

# User's Manual

G-MEN DR01・DR20・DR100



Thank you for your purchase. Please read the User's Manual carefully prior to use.

2014.10

## Accessories



■ USB Cable (MiniB) ■ AA Alkaline Batteries (LR6) ■ Magnet

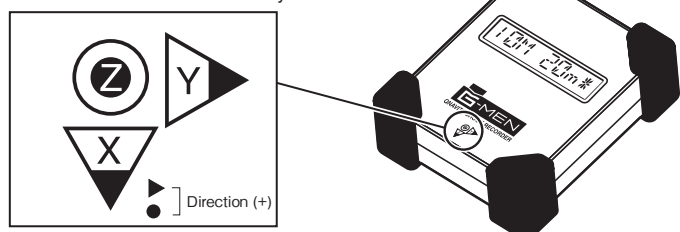


■ Attachment Plates ■ Application Software ■ Warning Sticker  
 ■ User Registration Card ■ Startup Guide ■ User's Manual  
 ■ Warranty Certificate

## About the "G-MEN" 3-Axis Direction Symbol

G-MEN measures the acceleration with 3 direction sensors, X, Y and Z. Each sensor detects positive and negative force. Graphs and CSV data depict acceleration with values of X-, Y- and Z-axes and +/- signs.

The "G-MEN" 3-Axis Direction Symbol



## Note

- Copying or reproduction of this User's Manual in part or in whole without prior authorization is strictly prohibited.
- Specifications, design and any other information included in this User's Manual may be revised without prior notice.
- To the best of our knowledge, this User's Manual is accurate at the time of printing, but should you encounter any omissions or inaccuracies, please contact your dealer or our Customer Support.
- This product is designed and manufactured for use within Japan.
- This product is designed to be used while attached and packaged with the object to be measured.
- Please handle with care as excessive direct impact may damage this product.
- This product is not intended for monitors and such equipment relevant to human and animal lives.
- This product is not an instrument specializing in measuring acceleration.
- This product is a data logger which records acceleration and temperature over an extended period of time.
- In no event will SRIC be liable for any direct or indirect damages of any kind incurred by the results of using this product.
- This product is designed and manufactured to ensure high reliability, however, absolute operation guarantee is not possible. If this product use is intended for providing proof for compensation for damages or insurance claims of high value, the use of multiple products is recommended.
- This product is intended for use under normal living conditions, and cannot be used under condensation, oil, water or extreme temperatures. Operation and data are not guaranteed under high-energy radiation. The user is responsible for the operating environment of this product.
- This product is battery-operated. It will run stably for approximately one month with new batteries, but if you intend to record for an extended period of time, be sure to use new batteries.
- The USB (Universal Serial Bus) standard used herein is HSSI.
- Logos and Windows7 used herein are trademarks of Microsoft Corporation.
- In this Manual marks such as TM, R, C have been omitted.
- Usage not described in this Manual is strictly prohibited.
- Operating Systems compatible with this product is limited.
- SRIC will not be liable for any damages incurred if the user does not use the product correctly, or has handled it in any way other than described herein, or has tampered with or changed it in any way, or if it has been repaired or changed in any way by a third party.

## Attention

For your safety, please read the "Safety Precautions" and the "User's Manual" carefully prior to use.

### Usage

- This product cannot be used under water, at high altitudes, up high in the air, or where there is no gravity.
- This product cannot be used where the temperature range is under 0°C or over 50°C.

### Placement

- Do not leave the product under direct sunlight, near any heat source, inside closed vehicles or freezers.

### Power Supply

- Replace with new batteries before use. When not in use for an extended period of time, remove batteries before storage.
- Accidental swallowing of batteries is dangerous. Keep out of reach of children.

### Warranty

- In no event will SRIC be liable for any direct or indirect damages of any kind incurred by the results of using this product.
- Operation cannot be guaranteed for usage other than described in this Manual.

### Repairs

- For maintenance during and after the warranty period, please contact your dealer or our Customer Support.

## Caution

- Do not scratch the surface or spill water on the liquid crystal display panel.
- When inserting the battery, make sure the positive and negative ends are facing the correct direction.
- When not in use for an extended period of time, take the battery out before storing.
- Always hold the plug when connecting and disconnecting the USB cable provided.
- Never handle with wet hands.
- Keep the product and batteries out of reach of children.

## Specifications

Model	G-MEN DR01		G-MEN DR20		G-MEN DR100
Measurement	3-Axis Acceleration・Temperature・Humidity		3-Axis Acceleration・Temperature・Humidity		3-Axis Acceleration・Temperature・Humidity
Acceleration Sensor (Passive Acceleration)	1G (Precision ±10%)	2G (Precision ±10%)	20G (Precision ±10%)	10G (Precision ±10%)	100G (Precision ±10%) Gravitational acceleration is not supported.
Measurement Resolution	0.01G	0.02G	0.2G	0.1G	1G
Response Frequency	0Hz~100Hz		0Hz~100Hz		16Hz~100Hz
Temperature	0~50°C (±1.25°C)				
Humidity	30~90% (±3%)				
Sampling Cycles	5 Cycles (1 msec・2 msec・5 msec・10 msec・20 msec)				
Recording Interval	1,5,10,15,20,30,secs.+1,2,3,4,5,10,15,20,30 minutes (Selectable)				
Display	LCD				
Recording Capacity	32,000 data (1 data: Date, time・X Axis・Y Axis・Z Axis・Temperature・Humidity)				
Record Saving	EEPROM				
Connection	USB (miniB) 2.0				
Operating System Requirement	Windows7 (32/64bit)				
Power Source	AA Alkaline Batteries (LR6) x2				
Battery Life	Approximately 50 days (at Sampling Cycle of 10 msec) *				
Operating Temperature and Humidity Range	0~50°C, RH less than 70% (no condensation)				
Measurement	75.5(H)×60.5(W)×33(D) mm				
Weight	Approximately 135g (including batteries)				
Accessories	USB Cable・AA Alkaline Batteries (2)・Warning Sticker Attachment Plates (2)・Software (CD-ROM)				

\* It depends on measurement environment and battery performance.

## Safety Precautions

### Definition

	<b>Warnings</b>	Failure to follow these instructions could result in death or serious injury.
	<b>Caution</b>	Failure to follow these instructions could result in mild or moderate injury.

### Symbols and Conventions

	▲ Warning (includes Caution). The description is shown in the pictogram. The example at left indicates "General Caution・Warning・Danger".
	⊘ Prohibited (Avoid). The description is shown in the pictogram. The example at left indicates "Dismantling Prohibited".
	● Compulsory (Required). The description is shown in the pictogram. The example at left indicates "Remove plug from socket".

## Warning

Please read the following instructions and the User's Manual carefully prior to use. This device is limited to use as attached and packaged with the object to be measured.  
 Do not drop the device and avoid excessive impact.  
 Do not use for objects relevant to human or animal life.  
 This device is not a high precision electronic measuring instrument.  
 Do not dismantle or attempt to modify the device.

### Do not use or store under the following conditions.

- ・Extremely high temperatures (Under direct sunlight, near heaters)
- ・Extremely low temperatures (In the refrigerator, in extremely cold weather)
- ・Near water (In the bathroom, on the water, at sea, in the water, in the sea)
- ・Areas affected by acid, alkaline, organic solvents, corrosive gases, etc.

## Inquiries to Support Center

- Inquiry to Support Center are restricted to those who have registered as a user.  
Information required

  1. User's address, name, and telephone number
  2. Product model number in use
  3. Usage environment (The model name of the apparatus connected )
  4. Present condition in detail.

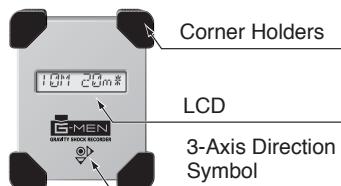
Support Center  
 e-mail [support-box@g-men.jp](mailto:support-box@g-men.jp)

## Repairs

- For repairs, check the items below and contact your dealer or our Customer Support.
- As a general rule, the user is responsible for the cost of delivering the product for repairs. You will not be charged for the cost of receiving your product after repairs.
- Please attach a note stating the circumstances of the
- The following will void your warranty and any repairs will be subject to a fee.
  1. Failure to present the Warranty Certificate
  2. Incomplete Warranty Certificate
  3. Damage caused by incorrect use, or caused by accidents after purchase
  4. Unauthorized modification or changes to the product

## Part Description

Front



Corner Holders

LCD

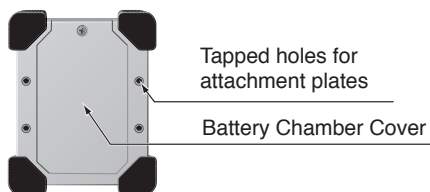
3-Axis Direction Symbol

Base



USB Connector (MiniB)

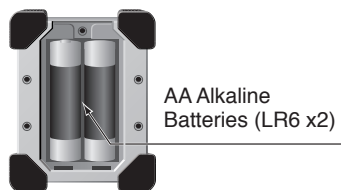
Back



Tapped holes for attachment plates

Battery Chamber Cover

Battery Chamber



AA Alkaline Batteries (LR6 x2)

## How to Install Batteries

### 1 Open the battery chamber cover

[+] Loosen the screw with a screw driver.

### 2 Remove the battery chamber cover

Make it ready for putting in the batteries.

### 3 Putting in the batteries

Install the AA Alkaline Batteries (LR6\*2) correctly as indicated with +/-.

### 4 Close the battery chamber cover

Put back the battery chamber cover and tighten the screw securely.

## Connecting with Computer

### 1 Open the connector cover

Open the cover of the USB connector (MiniB).

### 2 Connect the USB cable

Insert the USB connector (MiniB) end of the provided USB cable.

### 3 Connect with your computer

Connect the USB TYPE-A end of the provided USB cable with the USB port on your computer.

### 4 Communicate with your computer

Transfer data to your G-men software installed computer.

## How to mount Attachment Plates

### 1 Be aware of the mounting direction

See how the attachment plate is mounted as shown in the sketch.

### 2 Mount one of the attachment plates.

Tighten the screw with a screwdriver to fix the attachment plate on one side of the body.

### 3 Do the same with the other side

Mount each attachment plate to the both sides of the body.

### 4 Fix the unit to an object to be measured.

Install the unit by securing the Attachment Plates using appropriate screws onto an object to be measured.

## LCD Display

Display Setting	Model	Display Sample	Description
Default Setting	DR100	1S 10m 29.5°C 45%h	Recording Interval 1 Second Sampling 10 ms and the temperature and humidity are alternately displayed.
	DR01·DR20	1S 10m 29.5°C 45%h	Recording Interval 1 Second Sampling 10 ms and the temperature and humidity are alternately displayed.

1S indicates the recording interval is 1 second 10m indicates the sampling cycle 1M is displayed when the recording interval is 1 minute

## Sampling Cycle and the Response Frequency

Sampling Cycle	Response Frequency	Display	Display When Trace Mode is On
20msec	100Hz	1S 20m	TRC 20m. / = \ Alternately displayed
10msec	100Hz	1S 10m	TRC 10m. / = \ Alternately displayed
5msec	100Hz	1S 5m	TRC 5m. / = \ Alternately displayed
∕	40Hz	1S2 5m	TRC2 5m. / = \ Alternately displayed
∕	20Hz	1S4 5m	TRC4 5m. / = \ Alternately displayed
2msec	100Hz	1S 2m	TRC 2m. / = \ Alternately displayed
∕	70Hz	1S2 2m	TRC2 2m. / = \ Alternately displayed
∕	45Hz	1S4 2m	TRC4 2m. / = \ Alternately displayed
∕	25Hz	1S8 2m	TRC8 2m. / = \ Alternately displayed
1msec	100Hz	1S 1m	TRC 1m. / = \ Alternately displayed
∕	70Hz	1S4 1m	TRC4 1m. / = \ Alternately displayed
∕	45Hz	1S8 1m	TRC8 1m. / = \ Alternately displayed
∕	25Hz	1SF 1m	TRCF 1m. / = \ Alternately displayed

## Threshold Setting

Display during measurement	1S 10m*	* is displayed to show that the threshold has been set.
Trigger standing by	TRC 10m_	_ are alternately displayed. The threshold triggers the trace mode to stand by
Trigger measurement in progress	TRC 10m*	Triggered to start measuring and * and + are alternately displayed during measurement

Warnings	Data capacity is full	DATAFULL	Warning and measurement conditions are alternately displayed
	Battery is low	LoBAT	Recording stopped
	Excess over threshold detected	SHOCKED	Excess over the threshold is detected when the option is turned "ON".
	Excess over threshold measured	DTCT 002	Excess over the threshold is measured (displayed for 1 second).
	Hazard measurement ends	HALTED	Displayed after 1,000 hazard recordings, and then measurement is halted.
Starting	Idling time	WAIT 05	Counts down for 5 seconds.
	Magnet trigger	WAITMGNT	Standing by for magnet start
	Preset	31_12:30	_ are alternately displayed. The preset starting date and time is shown (the example at left indicates the 31st at 12:30).
Stopping		SLEEPNG	Measurement is suspended.
Display Options	00	1S 10m	Standard operation Measurement conditions·Temperature and humidity
	01	005 000	Displays the acceleration of X and Y axes.
	02	ID01 009	ID number and the acceleration of Z axis.
	03	1M2 010 dT 8/28 TM 14:11	"Alternately displays maximum measurement axis and the date and time of acceleration to date (10 G on Z axis on August 28th at 14:11)"
	04	1RC01595	Displays the current number of records
	05	0330.1620	Displays the date and time. March 30th 16:20