# DEGEN

OPERATION MANUAL

### CY-1 FM/MW/SW Digital Radio/ Bluetooth/MP3/Recorder



# **TECSUN RADIOS AUSTRALIA**

24/9 Powells Road, Brookvale, 2100 NSW, Australia +61 2 8078 2241 www.tecsunradios.com.au



### INTRODUCTION

# STATEMENT

# Thank You

Thank you for purchasing the **CY-1** multi-band radio. Please read the manual thoroughly before operating and keep this book in a safe place for future reference.

Included Items:

- ✓ CY-1 Radio
- ✓ Lithium Battery
- 🗸 USB Cable
- ✓ Operating Manual
- 🗸 Strap

Our engineers devoted three years to research and development of this **CY-1** emergency outdoor radio. the world first multi-band dial radio.it's perfect for outdoor use and sports activities, as well as indoor use during power outages or emergencies. the **CY-1** will quickly become an indispensable entertainment partner, and a helper during emergencies.



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# LOCATION CONTROLS

### LOCATION CONTROLS



LUC	ATION CONTROLS	
Volume knob: Pressing V- decimation	ressing V+ increases volume reases volume	1 e 2
	Choose play cycle mode	3
⑦ In radio mode:	M+ :: press to select and play E0 M-,long press to record rad long press to enter MIC	Q lio <sup>5</sup>
In radio mode: In music mode:	MW button A-B repeat	6
(9) In radio mode: F	Next song/fast forward	7 e 8
In music mode:	M button; Press to select FM Play/Pause de: Pause/Continue	9
	ong press to lock/unlock keys Long press to digital switch	ъ
1 NO. Button: 0-9	Mute	0
In recoding mo	Press to exit Press to display time de: Press to end recording and ecorded file into the memory	ESC d



# LOCATION CONTROLS

Radio/Bluetooth/MP3 mode selection

In Bluetooth mode: link with mobile device, short

press income calls can be answered and terminated

Menu button: Press to enter menu/sub-menu or confirm

In time set mode: Press to move cursor

Power button
 Ø Flashlight/SOS light

Hand Strap

- (19) Alarm light / lighting / alarm sound switch
- (2) Solar panel
  (2) Stereo earphone jack
- Micro USB port (link with computer/charge)
- 2 Micro SD/TF card slot
- External charging switch: Only external 5V charging in "ON", other status in "OFF"
- 29 Telescopic antenna
- 29 Crank power
- Battery compartment

# DEFINITION OF KEY OPERATIONS

### **DEFINITION OF KEY OPERATIONS**

There are 3 operational ways of pressing the keys: short press, long press and hold on. Unless expressly stated, all the operations are short press.

**Short press**: press the key once, and the function starts to work.

**Long press**: press and hold for more than 2 seconds and the function starts to work, and works only one time.

**Hold on**: press the key and hold on until stop, the function works several times in a certain frequency, such as fast forward/backward.

#### LOCK/UNLOCK KEYS

**CY-1** is equipped with a key lock and unlock function, which you can manually turn on and off. When the radio is on, this will prevent you from accidentally pressing the buttons and changing the station

LOCK: Long press < - >, all the keys except this key will be locked with the "  $\frac{1}{6}$  " symbol shown on the display.

UNLOCK: After keys locked, long press < -- > to unlock keys, and the " F " symbol disappears.

# LITHIUM BATTERY POWER SUPPLY

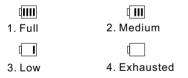
### LITHIUM BATTERY POWER SUPPLY

Please use the lithium battery approved by Degen to power this product. A lithium battery is included with this product. Do not use of any un-qualified battery that may cause problems or dangers such as inflammation or explosion.

#### INSTALLING THE BATTERY

- 1. Turn off the radio and open the battery cover.
- 2. Install the provided lithium battery according to the battery polarity.
- 3. Close the battery cover.

### BATTERY CONSUMPTION INDICATOR



#### CHARGING THE LITHIUM BATTERY External Adapter (not included)

Please use a matched adapter(**5V DC/500mA**, USB port) to charge the radio.

1. Install the lithium battery.

### LITHIUM BATTERY POWER SUPPLY

- 2. To charge the battery, connect the Micro-USB cable to the radio, the other end to a USB adapter.
- 3. While charging, the battery symbol shown on the display IIII moves from right to left, and stops when the battery is fully charged. Then disconnect the radio and the adapter.

#### NOTE:

When charging, press  $< \mathbf{O} >$  to turn on/off the radio. Battery chargers can interfere with the radio signal, so it is not recommended to use the radio when charging. Do not use a charger or computer to power the radio to play music or listen to the radio when the battery is unloaded. Please remove the battery or fully charge it once in 2 months if the radio is not used for a long time.

#### Charging using a PC

- 1. Connect the radio and the computer with the provided USB cable.
- 2. While charging, the battery symbol shown on the display im moves from right to left.
- 3. The battery symbol stops moving when the battery is full charged.

**NOTE:** When charged by PC, a USB symbol shown on the radio's display. When Micro SD/TF card or USB drive is inserted, press  $< \Phi >$  twice and select Music Mode to play the music.



# BATTERY POWER SUPPLY

# MAIN MENU

### CRANK POWER

When the battery is out of power, turn the crank for 360 degrees to charge the lithium battery.

NOTE: Set the power selector to OFF when crank charging the battery. This mode will charge the battery most efficiently.

#### SOLAR POWER

Solar panel is designed to run the radio under sunlight; it can also charge the battery pack at a very slow rate. So theoretically it will charge the battery, but it is better to crank it to charge the battery when no other option is available.

#### POWER ON/OFF

Press the  $< \bigcirc >$  button for 1 second to turn on/off the radio.

Auto turn off: The radio will turn off automatically in 3 minutes without any operation in Main Menu mode.

### MAIN MENU

In any mode, press <ESC> can go back to Main Menu.



Radio: FM/MW/SW Radio Music: MP3 music play mode Text browser (Ebook): Text reading mode System Settings Calendar

#### NOTE:

Press <ESC> in Main Menu to display the time. When the time is displayed, press <MENU> to go to Main Menu.

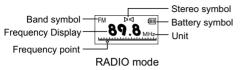
#### HOW TO OPERATE THE RECEIVER

In Main Menu, select Radio and press <MENU> to listen to FM, the frequency shows on the display.

Repeatedly pressing <MODE/MP3> to enter either Radio or Bluetooth.



# RADIO



### NOTE:

Due to current interference, it is not recommended to use FM radio when the radio is connected to an external adapter or a computer.

### **CHOOSE BANDS**

In Radio Mode, press <FM/►II >, <MW/A=B> or <SW/C>> to select your desired band.

The display will show the band symbol that you are listening to.

When listening to SW, press  $\langle SW | \mathfrak{S} \rangle$  to change  $\langle \mathbf{m} \rangle$  bands.

### SELECT FM FREQUENCY RANGE

When listening to FM, press <MENU> to enter the below sub-menu:

- Save: Store the station into memory manually
- Delete: Delete single memory
- Delete all: Delete all stored memories
- Auto Search: Auto tuning storage
- Ordinary band: 87-108MHz
- Campus radio: 64-108MHz
- Japanese FM: 76-90MHz
- ESC

# FM STEREO/MONO SELECTION

### **FM STEREO/MONO SELECTION**

When listening to FM, press <FM/H> to select stereo/mono listening. If [I=1] shows in the display, stereo listening is selected, press <FM/HI> again to change to mono listening and the mono symbol [[]] will show. You can not activate stereo listening when the radio signal you are receiving is mono.

#### Suggestions:

1. Stereo listening is for strong signal broadcasts and music programs.

2. For weak signal broadcasts or voice programs, please choose mono. (Because stereo decoding may produce background noise.)

#### 9k/10k AM TUNING STEPS

When listening to MW, press <MENU> to enter the below sub-menu:

(Use the 8 key to step through these functions)

- Save: Store the station into memory manually
- Delete: Delete single memory
- Delete all: Delete all stored memories
- Auto Search: Auto tuning storage
- Stepping switch: When "522" appears in the display, it indicates 9k step is selected; When it shows "520", it indicates 10k steps is selected. Repeatedly pressing <MENU> to change between 9k and 10k



TUNE IN STATIONS

# VOLUME / MUTE

### **VOLUME / MUTE**

To increase volume, press <VOL+>; To decrease volume, press <VOL-> the volume adjustment will be shown in the display.

Press **0** to mute, press again to restore the sound.

#### **TUNING IN STATIONS**

When attempting to tune in stations, stay away from electrical equipment and AC power wiring. Optimal use of the antenna improves the signal reception.

#### Suggestions:

When tuning indoors, stay near the windows for a better reception. Battery charges can interfere with the radio reception, please use the internal lithium battery to power the radio while tuning. It is not recommended to use the radio when charging the battery.

#### Using telescopic antenna:

It only works when listening to FM and SW. When listening to FM or SW, change the length of the telescopic antenna according to the signal intensity to get better reception.

### Using built-in antenna:

The built-in internal ferrite rod antenna works for the MW band only. Rotate/change the radio position to get the best reception. As the radio location affects the MW reception, the good direction of the radio can get you a much better reception on MW.

**Five tuning methods:** Manual tuning, Auto tuning, Direct frequency entry, Auto search (ATS) and memory recall.

### Manual tuning:

- 1. Turn on the radio and select [Radio] in Main Menu.
- 2. Adjust the volume to an appropriate level and choose your desired band.
- Press<+/>
   into a station, frequency will change a step with each pressing,stop pressing when you get a satisfactory station.

### Auto tuning:

- 1. Turn on the radio and select [Radio] in Main Menu.
- 2. Adjust the volume to an appropriate level and choose your desired band.
- Press and hold < +/m > or < -/m > for about 2 seconds, then release to auto tune into the next available station. If the auto-tuned station frequency is inaccurate, please use manual tuning to find the accurate frequency point.

### Auto search (ATS):

- 1. Turn on the radio and select [Radio] in Main Menu.
- 2. Adjust the volume to an appropriate level and choose your desired band.

# TUNE IN STATIONS

# RADIO RECORDING

3. Press <MENU> to open the sub-menu and using the 3 press <MENU> again to start auto tuning and store all the available stations into memory.

Memory location

### Memory Locations:

FM M005 89.8 MHz 88 52 96 100 104 108 **FM:** M001 - M440 **MW**: M001 - M132 **SW:** M001 - M928

#### **Direct frequency entry**

- 1. Turn on the radio and select [Radio] in Main Menu.
- 2. Adjust the volume to an appropriate level and choose your <u>de</u>sired band.
- 3. Firstly press , and then input the frequency numbers that corresponds to a station's frequency by using the key board, and lastly press . to enter the station you need.

#### Memory recall

- 1. Turn on the radio and select [Radio] in Main Menu.
- 2. Press <M+/EQ> or <M-/●> to select a station that stored within the memory.

#### STORING STATIONS MANUALLY

Select your desired station, press <MENU> to open the sub-menu and select [Save], press <MENU> again to confirm. The stored station's memory location will be stored into the memory by the order of the frequency from low to high.

#### NOTES:

After storing stations into memory, you can use Memory Recall to find the stored station quickly. All the stations that stored manually will be replaced when using Auto Search (ATS).

#### DELETE SINGLE/ALL MEMORIES

Press <MENU> in radio mode, and select either <Delete> or <Delete all>, then press <MENU> again to delete single memory or all memories.

#### **RADIO RECORDING**

While listening to radio broadcast, you can record the programs by the following steps:

(TF card must be inserted correctly when using this function, the recorded file will be saved in the inserted TF card.

- Tune into the station that you want to record, long press <M-/● > to start recording, the file will be in .MP3 format.
- 2. Press < FM/►II > to pause.
- 3. Press <ESC> to end recording, the file will be saved TF card automatically.

#### NOTE:

1. While recording, some keys will be disabled.

# CONSULT **PAGE 12** FOR THE CORRECT INSERT POSITION OF THE MICRO SD CARD



PLAYING MUSIC

# RADIO RECORDING

#### MIC RECORDING

In any mode except for radio mode, you can activate the MIC recording function by long pressing <M-/ $\bullet$  >. While recording, please get the audio source close to the built-in MIC. Before recording, please make sure TF card is inserted correctly, the recorded file will be saved in the card. MP3 format.

Do not pull out or insert TF card when recording is in the progress to avoid damage.

### LISTENING TO RECORDING FILES

Select [Music] in Main Menu, all the recording files can be found at the bottom of the list. You can also input the serial number of the particular file directly and press [MENU] to play it.

### MANAGE THE RECORDING FILES

In order to find out what you recorded, please follow the steps below to play it back.

Go to Music mode, press <**FM** /►**I**|> to pause the music, press <**MENU**> button, you will see 3 selections:

Press < +/m > button, select [**Browse Files**] by turning the main knob, press <**MENU**> button to enter music list.

Press < -/₩ > or < +/₩ > button ,you will see [JLREC] folder name here, select [JLREC] and press <MENU> to enter recorded list.

Press < -/ref > or < +/ref > button, select the one you recorded and play it by pressing <MENU> button.

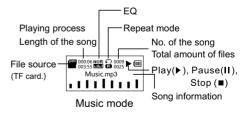
### CALENDAR

Select [Calendar] in Main Menu, press [MENU] to display the date, time and day of the week. You can use <Tuning knob> or <+/m >, <-/m >, <-/m > to adjust the year, month and day to see the corresponding day of the week. When adjusting the date, press <MENU> to move the cursor

### PLAYING MUSIC

In radio off mode, insert TF card with MP3/WMA/WAV format music files to the slot on the radio. Then turn on the radio and select [Music] in Main menu, the LCD shows the information of the song.

In Radio mode, press <Radio/MP3> to directly switch to Music mode.



# PLAYING MUSIC

#### NOTES:

Please insert or pull out the TF card when radio is off. Do not operate them when the music are playing. If Music mode can not be entered, please check if the card was inserted correctly.

#### BLUETOOTH

Two Modes are available:

- 1. Play music files from your mobile phone.
- 2. Answer and terminate incoming calls from your phone.

#### PLAY AND PAUSE

When the music is playing, press <FM/►II> to pause, the pause symbol "II" will show on the display. Press <FM/►II > again to resume playing and the play symbol "▶" appears.

#### SELECT MUSIC FILES

1.Press < +/>
> or < -/

2. When the music is playing, press <MENU> to open

the sub- menu and select [File browser], press <br/> <br/> <br/> MENU> to enter the folder and find the particular file by pressing < +/  $\bowtie$  > or < -/  $\bowtie$  >

 Directly input the No. of the music file and press <FM/►II > to confirm and the radio will play the selected file.

### A-B REPEAT

When the music is playing, press <MW/A≓B> once to set the start point A, [♣ ] shows on the display and "B" starts flashing. When the playing process reaches your desired location, press <MW/A≓B> again to set the ending point B. Now the radio will repeat playing from A to B. While repeating, press <MW/A≓B> to cancel the repeating and go on playing the file as normal.

### REPEAT MODE SELECTION

When the music is playing, press <SW/C> to select repeat mode from the below:

- 🗃 Repeat all 🛛 🔓 Repeat folder
- 🖀 Repeat one 🛛 🔒 Random

### EQUALIZER SELECTION

When the music is playing, press <M+/EQ> to select equalizer from the below:

📟 - Normal 📟 - Pop 🛛 🔤 - Rock

📟 - Jazz 🛛 🕮 - Classic 🔤 - Bass



SYSTEM SETTINGS

# PLAYING MUSIC

### LYRICS DISPLAY

Support both Chinese and English display. The lyrics must be in .lrc format, use the same name as the song and location in the same folder. Due to many Chinese versions on the market, you may have some character unreadable.

### DELETE MUSIC FILES

With music paused, press <MENU> to enter the following settings:

- File browser: Select music file
- Delete file: Delete a single music file
- Delete all: Delete all music files

To operate the above settings, press <MENU> to enter or confirm, press < +/> > or < -/

### TEXT BROWSER

Insert the TF card that with .txt format text file, then you can read the file with the radio. Select [Text browser] in Main menu, press <MENU> to enter and select your desired file. Then press <MENU> to start reading, press < +/m > or < -/m > to turn pages. When reading, press <MENU> to enter below settings:

- File selection: select a particular file
- Play set: Manual or Auto play selection
- Playback speed

- Enter main: Enter Main menu
- ESC

### SYSTEM SETTINGS

By pressing <MENU> and then the 8 key to select one of the following:

- System time
- Backlight

- Language

- Tools
- Firmware version
- Restore factory settings ESC

### DATE AND TIME SET

Select [System time] in System Settings, press <MENU> to enter date and time. Press <MENU> to move the cursor and press < +/+ > or

< -/ In to adjust. Press <ESC > to save and exit when setting finishes.

**NOTE:** Operating time for each step is about 5 seconds.



Year: Month: Day Hour: Minute: Second

Press <ESC > in Main menu can play the time on the display.

# BACKLIGHT TIMER

# ALARM SET

#### **BACKLIGHT TIMER**

Select [Backlight] in System Settings, press <MENU> to enter. Press < +/ H > or < -/ H > to adjust the backlight timer from 03-240(seconds), press <MENU> to confirm and exit.

### LANGUAGE SELECTION

Select [Language] in System Settings, press <MENU> to enter language selection mode, press <+/ m > or < - I<sup>44</sup> > to select your desired language. 1.Simple Chinese 2. Traditional Chinese 3. English

#### SLEEP TIMER

System Settings, select [Tools] - [Sleep timer], press <MENU> to enter. Press <+/m > or <-/m > to adjust the auto turn off timer from 00 - 90, select 00 to turn off the sleep timer. Press <MENU> to confirm exit.

The radio will turn off automatically when reaches the preset time.

After setting the sleep timer, [ 😭 will show on the display when the time is displayed.

#### TURN ON/OFF KEY TONE

In System Settings, select [Tools] - [Touch-tune (off)]. Press <MENU> to turn on the key tone, and [Keypad tones (on)] shows on the display. While [Keypad tones (on)] displays, select it and press <MENU> to turn off the key tone.

#### ALARM SET

In System Settings, select [Tools] - [Alarm]. Press <MENU> to enter the below settings:

#### - Alarm Off

Repeatedly pressing <MENU> to turn on or off the alarm. [Alarm Off] indicates the alarm is off, [Alarm ON] indicates the alarm is activated.

#### - Alarm Time

Press <+/ →> or < -/ ← > to adjust the Hour and the Minute, press <MENU> to move the cursor, and press <ESC> to save and exit.

#### - Alarm Cycle

You can select from [Ring Once], [Ring Daily] or [Ring multi-day].

Ring Once: Press <+/HH > or <-/HH > to adjust the Year, Month and day, press <MENU> to move the cursor, and press <ESC> to save and exit. Ring Daily: The alarm is effective everyday. Ring multi-day: Select from Monday to Sunday, press <MENU> to select and a tick will show. Press <ESC> to save and exit.

#### - Alarm Mode

Ring Embedded: Auto turn on the radio with a ringtone.

RADIO: Auto turn on the radio with the last radio station listened to.

Auto turn on the radio with the music file in the TF card that selected. Exit



# CONTRAST SET

#### - ESC

When the alarm is activated, [ 🔁 ] appears on the display, the radio will alarm with the selected mode when reaching the preset time. If the selected mode is [Ring Embedded], you can

press any button to turn off the ringtone when the alarm goes off.

#### CONTRAST SET

Select [Contrast] in System Settings, press <MENU> to enter. Press < +/++ > or < -/++ > to adjust from 00-16, press <MENU> to confirm and exit.

#### FIRMWARE VERSION

Select [Firmware version] in System Settings, press <MENU> to display the firmware version information.

#### RESET

#### How to insert the MICRO SD CARD.



# CARE AND MAINTENANCE

#### CARE AND MAINTENANCE

1. Keep it dry. Rain, humidity and other types of liquids or moisture can contain minerals that may cause corrosion to components. If the radio does accidentally get wet, remove the battery and wait for the radio to dry completely before placing it back.

**2.** Do not use or store in dusty or dirty areas. This may damage the moving parts and electronic components.

**3.** Do not store the radio in hot areas. High temperatures can shorten the life span of certain components.

**4.** Do not place the radio in cold environment. Otherwise, when the surrounding temperature rises to room temperature, internal moisture may develop and damage the circuit board.

5. Do not drop, hit or smash the radio.

**6.** Do not use harsh chemicals, cleaning solvents, or strong detergent to wash the radio. Use a clean and dry soft cloth to clean the screen.

# BATTERY SAFETY INFORMATION

### **BATTERY SAFETY INFORMATION**

**1.** Use the battery under normal conditions, temperature:  $(20\pm5)^{\circ}$ C, relative humidity: 65 ± 20%. Under normal circumstances, the battery can be charged and discharged about 300 times. **2.** Do not expose the battery to heat or high pressure, do not drop the battery, and prevent children from playing with the battery.

**3.** Do not short-circuit the battery, do not open or amend, do not expose to damp environments.

**4.** If not using for an extended period of time, remove the battery and store in a safe manner. Please use a nonconductive material to wrap the battery in order to avoid direct contact with metal. You can avoid damage by keeping the battery in a cool dry place.

**5.** Dispose of the battery properly, do not put into fire or water.

**6.** Do not use the battery under strong sunlight to avoid overheating, deformation or smoldering, which will reduce the performance and life span of the battery.



# TROUBLESHOOTING

# SPECIFICATIONS

#### TROUBLESHOOTING

#### 1. Cannot turn on the radio.

• Possibly the battery is drained. Please charge the battery.

#### 2. Cannot be connected to a computer.

- Please reconnect in radio off mode.
- The USB cable may be damaged, please try another one.

#### 3. Speaker does not produce sound.

- Check if headphones are connected.
- Check the volume level; if too low, turn it up.

#### 4. Cannot play audio from the TF card

- Check if the card or the USB drive has poor compatibility; by trying another card or USB drive.
- The file is damaged or with incorrect format, delete the file and try again.

#### 5. Cannot charge the radio.

- Check if the external adapter or the USB cable is
- connected correctly. Check if the adapter or USB cable is damaged.
- 6. How to reset the radio?
- Misuse may lead to errors in the firmware.
- Remove the battery for a few minutes and reload.

### SPECIFICATIONS

Memory Suppo	orts micro-SD card 64M-32G	
Music format N	IP3 WMA WAV	
Access rate N	/P3: 16-320Kbps	
V	VMA: 8-384Kbps	
Frequency range	FM 87.0-108MHz	
	64.0-108MHz	
	MW 522-1710KHz	
	SW 3.0-23.0MHz	
Earphone output	≤10mW*2	
Communication standard USB2.0(high speed)		
Max. output (Speaker) About 600mW		
Max. current consumption About 300mA		
Power source		
Lithium battery		
External adapter	5V 500mA	
Lithium battery c	onsumption MP3: About 5H	
(Volume is 22 leve	el) Radio: About 5H	
Charging time	4-6 hours	
Speaker	D40mm	
Earphone	D3.5mm	
Unit size	Approx.126 x 43 x 62mm	