Technical Data

Data Transmitter Modules inside POCSAG Encoder

Sub-1GHz ISM Band Frequency Synthesized Transmitter

Main Function

- FSK Modulation
- 1 channel programmed frequency
- 1 POCSAG Encoder with message inside for option
- High power output up to 5W
- Wide operational frequency range
- Any 2 level data formats
- Data rate up to 6 Kbps.
- Wide operation temperature from -30℃ -- +70℃
- Small Size: 95mm X 35mm X17mm
- BNC or SMA jack on board
- SMA or BNC jack with cable for option

Application

- Remote Controls
- Home and building automation
- Paging system
- Telemetry

-Specification-

Description	TX-115L			
Frequency Range	315/434/868/915 MHz			
Frequency stability	10 ppm Typ. at 25℃ .			
Channel spacing	12.5Khz or 25Khz.			
Data Rate	From 512bps up to 6 Kbps. (deviation 4.5K).			
Modulation	Direct 2level FSK.			
Deviation	Typ 5K Max			
Spurious and Harmonics	-60dBm.			
POCSAG Encoder	1 copcode 512/1200/2400bps Alphanumeric message			
Harmonic distortion	<2.5% maximum at 1200 bps.			
RF Power output (Adjustable)	1-5 Watt of <470MHz. 1-2W of 868 and 915 MHz.			
Duty Cycle at 25℃ by 12V	100% at 1 W	70% at 2W	60% at 3 W	50% at 5 W
Antenna Impedance	50Ω			
Transmitter attack time	<2mS for within 6K bps operation speed			
RF Output Jack	Standard. BNC or SMA Female on Board Option. SMA or BNC Female + 110mm RG174A/U cable			
Power Supply	DC 12V. (10V-13.8V).			
Temperature	-30℃ — +70℃			
Current Drain (Max)	900mA			
Module Size	95mm X 35mm X 17mm			
Weight. (with BNC Jack)	40 grams.			

I/O Connector and USB

J1 Main I/O

Pin 1 Data (must check the data phase to meet receivers)

Pin 2 GND

Pin 3 DC 12V + (max 1A)

Pin 4 PTT Low for TX active

J2 Mini USB

Via USB to Programming for Frequency and POCSAG Code with message ..etc.

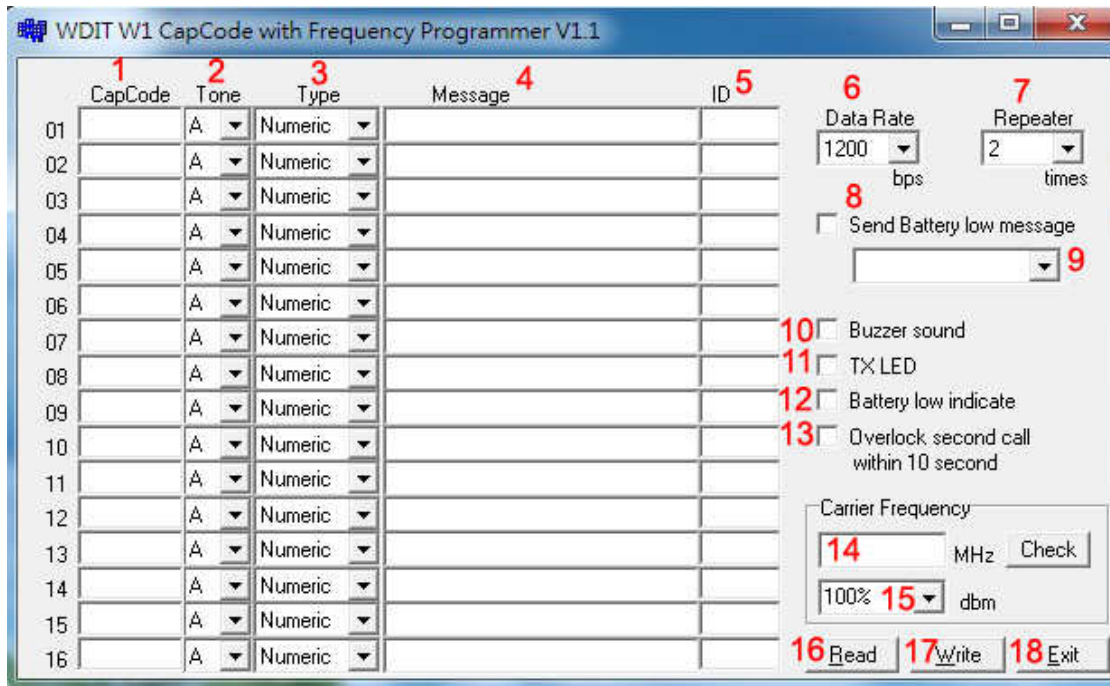## Tips to set up the programming parameters

1. Install the WDIT W1 programming AP execution file

    WDIT W1

2. Click W1 and then run the programming software.

3. Connect the USB plug into the TX-115L device and PC USB port .

Example Programming Screen as Below:

1. Capcode **:** 01-16 POCSAG address range 0000008-2097151 for POCSAG encoder option.

2. Tone A,B,C,D **:** For pager alert tone for POCSAG encoder option.

3. Type **:** For pager numeric or alphanumeric type selection.

4. Message **:** Pre-programming the encoder messages for pager contents

5. ID **:** For the ID call system such as each specific nurse ID set-up.

6. Data Rate **:** POCSAG data speed and baud rate in 512bps or 1200bps or 2400bps types.

7. Repeater : Each paging to be calling repeated times.

8. Send Battery Low Message **:** ✓ Sending the battery low alarm message by wireless

9. Activate the battery low alarm by any capcode 01-16 selection.

10. Buzzer sound **:** ✓ for the transmission beep sound.

11. TXLED Transmitter LED **:** ✓ for the transmission LED indication.

12. Battery Low Indicate **:** ✓ for the battery LED indication.

13. Overlock second call within 10 second **:**✓ Prohibited Duplicate calling within 10 seconds.

14. Carrier Frequency**:** For the Radio Frequency set-up (simply key-in your own frequency).

15. dBm **:** RF carrier output power set-up.

16. Read **:** Reading the programmed contents from your devices.

17. Write **:** Write the programming contents into your devices.

18. Exit **:** Exiting the programming screen.   Ccw144021-000