# SCALL POWER PRODUCTS

## INSTRUCTIONS FOR: MICRO 2-WAY RADIO SET MODEL: WT1

Thank you for purchasing a Sealey Product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.



IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS AND CAUTIONS. USE THIS PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.

## **1. SAFETY INSTRUCTIONS**

## 1.1 BATTERY SAFETY INSTRUCTIONS

- ✓ Charge batteries prior to first use. The batteries will have been shipped in a low charge state.
- ✓ Use only the charger provided to charge the batteries.
- X DO NOT charge batteries when room temperature is below 50°F (10°C) or above 104°F (40°C).
- X DO NOT attempt recharging the batteries by means of an engine generator or a DC power source.
- X DO NOT short-circuit the batteries by linking both terminals with a metal object, or your fingers etc.
- X DO NOT store the batteries (or radio) in locations where the temperature may exceed 104°F (40°C) such as outside sheds, above heaters, or metal buildings in summer.
- WARNING! Dispose of spent batteries correctly. For safety and environmental reasons DO NOT discard in domestic waste or by burning. ONLY discard or recycle according to local waste authority regulations.
- WARNING! DO NOT allow a leaking battery to come into contact with your skin. If you come into contact with battery fluid take immediate action:
  a) Skin contact: Wash immediately with soap and water.
  b) Eye contact: Flush eye immediately with cool, clean running water for at least 15 minutes and seek immediate medical attention
- 1.2 ELECTRICAL MAINS POWER SAFETY. ONLY USE THE SUPPLIED CHARGER PLUG FOR CONNECTING UNITS TO THE MAIN ELECTRICAL POWER SUPPLY.
- WARNING! It is the user's responsibility to read, understand and comply with the following electrical instructions: You must ensure the risk of electric shock is minimised by the installation of appropriate safety devices. An RCCB (Residual Current Circuit Breaker) should be incorporated in the main distribution board. We also recommend that an RCD (Residual Current Device) is used with all electrical products, particularly portable equipment which is plugged into an electrical supply not protected by an RCCB.You must also read and understand the following instructions concerning electrical safety.
- **1.3** The Electricity At Work Act 1989 requires all portable electrical appliances, if used on business premises, to be tested by a qualified electrician, using a Portable Appliance Tester (PAT), at least once a year.
- 1.4 The Health & Safety at Work Act 1974 makes owners of electrical appliances responsible for the safe condition of the appliance, and the safety of the appliance operator. If in any doubt about electrical safety, contact a qualified electrician.

## 1.5 You must ensure that you:

- ✓ Inspect the charger plug, cables and adaptors for wear and damage to ensure items are safe before connecting to the mains power supply. If worn or damaged DO NOT use.
- ✓ Check cable is protected against short circuit and overload.
- ✓ Important: Check that the voltage marked on the charger plug is the same as the power supply to be used.
- ✓ Uncoil the power cable between charger and plug.
- X DO NOT pull charger power lead, or pull the charger plug from the mains socket by the power lead.
- X DO NOT use any other type of charger with this product.
- X DO NOT place the power connector into any area of the product except the correct AC jack inlet socket.
- **x** DO NOT try to open or dis-assemble the charger plug.
- **x** DO NOT use charger plug to charge or power any other electrical item.
- X DO NOT get charger wet, or use in wet, damp conditions (for indoor use only).
- **WARNING! NEVER** substitute a standard 13Amp 3 pin plug, or any other type of plug, for the charger plug.



#### 2. INTRODUCTION/SPECIFICATION

Super compact, 2-way radios that fit easily into the palm of the hand or pocket yet have the features of a fully sized set, including, eight channels each with 38 sub-channels, voice-activation, call alert, channel scan, auto squelch, key lock and roger beep features. Selectable high and low transmission power levels maximise battery life while allowing low-interference communication over a range of up to 2 miles (depending on conditions). Headphone leads with PTT switch allow hands-free operation when required. Supplied complete with belt clip. 6 AAA rechargeable batteries and mains charger plug. No licence required.

Frequency Range: 446.00625 - 446.09375MHz Modulation: .....FM

Power Output:......500mW (High Power Level) 

## Communication

Range: .....2 miles (High Power) 

Display:.....Backlit LCD

Batteries

(3 per radio): ......AAA 600mAh - Alkaline or Ni-MH .....Rechargeable

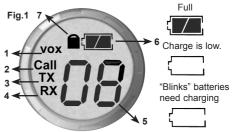
## Approx.

Battery Life: ......10hrs - 5% .....Transmit, 5% Receive, 90% Standby 



## Main Screen (Fig.1).

- 1. VOX indicator.
- 2. Call Mode (call).
- 3. Transmitting Mode (TX). 7. Key Lock Indicator.
- 4. Receiving Mode (RX).
- 5. Chan. No. Display (1-8).
- 6. Battery Level Indicator.



## Battery Installation (Fig.A).

- 1. Ensure the unit is turned off. Press the button on the belt clip and rotate clockwise or counter- clockwise through 90° (Fig.A).
- 2. Open the battery compartment by sliding the battery door down wards.
- 3. Install 3x AAA batteries ensuring the +/- signs correspond with the markings in the battery compartment.
- 4. Close the battery compartment door. Press and rotate the belt clip to its normal position.

## OPERATION

#### Power On/Off. 31

3.1.1 Press and hold menu key for 3 seconds, a beep and display indicates the radio is ready for use. (Fig.2).



Fig.A

3.1.2 Repeat procedure to turn off the radio.

#### 3.2 Key Lock/Unlock.

3.2.1 To lock keys press and hold MENU key, then press PTT key. 🗋 will show on LCD (Fig.3).



- 3.2.2 To unlock keys repeat the above procedure, the padlock symbol will disappear.
- NOTE: Under Key Lock all keys will be locked except PTT and CALL.

#### 3.3 Selecting Channel.

- 3.3.1 Press V/▲ key to select channel e.g. CH = 8 (Fig.2).
- 3.3.2 Set both handsets to the same channel.



### 3.4 Selecting Sub-code.

3.4.1 Press MENU key twice within 1 second to enter CTCSS sub-code settings, 'SC' displayed on LCD (Fig.4) after 1 second the current sub-code is shown blinking (Fig.5).



Fia.5

- Note: Both handsets must be configured with the same sub-code.
- 3.4.2 Press V/▲ key to select sub-code (00/01-38).
- 3.4.3 Press MENU key again to confirm selection and return to main screen.
- NOTE: If you do not confirm the sub-code, after two seconds the setting will be automatically confirmed and the display will return to main screen
- NOTE: Channel and sub-code are independently memorised. last channel and sub-code will be remembered before handset is turned off.

#### To Make a Call 35

3.5.1 Press CALL/MON key once to connect the other unit that has been set to the same channel and sub-code as your handset by transmitting the call tone (Fig.6) the other handset will sound a short melody.



- 3.5.2 A short melody will indicate the finish of a call transmission.
- 3.6 Transmitting. (Fig.7).
- 3.6.1 Press and hold PTT key and speak into the microphone from a distance of 2.5 to 5cm. 'TX' shown on the display indicates unit is in transmission mode



3.7.1 When you have finished talking release PTT key to receive signal from the other handset. 'RX' on the display indicates handset in receiving status.



Fig.7

- Using Voice-Over Headset. 3.8
- 3.8.1 Plug the earphone into the Earphone Jack.
- 3.8.2 Press and hold the 'PTT' button on the headset and speak into the microphone.

#### **FUNCTION SETUP** 4.

- Selecting Channel. 4.1
- 4.1.1 Press Vor▲ key to select channel 1-8 (Fig.2).
- 4.1.2 When the desired channel is located, press MENU to confirm.

#### Activate/Close Channel Auto-scan. 4.2

4.2.1 Press **▼**or**▲** key for two seconds to start channel scan.

- 4.2.2 The channel numbers will index through the range and stop when a transmission is detected.
- 4.2.3 To stop scan press the Vor▲ key.

#### 4.3 Auto Squelch (SQ).

4.3.1 Auto squelch eliminates interference during communication. This is factory set and non-adjustable.

#### 44 Activate/Close the VOX Function.

4.4.1 VOX is the voice activating transmitting function. Users can communicate with each other without pressing and holding the PTT button.



- 4.4.2 Press and hold MENU key, then press ▼ VOX key to activate VOX function. 'VOX' icon appears on the display (Fig.9). You can now proceed with a hands free conversation.
- 4.4.3 Repeat procedure to exit the VOX mode.

#### Activate/Close Monitor Function. 4.5

- 4.5.1 Monitor function is used during weak transmissions, activating it deactivates the auto squelch and continuously scans all signals in the channel.
- 4.5.2 Press and hold the MENU key, then press the CALL/MON key to activate the MON function.
- 4.5.3 To deactivate the **MON** function press and hold the MENU key, then press the CALL/MON key.

#### 4.6 Volume Level Adjustment.

4.6.1 Press and hold the menu key. then press the **VOL** key to alter the volume level from '1' to '4' (Fig.10 volume set at 4).



4.6.2 The volume level changes once for each ▼ VOL key press.

#### 4.7 Selecting Roger Bleep.

- 4.7.1 Turn off the unit.
- 4.7.2 Press CALL and MENU key for 3 seconds, 'ON' or 'OF' will be displayed (Fig.11 & 12).
- 4.7.3 Press V/▲ key to select Roger Beep on 'ON' or Roger Beep off OF'.
- 4.7.4 Press MENU key for 3 seconds to confirm and return to normal status.

#### Selecting Power Output Level. 48

- 4.8.1 This function can be used to select high or low transmission power to suit requirements.
- 4.8.2 Press and hold **PTT** key, then press ▲ key within 1 second to enter Power Output Level selectable mode.



Fig.11

Fig.12

- 4.8.3 'HI' or 'LO' shows (Fig.13 & 14), press ▲ key again to alter power output level.
- **NOTE:** 'HI'- High power = 500 mW. 'LO' - Low power = 10mW.
- 4.8.4 Release PTT and ▲ key to confirm and return to normal status.
- NOTE: The battery frame icon flashes when low power is selected (Fig.15).

Fig.13

Fig.14



### Fig.15

### 4.9 LCD Backlight.

- 4.9.1 LCD Backlight will remain lit for 5 seconds after any key press.
- 4.10 Charging.

The battery icon loops and flashes while charging. It stops flashing when the batteries are fully charged.

- **NOTE:** If the unit is on while charging, LCD shows the current channel and the unit can receive signals only. The CALL and PTT keys are not available.
- 4.10.1 Fully charge the batteries before first use.
- 4.10.2 Use the supplied charger only.
- 4.10.3 Charge takes approximately 1-8hrs depending on the state of discharge of the batteries.

## 4.11 Setting Memory.

The settings on the radio, prior to being switched off, will be remembered and returned to the same state when switched on again. If the batteries are pulled out before switching off the settings will be lost.

Interference Eliminator Code Chart (Hz)						
CHANNEL/ FREQUENCY		CHANNEL/ FREQUENCY		CHANNEL/ FREQUENCY		
1	67.0	14	107.2	27	167.9	
2	71.9	15	110.9	28	173.8	
3	74.4	16	114.8	29	179.9	
4	77.0	17	118.8	30	186.2	
5	79.7	18	123.0	31	192.8	
6	82.5	19	127.3	32	203.5	
7	85.4	20	131.8	33	210.7	
8	88.5	21	136.5	34	218.1	
9	91.5	22	141.3	35	225.7	
10	94.8	23	146.2	37	233.6	
11	97.4	24	151.4	37	241.8	
12	100.0	25	158.7	38	250.3	
13	103.0	26	162.2			

PMR446 Transmit-Receive Frequencies (MHz)						
CHANNEL/ FREQUENCY		CHANNEL/ FREQUENCY		CHANNEL/ FREQUENCY		
1	446.00625	4	446.04375	7	446.08125	
2	446.01875	5	446.05625	8	446.09375	
3	446.03125	6	446.06875			

## 5. TROUBLE SHOOTING

Problem	Solution
No Power.	Check batteries are correctly installed/ replace.
Message Not Transmitted.	Make sure the PTT button is completely pressed as you transmit.
Message Not	Confirm radios have the same settings.
Received.	Make sure PTT is not inadvertently being pressed.
	Obstructions, operating indoors or in vehi- cles may interfere with communication.
	Change your location.
	Check to make sure the volume is turned up.
	Reposition or replace batteries.
Hearing Other Conversation or Noise on a Channel.	Shared channel may be in use, try another.
Limited Talk Range.	Steel/concrete structures or heavy foliage will reduce communication range.
	Check for clear line of sight to improve transmission.
	Wearing radio close to body, such as in a pocket or on a belt will decrease range, change location of radio.
Heavy Static or Interference.	Radios are too close to each other. Radios must be at least 15 feet apart, increase your distance.
	Radios are too far apart. Obstacles interfere with transmission.
	Talk range is up to 2 miles in clear, unobstructed conditions.

## 6. PARTS

Part No: Description: WT1.C Charger



# **EC DECLARATION OF CONFORMITY**

We the sole importers into the UK, hereby declare that the equipment described below

Description and Function:Micro 2-Way	Radio Set + charger				
Model/Type:WT1					
Manufacturing Date / Serial number (optional)					
Manufacturer's authorised representative within the EC: Jack Sealey Ltd. Kempson Way, Suffolk Business Park, Bury St. Edmunds, Suffolk, IP32 7AR					
Conforms to the requirements of the following	ng Directives, as indicated.				
2006/42/EC Machinery Directive	2000/14/EC Outdoor Noise Emissions Directive				
2006/95/EC Low Voltage Directive	2002/96/EC WEEE Directive				
X 2004/108/EC EMC Directive	2002/95/EC RoHS Directive				
S 93/68/EEC CE Marking Directive	97/23/EC Pressure Equipment Directive				
And the following harmonised standard(s): BS EN 61558 part 1: 1998. BS EN 61558 part 2-6: 2009      BS EN 55014 part 1: 2006 + A1: 2009    BS EN 61000 part 6-3: 2007      Additional technical standards and specifications (if applicable):ETSI EN 300 292-2 V1.1.1 (2001-03)      ETSI EN 301 495-5 V1.3.1 (2002-08)    ETSI EN 301 495-5 V1.4.1 (2002-08)      Technical file compiled by: Jack Sealey Ltd.      Signed:					
Position: Marketing Director					
Being the responsible person appointed	by the manufacturer.				

NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. IMPORTANT: No liability is accepted for incorrect use of this product. C F WARRANTY: Guarantee is 12 months from purchase date, proof of which will be required for any claim.

INFORMATION: For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including postcode.



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Original Language Version

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