GDL 30/30A owner's manual



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INTRODUCTION

The GDL 30/30A Marine Weather/Audio Satellite Receiver provides graphical and textual marine XM WX weather information to be viewed on your Garmin Marine Network chartplotters. Operation of the GDL 30 requires a subscription to the XM WX Satellite Weather service. Additionally, the GDL 30A offers music, news, and talk programming capability with a subscription to the XM Radio service.

This manual covers the XM weather and audio features of the GDL 30/30A when viewed on a GPSMAP 3000 Series Garmin Marine Network chartplotter. To understand the XM weather and audio features of the GDL 30/30A when viewed on a GPSMAP 4000 or 5000 series chartplotter, see the 4000 or 5000 series Owner's Manual.

To install the GDL 30/30A, reference the printed installation instructions.

Product terminology used throughout this manual

- This manual refers to the GDL 30 Marine Weather Satellite Receiver as GDL 30 and the GDL 30A Marine Weather/Audio Satellite Receiver as GDL 30A. It covers instructions for both units (GDL 30/30A). Unless otherwise specified, unit operations are the same on both models.
- Garmin Marine Network Chartplotters are Multi-Function Display units such as the GPSMAP 3005C, and GPSMAP 3006C/3010C. They are referred to as chartplotters throughout this manual.

Product Registration

Help us better support you by completing our online registration today! Connect to our Web site at http://my.garmin.com. Keep the original sales receipt, or a photocopy, in a safe place.

Important Numbers

For future reference, write down the important numbers associated with your GDL 30/30A.

Serial number

(located on the bottom of the unit)

Unique XM IDs are associated with your GDL 30/30A. XM Satellite Radio uses these ID numbers to activate and deactivate your XM weather and XM audio (if applicable). To locate the ID number(s) on your unit, see page 23.

XM WX Weather ID

XM Radio ID (GDL 30A only)

Contact Garmin

Contact Garmin if you have any questions while using your GDL 30/30A. In the USA contact Garmin Product Support by phone: (913) 397-8200 or (800) 800-1020, Monday–Friday, 8 AM–5 PM Central Time; or go to www.garmin.com/support/.

Contact XM

To set up your XM account call (800) 800-9200. For XM weather information, visit www.xmwxweather.com.

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Packing List and Accessories

Before installing your unit, please check to see that your package includes the following items. If any parts are missing, contact your Garmin dealer immediately.

Standard Package

- GDL 30 or 30A unit
- 7-pin power cable
- Garmin marine network cable (6 ft)
- Installation Instructions
- Owner's Manual
- GA 31 Antenna with cable
- Audio cable (GDL 30A only)
- Grommet

Optional Accessories

- GMS 10 Network Port Expander
- Garmin marine network cables (20 ft and 40 ft)

Caring for the Unit

The case is constructed of high-quality materials and does not require user maintenance, except cleaning.

Cleaning the Case

Clean the unit's outer casing using a cloth dampened with a mild detergent solution and then wipe dry. Avoid chemical cleaners and solvents that may damage plastic components.

Water Immersion

The unit is waterproof to IEC Standard 60529 IPX7. It can withstand immersion in 1 meter of water for 30 minutes. Prolonged submersion can cause damage to the unit. After submersion, be certain to wipe and air dry the unit before reuse.

Storage

Do not store the unit where exposure to temperature extremes may occur, as permanent damage may result.

Servicing Your Unit

The Garmin GDL 30/30A has no user-serviceable parts. Should you ever encounter a problem with your unit, take it to an authorized Garmin dealer for repairs or contact Garmin Product Support.

The GDL 30/30A is fastened shut with screws. Any attempt to open the case to change or modify the unit in any way voids your warranty and may result in permanent damage to the equipment.

INSTALLING AND ACTIVATING THE GDL 30/30A

Step 1: Install the unit

Use the GDL 30/30A Installation Instructions to make the appropriate wiring connections.

Step 2: Set up the XM account

Have your XM Weather ID ready (and XM Radio ID, if applicable). Contact XM Satellite Radio by phone at **800-985-9200**. After providing the required information, the XM representative activates the account and sends out an XM signal to activate the GDL 30/30A.

For answers to other XM questions, call the above number or visit www.xmwxweather.com.

Step 3: Confirm all components of your service package

XM WX Weather: Ensure your chartplotter turned on so you receive the XM signal. The XM signal is received when the components of the selected service package appear in the Weather Products list. Do not turn off the chartplotter until the name of the selected service package appears in the Service Level field (see page 23).



NOTE: on a 4000 or 5000 series chartplotter, your service package appears on the system information screen (**Configure > System > System Information > Weather Subscription**)

XM Radio: Highlight the **Audio** sub tab and verify that channels 7, 9, 47, and 122 are being received (see page 22). This indicates that all channels on XM's basic radio service are being received. If within an hour the XM WX Weather and/or the XM Radio service has not activated, call XM customer care at **800-985-9200** to refresh the signal.

Step 4: Save the service package

After the service package name appears, turn off the entire marine network using the chartplotter's power key.

Step 5: Use your new XM services

When you turn on the GDL 30/30A after completing Step 4, you are ready to view weather features on the chartplotter and customize the new radio stations (GDL 30A only).

USING XM WX WEATHER

This manual describes the use of XM WX Weather and XM Audio functions (GDL 30A only) on a GPSMAP 3000 Series chartplotter. If you have a GPSMAP 4000 or 5000 Series chartplotter, please use your chartplotter's Owner's Manual for instructions on using XM WX Weather and XM Audio.

Preset Weather Displays

Selecting a preset weather display

There are three preset weather displays, General, Sea State, and Storms. The name of the selected preset appears in the lower left corner of the screen. Use presets to view different types of weather information quickly.

To select a preset weather display:

- 1. Press the Wthr Options soft key.
- 2. Press the Next Preset soft key to cycle through the three presets.



USING XM WX WEATHER

Customizing the Preset Weather Displays

The preset weather displays can be customized. Each preset has three subcategories: Precipitation, Atmosphere, and Sea Surface. Each category contains display settings for that topic. The name of the preset can be changed and any of the weather features can be selected for display. For detailed information on customizing the preset weather displays, please see the chartplotter's Owner's Manual.



Sea Surface

THE WEATHER FEATURES

Following is a brief description of each weather feature. The weather features are divided into three sub categories, Precipitation, Atmosphere, and Sea State.

Precipitation

The Precipitation category contains NEXRAD/Cloud Tops, Storm Cells, Lightning, and Hurricanes. Each feature can be turned on, off, or set to display at a selected zoom range.

NEXRAD

NEXRAD is an acronym for **NEX**t Generation Weather **RAD**ar. The NEXRAD feature displays precipitation from very light rain and snow up to strong thunderstorms in varying shades and colors. A legend showing the colors for Rain, Mix, and Snow can be displayed by pressing the ADJ key and selecting Weather Legend. NEXRAD can be displayed independently or with Cloud Tops.



Cloud Tops

Cloud Tops displays the varying level of cloud tops in shades of gray. Cloud Tops can be displayed independently or with NEXRAD information.



Cloud Tops Legend

Cloud Tops with NEXRAD

Storm Cells

The Storm Cells feature displays storms as well as the storm's projected path in the immediate future. It also shows the size of the storm cell. The direction of the red cone indicates the projected path of the storm cell. The red bars that appear in the middle of the cone indicate where the storm will be in the future. Each bar represents 15 minutes.



Lightning

Lightning strikes are represented by lightning bolt icons, as shown in the images below. Lightning appears on the map if strikes have been detected within the last seven minutes.



Hurricanes

The Hurricanes feature shows the current position of a hurricane as well as its projected path (indicated by a red line). The darkened squares that appear (as in the examples in the left-hand column below) along the red line display the projected locations received from the National Hurricane Center. The Center provides four forecasts at 12-hour intervals as well as a fifth forecast at a 24-hour interval.



In this example, this hurricane is projected to travel West-

This example shows Hurricane Charley's projected path through Florida in August 2004. Wind and storm cells are also visible.



In this example of Hurricane Charley in August, 2004, NEXRAD data, wave height, and wind are shown.



Atmosphere

The Atmosphere category contains Wind, Pressure, Visibility, Fronts and City Conditions. Each feature can be turned on, off, or set to appear at a selected zoom range.

Wind

The Wind feature displays wind speed and direction. Wind direction is indicated by a circle with a wind barb. The circle points into the wind with the barb as a tail. Wind speed is indicated by different flags attached to the barb.



²⁰⁻knot winds blowing to the Southwest.

Pressure

This feature displays pressure isobars and pressure centers on the chartplotter's map. The isobars connect points of equal pressure. Pressure readings can help determine weather and wind conditions in an area. High pressure areas are generally associated with fair weather. Low pressure areas are generally associated with clouds and the chance of precipitation. Isobars that are packed closely together show a strong pressure gradient. Strong pressure gradients are associated with areas of stronger winds.

Pressure units can be displayed in Millibars (mb), Inches of Mercury (in), and Hectopascals (hPa). See the chartplotter's Owner's Manual for more information.



Pressure Isobars



Visibility

Visibility is the maximum horizontal distance that can be seen. Isobars on the Visibility feature show a change in visibility. In the example below, visibility ranges from .5 miles to 3 miles.







Fronts

The Fronts feature displays the lines indicating the leading edge of an air mass that is replacing another. This feature also displays pressure centers. Pressure centers are represented by a large Red "L" for low pressure centers or a large Blue "H" for high pressure centers. Pressure centers represent an area where pressure is measured to be either the highest or lowest relative to the surrounding area.



Indicates a Low Pressure Center. A Low Pressure Center is an area where the measured pressure is lowest relative to the surrounding area. Moving away from a Low Pressure Center in any horizontal direction results in increased pressure. Winds flow counterclockwise around Low Pressure Centers in North America.



Indicates a High Pressure Center. Similar to a Low Pressure Center, a High Pressure Center is an area where the measured pressure is highest relative to the surrounding area. Moving away from a High Pressure Center in any horizontal direction results in decreased pressure. Winds flow clockwise around High Pressure Centers in North America.



City Conditions

This feature displays the current weather conditions at selected cities throughout North America. The current weather condition for an area is depicted by an icon.

City Condition Icons



Sea Surface

The Sea Surface category contains Temperature, Wave Height, Wave Period, and Wave Direction. Each feature can be turned on, off, or set to display at a selected zoom range.

Temperature

The Temperature feature displays the water's surface temperature. The temperature breaks are indicated by isobars.

Wave Height

The Wave Height feature displays wave heights. The wave heights for an area are separated by isobars.





THE WEATHER FEATURES

Wave Period

The Wave Period feature provides the time (in seconds) between successive waves.

Wave Direction

The Wave Direction feature shows the direction in which a wave is moving, as indicated by the direction of the red arrow.





Main Menu

Weather Tab

The GDL 30/30A provides current weather conditions, forecast information, and sea surface information from the weather center nearest to your present location or a location selected using the Find Information Page. To display the Weather tab, press and hold the **ADJ/MENU** key to display the Menu Menu. Using the **ROCKER**, highlight the Weather tab. Five sub tabs are available: Current, Forecast, Sea Surface, Forecast Map, and Setup.

Current

The Current sub tab displays current weather conditions observed at the weather data location closest to your current position or a location selected using the Find Information Page.

🧾 👔 Nor	mal Operation
Celestial	Current Forecast Sea Surface Forecast Map Setup
Trip	Nearest To
Weather	Current Position
Database	01:53PM at Olathe, Johnson Co Exec Air, KS
Points	Temperature 82 [°]
Routes	
Tracks	Dew Point $66_{\rm F}$
DSC	Winds 167 [°] _M 17 _{kt}
Card	Wind Cust
Setup	
Alarms	Visibility 4.3nm
System	Pressure 29.82:
Pages	
Мар	Haze
L	

If a condition field is empty, data for that field is not available at this time.



To search for data at a location other than your current location, highlight **Current Position** and press **ENTER**. With the Find Weather Information Page displayed, highlight a search option and press **ENTER**. With a new location selected, all information shown in the sub tab categories relates to the selected location.

Main Menu

Forecast

The Forecast sub tab includes two panels that display forecast information for the location selected in the Current sub tab. The top panel displays the high/low temperature, chance of precipitation, and weather condition (cloudy, sunny, thunderstorms). The number of days that appear in this panel depend on the data available from the responding weather service center. If more than four days of forecasts appear, use the **ROCKER** to move down the list.

The bottom panel on the Forecast sub tab features a detailed 24-hour forecast for winds, wind gust, and visibility. In order to see all of this information, use the **ROCKER** key to move down the list. If a condition field is empty, data for that field is not currently available.

🗾 📷 Nor	mal Operation					
Reference	Current Forecast	Sea Surface	Forecas	t Map	Setup	
GPS	Kansas City, MO					
Tide	11-MAY-05 88	°F / 67°F	10%	Partly	y Cloud y	<u> </u>
Celestial	12-MAY-05 82	°F / 58°F	40%	Most	ly Cloudy	
Тгір	13-MAY-05 70	Բ / 51Ք	60%	Thur	derstorms	
Weather	14-MAY-05 70	°F / 48°F	20%	Partly	y Cloud y	•
Points						
Routes	24 hour forecast fo	or: Kansas C	ity Dow	ntown	Air, MO	
Tracks	Forecast for:		12:00 _{РМ}			<u>^</u>
DSC	Winds	I	077°м		10kt	
Card	Wind Gust		k t			
Setup	Visibility	!	5.2nm			
Alarms	Haze					

The scroll bars indicate that additional information is available. To scroll through the information, highlight the list.

24 hour forecast for:	Kansas City Downtow	n Air, MO	
Forecast for:	12:00 _{РМ}		
Winds	167 %	12kt	
Wind Gust	18.0kt		
Visibility	5.2nm	or more	
			_
Changing to at:	06:00рм		
Winds	147 [°] м	11kt	
Wind Gust	k t		
Visibility	5.2nm	or more	
Changing to at	03.00		
	03:00AM		
Winds	147м	11kt	
Wind Gust	 kt		
Visibility	5.2nm	or more	
Changing to at:	00.00		
Changing to at.	4579	45.	
Winds	157м	I5kt	
Wind Gust	22.0kt		
Windhiller	5.2nm	or more	
visionity			

Sea Surface

The Sea Surface sub tab provides weather data of specific importance to mariners. This data comes from a variety of data sources that are nearest to your current or selected location. If a condition field is empty, data for that condition is not currently available.

🗾 👬 Nor:	mal Operation		
Reference	Current Forecast Sea Sur	<mark>face</mark> Forecast Map	Setup
GPS	01:00рм 421.6nm 051°м	From Current Posi	tion
Tide	Temperature	42°F	
Celestial	Dew Point	41°F	
Trip	Winds	34 7°м	23 kt
Weather	Wind Gust	27.2kt	
Database	Visibility	nm	
Points	Pressure	30.08 in	+0.05in
Routes	Water Temperature	40°-	
Tracks	water reinperature	4 <i>L</i> F	
DSC	Waves	4.3 ft	00:00:05
Card	Tide Measurement	f t	
Setup			
Alarms			

Forecast Map

The Forecast Map sub tab displays Fronts, High and Low Pressure Centers, and City Conditions. The map zoom range can be changed using the Range keys. There are three icons at the top of the map. These icons are used to show or play the forecast conditions for the next 48 hours.



Setup

The Setup sub tab provides access to the three preset weather displays: General, Sea State, and Storms. The preset weather displays can be customized from this tab. The Setup tab contains a map that displays any changes that are made. Legends for all weather conditions are also shown. For detailed information on customizing the preset weather displays, see the chartplotter's Owner's Manual.



XM Tab

To display the XM tab, press and hold the **ADJ/MENU** key to display the Menu Menu. Using the **ROCKER**, scroll through the tabs and highlight the XM tab. The XM tab contains two sub tabs, Audio and Information. The Audio sub tab is used to tune and customize the XM Radio feature (only available on GDL 30A). The Information sub tab contains the Radio ID numbers and information about the XM service being received.

Audio (for GDL 30A only)

The Audio sub tab provides access to the XM Radio feature. From this tab, stations can be scanned, selected, and added to a Favorites List. Also, the Audio Output can be turned on and off. If the GDL 30A is properly connected, the Audio Output should be set to On. If CHECK ANTENNA appears in the Tuning field, double-check to make certain the GA 31 antenna has been properly installed and that the audio cable is securely connected to your GDL 30A and to your stereo receiver. For more information on using the XM Radio feature, refer to the chartplotter Owner's Manual.

Тетр	Audio Information	
Weather	1 Preview	
Database	XM Preview)	
Points		
Routes		
Tracks	Add To Favorites	Start Scanning
DSC	Audio Output	Scan
Card	On)	All Channels
Setup	Pavoriter	
Alarms		
System		
Мар		
Highway		
XM		
	<u> </u>	

If your GDL 30A is properly connected, you will see "On" in the Audio Output box and "XM Preview" in the Radio Tuning box.

Normal Operation			
Database	Audio Information		
Points	46 Top Tracks	Rock	
Routes	GENESIS		
Tracks			
DSC	TIMIONEL		
Card	Add To Favorites	Start Scanning	
Setup	Audio Output	Scan	
Alarms	On	All Channels	
System	Favorites		
Pages	8 The 80s Aerosmit	h Dude Looks Like	
Мар	10 America Homepla	te XM Channel 175	
Тетр	20 Top 20 No Dou	ot Hella Good	
Highway	46 Top Tracks GENES	S THAT'S ALL	
XM	186 PlaybyPlay ARI@H	OU Tue@805 PM	
21111	226 Houston Partly C	oudy 75 Degrees	

Audio Tab

Information

The Information sub tab contains the Weather and Audio Radio ID Numbers that are needed to subscribe to XM Service. Your XM Weather Service Level and a list of Weather Products that are being recieved appear here as well. These weather products determine and display the weather information on the chartplotter.

🗾 📶 Nor	mal Operation	
Database Points	Audio Information Radio ID - Weather Radio ID - Audio	
Routes	J90K50HB XR4K5041	
Tracks	Service Level	
DSC	Master Mariner	
Card	Weather Products	The Radio ID numbers are required when setting up the XM service.
Setup	METARs	Copy these numbers and have them
Alarms System	County Warnings	
Pages	City Forecasts	
Мар	Radar Coverage	
Temp	High Resolution NEXRAD Radar	
Highway	TAFs	
XM		



NOTE: To obtain the XM Weather and Radio IDs from a 4000 or 5000 series chartplotter, select **Configure > System Information**.

APPENDIX

Blink Codes

The GDL 30/30A turns on and off when the chartplotter to which it is connected is turned on or off. The two-color (Green/Red) Status LED on the GDL 30/30A indicates the current operational status of the module. Codes are:

Green blinking, on for 1 second, off for 1/2 second (slow blink) Status: GDL 30/30A is on and is receiving an XM signal.

Red blinking, on for 1/10 second, off for 1/10 second (very fast blink) Status: System alarm. The display device gives a message indicating the type of failure.

Solid Red (no blink)

Status: Software failure - Call Garmin Product Support.



Status Indicator LED

Weather-Related	Broadcast	Rates
-----------------	-----------	-------

Footuro	Broadcast Rate
Feature	(minutes)
NEXRAD	5
Cloud Tops	15
Storm Cells	1.25
Lightning	5
Wind	12
Pressure	12
Hurricanes	12
Visibility	12
Fronts	12
Sea Surface Temperature	12
Wave Height	12
Wave Period	12
Wave Direction	12
Current Conditions	12
Forecasts	12
Sea Surface Conditions	12

GDL 30/30A Specifications

Physical

Size:	6 ³ / ₄ " L x 4 ³ / ₄ " W x 2.00" H (17.2 cm x 12.1 cm x 5.1 cm)
Weight:	1.5 lbs. (.680 kg)
Case:	Fully gasketed, high-impact plastic and aluminum alloy,

vase: Fully gasketed, high-impact plastic and aluminum alloy, waterproof to IEC 60529 IPX7

Temp Range: 5°F to 158°F (-15°C to 70°C)

Power

Source:	10-35 Vdc
Usage:	18 watts max
Fuse:	AGC/3AG - 2.0 Amp

Data Output

Source:

Proprietary Garmin data format.

Audio

Output Level:300mV rms into 47 kohmFrequency Response:10-20,000 Hz, ± 1 dBHarmonic Distortion:<0.5%</td>



NOTE: When using the Chartplotter and GDL 30/30A on battery power only (engines off) for extended periods of time, be sure there is enough available amperage to run the units for the time period. Running other onboard devices at the same time may lower the available amperage, causing the Chartplotter and/or GDL 30/30A to shut off. Check with your local marine dealer/installer if problems persist.

GA 31 Antenna Specifications

Physical

Size:	3 ⁹ / ₁₆ "D x 4 ¹ / ₄ "H (9.1 cm x 10.8 cm)
Weight:	1.0 lbs. (0.45 kg)
Operating Range:	-40°F to +176°F (-40°C to +80°C)
Waterproof:	-1 meter submersion for 30 minutes IEC 60529 IPX7
Mount Thread Size:	1" diameter at 14 threads/inch
Cable:	Foil-shielded center conductor 18 AWG
Dynamics:	999 knots, 40g

Product Safety and Regulatory Information

The GPS system is operated by the United States government, which is solely responsible for its accuracy and maintenance. The system is subject to changes which could affect the accuracy and performance of all GPS equipment. Although the Garmin GDL 30/30A is a precision electronic NAVigation AID (NAVAID), any NAVAID can be misused or misinterpreted and, therefore, become unsafe.

The electronic chart is an aid to navigation and is designed to facilitate the use of authorized government charts, not replace them. Only official government charts and notices to mariners contain all information needed for safe navigation. As always, the user is responsible for prudent use of this information.

Use the GDL 30/30A at your own risk. To reduce the risk of unsafe operation, carefully review and understand all aspects of this Owner's Manual. If necessary, thoroughly practice operation using the simulator mode prior to actual use. When in actual use, carefully compare indications from the unit to all available navigation sources, including the information from other NAVAIDs, visual sightings, and charts. For safety, always resolve any discrepancies before continuing navigation.

Weather and Sea Surface information

The GDL 30/30A receives XM Weather Radio data and shows it on your chartplotter. The weather data for each feature comes from reputable weather data centers such as the National Weather Service and the Hydrometerological Prediction Center. (See the XM WX Satellite Weather Web site at http://weather. xmradio.com/weather for more information.) Any weather feature can change in appearance or interpretation if the source that provides the information changes. XM Weather Radio data is broadcast at set rates (see page 24 for all weather-related broadcast rates). For example, NEXRAD Radar data is broadcast at five minute intervals. When the marine network is turned on or when a new feature is selected, the GDL 30/30A has to receive new data before it can be displayed. For this reason you may experience a delay before weather data or a new feature appears on the map.

Caution

IT IS THE USER'S RESPONSIBILITY TO USE THIS PRODUCT PRUDENTLY. THIS PRODUCT IS INTENDED TO BE USED ONLY AS A NAVIGATIONAL AID AND MUST NOT BE USED FOR ANY PURPOSE REQUIRING PRECISE MEASUREMENT OF DIRECTION, DISTANCE, LOCATION, OR TOPOGRAPHY.

Software

Software Versions

The GDL 30/30A is designed to work with software version 2.0 and higher on the GPSMAP 3005C/3006C/3010C. See the chartplotter Owner's Manual for instructions on determining the chartplotter software version. Visit our Web site at www.garmin.com/support/download.jsp for software updates (excluding map data).

Software License Agreement

BY USING THE GDL 30/30A, YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS OF THE FOLLOWING SOFTWARE LICENSE AGREEMENT. PLEASE READ THIS AGREEMENT CAREFULLY.

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 a valuable trade secret of Garmin. 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.FCC Compliance



The GDL 30/30A complies with Part 15 of the FCC interference limits for Class B digital devices FOR HOME OR OFFICE USE. These limits are designed to provide more reasonable protection against harmful interference in a residential installation, and are more stringent than "outdoor" requirements.

Operation of this device is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment generates, uses, and can radiate radio frequency energy and may cause harmful interference to radio communications if not installed and used in accordance with the instructions. 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 of the following measures:

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

The GDL 30/30A does not contain any user-serviceable parts. Repairs should only be made by an authorized Garmin service center. Unauthorized repairs or modifications could result in permanent damage to the equipment, and void your warranty and your authority to operate this device under Part 15 regulations.

Limited Warranty

This Garmin product is warranted to be free from defects in materials or workmanship for one year from the date of purchase. Within this period, Garmin will at its sole option repair or replace any components that fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts or labor, provided that the customer shall be responsible for any transportation cost. This warranty does not cover failures due to abuse, misuse, accident or unauthorized alteration or repairs.

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Garmin retains the exclusive right to repair or replace the unit or software or offer a full refund of the purchase price at its sole discretion. SUCH REMEDY SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OF WARRANTY.

To obtain warranty service, contact your local Garmin authorized dealer or call Garmin Product Support for shipping instructions and an RMA tracking number. The unit should be securely packed with the tracking number clearly written on the outside of the package. The unit should then be sent, freight charges prepaid, to any Garmin warranty service station. A copy of the original sales receipt is required as the proof of purchase for warranty repairs.

Online Auction Purchases: Products sold through online auctions are not eligible for rebates or other special offers from Garmin. Online auction confirmations are not accepted for warranty verification. To obtain warranty service, an original or copy of the sales receipt from the original retailer is required. Garmin will not replace missing components from any package purchased through an online auction.

International Purchases: A separate warranty is provided by international distributors for units purchased outside the United States. This warranty is provided by the local in-country distributor and this distributor provides local service for your unit. Distributor warranties are only valid in the area of intended distribution. Units purchased in the United States or Canada must be returned to the Garmin service center in the United Kingdom, the United States, Canada, or Taiwan for service.

The Garmin GDL 30/30A has no user-serviceable parts. Should you ever encounter a problem with your unit, please take it to an authorized Garmin dealer for repairs.

The GDL 30/30A is fastened shut with screws. Any attempt to open the case to change or modify the unit in any way will void your warranty and may result in permanent damage to the equipment.

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