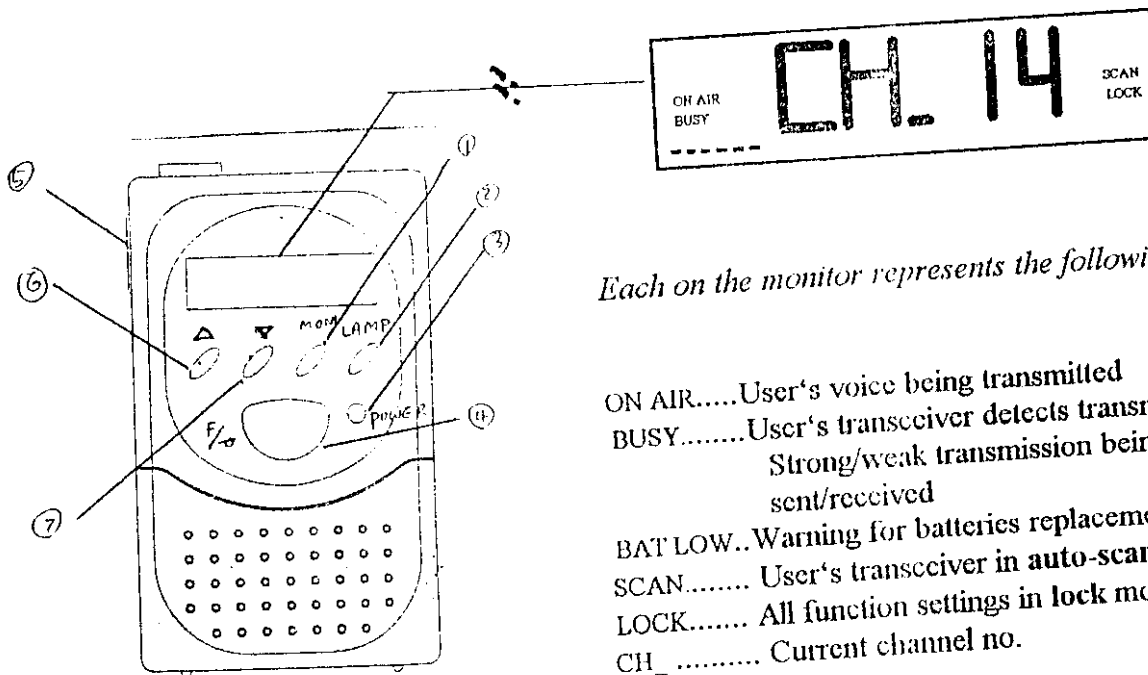


# ***EXHIBIT C***

## ***User Manual***

# COMPACT MODEL-120



*Each on the monitor represents the followings:-*

ON AIR.....User's voice being transmitted  
 BUSY.....User's transceiver detects transmission,  
                     Strong/weak transmission being  
                     sent/received  
 BAT LOW..Warning for batteries replacement  
 SCAN..... User's transceiver in auto-scan mode  
 LOCK..... All function settings in lock mode  
 CH\_ ..... Current channel no.

- ①MONI BUTTON
- ②LAMP BUTTON
- ③POWER BUTTON
- ④FUNCTION BUTTON
- ⑤PTT BUTTON
- ⑥UP BUTTON
- ⑦DOWN BUTTON

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## **HOW TO USE BUTTONS AND KEY**

### **POWER ON/OFF button (small color button):**

Press and hold the small red button for about 2 seconds to switch the transceiver ON. To turn OFF, press and hold for about another 2 seconds.

### **UP AND DOWN BUTTONS:**

Under the power ON condition before pressing the function button, one press of any such buttons makes the monitor show the sound level status. Press up  $\Delta$  or down  $\nabla$  button to readjust the sound level up/downwards as required. Sound level ranges 1~15.

**MONI BUTTON /Sound level checking :** To check the sound level of your previous sound setting, press this button while the power is ON.

While user feels his transceiver can receive a weak transmission (i.e. his partner's voice becomes barely audible during communication), pressing this button enables him to hear the weak message more loudly.

### **LAMP BUTTON /Display backlight :**

While the power is on, giving a short press to this button lightens the display backlight to enable monitor checking in a dark environment. The display light will automatically shut off after 20 seconds to save power. To turn this off immediately, just press the same button one more time.

### **FUNCTION /LOCK button / function changing mode :**

While in ON mode, user can hop among 3 function modes every time this button is pressed. Initial press will start from channel no.  $[CH-XXXX]$  /squench no  $[S4LXXX]$  /beeper on-off  $[BPON]$  in the last and restart in same cyclic order. Guide of each optional setting of such functions is as below.

(Locking can be activated by pressing this button for about 2 seconds to prevent escape of all confirmed settings. "LOCK" mode will show in the monitor. In lock mode, user cannot alter to a new setting from previous function settings without unlocking it. To unlock or release the lock mode for a new adjustment of functions, press this button for about 2 seconds. "LOCK" mode will disappear from the monitor)

**Channel setting:** While the power is ON, search for the channel setting mode  $[CH-XXXX]$  by pressing the **Function Button**  one or more times or as is needed (normally once). While the digital figure  $[CH-XXXX]$  is blinking, press up  $\Delta$  or down  $\nabla$  button shortly to select desired channel 1~14.

**Auto Scanning** :In the above channel setting process, a longer press on up  $\Delta$  or down  $\nabla$  button will start the auto-scanning. The "SCAN" word will show on the monitor.

Auto-scanning will stop at the channel when any transmission on this channel is detected. The detected channel is fixed for a few seconds before the transceiver will keep on continuous scanning. To bypass it, press the function or PTT button first, then press  $\Delta$  up or down  $\nabla$  button to locate a new higher/lower channel. To completely deactivate the auto-scanning or to decide to choose the current channel being found, press the function or PTT button again. The "SCAN" word will disappear on the monitor.

**Squelch setting**: Follow the same procedures as in the function changing mode, press the function button till squelch setting mode  $\text{[S] [L] [ ] [ ] [ ] [ ]}$  shows by pressing 2 times normally (or more times as is needed). Substitute the blinking digital figure  $\text{[S] [L] [ ] [ ] [ ] [ ]}$  by pressing up  $\Delta$  or down  $\nabla$  button to the best condition. High squelch value is good to reduce voice interferences when receiving your partner's talk. However, it can affect the effective communication range. Excessive squelch value is not necessarily desirable. Setting at 3 is recommended.

**Beeper on/off setting**: Follow the same procedure as in the function changing mode, press the function button till the beeper on/off mode  $\text{[B] [P] [O] [N] [O] [F] [F]}$  is seen by pressing 3 times normally or more times as is required. Press up  $\Delta$  and down  $\nabla$  button to set this on / off mode. While beeper is ON mode, each press on up  $\Delta$ , down  $\nabla$  or function button is followed by a tone.

**PTT(Press To Talk) BUTTON**  *How to communicate :*

Press and hold this button each time you talk to your partner with another transceiver set at the same channel with that of yours. Keep your mouth at 8~12 cm from the transceiver when talking to ensure better voice quality. Release PTT quickly after you finish talking to allow your partner to reply. Your partner's voice is blocked when the PTT button is being pressed (i.e. transmitted message cannot be received with the same transceiver simultaneously transmitting a message.)

#### **BATTERY LOW WARNING:**

Monitor will show "LOW BAT" as a warning for replacement of batteries. The small word "ON AIR" will show up each time you press this button to ensure that your voice is being transmitted. When the batteries become weak only the small word "on" shows up while you press the PTT.

The 1~6 dotted lines ( ----- ) on the monitor tells you

how weak/strong your voice is being transmitted while the PTT button is pressed. (This phenomenon can be used as a reference for your batteries condition.) When the PTT is not pressed, the dotted lines will show up when the transceiver detects any trace of transmission. (The stronger the transmission it detects, the more dots appear on the monitor.)

#### **TROUBLE SHOOTING:**

- a) If you are unable to transmit even pressing the PTT;
  - 1) check if the batteries are weak.
  - 2) Check if the batteries are in correct polarity.
- b) If you are unable to receive your partner's call;
  - 1) check if your channel setting is of the same with that of your partner.
  - 2) Check if your volume level is too low.
  - 3) Check if the PTT button is still being pressed.
  - 4) Check if the batteries are in good condition.
  - 5) Check if there is a serious interference.  
Transmitting/receiving to/from a car or heavily enclosed surroundings can affect effective communication range.
- c) If the transceiver makes a lot of noises ;
  - 1) Check if the squelch setting is too low. Set it to at least 2. Squelch setting at zero is the same condition as the speaker volume being maximized and thus makes loud noises.
  - 2) Try to stay away from electronic devices like computers to avoid interferences.

#### **WARNINGS:**

- 1) Take out the batteries from the battery compartment if the transceiver is not to be in service for a long period to avoid erosion of internal parts by chemical from leakage.
- 2) Only rechargeable batteries can be used with standard charging device (not included). Normal batteries are not to be used with the charging device.
- 3) Any transceiver must not be used in any work place where radio-control mining is used. Immature or accidental detonation may occur.
- 4) Even though this is legalized low-power radiocommunication device, any changes or replacement of inner parts may result in higher output power and/or frequency range and thus breach legal regulations and become unlawful.

## TECHNICAL SPECIFICATIONS

### GENERAL

Frequency range..... 462-467 Mhz  
 Channels.....1~ 14  
 Modulation type..... FM  
 Antenna impedance.....50 Ohm  
 Sound Level..... 1 ~15  
 Loud speaker.....8 Ohm 0.3W  
 Microphone.....condenser type  
 Power supply..... 3 Ni-cads or Alkalines(3v-4.5 VDC)

### RECEIVER

Sensitivity at 12dB Sinad..... 0.25 $\mu$ V  
 Selectivity.....45dB  
 Squelch range.....0~6  
 Audio output power..... 0.3W@8Ohm(10% distortion)  
 Distortion at 775mV Audio power.....3%  
 Audio frequency response.....400 ~ 3000 Hz

### TRANSMITTER

RF Output Power..... nominal 500 mW@4.5VDC  
 Frequency Tolerance..... .0.00025%  
 Harmonic Suppression. ....more than 50 dB  
 Modulation .....FM +/- 2.5 KHz

## CHANNEL NUMBERS VS FREQUENCIES

| Channel No. | Freq MHz | Channel No. | Freq MHz |
|-------------|----------|-------------|----------|
| 1           | 462.5625 | 8           | 467.5625 |
| 2           | 462.5875 | 9           | 467.5875 |
| 3           | 462.6125 | 10          | 467.6125 |
| 4           | 462.6375 | 11          | 467.6375 |
| 5           | 462.6625 | 12          | 467.6625 |
| 6           | 462.6875 | 13          | 467.6875 |
| 7           | 462.7125 | 14          | 467.7125 |