FR1500XTM
Operating Manual

J Communications Co., Ltd.

KEY Definition
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(1)  POWER KEY
     1)  Short key
         -  Press the Power button shortly to turn the unit on.
     2)  Long key (In case of pressing and holding more than
         1.2sec)
         -  After saving all information to EEPRO, the unit is
            turned off.
(2)  MODE KEY
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        1)  Short key – increasing a Mode up.
        2)  Long key  - turning to the TWO-WAY mode, first mode.
(3)  MENU KEY
        1) Short key – increasing a Menu up.
        2) Long key  - making the Key locked and disabled.
(4)  Shift/Key lock
        1) Short key – shifting Cursor.
        2) Long key  - releasing Key lock function.
(5)  UP
        1)  Short key – increasing Volume or current item.
        2)  Long key  - increasing Volume or current item at a more
                        rapid  rate.
(6)  DOWN
        1)  Short key – decreasing Volume or current item.
        2)  Long key  - decreasing Volume or current item at a more
                        rapid  rate.
(7)  MONITOR
        -  This key is used to check the active channel before
           transmitting. If you press and hold the monitor key for
           more than 3 seconds, the unit monitors the receiving
           signal continuously. To stop auto monitoring, press the
           monitor key shortly.
(8)  PTT
        -  Pressing and holding this button will allow you to
           speak to any transceiver that is set to the same
           channel and privacy code setting as yours.
        -  Pressing the button twice quickly will allow you to
           transmit a calling to another party on the same
           channel.
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LCD icon display

     : VOX icon – appears when VOX mode is activated.

     : SCAN icon –appears when Scan mode is activated.

     : WEATEHR ALERT icon –appears when Weather alert is selected

     : ALARM icon - appears when Alarm mode is On

 : VIBRATOR CALL icon –appears VIB in the call mode is

selected.

 : BUSY icon – appears carrier detect in the two way channel

 : KEY LOCK icon –appears when key lock mode is activated.

CH : CHANNEL icon –appears when Two way channel is displayed

CODE : CTCSS Code icon –appears when code of Two way channel is displated.

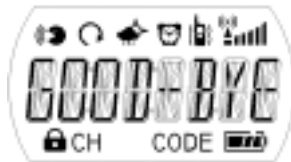 :BATTERY strengtt icon –indicates the battery charge strength.

◆ *POWER ON AND OFF OPERATION*

0.POWER ON OPERATION
If you press the Power key, user's name is shown on LCD for a second with an initial beeping.

1. POWER OFF OPERATION

To turn it off, press and hold the Power key for more than 1.2 seconds. The unit will save the set data before it shuts off.
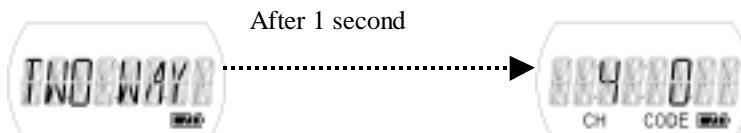
2. AFTER POWER ON INITIAL DISPLAY
Indicates channel, code, Battery balance

◆ *DETAILED MENU BY MODE*
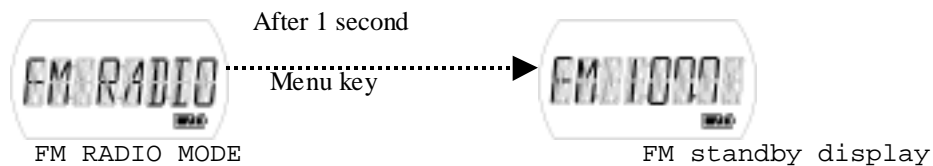
1. TWO WAY MODE

After 1 second

Menu key

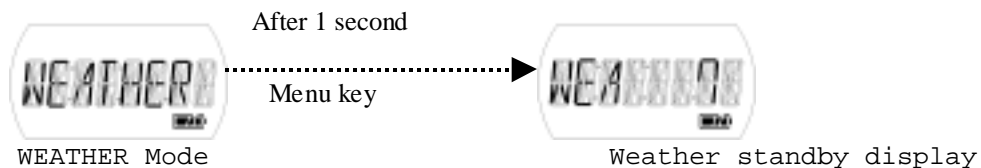TWO WAY mode.   TWO WAY standby display

1) Pressing the mode key in the set up mode allows you to enter the two-way mode. Current channel and code are shown on LCD

2) Detailed function in the two-way mode.
   (1) Channel/Code selection menu
       - Pressing the menu key in the standby display of Two way mode allows you to enter the channel selection menu with beeping and the current channel is blinking. You can select the channel by using up and down key.
       - Pressing the shift key allows you to enter the code selection menu with key beeping and the current code is blinking. You can select the code by using up and down key.
       - Pressing the shift key allows you to return to the channel selection menu.

   (2) Scan selection menu
       - Pressing the menu key in the channel/code selection menu allows you to enter the scan selection menu with key beeping. If there is no key entering for 10 seconds in the scan selection menu, returns to the TWO WAY standby display.
       - You can select scan mode in the off, Normal scan and priority scan by using up / down key while Scan is blinking.
       - If you select the Normal scan, it starts to scan the channel from the current channel.
       - If you select the priority scan, it scans the current channel and priority channel in turn.

   (3) VOX selection menu
       - Pressing the menu key in the scan selection menu allows you to enter VOX selection menu with key beeping.
       - You can select one out of off/Hi/Mid/Low by using up or down key.

   (4) Scrambler selection menu
       - Pressing the menu key in the VOX selection menu allows you to enter scrambler selection menu with key beeping.
       - You can select one out of off/1/2/3/4 by using up or down key.
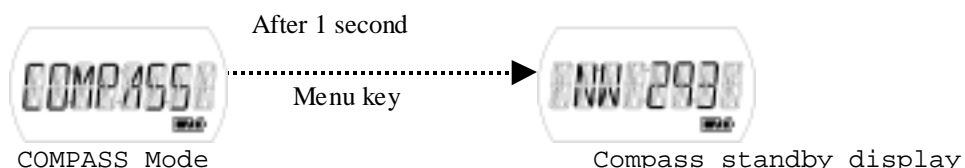
2. FM RADIO MODE

After 1 second

Menu key

FM RADIO MODE   FM standby display

1) Pressing the mode key in the two-way mode allows you to enter FM radio mode and enter FM standby mode showing current FM operating status after 1 second.
2) Detailed function by menu.
   (1) FM Seek
      - Pressing the menu key in the FM Standby display allows you to enter FM seek menu and you can scan the FM radio frequency by using up/down key. If an active broadcast signal is detected, it receives a signal in that channel.
   (2) FM Tune
      - Pressing the menu key in the FM seek menu allows you to enter FM tuning menu. You can increase and decrease FM broadcast frequency by 0.1KHz using up/down key.
   (3) FM Preset menu
      - Pressing the menu key in the FM Tune menu allows you to enter FM preset menu. You can preset the broadcast channel up • 9 channels by using the shift key. You can change a broadcast frequency by using up/down key.
   (4) FM selection menu
      - Pressing the menu key in the FM Preset allows you to enter FM selection menu. You can select one out of FM off/FM only/FM +2WAY
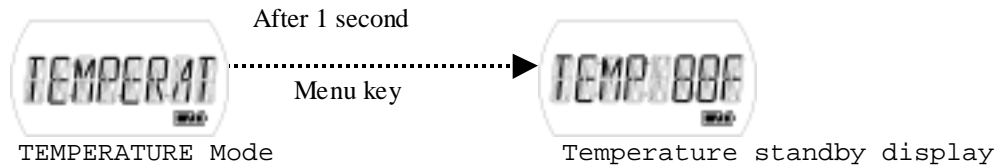
3. WEATHER MODE

After 1 second

Menu key

WEATHER Mode   Weather standby display

1) Pressing the mode key in the FM MODE allows you to enter weather radio mode shows weather channel operation status after 1 second.
2) Detailed function by menu.
   (1) Weather Channel selection menu
      - Pressing the menu key in the Weather Standby allows you to enter weather channel selection menu. You can select the weather channel out of WEA 1/~/WEA 10. (Default=1)
   (2) Weather Alert selection menu
      - Pressing the menu key in the Weather Channel Selection menu allows you to enter the Weather alert selection menu. You can select ALERT ON/OFF by using up/down key. (Default=OFF)
      - If the WEA Alert On, this radio always detects the weather alert signal (=1050Hz) of weather channel.
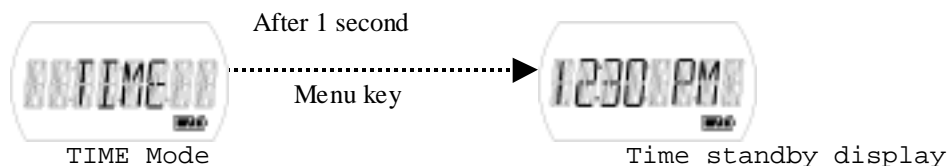
4. COMPASS MODE

After 1 second

Menu key

COMPASS Mode   Compass standby display

1) Pressing the mode key in the WEATHER MODE allows you to enter COMPASS radio mode and it shows you the current direction on the basis of which radio antenna is heading for.
2) There are 8 directions such as N/NE/E/SE/S/SW/W/NW in the compass direction.
3) Detailed function by menu.
   (1)Calibration menu
       - Pressing the menu key in the Compass Standby allows you to enter Compass Calibration menu. If you select CALIB ON by using up or down key, the Calibration is started.
    (2)Compass Declination selection menu
       - Pressing the menu key in the Compass Calibration menu allows you to enter Compass Declination selection menu. You can one out of DECL 90E~90W by using up/down key.

5. TEMPERATURE MODE

After 1 second

Menu key

TEMPERATURE Mode   Temperature standby display

1) Pressing the mode key in the COMPASS MODE allows you to enter the temperature mode, and it shows you the current temperature on the LCD after I second.
2) Detailed function.
   (1) Unit selection menu
       - Pressing the menu key in the Temperature standby allows you to enter the Unit selection menu, you can select Fahrenheit or Celsius by using up/down key.
    (2)Alarm Set menu
       - Pressing the menu key in the Unit selection menu enters the Alarm Set menu and you can select alarm function by using up/down key.
   (2) Alarm High limit Set menu
       - Pressing the menu key in the Alarm Set menu allows you to enter Alarm High limit set menu and you can set the High limit temperature by using up/down key.
   (3) Alarm Low limit Set menu
       - Pressing the menu key in the Alarm High limit Set menu allows you to enter the Alarm Low limit set menu and you can set the High limit temperature by using up/down key.
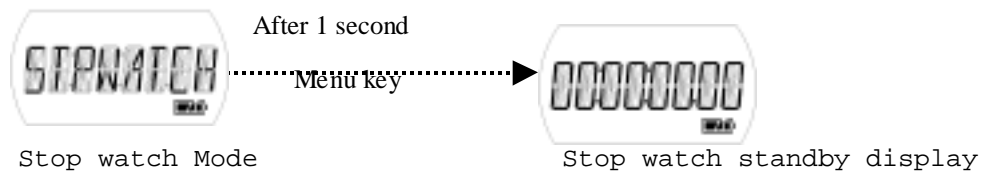
6. TIME MODE

After 1 second

Menu key

TIME Mode   Time standby display

1) Pressing the MODE key in the Temperature mode allows you to enter the Time mode and after 1 second it shows you the current
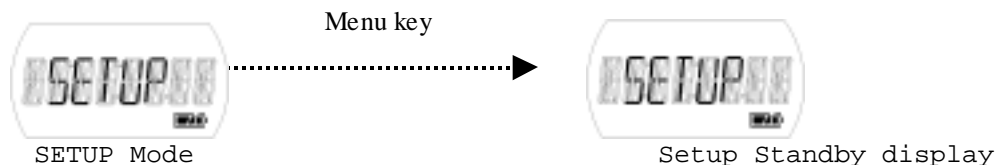
time.
2) Detailed function by menu.
    (1)   Unit selection menu
        - Pressing the menu key in the Time Standby allows you to
          enter Unit selection menu and you can select the time
          unit in the 12/24 hour by using up/down key.
    (2)   Alarm selection menu
        - Pressing the menu key in the Unit Selection menu allows
          you to enter the Alarm selection menu and you can
          select the ALARM Off/ALARM ON by using up/down key.
        - If the Alarm is on, the radio makes a alarm beeping at
          the set time.
    (3)   Alarm time setting menu
        - Pressing the menu key in the Alarm selection menu
          allows you to enter the Alarm setting menu, you can
          select hour/minute or AM/PM by using shift key and
          change setting time by using up/down key.
        -

7. STOPWATCH MODE

After 1 second
Menu key

Stop watch Mode   Stop watch standby display

1)   Pressing the Mode key in the Time mode allows you to enter the
     Stop Watch mode and access to the Stopwatch standby display
     after 1 second.
2)   You can operate the stopwatch by using the menu key.

8. SETUP MODE

Menu key

SETUP Mode   Setup Standby display

1) Pressing the Mode key in the Stopwatch mode allows you to enter
   Setup mode and access to the Setup standby display after 1
   second.
2) Detailed function by menu.
    (1) Priority scanning channel selection menu
        - Pressing the Menu key in the SETUP mode allows you to
          enter in the priority scanning channel selection menu.
          You can select the Priority scanning channel by using
          the up/down key.
    (2) VOX Recovery time selection menu
        - Pressing the menu key in the Priority scanning channel
          selection menu allows you to enter in the VOX Recovery
          time selection menu. You can select one out of
          Off/1sec/2sec/3sec/5sec by using the up/down key.
    (3) CALL selection menu
        - Pressing the menu key in the VOX delay time selection

menu allows you to enter in the Call selection menu. You can select call option out of Off/1/2/3/4/5/6/7 by using up/down key.

    (4) VIBCALL selection menu
- Pressing the menu key in the Call selection menu allows you to enter in the VIBCALL selection menu. You can select VIBCALL option out of Ring/Ring+VIB/VIB by using up/down key.

    (5) Roger beep selection menu
- Pressing the menu key in the VIBCALL selection menu allows you to enter in the Roger beep selection menu. You can select the Roger beep on/off by using the up/down key.

    (6) Key beep selection menu
- Pressing the menu key in the Roger beep selection menu allows you to enter the Key beep selection menu and you can select key beep on/off by using up/down key.

    (7) T-O-T (Time out timer) selection menu
- Pressing the Menu key in the Key beep selection menu allows you to enter T-O-T selection menu. You can select one out of Off/30/60/180 by using the up/down key.

    (8) User name setting menu
- Pressing the Menu key in the T-O-T selection menu allows
you to enter the User name setting menu.
You can set the user name by using Shift key and Up/down key.

◆ *Operating*

1. Transmit
    (1) Transmitting is started by Internal PTT/External PTT/VOX PTT keying.
    (2) You can transmit a call signal by Double Internal/External PTT Keying. If you press the Internal/External PTT key during Calling, stop the call transmitting and return to the receiving stand by mode.
    (3) If the battery is low, you can make a transmission for 10 seconds.
    (4) You can transmit signal in every mode by using transmit keying.

2. Receive
    (1) Two way channel receiving
        1) If the radio detects the correct channel and code, release the receiving.

    (2) FM radio receiving
        1) IF the FM radio is on, it receives FM RADIO CHANNEL.

    (3) Weather Alert receiving
        1) If the Weather Alert is on, it detects the whether Alert

signal of weather channel.

    (4) Weather receiving
       1) If the weather channel is on, it receives the weather channel.

3. Normal Scan
    1) If the Normal Scan is on, it starts scanning all channels.
    2) If a transmission is detected, it receives a signal for 5 seconds and then change to next channel.
    3) Scan wait time is 5 seconds after receiving.
    4) You can pause on any channel for 15 seconds while in the channel Scan mode by pressing the PTT key during of a signal for 5 seconds afterward.
    5) When you make a transmitting during Scanning, if you are receiving or in scan wait time, you transmit a signal in that channel. Otherwise you transmit a signal in the channel in which you start the scanning.
    6) Pressing the monitor key shortly during receiving or scan wait time allows you to move to next channel and pressing and holding the monitor key for more than 1.5 seconds deletes the current receiving channel in the scan list.

4. Priority scan
    1) Priority scan allows the scanning of two different channels at the same time.
    2) If the radio receives a signal in the current channel, the radio detects the priority channel every 5 seconds and the radio receives a signal in the priority channel, detects the priority channel continuously.
    3) When you try to transmit a signal during Scanning, if you are receiving or in the scan wait time, you transmit a signal in that channel. Otherwise you transmit a signal in the channel in which you start the scanning.
    4) Pressing the Monitor key during scan wait time or receiving allows you to switch to the next channel.

5. Monitoring
    1) Pressing the Monitor key allows you to monitor the current channel.
    2) Monitor key does not operate during transmitting.
    3) Pressing the Monitor key for more than 3 seconds enables to monitor continuously. Pressing the Monitor key releases the auto monitoring.
    4) Changing the channel or receiving a signal release the Auto Monitoring.

6. Power Save
    1) After Radio is on, it does not save the power for 5 seconds.
    2) After finishing transmitting or receiving, it does not save for 5 seconds.
    3) When code option is off, Auto Power Save operating abides by the rule of 100ms/400ms(off/on) for 20 seconds after power save is started and abides by the rule of 100ms/900ms(off/on) after 20 seconds when power save is started.
    4) When code option is on, Auto power save operation abides by

the rule of 300ms/400ms(off/on) for 20 seconds after power save is started and abides by the rule of 300ms/900ms(off/on)after 20 seconds.

7. Low cell indication
    1) The radio checks the battery charge strength regularly.
    2) The cell icon will blink when the radio is in low battery power after making a low cell beeping.
    3) You can not transmit for more than 10 seconds during low cell.

8. RSSI display
    1) RSSI Icon and strength appear on the LCD when the radio receives a busy signal.

9. Volume control
    1) Pressing the up/down key in the every mode increase or decrease the volume.