GARMIN.

~rino 110

2-way radio &
personal navigator®

quick
start
guide

Read
This
First!

Installing the Batteries

The Rino operates on three "AA" batteries (not included), which are located in the back of the unit. Rechargeable Alkaline, NiMH, NiCad or Lithium batteries (see Reference Manual for setting battery type) may also be used. Stored data will not be lost when the batteries are removed.

To install batteries:

1. Remove the battery cover on the back of the unit. Turn the D-ring 1/4 turn counter-clockwise & pull away clockwise.

2. Insert batteries observing the polarity. A polarity reference can be found moulded in the unit housing. The negative (-) battery terminal always orients closest to the spring.

3. Reinstall the battery cover by inserting the bottom hinge clip and closing the cover. Turn the D-ring 1/4 turn clockwise.

Battery Installation

Important Note:
When replacing batteries, use only new or fully recharged batteries and do not mix Alkaline, NiMH, NiCad or Lithium batteries. Rechargeable batteries may typically display less capacity than Alkaline batteries.

Remove the batteries from the unit if you don't plan to use it for several months.

Follow the battery manufacturer's instructions for proper care and disposal of used batteries.

Extensive use of backlighting and/or WAAS will significantly reduce battery life.

Unit Overview

POWER button:
• Press and hold to turn the unit On/Off.
• Press to adjust contrast and backlighting.

LCD DISPLAY

CALL button:
• Press to send out Call Tone.
• Will send position when released (if enabled).

TALK button:
• Press and hold to talk.
• Will send position when released (if enabled).

PAGE/QUIT button:
• Press to cycle through main pages.
• Used to quit or escape menu items.

VOLUME (V) button:
• Press to pop up volume control.

MICROPHONE:
• Hold unit 3-4 inches away when talking.

CLICK STICK™
• Press in to enter highlighted options and to confirm messages.
• Move Up/Down or Right/Left to move through lists, highlight fields, on-screen buttons, icons, enter data or move the map panning arrow.
• Press in and hold to display Shortcut Menu.

ZOOM/MAP (Z) button:
• From Map Page, press to pop up Zoom control.
• From any other page, press to display Map Page and press again to pop up Zoom control.

2

SPEAKER

Unit Overview

2-WAY FRS/GMRS ANTENNA

GPS ANTENNA

BELT CLIP CONNECTOR MOUNT

EXTERNAL POWER AND
DATA CONNECTOR WEATHERCAP

BATTERY COMPARTMENT D-RING

HEADSET CONNECTOR WEATHERCAP

BATTERY COMPARTMENT COVER

MOUNT ALIGNMENT NOTCHES

**Backlighting
and
Contrast**

Display Backlighting and Contrast Set Up

If lighting conditions make it hard for you to see the display screen, you can adjust the contrast or turn on the backlight.
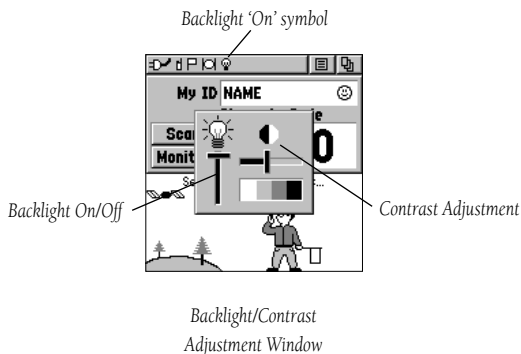
To turn on the backlighting:

1. Briefly press and release the **POWER** button from any page on the unit to display the Backlight and Contrast adjustment. Press either the **POWER** button or Up or Down on the **CLICK STICK** to turn the Backlight either On or Off. The backlight will remain on until the set timeout period is completed or the **POWER** button is pressed again.

   The unit is factory set to timeout 15 seconds after the last button press. A light bulb symbol will appear on the top Status Bar when the backlight is On.
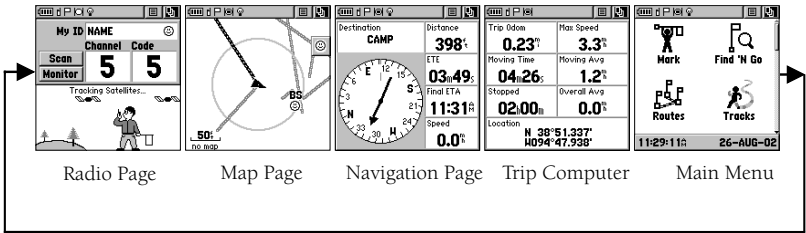
To adjust the screen contrast:

1. Briefly press and release the **POWER** button from any page on the unit to display the Backlight and Contrast adjustment. Move the **CLICK STICK** to Left (Lighter) or Right (Darker) to adjust the contrast.

Backlight 'On' symbol

Backlight On/Off

Contrast Adjustment

*Backlight/Contrast
Adjustment Window*

Moving between the main pages

All of the information you need to operate the Rino can be found on five default main pages (or display screens). You can simply press and release the **PAGE** button to cycle through the Radio Page, Map Page, Navigation Page, Trip Computer, and Main Menu Page.

Main Display Pages

Radio Page	Map Page	Navigation Page	Trip Computer	Main Menu

While these five pages provide you with different types of communication and navigation information, they all share common features like Option Menus and a Main Page Menu, both of which are accessed by on-screen buttons. To display one of these menus, use the **CLICK STICK** to highlight the on-screen button, then press IN on the **CLICK STICK.**

Radio [≡] [⧉]

Option Menu Button   Main Page Menu Button

Setup Radio
Setup Scanlist
Turn Radio Off
Turn GPS Off

An Option Menu

These menus allow you to access options that provide additional features or customize the unit to your preferences. To exit these and other pop-up type menus, move the CLICK STICK to the left or right.

Radio
Map
Navigation
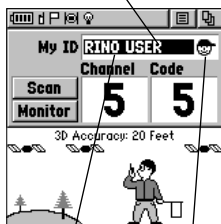**Trip Computer**
Main Menu

Main Page Menu

Use to go directly to a Main Page and as an alternate to cycling through the Main Pages. Double click on the on-screen button to toggle between two pages.

Entering Data

Highlight Cursor

'My' ID' field   Symbol field

Data entry using keyboard.

*If you hold the **CLICK STICK** Up or Down, you will scroll through the list more quickly. Once you reach the end of the list, you can 'wrap' back to the top or bottom by releasing the **CLICK STICK** then pressing in the same direction again. This same method may also be used on other selection windows.*

Entering data and changing unit settings

There will be many times that you will need to enter data in the Rino or make changes to the unit settings. Let's practice by entering a user ID (My ID) and changing the user symbol. The ID and symbol are used to identify you to other Rino users.

Changing the name:

1. Using the **CLICK STICK**, highlight the 'My ID' field and then press the **CLICK STICK** IN. This will activate the field and display the keyboard.

2. Move the **CLICK STICK** Up, Down, Left or Right to highlight the 'Clear' field, then press IN on the **CLICK STICK** to clear the default 'Name' ID.

3. To enter a new ID, press the **CLICK STICK** Up, Down, Left or Right to move the cursor to the desired letter, number or a space, then press IN on the **CLICK STICK** to select that highlighted character. You may enter up to 10 characters for your ID.

   You will also see a highlight cursor in the 'My ID' field showing your current entry position in that field. Choosing 'Back' will delete the character to the left of the cursor. Use the left or right arrow symbols to move the highlight in the ID field.

4. When you have entered your new ID, use the **CLICK STICK** to highlight 'OK' and then press IN on the **CLICK STICK**.

Changing the user symbol:

1. Using the **CLICK STICK**, highlight the face symbol to the right of the 'My ID' field and then press the **CLICK STICK** IN. This will show a list of available face icons.

2. Move the **CLICK STICK** Up or Down to scroll through the selections. Since not all the selections can fit in the window, you will see a slider bar on the right side indicating your current position in the list.

3. Once you have highlighted the desired icon, press IN on the **CLICK STICK**.

You should now be able to display any main page, display any options that may be available, change a setting and enter data.

Radio Setup

The Rino comes set from the factory to transmit on the FRS (Family Radio Service) frequencies. Your Rino will allow you talk with other FRS users, but if the other radio is a Rino, several other features are available.

The Rino can transmit on fourteen FRS channels and has thirty eight squelch codes available to block unintended conversations from being heard on your radio. Remember, FRS channels are public domain and can be monitored by anyone with an FRS radio.

Unique to Rino users are a personal ID name (My ID) and face icon. When talking with other Rino users, your ID and icon will be displayed on the receiving radio as your identification. This feature of the Rino can be disabled. Since we have already created an ID and selected an icon, lets pick a channel and code to transmit on.

To select a channel:

1. Place the highlight over the "Channel" field and press the **CLICK STICK** IN.

2. Using the **CLICK STICK**, select one of the fourteen available channels and press the CLICK STICK IN to accept the selection.
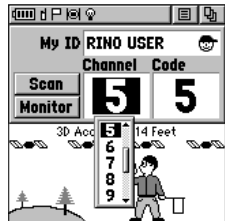
To select a code:

1. Place the highlight over the "Code" field and press the **CLICK STICK** IN.

2. Using the **CLICK STICK**, select one of the thirty eight available codes and press the **CLICK STICK** IN to accept the selection.
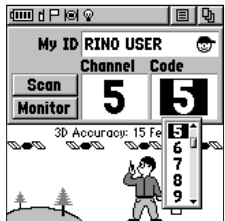
Adjusting the volume

If you need to adjust the volume, press the **V** key on the front of the unit to display a slider adjustment. Using the **CLICK STICK** Up/Down, raise or lower the slider to change the volume up or down. When you have the proper level set, press the **V** key to hide the slider control.
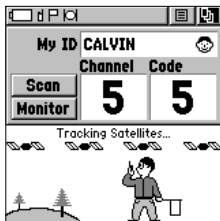
Setting Up the Radio

Selecting a Channel

Setting a Squelch Code

**Initializing
the GPS**

Tracking Satellite Signals

Mark Waypoint Page

Initializing the GPS

Before the Rino can be used for navigation, the GPS receiver has to be initialized. The initialization process allows the Rino to receive and store satellite information, and begin using the satellites for navigation. The initialization is automatic, should only take a few minutes, and only needs to be done the first time that the unit is used.

Take the Rino outside where it will have an unobstructed view of the sky and turn it on. The unit will begin to search for satellite signals. Initialization should take no more than five minutes. When the GPS is initialized and ready for navigation, the message "3D Accuracy" will be displayed on the lower portion of the Radio Page.

If for some reason the unit is not able to gather the necessary satellite information, please refer to the Reference Manual for more information.

Basic Navigation

With the Rino turned on and tracking satellites, lets learn to navigate using the Rino.

First lets mark a waypoint at your current location. Marking a waypoint is simply capturing your current location and storing it in the unit's memory.

To Mark a Waypoint:

1. Press the **CLICK STICK** IN and hold it until the Shortcuts Menu is displayed.

2. Using the **CLICK STICK**, highlight 'Mark Waypoint' and press the **CLICK STICK** IN. This will display the Mark Waypoint Page.

3. Using the **CLICK STICK** highlight the 'Name' field and press the CLICK STICK IN. Using the method described on page 6, enter a new name then press the **CLICK STICK** IN.

4. Using the **CLICK STICK** highlight the 'Symbol' field and press the **CLICK STICK** IN. Using the **CLICK STICK**, choose a symbol then press the CLICK STICK IN to accept the selection.

5. Using the **CLICK STICK** highlight the 'OK' button at the bottom of the page and press the **CLICK STICK** IN to save the waypoint.

Change to the Map Page and begin walking. Walk away from your original location for at least three minutes. As you are walking, notice that a breadcrumb trail of your path is left on the map. This trail is called a Track Log. When you feel that you are a sufficient distance away from your starting point, press the **CLICK STICK** IN and hold it until the Shortcuts Menu is displayed.
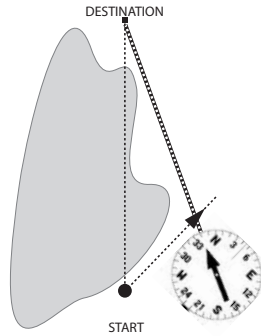
To Begin Navigation:

1. Highlight 'Find 'N' Go', press the **CLICK STICK** IN.

2. Highlight 'Waypoints', press the **CLICK STICK** IN.

3. You will have the option to display saved waypoints by 'Nearest' or by 'Name', select 'Nearest' and press the **CLICK STICK** IN.

4. Highlight the waypoint that you created and press the **CLICK STICK** IN.

5. With the Waypoint Page displayed, highlight the 'Goto' button at the bottom of the page and press the **CLICK STICK** IN to begin navigation.
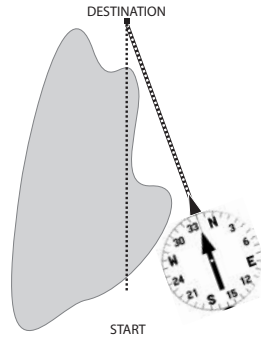
The Compass Page is used for navigation. The two main components of the compass page are the compass ring and the pointer. As you move, the compass ring will rotate showing your current direction of travel at the top of the display. The pointer will point toward your destination. When the pointer is aligned with the vertical line at the top of the compass ring, you are on a course directly toward your destination. If you are off course don't worry the pointer will always point you the right direction. Remember, a GPS has to move to navigate. If you are standing still or moving very slowly, the navigation data may not be accurate.

OK lets try it. Begin walking at a normal pace. The compass ring should rotate and the pointer should begin pointing toward your starting point. As soon as you are able, turn toward the pointer until it is pointed toward the top. Continue walking toward your starting point. Make a few turns to see how the pointer acts and get a feel for it. When you are close to your destination a message will be displayed alerting you that you have arrived.

Basic Navigaiton

DESTINATION

START

The Rino provides a straight line, direct navigation course to your destination. Since it is not always possible to follow a straight line from start to finish, as you move, the Pointer will always point toward your destination and the Compass Ring will always show your current direction of travel.

DESTINATION

START

When you are able to turn toward the destination, follow the Pointer until it points toward the top of the display and aligns with the lines in the Compass Ring.

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Putting it all together

New Contact Page

Microphone

The Rino has a maximum talk time of 45 seconds. If you exceed the 45 second limit the unit will emit a warbling tone to alert you. This limit is in place as a safety factor. In the event that the CALL or TALK key were accidentially depressed and held.

Since it takes at least two Rino's to show all of the Rino's features, this exercise will explain Rino to Rino operation. First, make sure that both Rinos are set on the same channel and squelck code, and both are tracking satellites.

The Rino's most unique feature is being able to send it's location to another Rino, this is called Peer-to-Peer positioning. The process is automatic. When you press and release either the **CALL** key or the **TALK** key, the Rino will send out it's location. This information will be available to all other Rino users that are monitoring the same channel and code. This feature allows you to track the movement of other Rino users and even navigate to their location.

The first time that a signal is received from another Rino user, a 'New Contact' page will be displayed. From the New Contact page you can show their location on your map, 'Goto' their position, or select 'OK' to add them to your contact list. The Rino can manage up to fifty contacts at any time. Each time that you receive a signal from a contact, your map will be updated showing their new position and a Track Log of their movement will be created and shown on your map.

Its time to do some talking! To transmit on your Rino, press and hold the **TALK** key, and in a normal voice, speak into the microphone area on the front of the Rino from a distance of about 3-4 inches. When you are finished talking, release the **TALK** key. When the **TALK** key is released, your location will be updated on all receiving Rinos. If you want to call another user, or update your location on another Rino, press and release the **CALL** key. This will sound a call tone on all Rinos that are monitoring your channel and code. Your position will be updated when your signal is received.

You can also send a specific location to other Rino user's. This can come in handy if you are trying to round-up the troops, or just want to meet at a specific location.

You can send any location that you have available in your "'Find 'N' Go'" menu. These may be waypoints, contacts, cities, exits or any other data they you may have loaded in the unit. Below as an example are the step to send a waypoint. To send a location from a different 'Find 'N' Go' list, just select the list and use the same basic steps as below.
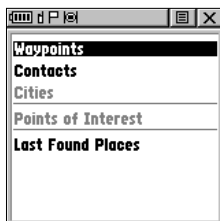
Sending a location

To send a location (waypoint):

1. Press the **CLICK STICK** IN and hold it until the Shortcuts Menu is displayed.

2. Highlight "'Find 'N' Go'" and press the **CLICK STICK** IN.

3. Highlight 'Waypoints' and press the **CLICK STICK** IN.

4. Select 'Nearest' and press the **CLICK STICK** IN.

5. Highlight the waypoint that you want to send and press the **CLICK STICK** IN. This will display the Waypoint Review page.

6. Highlight the Options Button at the top right of the display and press the **CLICK STICK** IN.

7. Select 'Send Location' and press the **CLICK STICK** IN.

The waypoint location will be sent to all Rinos that are listening. They can then choose to 'Goto' that location, letting everyone meet at that location.

That about covers the basic operation of your new Rino. If you have further questions or just want to learn more about the operation of Rino, please refer to the Reference Manual. The Reference Manual will provide detailed information about all of your Rino's features.

Thanks again for choosing GARMIN!

'Find 'N' Go' Menu

Sending a Location

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For the latest free software updates throughout the life of your GARMIN products, visit the GARMIN web site at www.garmin.com.