity (to EC Directive 2006/95, 2004/108, 99/5)	
<b>DECLARATION OF CONFORMITY</b>	
With the present declaration, we certify that the following products :	
<b>INTEK i-Talk T90</b>	
comply with all the technical regulations applicable to the above mentioned products in accordance with the EC Directives 2006/95/EC, 2004/108/EC, 99/5/EC.	
<b>Type of product :</b>	PMR 446 Transceiver
<b>Details of applied standards :</b>	EN 300 296-2, EN 301 489-5, EN 60065
<b>Manufacturer :</b>	<b>INTEK S.R.L.</b> 16 Via G. Marconi 20090 Segrate (Mi) Tel. 02-26950451 / Fax 02-26952185 E-Mail intek.com@intek-com.it
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Segrate, 10/09/2008	dr. Vittorio Zanetti (General Manager)