



960 Overland Court, San Dimas, CA 91773
(909)394-5000

22-60105-000

MAGELLAN

GSC 100

Global Satellite Communicator



Quick Reference Guide

WARNINGS

GOOD JUDGEMENT

This product is an excellent navigation aid and communications tool, but does not replace the need for careful orienteering and good judgement. Never rely solely on one device for navigating.

USE CARE

The Global Positioning System (GPS) is operated by the U.S. Government, which is solely responsible for the accuracy and maintenance of GPS.

The accuracy of position fixes can be affected by the periodic adjustments to GPS satellites made by the U.S. Government and is subject to change in accordance with the Department of Defense civil GPS user policy and the Federal Radionavigation Plan.

USE CAUTION

Accuracy can also be affected by poor satellite geometry. When the accuracy warnings appear on the screen, use the data with extreme caution.

USE PROPER ACCESSORIES

Use only Magellan cables and antennas; the use of non-Magellan cables and antennas may degrade performance or damage the receiver, and will void the warranty.

LICENSE AGREEMENT

Magellan grants you, the purchaser, the right to use the software supplied in the GSC 100 Global Satellite Communicator (the "SOFTWARE") in the normal operation of the equipment. You may make copies only for your own personal use and for use within your organization.

The SOFTWARE is the property of MAGELLAN and/or its suppliers and is protected by United States copyright laws and international treaty provisions; therefore, you must treat this SOFTWARE like any other copyright material.

You may not use, copy, modify, reverse engineer or transfer this SOFTWARE except as expressly provided in this license. All rights not expressly granted are reserved by MAGELLAN and/or its suppliers.

LIGHTNING WARNING

Due to the extension capability of the ORBCOMM telescopic antenna located on the GSC 100, it is strongly advised that operations of the GSC 100 cease when thunderstorm or electrical storm conditions are present.

RADIATION WARNING

Although no single value of "safe radiation level" has been agreed upon by all countries, the American National Standards Institute (ANSI/IEEE C95.1 - 1992) recommends that people should not be exposed to radiation stronger than 1 milliwatt per square centimeter at the frequencies used in the Magellan GSC 100. Due to the GSC 100 transmission times being very brief, the amounts are well within acceptable limits as set forth by the American National Standards Institute.

OBTAINING LICENSING FOR ORBCOMM COMMUNICATORS

Use of the ORBCOMM System outside the United States has only been authorized by a limited number of foreign Governmental Authorities. Use of the ORBCOMM System outside the United States is permissible only when all necessary permits, approvals and authorizations have been received from the applicable foreign Governmental Authorities. In addition, use of the GSC 100 outside the United States is only permissible if it has been "type approved" for use in that country or territory. Both the ORBCOMM System and the GSC 100 may need to be approved prior to use in a foreign country or territory. For information on those countries or territories in which use of the ORBCOMM System and the GSC 100 is authorized, please contact ORBCOMM or your local service provider.

NOTICE OF COPYRIGHT PROTECTION

Copyright 1998 Magellan Corporation, 960 Overland Court, San Dimas, CA 91773 USA. World Rights Reserved.

No part of this publication may be stored in a retrieval system, transmitted or reproduced in any way, including but not limited to photocopy, photograph, magnetic or other record, without the prior written permission of Magellan Systems Corporation.

Magellan™, GSC 100™ are the trademarks of Magellan Systems Corporation.

ORBCOMM™ is the trademark of Orbital Communications Corporation.

GlobalGramSM is a registered service mark of ORBCOMM Global LP.

Part No. 22-60105-000

This Quick Reference Guide is provided to assist you in the operation of your GSC 100 while making your way outdoors. The information contained within is brief in nature and outlines the necessary keystrokes to perform required functions without extensive explanation. For more details, please refer to your GSC 100 User Manual.

Power

Pressing the Power key for one second turns the unit ON or OFF.

PWR

P
W
R

Turning The Light ON & OFF

Pressing the Light key turns the backlight ON or OFF.



Icons



Arrow Key. This icon displays the keys that are active for that screen.



Battery Charging. The receiver is connected to external power and the battery is charging.



Low Battery Warning. The battery is low.



Poor GQ Alert. The geometric quality (GQ) of the satellites is poor.

²_d

2D. The unit is calculating a two-dimensional position fix using three satellites (e.g. latitude and longitude).

³_d

3D. The unit is calculating a three-dimensional position fix using four satellites (e.g. latitude, longitude and elevation).

D

Differential. The receiver is utilizing DGPS to compute position fixes.



Light. The LCD backlight has been turned ON.



Old Data. The receiver has not updated position fixes for more than 10 seconds.



CAPS. The keypad is active and capital letters are being used.



ALT. The keypad is active and the ALT mode is being used.



Simulator. The receiver is in GPS simulation mode.



Envelope. There are unread messages in the *MESSAGE LIST*.



Open Envelope. Appears in front of messages that have been opened.



Satellite. This icon appears when ORBCOMM satellites are in view.



Page. This icon represents GlobalGrams that have been saved but not sent.



Double Arrow. Your only available message option is STANDARD GlobalGram.



Broken Double Arrow. Your only available message option is STORE & FWD.



Envelope and Check. The unit is checking for messages and you have a message.



Check. The unit will check for messages when in contact with an ORBCOMM satellite.



Mailbox with Flag Up. There are messages in the MAILBOX waiting to be sent.



Mailbox with Flag Down. Denotes messages that have been sent.



ORBCOMM. The unit is operating in the ORBCOMM mode.



GPS. The unit is operating in the GPS mode.



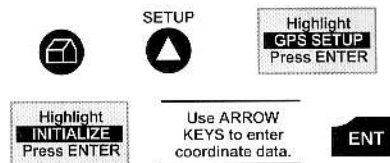
Down Arrow. The unit is "listening" to, or receiving, signals from an ORBCOMM satellite and you can send a STANDARD GlobalGram.



Broken Down Arrow. The unit is "listening" to, or receiving, signals from an ORBCOMM satellite, when the satellite is not in contact with a GES, and you can only send a STORE & FWD GlobalGram.

GPS Initialization

If the unit has been moved more than 300 miles you should re-initialize the receiver with your new coordinates.



Switching Operational Modes

There are three different operational modes: AUTO, GPS and ORBCOMM.



Viewing ORBCOMM Satellite Status Screen

While sending and receiving GlobalGram messages you can access this screen to show data pertaining to the satellite that your unit is in contact with as well as a satellite pass schedule.



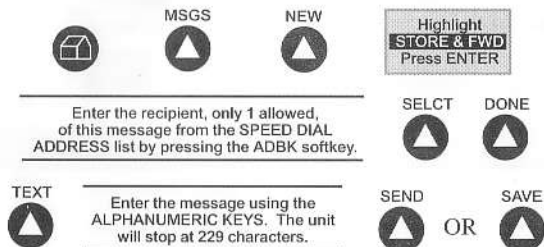
Messaging

There are two types of GlobalGrams that you can send from your GSC 100: STANDARD and STORE & FWD.

Message Type	No. of Recipients	Subject Field	Text Field	Icon Displayed
STORE & FWD	1 (Speed Dial Address Only)	None (SF Timestamp)	229 Characters Maximum	
STANDARD	7 (Primary & CC Combined)	79 Characters Maximum	2000 Characters Maximum	

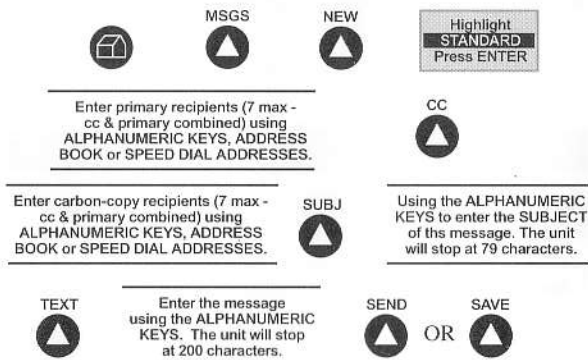
Creating & Sending a STORE & FWD GlobalGram

When creating and sending a STORE & FWD GlobalGram, your receiver will be in contact with an ORBCOMM satellite that is not communicating with a Ground Earth Station.



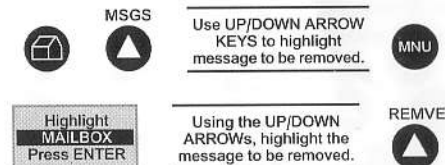
Creating & Sending a STANDARD GlobalGram

To create and send a STANDARD GlobalGram, your receiver will be in contact with an ORBCOMM satellite that is communicating with a Ground Earth Station.



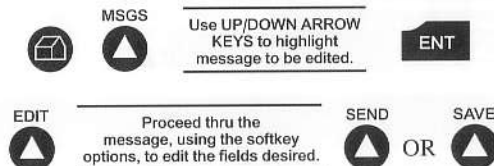
Removing A GlobalGram From The MAILBOX

Prior to editing a GlobalGram you will need to remove it from the MAILBOX.



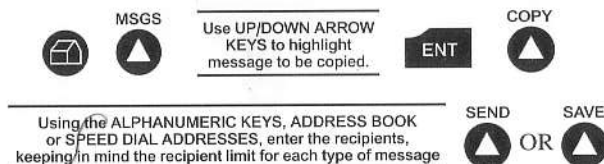
Editing A User-Created GlobalGram

If you haven't removed the GlobalGram from the MAILBOX you will be prompted to do so prior to editing.



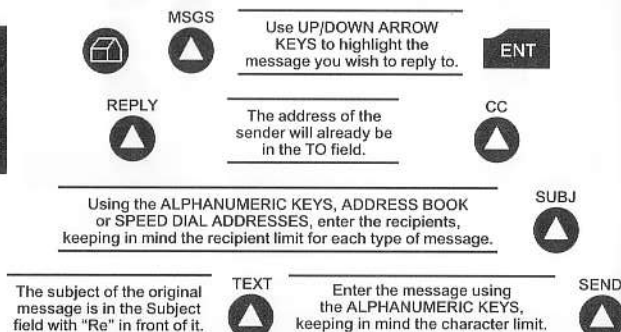
Copying A User-Created GlobalGram

This feature will be the same as creating a message, although the subject and text fields will contain the information you had copied from the original message.



Replying To A Received GlobalGram

If replying to a STANDARD GlobalGram, you can use speed dial, address book or manually typed-in addresses. If replying to a STORE & FWD, then the recipient must be a speed dial address.



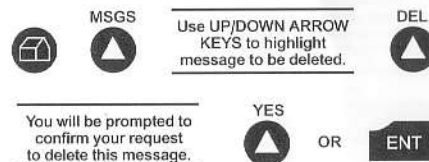
Forwarding A Received GlobalGram

This feature is similar to creating a message and allows you to forward a received GlobalGram to additional recipients.



Deleting A GlobalGram

This feature allows you to delete any GlobalGram from your receiver. Once the message has been deleted it can not be retrieved.



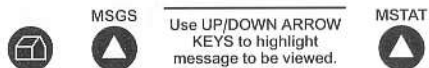
Accessing The Mailbox

This feature allows you to view the GlobalGrams that are awaiting transmission.



Viewing Message Status

This feature allows you to view information regarding GlobalGrams you have created and received, such as time and date created, message size and time sent/received.



Requesting A Message Check

To receive incoming GlobalGrams, you must first request your unit to check for messages from an ORBCOMM satellite. The unit will perform the check and download messages during the next satellite pass.



Setting Auto Message Check

This feature allows you to set your GSC 100 to automatically check for GlobalGrams at specified intervals. The unit must have a clear view of the sky.



Accessing The Address Book

This is the location where you store all the addresses that are used most frequently by "nickname". You are able to save up to 150 addresses.



Viewing An Address

This allows you to view the address and name associated with the nickname listed in the address book.



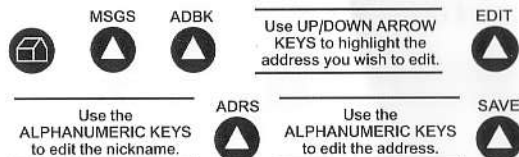
Creating A New Address

This feature allows you to enter a new address in your address book.



Editing An Address

This feature allows you to edit an address in your address book.



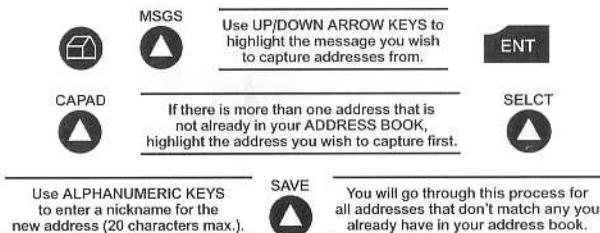
Deleting An Address

This feature allows you to delete an address in your address book.



Capturing An Address

This feature allows you to retain addresses from incoming GlobalGrams to your address book.



Selecting Recipients From The Address Book

This feature allows you to select recipients of your GlobalGrams whose addresses you have stored in the ADDRESS BOOK.

From the TO screen, or CC screen, while composing a GlobalGram



Use the UP/DOWN ARROW KEYS to highlight the address you wish to select.

ENT

OR

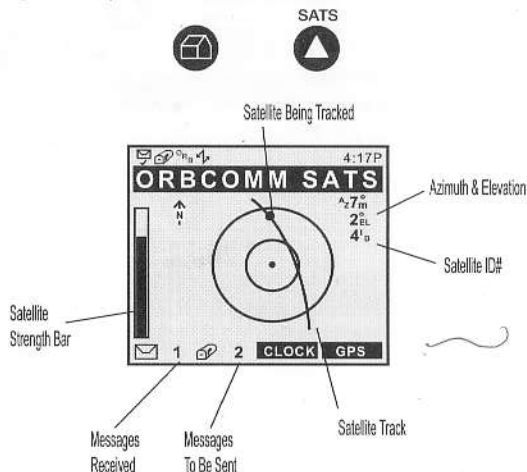


THEN



Transmitting To An ORBCOMM Satellite

This screen displays the ORBCOMM satellites by their location, using azimuth and elevation data, and showing their signal strength using an energy bar located on the left side of the screen. The dot moving within the circles represents the satellite being tracked. Your location is designated by the dot in the center of the two circles.



Pressing the down arrow from this screen allows you access a 24 hour schedule of available ORBCOMM satellites.

Viewing GPS Satellite Status Screen

This screen allows you to see GPS satellite information pertaining to the satellites that are in view of your receiver. The higher the number, the stronger the signal strength for the satellite you are tracking.



Getting A Position Fix

Getting a position fix allows the unit to locate itself relative to GPS satellites so that you can start navigating.



Once you are at the POSITION screen, the unit will first display the word "searching". "Searching" is then replaced with a bar graph indicating the receiver's progress toward acquiring a signal. When the bar graph is replaced with the map datum, the receiver has acquired a position fix.

Saving Your Current Position

This allows you to save your current position in the receiver's memory.

From any NAV or PLOT Screen



Highlight SAVE POS Press ENTER

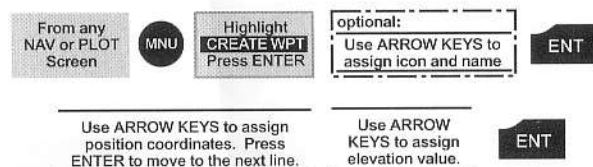
optional:

Use ARROW KEYS to assign icon and name

ENT

Creating A Waypoint

This allows you to create and store a waypoint with a receiver-generated or user-generated name and allows you to assign the coordinates.



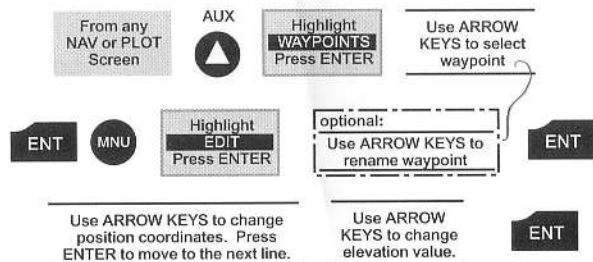
Viewing A Waypoint

This allows you to view a waypoint and its associated information.



Editing A Waypoint

This allows you to rename or change the coordinate values for a particular waypoint.



Deleting A Waypoint

This function permanently removes a waypoint from the receiver's memory.



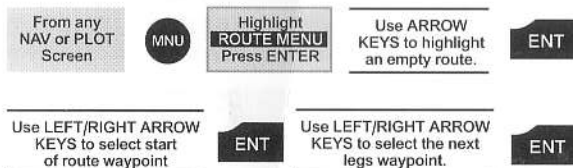
Creating A GOTO

This function allows you to navigate from your current position to any waypoint you have saved in your unit's memory.



Creating A Route

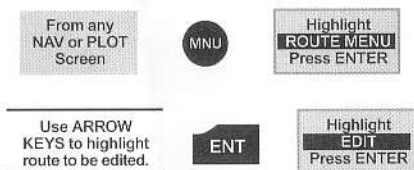
This function allows you to create a route of 1 to 15 legs.



- To finish creating a multi-leg route, press ENTER without selecting a "TO" waypoint.
- Continue this procedure until the final destination waypoint is entered.

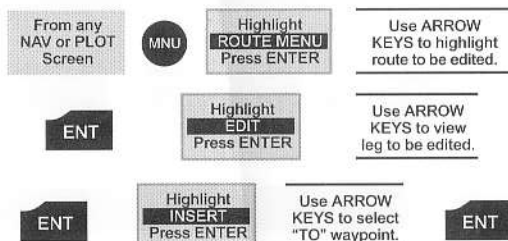
Viewing The Route Summary Screen

This function allows you to view the Route Summary Screen.



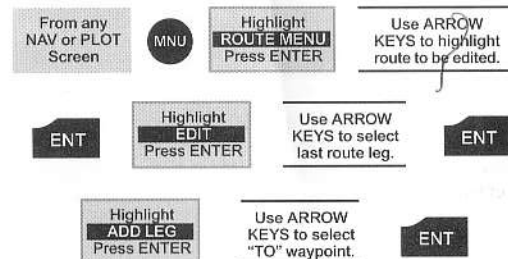
Inserting A Leg

This function allows you to insert a waypoint between the starting and ending waypoints of an existing route.



Adding A Leg

This function allows you to add a waypoint at the end of an existing route.



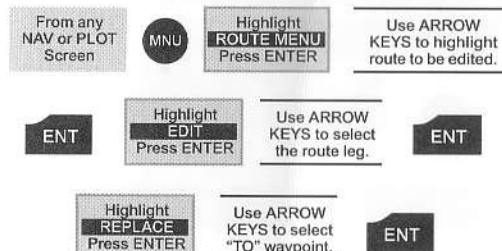
Deleting A Leg

This allows you to delete a leg from an existing route.



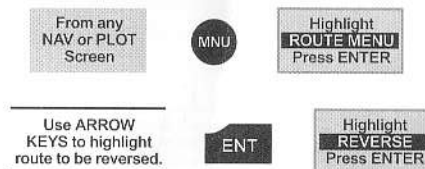
Replacing A Leg

This allows you to replace a leg in an existing route.



Reversing A Route

This function allows you to reverse the order of waypoints in an existing route.



Deleting A Route

This function permanently removes an existing route from the Route Menu.



Using The Man-Over-Board (MOB) Feature

The MOB causes the receiver to save the position that is current when the feature is accessed and creates a one-leg route back to that position.



Creating A Backtrack

This function allows you to create a route that "backtracks" the course you last took.



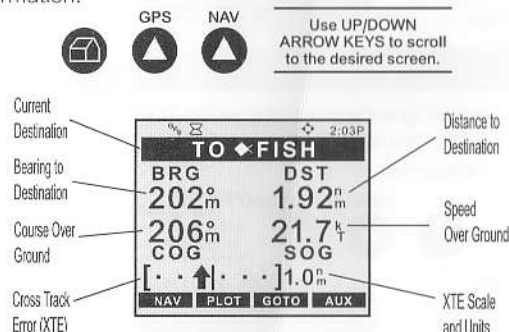
Viewing The Position Screen

The Position screen displays the coordinates, elevation and map datum information.



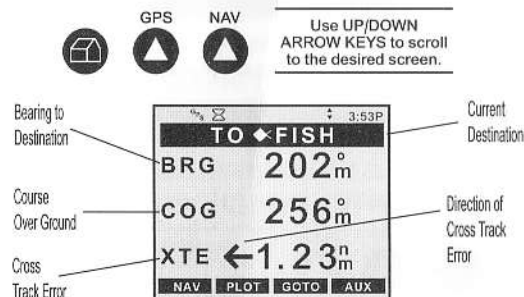
Viewing The NAV 1 Screen

The NAV 1 screen displays the bearing, distance, course over ground, speed over ground and courseline information.



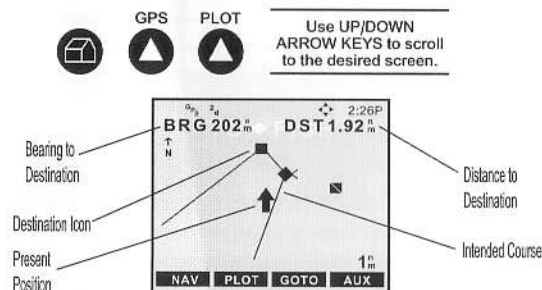
Viewing The NAV 2 Screen

The NAV 2 screen displays the bearing, course over ground and cross track error information.



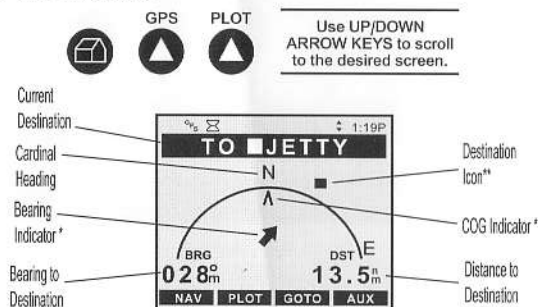
Viewing The PLOT Screen

This screen plots your route on the display using the arrow icon to display your relative position on the route.



Viewing The POINTER Screen

This screen graphically displays the TO destination waypoint of the current leg and the bearing and distance to that waypoint.

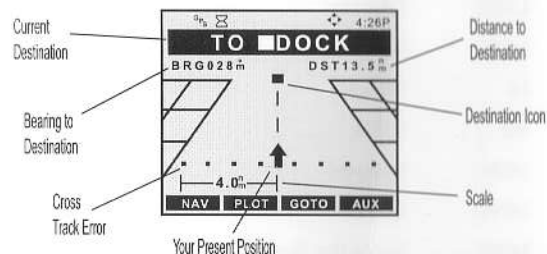


* Displayed only if receiver is moving.

** The destination icon disappears if it extends past the displayed arc (is behind you).

Viewing The ROAD Screen

This screen depicts the course you should be on as the center line and position relative to your actual course.



Abbreviations

°M	Degrees Magnetic north
°T	Degrees True north
2D	Two-Dimensional
3D	Three-Dimensional
BRG	Bearing
CDI	Course Deviation Indicator
CLR	CLEAR
CTS	Course To Steer
DEG	Degrees
DST	Distance
FT	Feet
GCC	Gateway Control Center
GES	Gateway Earth Station
GPS	Global Positioning System
GQ	Geometric Quality
HDG	Heading
KM	Kilometers
KPH	Kilometers Per Hour
KT	Knots
LAT	Latitude

LFIX	Last Fix
LON	Longitude
M	Meters
MI	Miles
MIN	Minutes
MNU	MENU
MPH	Miles Per Hour
NAV	NAVIGATE
NM	Nautical Mile
SEC	Seconds
SPD	Speed
TTG	Time To Go
UTM	Universal Transverse Mercator
UT	Universal Time
VMG	Velocity Made Good
WPT	Waypoint
WPTxx	Receiver-generated waypoint name
XTE	Cross Track Error

Contacting Customer Service

If you are unable to solve your operation problems, please call Magellan's Customer Service at (800) 707-9971. Representatives are available Monday through Friday, from 7 A.M. to 5 P.M., U.S.A. Pacific Standard Time. Faxes can be sent to Customer Service at (909) 394-7050. You can e-mail Magellan Technical Support at: wireless@mglm.com

To contact ORBCOMM Customer Service you can call (800) ORBCOMM (672-2666). Faxes can be sent to (703) 404-8039. You can e-mail Customer Service at customer_service@orbcomm.com or visit www.orbcomm.com/globalgram.