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You can read the recommendations in the user guide, the technical guide or the installation guide for GARMIN ASTRO 320. You'll find the answers to all your questions on the GARMIN ASTRO 320 in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

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Manual abstract:

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See the Important Safety and Product Information guide in the product box for product warnings and other important information. NOTICE REGARDING LEGAL RESTRICTIONS; SPECIAL NOTICE TO USERS IN CALIFORNIA AND ALASKA: State law in California prohibits the use of GPS dog collars for the pursuit of mammals. Alaska law prohibits guides from using GPS devices to assist in the taking of big game animals. This is not intended to be an exhaustive list of applicable laws and ordinances, and Garmin makes no such guarantees or warranties that this list is complete. Check your state and local laws and ordinances to ensure you fully understand any restrictions applicable to this product in your jurisdiction prior to purchase and/or use.

Garmin does not assume any responsibility for any fines, penalties, or damages that may be incurred as a result of any state or local law or ordinance relating to use of the product. To prevent damage, remove the unit from the vehicle or store it out of direct sunlight, such as in the glove box. When storing the unit for a limited length of time, store within the following temperature range: from -4°F to 104°F (from -20°C to 40°C). When storing the unit for an extended time, store within the following temperature range: from 32°F to 77°F (from 0°C to 25°C). • Do not operate the unit outside of the following temperature range: from -4°C to 140°F (from -20°C to 60°C).

• Recharge the unit within the following temperature range: from 32°F to 113°F (from 0°C to 45°C). the DC 30 contains a replaceable, rechargeable lithium-ion battery, the following warnings also apply: • Do not recharge the battery outside of the unit or disassemble the battery. • Keep the used battery away from children. Using another battery presents a risk of fire or explosion. Do not leave the DC 30 where a dog may attempt to chew on it. If the battery cell is punctured, electrolyte can be released that can be harmful to the dog. If these guidelines are not followed, the internal lithium-ion battery may experience a shortened life span or may present a risk of damage to the DC 30, fire, chemical burn, electrolyte leak, or injury. • Contact your local waste department to properly dispose of the unit/battery. • Do not leave the unit exposed to a heat source or in a iv Belt clip button attachment Power key LCD screen Wrist strap attachment slot Battery compartment locking D-ring Battery compartment cover and access to the microSDTM card tray VHF antenna GPS antenna Route the strap through the loop and pull the end of the strap. Turn the D-ring ¼ turn counterclockwise and remove the battery cover.

Remove the batteries from your Astro 220 when you do not expect to use the unit for several months. When you Battery remove the batteries, data is not lost. Place the small loop of the wrist strap through the slot on the back of the unit. Press to scroll up or down a list on any other page. DOG Press at any time to view the Dog Tracker page. mAP Press to view the Map page. Rocker Press up, down, left, or right to highlight options and to enter data, or to move the map-panning arrow. mENU Press to view page options. Press twice to view the Main Menu. The first time you turn the Astro 220 on, a message appears followed by a prompt.

Thereafter, when you turn the Astro 220 on, the Garmin Logo appears, followed by the Dog Tracker page. Or, press and quickly release the Power key to cycle through the brightness levels. Charge the DC 30 until the blue LED on the bottom of the unit turns off. To turn the DC 30 off, press and hold the Power key. Before the Astro 220 can find your current location and the location of the DC 30, both units must acquire GPS signals.

NotE: The DC 30 does not transmit its location to the Astro 220, and the Astro 220 will not indicate the location of the DC 30, until both units have acquired satellite signals. to acquire GPS satellite signals: 1. Go outdoors to an open area, away from tall buildings and trees. Acquiring satellite signals can take a few minutes. DC 30 Power key Battery charging port LEDs blink red when power is on When the bars are black, the Astro 220 has acquired satellite signals. The two red LEDs on the DC 30 double blink at each pulse when a location fix is achieved. Calibrate the Astro 220 electronic compass the first time you use it, after periods of storage, after you install new batteries, or when the unit has been exposed to temperature changes of greater than 20°F (11°C).

calibrate the compass outdoors. Hold the compass level and away from objects that generate magnetic fields, such as cars or buildings. Hold the unit level and turn slowly. "Just Right," "Too Fast," or "Too Slow" appears, notifying you to adjust your turning speed. Hold the unit level while turning. The following terms are used throughout this manual: Select Move the highlighted area on the screen up, down, left, or right with the Rocker to select individual fields. Field the location on a page where data or an option can be shown and entered. Scroll bar A bar that appears on the right side of a list that is too long to fit on the screen.

Use the Rocker to scroll through a list. You can change the settings, but you can revert to the factory settings by selecting Restore Defaults. In this manual, small arrows (>) indicate that you should highlight a series of items on the screen using the Rocker, and press the ENtER key after each item. For example, if you see "select Dog > Show Info," highlight Dog, press ENtER, highlight Show Info, and press ENtER again.



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Ablinks when the unit detects a signal (for example, a DC 30) on the channel it is receiving. When an on-screen message appears, press ENTER to acknowledge the message and close the window. Messages also indicate temporary conditions, such as "Calculating Route." The message window closes as soon as the process is completed. This section describes communications between the DC 30 and the Astro, tracking dogs on the map, and adding dogs to the Dog List. When communicating with the DC 30, the Dog Tracker page indicates the direction of the dog, the distance away from you, and the status of the dog.

The Astro 220 can keep track of ten dogs. Use the Rocker to scroll through the list of dogs. The DC 30 that was packaged with your Astro 220 System was linked with the Astro 220 at the factory. If you are using a DC 30 that you ordered separately, follow the instructions for adding a new dog on page 12 to establish communications with the Astro 220. To view communication status with the DC 30: Press DOG to view the Dog Tracker page. The dog name is listed in the Name field. Note: The DC 30 does not transmit its location to the Astro 220, and the Astro 220 will not indicate the location of the DC 30, until both units have acquired satellite signals. To view details about a selected dog: 1. Dog Tracking Dog status fields Position update rate and dog communication ID number (page 3) DC 30 GPS signal strength Dog Information Page Dog name field DC 30 battery capacity DC 30 communication signal strength), the distance from your location, the distance traveled, and the average speed. Select Map to view the location and movement of your dog. Settings allows you to assign a new ID number (page 13) to a dog to avoid conflicting signals and/or the rate of reporting (5, 10, or 30 seconds). Change Dog Unit type allows you to identify the dog type so that the appropriate dog status symbols are shown. Attach the DC 30 with the collar to your dog's neck with the VHF antenna (page 1) pointing up. The Dog Tracker page shows the direction and distance of the dog from the Astro 220, and the status of the dog. The dog you are tracking is identified and the dog pointer indicates its direction from you. The dog pointer is most accurate when you are holding the Astro 220 level and the dog is farther than 30 feet (9.1 meters) away. At less than that distance, a NEAR message appears, and the dog pointer is shortened. When you are close to the dog, the dog pointer may be inaccurate. The location of the dog, its name, and a track showing its movements. Your location and track Marked locations on map Dog status icon Dog track], indicates that the DC 30 has not acquired a satellite signal and that the Astro 220 cannot determine the location of the dog.

Note: When the Map page is in the Track Up orientation mode, objects on the map appear to rotate around your position. As you move, the entire map reorients in the direction you are facing. For more information about the Map page features and custom settings, refer to page 46. Small Numbers (or Big Numbers) changes the size of the dog descriptions on the Dog Tracker page. Press the left or right arrows on the Rocker to scroll through multiple dogs in the Big Numbers mode. By default, the new dog is named "Dog" and an ID number is randomly assigned. Note: The setup wizard may indicate that there is a conflict with the ID number of another dog. Each dog you track has its own ID number. If two dogs within range of the Astro 220 have the same ID, the Astro 220 warns you of a conflicting ID signal. It then opens a setup wizard to guide you through the process of resolving the conflict.

If necessary, you can manually assign a new ID number to a dog. When possible, you should allow the Astro 220 to automatically assign IDs. If you purchase additional DC 30 units, you can link them to the Astro 220 using the setup wizard in the Dog List. To link, the Astro 220 must be close enough to the DC 30 to touch it, or you must know the DC 30 ID number. To assign a new ID number to a dog and change the update rate: 1.

Both 10-second and 30-second updates reduce battery drain, but they create a less-detailed dog track and collected statistics. 4. Ensure that the Astro 220 is within a few feet of the DC 30. Between you and your dog's DC 30 produces the best communication signal. obstructed radio waves result in a poor signal. To achieve the best line-of-sight conditions, move to the highest elevation point in your area (for example, on the top of a hill). Keeping an unobstructed line of sight Note: Items shown on the Main Menu can be moved, deleted, or added as described on page 46. To view the rise and set times for a different date or location, select the Date field. Use the on-screen keypad to enter the name of the location. Use the Rocker to move the map pointer to the map location you want, and press ENTER to show a list of items near the new map location. OR If the city you want is not listed, press MENU > select a search method. The exit description, a list of services near the exit, and the distance and bearing from the exit to the highlighted service are shown. 3. Select a service from the list > ENTER for more information about the service. When a geocache is found, the Astro 220 marks the cache as found, logs an entry into the calendar, and shows the nearest cache.

Com, log on, and click Go Geocaching for details and how to download geocache locations from the Internet. The Options menu for each information page contains options for using a Find item as a tool for navigation. Project Location projects the distance and bearing to a new location (page 16). Change Reference finds an item from another location on the map (page 20). Set Proximity programs an alarm to sound when you are within a specified radius of an item (page 37). View Sunrise/Sunset displays Sunrise/Sunset tables for this location (page 14). View Hunting Almanac displays Hunting tables for this location (page 14). If you have detailed mapping data, you can find locations using addresses or intersections. If your unit has a GPS fix, the <ENTER Region> field is populated with your current region. Enter the street number using the on-screen keypad > OK (on the keypad).

Use the on-screen keypad to enter the street name > OK. Follow these same basic steps when searching for an intersection. A list of points of interest near your current location appear. Select the item you want from the list > ENTER to open the information page for the item. Create your own category for points of interest by using the Garmin POI Loader utility, downloadable from the Garmin Web site: www.

Follow the Help instructions to use POI Loader. The Trip Computer page provides travel data such as current speed, distance traveled, and other statistics that can be useful when navigating a long distance.



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The Compass page guides you to your destination with a compass display and a bearing or course pointer. It also provides navigation data such as current speed, distance to the next point on the route, and estimated arrival time. The bearing pointer indicates the direction to your destination, and the course pointer indicates your relationship to a course line leading to the destination.

The course line to your destination is based on your original starting point. If the bearing pointer is pointing in your direction of travel, you are traveling directly toward your destination. If the bearing pointer points any other direction, turn toward that direction until the bearing pointer is pointing ahead. Move back to the "course line to destination" to compensate for deviation and to get back on course. This is most useful if you are navigating on water or where there are no major obstacles in your path. It also helps you avoid hazards to either side of the course, such as shoals or submerged rocks. Sight N Go allows you to navigate to an object within your sight by pointing the unit at it (page 27). Hold the unit at eye level and line up the two sighting marks with a distant object. The Altimeter page displays the current elevation, the rate of your ascent or descent, elevation changes over distance or time, or pressure changes over time. The field at the bottom of the page shows your current elevation and your rate of ascent (or descent) when moving.

(This option is available only when you are plotting elevation. Pressure is plotted only against time.) View Elevation Plot (or View Pressure Plot) selects either an elevation plot or a barometric pressure plot for a set period of time. Select individual points on an elevation plot or a pressure plot to view the elevation (or pressure) reading, the time of day, and the date when the point was recorded. To view points on a plot: On the Altimeter page, press left or right on the Rocker to display crosshairs and scroll the crosshairs across the plot. To view altitude points on the Map page: 1. On the Altimeter page, use the Rocker to move the red crosshairs to the point you want to view on the map. The point is marked by the map pointer with location coordinates, the compass bearing, and the distance from your current location. Calibrate Altimeter calibrates the altimeter if you know the elevation or pressure at your current location (page 30). Use the Rocker and press ENTER to place a check mark next to the items you want to reset.

Go to a location where the elevation or barometric pressure is known 2. Select Yes if you know the elevation, select No > Yes if you know the barometric pressure. 4. Enter the elevation or barometric pressure > OK. A track is a recording of your path and of the path of your dogs.

The track log contains information about points along the recorded path, including time, location, and elevation for each point. The percentage of memory used by the current track log appears at the top of the Tracks page. After you clear the track log, it shows 0%. Wrap When Full replaces the oldest data with new data when the track log is full. Record Method Distance records track points after a specified distance is traveled.

Time records track points after a specified time has elapsed. Auto can record more points or fewer points. Selecting more points creates a more accurate track, but fills up the track log faster. To change the color of a dog's track, use the color option on the Saved Track page. To save the entire track log: On the Tracks page, select Save > Yes. To clear the track log: On the Track page, select Clear > Yes. Use the Saved Track page to rename the track and view the track distance, the calculated area, and the color for the track on the Map page. You can change the track color and the units for the calculated area. Changing the color of a dog's saved track also changes the dog pointer color on the Dog Tracker page. Use the Rocker to move the map pointer to the ending point and press ENTER > OK.

To view a track on the map: On the Tracks page, select Save > Yes > Map. To save a portion of the track log: 1. When you begin to move, a Stop button appears. 2. When you are finished, select Stop. To view a track profile: 1. on the Saved Track page, press MENU > Profile. The beginning and the end of the track are marked by a flag. Press left or right on the Rocker to scroll across the track profile. Com/cartography/ontheTrail/ for more information about MapSource U.

to mark a location on a saved track: 1. You can create and store up to 50 routes with up to 250 points each. To create and navigate a new route: 1. To add more points to the route, repeat steps 2 through 5. After entering your changes, select OK (on the keypad).

Select the method to use when advancing to the next point. Copy Route makes a copy of the route. Remove All removes all locations from a saved route. An alarm sounds when you enter within the designated radius. Select an alarm field to view the list of tones.

Speed Alerts are obtained by using POI Loader (page 23). To preview the turns on a map while navigating a route: 1. To scroll through all turn previews, press up or down on the Rocker. Select a turn to view an individual turn. Multicolor (or Single Color) selects whether each satellite appears in a different color or the same color. New Location select if you have moved the unit more than 600 miles and you are having trouble locking onto satellite signals. The calendar can record locations on specific days and provide sunrise, sunset, and hunting-almanac information. Use the Rocker to select the field you want to change. Enter the new value, and press ENTER. Use the Rocker and the ENTER key to enter calculations.

Some games use GPS during the game. View Card Info displays the microSD card status. Mass Storage Mode allows you to use the microSD card as a data-storage device. software Version displays the Astro 220 software version, the GPS SW version, and the unit identification number. Note: View Card Info and Mass Storage Mode are available only when a microSD card is installed. External Power Lost selects whether the Astro 220 stays on or turns off when external power is removed. To view the Dog Info page, move the dog on the list, or remove the dog from the list: Select a dog on the list > ENTER. Lost Communication Alert the Astro 220 is not receiving the signals from the DC 30. Treed Alert indicates that the dog has treed quarry and has confined its own movements to a small area for 60 seconds. Select Auto to automatically switch to night mode at sunset and to day mode at sunrise. Backlight Timeout sets the backlight to time out after a period of time has elapsed (to save battery power) or to stay on.



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The Main Menu (page 14) can be customized to list the menu items you want to use. Select Move > ENTER and then use the Rocker to move the item. Use the Rocker left or right to move from icon to icon when selecting a Map Setup category. OrientationÂorients North or your current heading (track Up) at the top of the display. â· BelowÂsets the map scale at which Track Up is used.

At scales above the setting, map orientation is set to North Up. â· Auto ZoomÂsets the map scale to include the beginning and ending points of a route. Saved tracksÂsets the maximum zoom at which saved tracks are shown. â· Track LogÂsets the maximum zoom at which active track logs are shown. â· Track PointsÂsets the maximum number of track points used to record a track.

â· Go to LineÂselects either a bearing line or course line (page 26) to navigate a track. Set the maximum zoom (Auto, off, or a specific zoom level) at which Map Points, Marked Location, Street Label, and Land Cover appear on the Map page. Use the Rocker > ENtER to show the detailed map on the map display or turn it off. Set the text size (None, Small, Medium, or Large) for descriptions of map items on the Map page. Use the Map Setup Â Marine page to customize settings for marine colors, spot soundings, light sectors, and symbol sets when using downloaded marine charts (MapSource BlueChart g2 marine mapping data). PromptedÂasks you to select a routing method before the route is calculated. Off RoadÂcreates a direct line from your current location to your destination. To select the method your Astro 220 uses to calculate road routes: On the Routing Setup page, select Follow Road Method. â· PromptedÂasks you to select a follow-road method before the route is calculated. Spot SoundingsÂturns spot soundings that indicate depth measurements On or Off on the Map page.

â· Light SectorsÂturns navigational light locations Off, Auto (location shown when map pointer passes over), or On. Faster TimeÂcalculates routes that are faster to drive but can be longer in distance. â· Shorter DistanceÂcalculates routes that are shorter in distance but can take more time to drive. to turn the Next Turn Pop-up on or off: On the Routing Setup page, select Next Turn Pop-up. To select whether the Astro 220 recalculates if you depart from the original route: On the Routing Setup page, select Follow Road Options (bottom of the page). Quick CalculationÂtakes more time to calculate but generates a better quality route. â· Better RouteÂgenerates an even better quality route but uses a longer calculation time. To avoid certain road types on your route: 1. In the Avoid field, select the types of roads you want to avoid. Use the Geocache Setup page to find and record geocaches.

Select a symbol for caches that you are looking for or have found. 3. Select Calendar Entry When Found > Yes to make an entry on the calendar (page 41) when a cache is found. Anchor Drag AlarmÂsets an alarm to sound when you exceed a specified drift distance. â· Off Course AlarmÂsets an alarm to sound when you are off course by a specified distance.

Map DatumÂsets the coordinate system in which a given location reading appears. Do not change the map datum unless you are using a map or chart that specifies a different position format. â· Distance/SpeedÂsets the unit of measure for distance and speed readings. SpeedÂsets the unit of measure for your rate of ascent or descent. PressureÂsets the unit of measure for gauge and atmospheric pressure readings.

The Heading Setup page specifies the type of heading display and the type of North reference used to calculate a heading. NotE: Unless you have a good understanding of headings and North referencing, use the default values. DisplayÂsets the units used to calculate a heading (Cardinal Letters, Degrees, or Mils). â· North ReferenceÂprovides headings based on a true, magnetic, grid, or specific user value. â· Switch to compass heading when belowÂsets the speed to switch to a compass heading when for more than time is exceeded. To set the altimeter to self-calibrate each time you turn the Astro 220 on: 1. Trip data is not recorded when in Fixed Elevation mode. Use the Altimeter Setup page to self-calibrate the altimeter each time you turn the unit on, to function as a barometer, or to manually calibrate the altimeter when you have accurate elevation or pressure data. (116 g) with batteries and antenna and without collar Display: 1. Temperature Range: Astro 220: from -4Â°F to 158Â°F (from -20Â°C to 70Â°C) DC 30: from -4Â°F to 140Â°F (from -20Â°C to 60Â°C) DC 30 charging temperature: from 32Â°F to 113Â°F (from 0Â°C to 45Â°C) Receiver: WAAS enabled Acquisition times: average, for a stationary receiver with an open sky view.

Warm: 15 seconds Cold: 45 seconds AutoLocate: 2 minutes Update Rate: 1/second, continuous Antenna: Astro 220: Built-in quad helix DC 30: Built-in patch (from -610 to 9144 m) Interfaces: USB for computer interface Data Storage Life:Indefinite; no memory battery required Map Storage: microSD card capacity (a small portion of the card capacity is used for formatting) 5 volt AA batteries, vehicle power adapter, USB data cable DC 30: Internal rechargeable lithium-ion battery, vehicle power adapter, AC charger Battery Life: Astro 220: Up to 24 hours (typical use). alkaline batteries lose capacity as temperature decreases. Use lithium batteries when operating in below-freezing conditions. 2 km) - line of sight To obtain replacements for Astro 220 accessories and for optional accessories, contact your Garmin dealer, Garmin Product Support (page i), or visit the Garmin Web site at www. To your computer, your computer detects your Astro 220 each time you connect it to a USB port. To connect your Astro 220 to your computer: 1. Insert the smaller connector on the USB cable into the USB port on the back of your Astro 220. 2. Connect the other cable end to a USB port on your computer. Before connecting your Astro 220 to a computer, install the USB drivers contained in the MapSource Trip and Waypoint Manager software that came with your Astro 220.

Follow the instructions for installation and operation provided with the software. The USB drivers are installed when you install the MapSource Trip and Waypoint Manager software. When you initially connect the Astro 220 to a USB port, your computer might prompt you to locate the destination of the drivers for the device. After the drivers are installed Some Astro 220 navigation features require detailed mapping data, and you may decide to purchase and transfer detailed maps.



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A microSD card (not included) can be loaded with detailed maps from optional MapSource disks to enhance your Astro 220.

With detailed MapSource mapping data, you can view listings of nearby restaurants, lodging, shopping centers, and entertainment, and you can retrieve addresses and phone numbers for any listed location. To achieve the best terrain details when hunting, use Garmin U. In order to transfer map data to a microSD card, you must install the Trip and Waypoint Manager software and the USB cable. To transfer other data to the microSD card, use the USB mass storage feature explained on page 57. to transfer tracks , see page 59.

Purchase microSD cards from an electronics supplier or purchase preloaded MapSource detailed map data cards from your Garmin dealer. Remove the battery compartment cover from the back of the Astro 220. Slide the tray cover back to open it, then lift it to remove or insert the microSD card. Slide the cover forward to lock it in place. Astro Dog Tracking System Owner's Manual MicroSD card cover MicroSD card tray MicroSD card To transfer Garmin MapSource map data to the microSD card: Follow the instructions provided with the MapSource map data disk. NotE: If you have several network drives mapped to your computer, Windows may experience difficulty assigning a drive letter for your Astro 220 microSD card. Either log on without connecting to the network or, from Windows Explorer, click tools > Map Network Drive and remap a drive letter for the Astro 220 removable storage device. for more information , refer to the Windows Help system. If you are using a Macintosh computer, double-click on the icon to view the directory of files. To view information for the microSD card: Prior to downloading data to the microSD card, press MENU > View Card Info to view data-card storage information.

Browse your computer for the file you want to copy. When you are finished transferring files, click the Eject icon in your system tray, or drag the volume icon to the Trash on Macintosh computers. 2. Unplug your Astro 220 from your computer. Follow the instructions for installation and operation provided with the software. Follow the instructions for using WebUpdater or click Download (located under Unit Software) and follow the instructions. (If Unit Software is not listed on the Web site, there are no updates.) NotE: To avoid data corruption, do not turn the Astro 220 off or the DC 30 off during data transfer. The DC 30 uses your Astro 220 as a wireless transfer device when transferring software updates and detailed dog tracks. Follow the instructions for installation and operation provided with the software.

Turn the DC 30 on and place it within 12 inches of the Astro 220. Follow the instructions for using WebUpdater or click Download (located under Unit Software) and follow the instructions. (If Unit Software is not listed on the Web site, there are no updates. Click Receive from Device from the Transfer menu.

The dog tracks saved on your Astro 220 are detailed enough for most users to view the movements of their dog.

The DC 30 does, however, store more-detailed tracks These tracks can be transferred to MapSource on your computer using the Astro 220 as a wireless transfer device to a computer. Turn the DC 30 on and place it within 12 inches of the Astro 220. Wait until the track data is buffered in to your Astro 220 and "Ready to communicate with PC" appears. Click Receive from Device from the Transfer menu in MapSource. Check Tracks in the Receive from Device window and click Receive.

Clean the outer casing of each unit (except for the Astro 220 screen) using a cloth dampened with a mild detergent solution, and then wipe it dry. Clean the Astro 220 screen using a soft, clean, lint-free cloth. use water , isopropyl alcohol , or eyeglass lens cleaner. Apply the liquid to the cloth, and then gently wipe the screen with the moistened cloth. Hand wash the collar using a mild detergent solution, rinse it, and then let it air dry. Battery again before using the DC 30. Do not store the Astro 220 or DC 30 where prolonged exposure to temperature extremes may occur, because permanent damage may result. long-term

DC 30 Battery Storage: The normal long-term decrease in the charging capacity of lithiumion batteries can be accelerated by exposure to elevated temperatures. Storing a fully charged battery for more than three months in a location that exposes it to high temperatures (above 70Â°F or 21Â°C) can significantly reduce its recharging capacity. Before storage, charge the battery to approximately 50% of capacity and store it in a cool, dry location where temperatures are not expected to exceed typical household levels.

Do not store a fully depleted battery because it may not recharge after an extended period of storage. After immersion, be certain to wipe and air dry the units before using or charging. Garmin grants you a limited license to use the software embedded in this device (the "Software") in binary executable form in the normal operation of the product. Title, ownership rights, and intellectual property rights in and to the Software remain in Garmin. You acknowledge that the

Software is the property of Garmin and is protected under the United States of America copyright laws and international copyright treaties. You further acknowledge that the structure, organization, and code of the Software are valuable trade secrets of Garmin and that the Software in source code form remains You agree not to decompile, disassemble, modify, reverse assemble, reverse engineer, or reduce to human readable form the Software or any part thereof or create any derivative works based on the Software. You agree not to export or re-export the Software to any country in violation of the export control laws of the United States of America. iMPoRtAnT WARNINGS: READ tHIS INFoRMAtIoN BEFoRE USING YoUR ASiRo 220 DoG tRACKING SYStEM: Exposure to Radio Frequency SignalsÂYour product is a low power radio transmitter and receiver. When it is on, it receives and also sends out radio frequency (RF) signals. in August 1996 , The Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for handheld wireless radios.

Those guidelines are consistent with safety standards previously set by both U. Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 130 scientists, engineers, and physicians from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C95. 1). The design of your radio complies with the FCC guidelines (and those standards).

For body-worn and face-held operation, this radio demonstrates compliance and meets the FCC RF exposure guidelines for uncontrolled exposure (general population) when used with approved accessories supplied with or designed for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.



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antenna Care Use only the supplied antenna. @ @ @ @ @ @ Pacemakers The Health Industry Manufacturers Association (HIMA) recommends that a minimum separation of six inches (6") be maintained between a handheld wireless radio and a pacemaker to avoid potential interference with the pacemaker.

These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research.

Persons with pacemakers should ALWAYS keep the radio more than six inches from their pacemaker when the radio is turned on, should not carry the radio in a breast pocket, should use the ear opposite the pacemaker to minimize the potential for interference, and should turn the radio off immediately if you have any reason to suspect that interference is occurring. Some digital wireless radios may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives. Other Medical Devices If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information. Turn your radio OFF in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy. vehicles RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle. Posted Facilities Turn your radio OFF in any facility where posted notices so require.

commercial Aircraft Many commercial airlines prohibit the use of FRS/GMRS radios on board. Switch OFF your radio before boarding an aircraft or check the airline rules. Blasting Areas To avoid interfering with blasting operations, turn your radio OFF when in a "blasting area" or in areas posted: "Turn off two-way radio." Obey all signs and instructions. Potentially Explosive Atmospheres Turn your radio OFF and do not remove your battery when you are in any area with a potentially explosive atmosphere. obey all signs and instructions. Sparks from your battery in such areas could cause an explosion or fire resulting in bodily injury or even death. Areas with a potentially explosive atmosphere are often, but not always clearly marked. They include fueling areas such as gasoline stations, below deck on boats, fuel or chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air contains chemicals or particles, such as grain, dust, or metal powders; and any other area where you would normally be advised to turn off your vehicle engine. 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