

# GPS Director GD-101 User Manual

Version 1.0



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### **Chapter 1: Functions and Specifications**

#### **Function and Features**

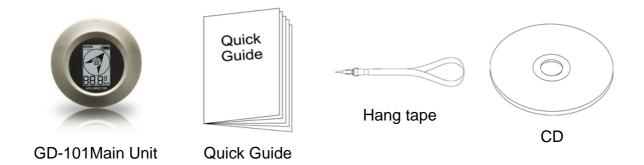
- Can set 5 Destination Points
- Display directions with Digital Arrow Display (Can display 16 directions)
- Magnetic North Direction Indication; present coordinates display
- Manual Setting of Destination Coordinates
- Maximum Destination Distance Showing (0~999.99)
- GPS fix status indication
- 3 Kinds of Distance Unit: km/mi/nm for setting
- Time Zone Setting/ Date and time display
- End User changeable Battery Design: AAA x 2, Rechargeable Battery / General
   Battery / Alkaline Battery
- Alkaline battery life can last for 18 hours. The battery life can be lengthened under power-saving mode.
- Simple function of buttons
- Battery Power Level Indication
- Backlight Time Setting
- Power-saving mode setting

## **Specifications**

Electricity		
GPS chipset	High sensitivity single chip solution	
Frequency	L1, 1575.42 MHz	
C/A Code	1.023 MHz chip rate	
Channels	48 channel all-in-view tracking	
Sensitivity	Tracking:-161dBm	
Display		
Pixel H*W	96x65 dot Matrix	
Backlight Type	White	
Power		
Battery Type	AAA X 2	
Operation Time	9 hours	
Buttons		
Power/Backlight Button	Short-click: Turn on backlight. Long-click:	
	Power off device under main screen.	
	2. Return to last page under each setting screen.	
Selection/ Setting	Short-click: To select.	
Button	Long-click: To set.  Make GD-101 enter main screen by long clicking	
	Power/Backlight Button and Selection/ Setting Button at the same time.	
Appearance		
Dimension	60 X 60 X 28 (mm)	
Weight	45g, (Not including batteries)	
COORDINATES SY	YSTEM	
Coordinates System	Default: WGS-84	
DYNAMIC CONDIT	TION	
Accelerate Speed	Less than 4G	
Height Limit	18,000 Meter	
Speed Limit	515 m/sec	
Vibration Limit	20 m/sec**3	
<b>GPS FIX TIME</b>		
Hot Start	Average 1 second	
Warm Start	Average 38 second	
Cold Start	Average 42 second	
Get GPS fix Again	Average 0.1 second	
Antenna		
GPS antenna	12 X 12 mm, Patch Antenna	

ACCURACY			
Horizontal	10 meters, 2D RMS		
Position	1-5 meters 2D RMS, WAAS corrected		
Speed Accuracy	0.1 m/sec		
Time Accuracy	1 micro-second synchronized to GPS time		
Temperature			
Operation	0°C ~ 50°C		
Temperature			
Storage	-20°C ~ 70°C		
Temperature			
Humidity Range	Operational up to 95% non-condensing		
Certification			
FCC	USA (Covers requirements for CANADA ICES-003)		
CE	Europe		

### **Accessories**



#### NOTE:

If any accessory is not included or damaged, please contact the local dealer.

### **Appearance**



Front view and Back view				
0	Display	Shows the GPS fix status, power level, destination direction and distance		
0	Battery Cover	Open the battery cover by rotating it according to the arrow.		
8	Power/Backlight Button	<ul> <li>Short-click (1sec): Turn on backlight.</li> <li>Long-click (2sec):</li> <li>1. Power off device under main screen.</li> <li>2. Return to last page under each setting screen.</li> </ul>		
4	Selection/ Setting Button	Short-click (1sec): To select.  Long-click (2sec): To set.  Make GD-101 enter main screen by long clicking  Power/Backlight Button and Selection/ Setting Button at the same time.		

### **Chapter 2: Start to Use**

#### **Install Battery**

Open Battery cover



**Install Battery** 



Loosen the cover



Lock the cover



### **Magnetic North Adjustment**

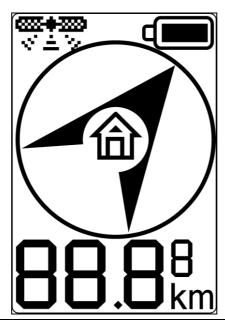
 When using GD-101 for the first time, GD-101 will automatically perform the magnetic-north adjustment as seen in the screenshot below.



- 2. For the method of adjustment, please refer to Chapter 3-2.
- 3. If GD-101 shows the incorrect or inaccurate direction, please perform the magnetic adjustment by operating the function button.

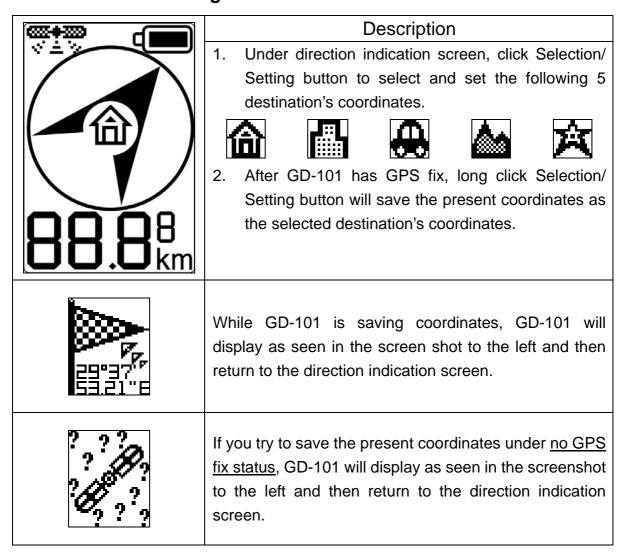
# **Chapter 3: Using GD-101**

### **3-1 Direction Indication Screen**



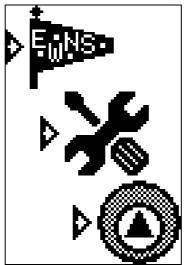
Indication	Description	
<b>2220 +320</b> ñ2	The GPS fix indication will keep ON when device gets a GPS fix. GPS fix indicator will flash when device does not have GPS fix.	
The distance between GD-101 and destination will continue shown/ displayed when device has GPS fix.		
	The direction of the setting destination of GD-101. The arrow will direct to the destination after GD-101 has GPS fix and has performed the magnetic-north adjustment.	
-	What is shown on upper right corner is the battery power level 75%~100% 50%~75% 25%~50% Battery Low. Please change the batteries	

#### **3-1-1 Automatic Setting the Destination**



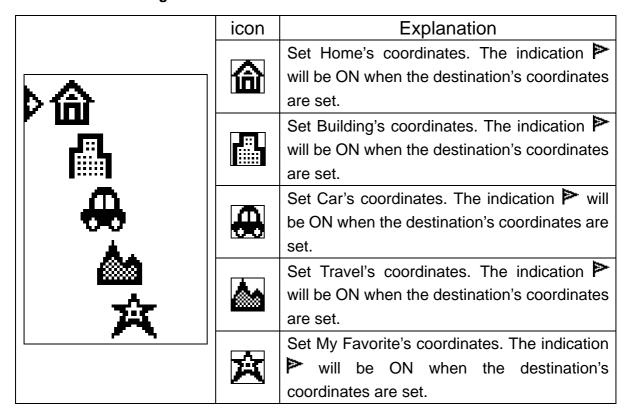
### 3-2 Main Setting Screen

In the direction indication screen, you could make GD-101 enter main screen by long clicking Power/Backlight Button and Selection/ Setting Button at the same time.

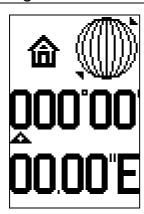


Screen and Operation Explanation:				
Indication	Function	Operation		
	Manual Set Destination's Coordinate	Long click Selection/Setting button to enter setting screen.  You could set the following 5 destination's coordinates.		
<b>*</b>	Function Setting	Long click Selection/Setting button to enter setting screen.  You could set the following items.  Time Zone  Backlight Setting  Automatic Sleeping Time		
	Data Setting	Long click Selection/Setting button to enter setting screen.  You could set the following items.  Date  GPS Cold Start  Delete Memory		

#### 3-2-1 Manual Setting Destination's Coordinate

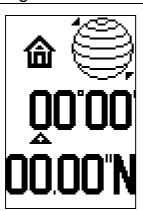


#### Setting Destination's Longitude



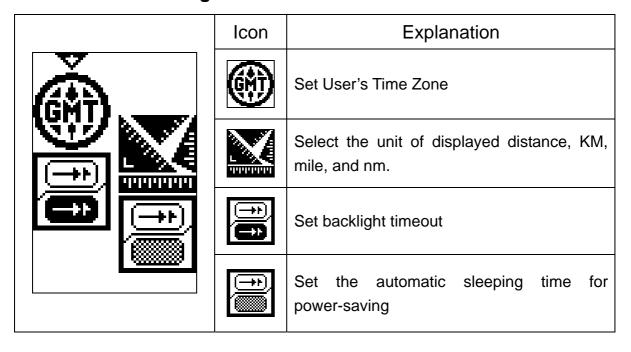
- The upper left corner is the selected destination.
   The number is the setting longitude (East or West). An arrow will be indicated to the number on the initial screen.
- Short click Selection/Setting button to select the number. Long click Selection/Setting button to enter the selected value and move to the next digit for setting.
- 3. The maximum setting is 180 ° 00 '00 . 00 "

#### Setting Destination's Latitude



- The upper left corner is the selected destination.
   The number is the setting longitude (North or South). An arrow will be indicated to the number on the initial screen.
- Short click Selection/Setting button to select the number. Long click Selection/Setting button to enter the selected value and move to the next digit for setting.
- 3. The maximum setting is 90 ° 00 '00 . 00 "

#### 3-2-2 Function Setting



#### Setting Time Zone



#### **Explanation**

- You could set time zone in this screen. The value on the lower screen represents the GMT time.
- 2. **Short click** Selection/Setting button to select the time zone.
- 3. **Long click** Selection/Setting button to save the time zone.
- 4. **Long click** Power button to return to last screen.

#### Setting Unit of Displayed Distance



- 1. You could select the unit of displayed distance in this screen. The default setting is km.
- 2. **Short click** Selection/Setting button to select the unit.
- 3. **Long click** Selection/Setting button to save the unit.
- 4. **Long click** Power button to return to last screen.

#### Setting Backlight Timeout-time



#### Explanation

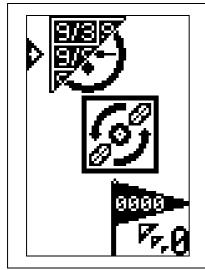
- 1. Set the backlight timeout-time in this screen. The value in the lower screen is the backlight time-out time. The backlight will be on for the time-out time after you short click the power/backlight button.
- 2. **Short click** Selection/Setting button to select the backlight timeout.
- Long click Selection/Setting button to save the backlight timeout
- 4. **Long click** Power button to return to last screen.

#### Set Idle-timeout Time for Going to Sleep Mode



- 1. Set idle-timeout time for going to sleep mode in this screen. The value in the lower screen represents the idle-timeout time.
- 2. **Short click** Selection/Setting button to select idle-timeout-time.
- 3. **Long click** Selection/Setting button to save idle-timeout-time.
- 4. **Long click** Power button to return to last screen.

#### 3-2-3 Setting Data



Icon	Explanation		
	Display the present time of the set time zone.		
وي	Make GD-101 do cold start ∘		
9999 Pr. 0	Delete the setting coordinate of destination in GD-101		

#### Showing Date and Time



#### Explanation

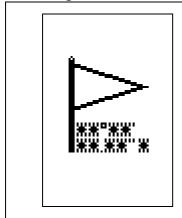
- 1. The displayed date and time is from satellite data. It is not user-defined.
- 2. **Long click** Power button to return to last screen.
- 3. **Long click** Selection/Setting button to go to main screen.

#### **Cold Start**



- This screen shows GD-101 is performing a GPS Cold Start
- 2. It will return to navigation screen after 1 second.

### **Deleting Coordinates of Destination Screen**



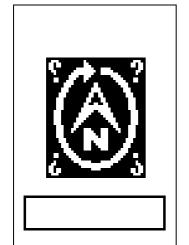
- 1. This screen shows GD-101 is deleting the coordinates of the destination.
- 2. It will return to navigation screen after 1 second.

#### 3-3 Adjusting E-Compass



#### Explanation

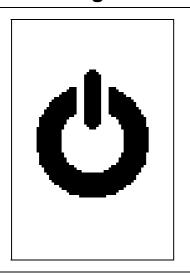
- GD-101 will display the magnetic northern direction after entering the adjusting electronic compass mode.
- GD-101 will show the coordinates after getting a GPS fix.



#### Adjusting the Electronic Compass

- 1. You could adjust electronic compass in this screen.
- 2. In order to avoid the magnetic interference from other objects, please adjust the compass outdoors. Place the GD-101 on flat surface and rotate clockwise 360 degrees, twice.
- 3. GD-101 will automatically return to navigation screen.

#### 3-4 Turning Off GD-101



- 1. In the direction navigation screen, long click power button to turn off GD-101.
- 2. GD-101 will be turned off 2 seconds after seeing this screen.

# **Chapter 4: Troubleshooting**

When GD-101 can not be turned on or does not work properly, Please check if the battery is installed correctly.

<b>(i)</b>	It requires more time to get GPS fix while GD-101 is moving. Please keep GD-101 stationary when powering on GD-101. This will shorten the time to get a GPS fix.		
<b>(i)</b>	Keep GD-101 away from excessive moisture and extreme temperatures. Do not leave it in the closed vehicles or put it under direct sunlight for extended periods of time. Excessive moisture and extreme temperatures may damage the GD-101.		
<b>(i)</b>	If the date and time is not correct, please select the local time zone in the time zone setting. Ie PST GMT -8 / Taiwan GMT +8		
<b>(i)</b>	Do not put GD-101 near the magnetic objects like electric appliances or magnets. The magnetic objects may cause the GD-101 point to wrong direction.		
(i)	If the pointed direction is not accurate, please adjusting the electronic compass.		

# **Appendix 1: World Time Zone Table**

Time Code	Description	Region	Time Zone
ACDT	Australian Central Daylight Time	Australia	+10:30
ACST	Australian Central Standard Time Australia		+ 9:30
ADT	Atlantic Daylight Time	North America	- 3:00
AEDT	Australian Eastern Daylight Time	Australia	+ 11:00
AEST	Australian Eastern Standard Time	Australia	+ 10:00
AKDT	Alaska Daylight Time	North America	- 8:00
AKST	Alaska Standard Time	North America	- 9:00
AST	Atlantic Standard Time	North America	- 4:00
AWDT	Australian Western Daylight Time	Australia	+ 9:00
<i>AWST</i>	Australian Western Standard Time	Australia	+ 8:00
BST	British Summer Time	Europe	+ 1:00
CDT	Central Daylight Time	Australia	+10:30
CDT	Central Daylight Time	North America	- 5:00
CEDT	Central European Daylight Time	Europe	+ 2:00
CEST	Central European Summer Time	Europe	+ 2:00
CET	Central European Time	Europe	+ 1:00
CST	Central Summer Time	Australia	+ 10:30
CST	Central Standard Time	Australia	+ 9:30
CST	Central Standard Time	North America	- 6:00
CXT	Christmas Island Time	Australia	+ 7:00
EDT	Eastern Daylight Time	Australia	+ 11:00
EDT	Eastern Daylight Time	North America	- 4:00
EEDT	Eastern European Daylight Time	Europe	+ 3:00
EEST	Eastern European Summer Time	Europe	+ 3:00
EET	Eastern European Time	Europe	+ 2:00
EST	Eastern Summer Time	Australia	+ 11:00
EST	Eastern Standard Time	Australia	+ 10:00
EST	Eastern Standard Time	North America	- 5:00
GMT	Greenwich Mean Time	Europe	0:00
HAA	Heure Avancée de l'Atlantique	North America	- 3:00
HAC	Heure Avancée du Centre	North America	- 5:00
HADT	Hawaii-Aleutian Daylight Time	North America	- 9:00
HAE	Heure Avancée de l'Est	North America	- 4:00
HAP	Heure Avancée du Pacifique	North America	- 7:00

HAR	Heure Avancée des Rocheuses	North America	- 6:00
HAST	Hawaii-Aleutian Standard Time	North America	- 10:00
HAT	Heure Avancée de Terre-Neuve	North America	-2:30
HAY	Heure Avancée du Yukon	North America	- 8:00
HNA	Heure Normale de l'Atlantique	North America	- 4:00
HNC	Heure Normale du Centre	North America	- 6:00
HNE	Heure Normale de l'Est	North America	- 5:00
HNP	Heure Normale du Pacifique	North America	- 8:00
HNR	Heure Normale des Rocheuses	North America	- 7:00
HNT	Heure Normale de Terre-Neuve	North America	- 3:30
HNY	Heure Normale du Yukon	North America	- 9:00
IST	Irish Summer Time	Europe	+ 1:00
MDT	Mountain Daylight Time	North America	- 6:00
MESZ	Mitteleuroäische Sommerzeit	Europe	+ 2:00
MEZ	Mitteleuropäische Zeit	Europe	+ 1:00
MSD	Moscow Daylight Time	Europe	+ 4:00
MSK	Moscow Standard Time	Europe	+ 3:00
MST	Mountain Standard Time	North America	- 7:00
NDT	Newfoundland Daylight Time	North America	- 2:30
NFT	Norfolk (Island) Time	Australia	+ 11:30
NST	Newfoundland Standard Time	North America	- 3:30
PDT	Pacific Daylight Time	North America	- 7:00
PST	Pacific Standard Time	North America	- 8:00
UTC	Coordinated Universal Time	Europe	0:00
WDT	Western Daylight Time	Australia	+ 9:00
WEDT	Western European Daylight Time	Europe	+ 1:00
WEST	Western European Summer Time	Europe	+ 1:00
WET	Western European Time	Europe	0:00
WST	Western Summer Time	Australia	+ 9:00
WST	Western Standard Time	Australia	+ 8:00

### **Appendix 2: FCC Notices**

This device complies with part 15 of the FCC rules. Operation is subject to the following two 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.

#### FCC RF Exposure requirements:

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.