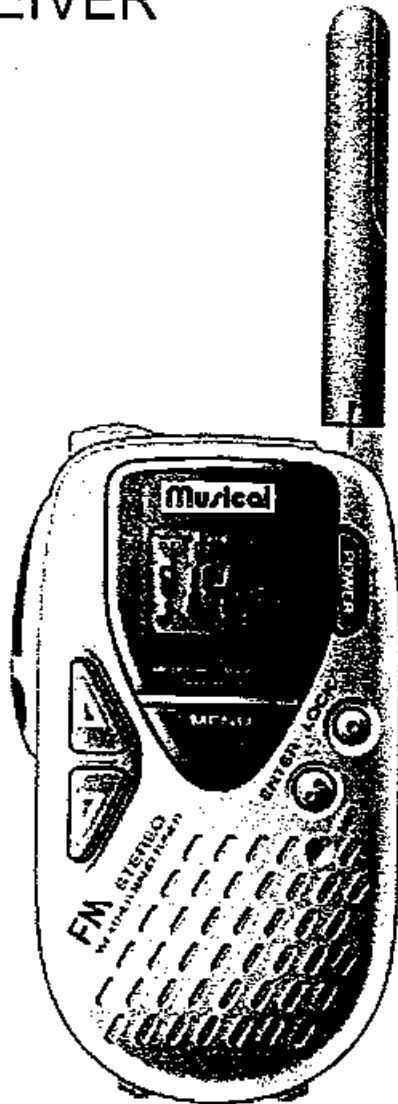# Musical

FRS300A

FAMILY RADIO SERVICE: 14 CHANNELS

TRANSCEIVER WITH FM/WEATHER

BAND RECEIVER

INSTRUCTION MANUAL

Warning: Adjustment to this unit or replacement of any transmitter component (crystal, semiconductor, etc.) to this unit that could result in a violation of the rules.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

☐ Reorient or relocate the receiving antenna.
☐ Increase the separation between the equipment and receiver.
☐ Connect the equipment into an outlet on a circuit different from that to which the receiver is needed.
☐ Consult the dealer or an experienced radio/TV technician for help.

If shielded cables or special accessories are required for compliance, a statement must be included which instructs the user to employ them, eg,

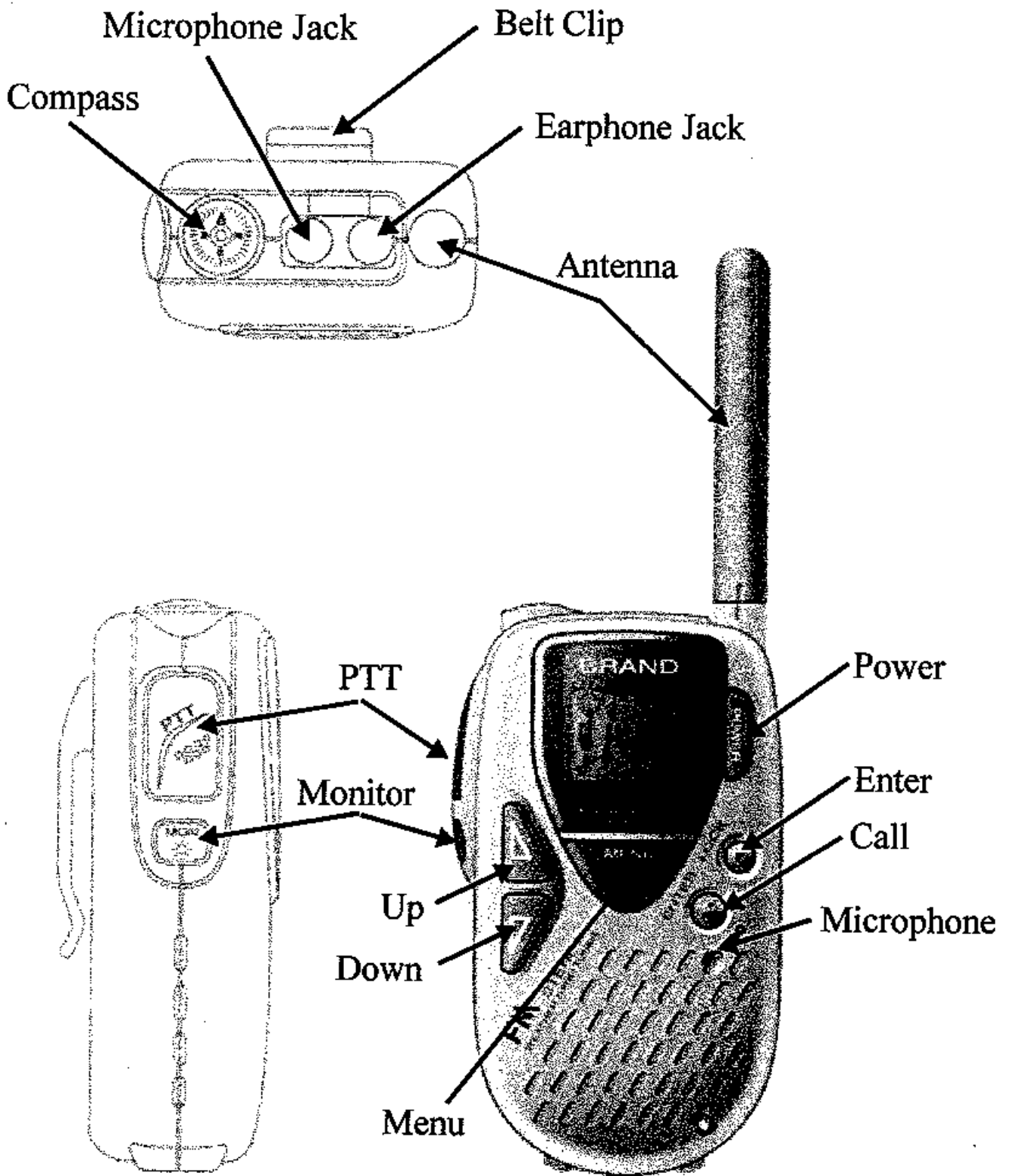Shielded cables must be used with this unit to ensure compliance with the Class B FCC limits.

Precautions
• Do not modify or attempt to adjust the transceiver for any reason.
• Avoid extremes n exposure to water, heat, and cold. This transceiver is weather resistant but not waterproof.
• Do not expose the transceiver to long period of direct sunlight, nor place the transceiver close to heating appliances.
• Do not place the transceiver in excessively dusty areas, humid areas, wet areas, nor on unstable surfaces.
• If an abnormal odor or smoke is detected coming from the transceiver, immediately switch OFF the power and remove the batteries from the transceiver. Contact your dealer.

Unpacking
Carefully unpack the transceiver. We recommend that you identify the items listed below before discarding the packing material.

• Transceiver..........................1
• Belt Clip.............................1
• Instruction Manual.................1

FRS300 4

Compass

Microphone Jack

Belt Clip

Earphone Jack

Antenna

GRAND

Power

PTT

Enter

Call

Monitor

Up

Down

Microphone

Menu

To Turn On The Unit or To Turn Off The Unit

Press the POWER switch for more than 1 second.

Auto Battery Power Saver
The unit has a special circuit designed to extend battery life. If there are
no transmissions within 5 seconds, the unit will automatically switch to
battery save mode.

To Transmit

Simply talk to the built-in microphone as VOX (Voice Activated Trans-
mission) turns into transmission mode automatically, or press the
PTT(Push-To-Talk) button.

To Adjust VOLUME control

Press momentarily UP button to increase or
DOWN button to decrease volume.
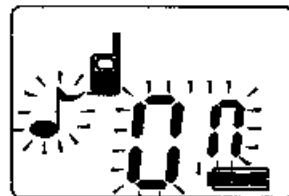The higer number, the higher volume level.
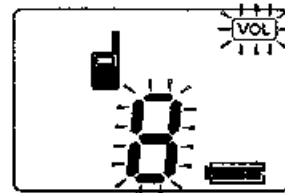
To Turn On or Off Beep (Talk Confirmation Tone)

This alerts the other party that you are finished talking and it's OK for
them to begin talking.

1. Press the MENU button repeatedly until the
   LCD display indicates as shown at right.
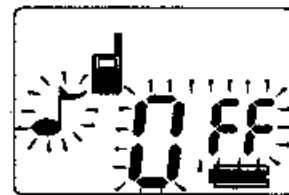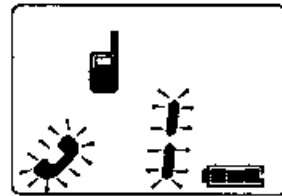
2. Press the UP or DOWN button to turn on the
   beep.

3. Press the MENU button to continue other settings.
   To complete setting, press the ENTER button.

To Select Call Tones

Call tones sound like a telephone ring, and are convenient for quickly identify yourself to another party. Persons whom you call will instantly recognize you because of your call tone. As the unit features 5 different tones, you can select and set your favorable tone.

1. Press the MENU button repeatedly until the LCD display indicates as shown at right.

2. Press the UP or DOWN button to set a desired tone from 1 to 5.

3. Press the MENU button to continue other settings.
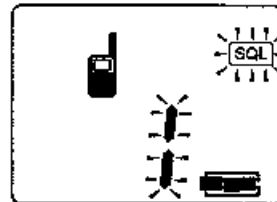   To complete setting, press the ENTER button.

To Lock Control Keys (UP/DOWN, MENU keys)

Press and hold the ENTER button for 2 seconds. Key icon will appear on the display.

To Select Squelch Level

This feature enables you to adjust squelch level on reception.
When you hear interference noises during reception, adjust squelch level.

1. Press the MENU button repeatedly until the LCD display indicates as shown at right.

2. Press the UP or DOWN button to set a desired number from 1 to 3.
   Number 1 – Low
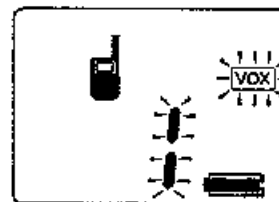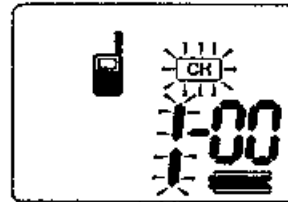   Number 2 – Middle
   Number 3 – High

3. Press the MENU button to continue other settings.
   To complete setting, press the ENTER button.

To Select VOX Level

This feature enables you to adjust VOX microphone sensitivity.

1. Press the MENU button repeatedly until the LCD display indicates as shown at right.

2. Press the UP or DOWN button to set a desired number from 1 to 3.
   Number 1 – High Sensitivity
   Number 2 – Middle Sensitivity
   Number 3 – Low Sensitivity

3. Press the MENU button to continue other settings.
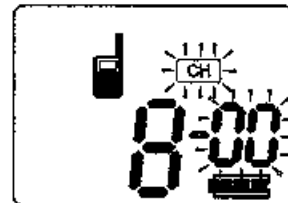   To complete setting, press the ENTER button.

To Select Main Channel

1. Press the MENU button. The LCD display indicates as shown at right.

2. Press the UP or DOWN button to set a desired channel from 1 to 14.

3. Press the MENU button to continue other settings. To complete setting, press the ENTER button.

To Select Sub-Channel

1. Press the MENU button repeatedly until the LCD display indicates as shown at right.

2. Press the UP or DOWN button to set a desired sub-channel from 00(sub-channel Off) to 38.

3. Press the MENU button to continue other settings. To complete setting, press the ENTER button.

Automatic Channel Scan

Press and hold the UP or DOWN button to search signals.
When the unit catches a strong signal , scan will stop for 5 seconds.
If you want to stop at that channel, press the PTT or ENTER button.

To Set Preset Memory

You can store the most frequently used channels up to 10 presets.
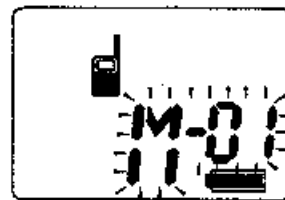
1. Press the MENU button and set main and sub-channel as desired.
   For example: Channel 14-38 as shown at right
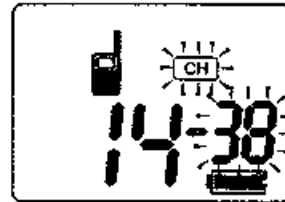
2. Press the MENU button. The LCD display indicates as shown at right.
   If a memory number is flashing, a memory preset is free to store a channel.

   If a memory number is not flashing, that memory preset number is occupied. A channel number is shown after memory preset number.

   To see a memory number, press the MONITOR button.

3. Press the UP or DOWN button to set a desired memory preset number.
   For example: Memory preset number M-10 as shown at right.
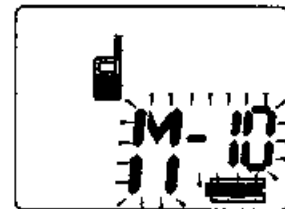
4. Press and hold the ENTER button for 2 seconds. You will hear a confirmation beep. A channel number is stored, then the display shows a stored channel number.

5. To enter a new channel number to an occupied memeory preset, set a desired channel first. Then, press the MENU button. While a memory number flashes, press UP or DOWN button to select a desired memory number and press and hold the ENTER button for 2 seconds until a beep is heard.

To Set Out-Of-Range Warning

This feature enables two transceivers to exchange and measure signals automatically, then will alert you by a tone sound and flashing LCD display before two transceivers are located distant beyond communication range.

1. Press the MENU button repeatedly until the LCD display indicates as shown at right.
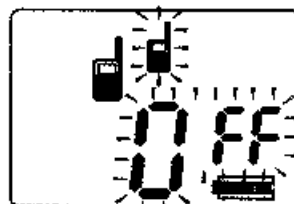
2. Press the UP or DOWN button to set On.
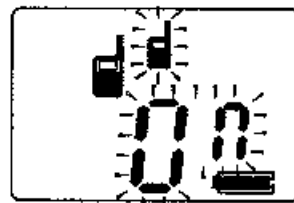
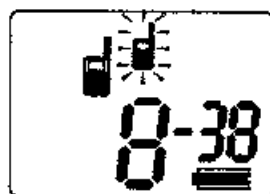3. Press the MENU button to continue other settings.
   To complete setting, press the ENTER button.

In case you have set a channel at 8-38, the display shows as above.

| Beyond Small Area	Beyond Large Area
Signals between two tarnsceivers becomes weaker, the unit alerts you to contact the other party.	Before two transceivers move out beyond communication range and it is unable to reach signals each other, the unit alerts you to contact the other party.

To Set FM Mode

To receive FM signals, insert an earphone into the Earphone jack. As a cord works as FM antenna, adjust a cord position to have the best reception.

1. Press the MENU button repeatedly until the LCD display indicates as shown at right.

2. Press the ENTER button to set FM mode. Press the MENU button. The frequency indication will flash.
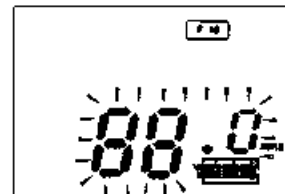
3. Press the UP or DOWN button to set a desired FM station, then press the ENTER button.
When pressing and holding the UP or DOWN button, frequency search becomes fast mode.

To Set FM Preset Memory Stations (Up to 5 Presets)

You can store the most frequently listening stations up to 5 presets.

1. Press the MENU button and set the frequency as desired and press the ENTER button.
For example: 88.1MHz as shown at right
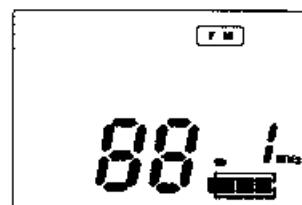
2. Press the MENU button twice. The LCD display indicates as shown at right. If a memory number is flashing at normal speed and a frequency is not shown, a memory preset is free to store a channel.
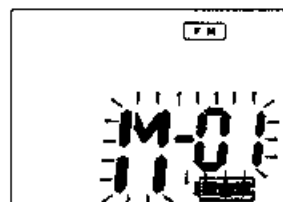
If a memory number is flashing at higher speed, that memory preset number is occupied and a frequency is displayed.

To see a memory number, press the MONITOR button.

3. Press the UP or DOWN button to set a desired memory preset number. For example: Memory preset number M-02 as shown at right.

4. Press and hold the ENTER button for 2 seconds. You will hear a confirmation beep. A station is stored, then the display shows a stored frequency.
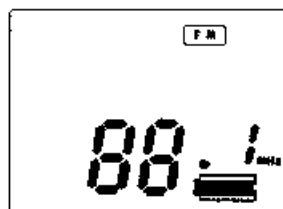
5. To enter a new channel number to an occupied memeory preset, set a desired frequncy first. Then, press the MENU button. While a memory number flashes, press UP or DOWN button to select a desired memory number and press and hold the ENTER button for 2 seconds until a beep is heard.

To Select Listening from Earphone or Speaker

1. If you want to listen to FM radio from the built-in speaker, press the MENU button repeatedly until the LCD display indicates as shown at right.
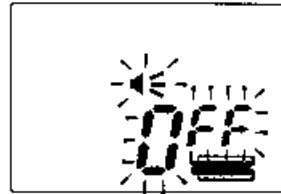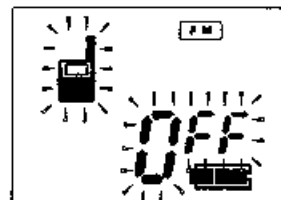
2. Press the UP or DOWN button to set SPEAKER ON.
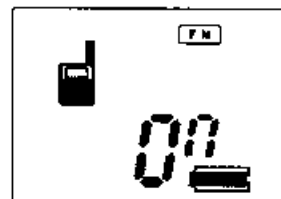   Now you can listen to FM radio from the built-in speaker.
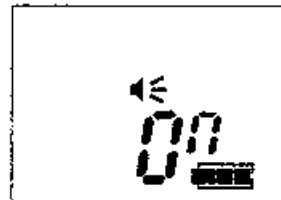
To Set FM and FRS Dual Mode

If you want to hear FRS incoming call or transmit while you listen to FM radio, this feature enables you to do so.

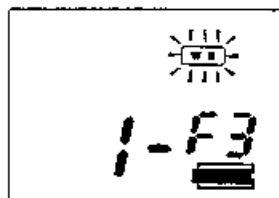1. Press the MENU button repeatedly until the LCD display indicates as shown at right.

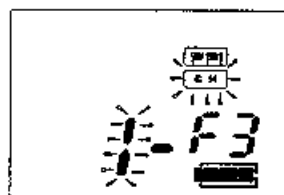2. Press the UP or DOWN button to set FRS ON.

To Set Weather Band Radio Mode

1. To receive Weather Band Radio signals, press the MENU button repeatedly until the LCD display indicates as shown at right.

2. Press the ENTER button to set Weather Band Radio mode.
   Press the MENU button. The channel indication will flash.

3. Press the UP or DOWN button to select the channel with the strongest signal in your area, then press the ENTER button.

To Set Receiving Mode

This feature enables you to select monitor mode when All Hazard Alert Signal is received.

1. Press the MENU button repeatedly until the LCD display indicates as shown at right.
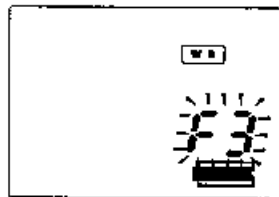
2. Press the UP or DOWN button to select F1, F2 or F3. (See monitor mode on the next page.)

F 1 - **Mute** mode. When receiving an alert signal, the LCD illuminates and flashes.

F 2 - **Standby** mode. When receiving an alert signal, the LCD illuminates and flashes and sound comes from the speaker.

F 3 - **Speaker** mode. Set this mode to listen to Weather Band Radio from the speaker.
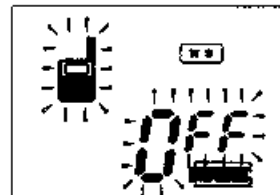
When receiving All Hazard Alert Signal is received, the LCD will illuminate and indicate EAS(Emergency Alert Syatem).

To Set Weather Band and FRS Dual Mode

If you want to hear FRS incoming call or transmit while the unit monitors Weather Band signal, this feature enables you to monitor FRS as well.

1. Press the MENU button repeatedly until the LCD display indicates as shown at right.

2. Press the UP or DOWN button to set FRS ON.