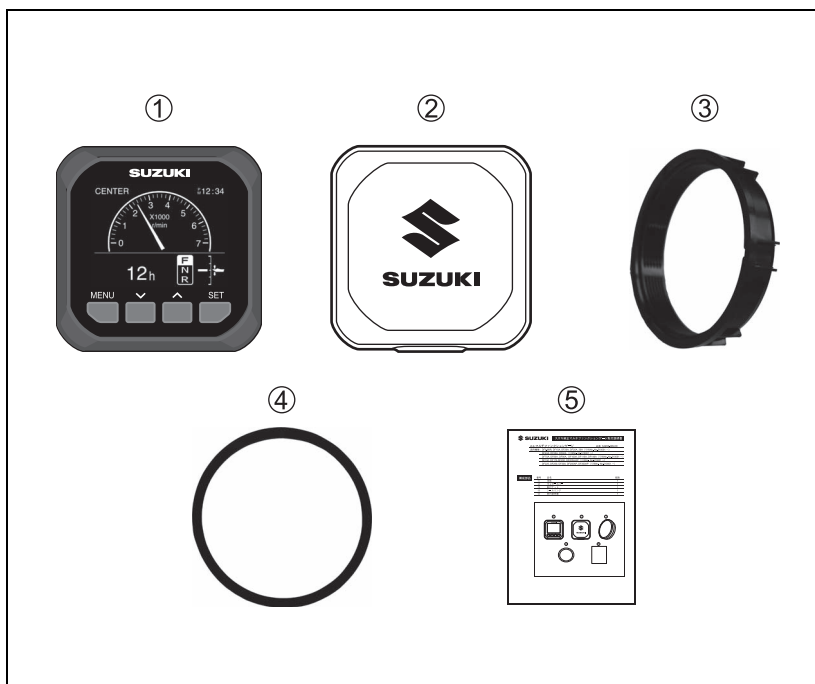


Description: **Multi-Function Gauge** Part Number: 34200-96L1\*

Applications: DF9.9B, DF15A, DF20A, DF25A, DF30A (Serial No. 510001-)  
 DF40A, DF50A, DF50AV, DF60A, DF60AV (Serial No. 510001-)  
 DF70A, DF80A, DF90A, DF100A, DF115A, DF140A (Serial No. 510001-)  
 DF150, DF175, DF200A, DF200AP (Serial No. 510001-)  
 DF200, DF225, DF250, DF250AP, DF300AP (Serial No. 510001-)  
 DF150AP, DF175AP (Serial No. 710001-)  
 DF350A (Serial No. 810001-)

**CONTENTS**

Ref.	Description	Q'ty
①	GAUGE ASSEMBLY	1
②	WEATHER COVER	1
③	MOUNTING NUT	1
④	SEAL RING	1
⑤	OPERATION MANUAL	1



## INTRO- DUCTION

Thank you very much for purchasing a SUZUKI Genuine Multi-Function Gauge.

[Request to Customers]

- Store this operation manual in a place where it will not be lost or damaged. Always carry this manual with you when the operation is performed and keep this manual close at hand so that you can read it anytime you need it.
- If you transfer this product, give this operation manual to the new owner.

## IMPORTANT

### ▲ **WARNING** / ▲ **CAUTION** / **NOTICE** / **NOTE**

Please read this manual and follow its instructions carefully. To emphasize special information, the symbol ▲ and the words **WARNING**, **CAUTION**, **NOTICE** and **NOTE** have special meanings. These special meanings are applied except when laws or regulations require the signal words to be used with different meanings. Pay special attention to the messages highlighted by these signal words.

#### ▲ **WARNING**

**Indicates a potential hazard that could result in death or serious injury.**

#### ▲ **CAUTION**

**Indicates a potential hazard that could result in minor or moderate injury.**

#### **NOTICE**

**Indicates a potential hazard that could result in damage to the motor or boat.**

#### **NOTE:**

*Indicates special information to make maintenance easier or instructions clearer.*

- This manual shall not be reproduced, whether in part or in full, without permission.
- Please note that some part of the product may differ from the contents in the instructions due to specification changes etc.
- If you have any question, find a problem or have a missing part, contact your authorized SUZUKI Marine Dealer where you purchased this product.

**SAFETY  
PRE-  
CAUT-  
IONS**

In "Safety Precautions", important precautions are described to prevent danger to the operator of this gauge or other persons, or damage to the gauge or boat.

Precautions for Handling The Gauge Assembly

**▲ WARNING**

**Do not disassemble or modify the gauge, otherwise you may get an electric shock, or even the cause of a fire or injury. Ask for repairs from the authorized SUZUKI Marine Dealer.**

**▲ CAUTION**

- **Use navigation information, such as Distance and Fuel Consumption indicated on this gauge as a general reference only.  
When exact navigation information is required, use nautical charts and dedicated navigation instruments.**
- **Do not operate this gauge while steering the boat or you might cause a maritime accident.  
When using this gauge while the boat is stopped, check around the boat to be sure it is safe.**
- **Do not use the power source other than the specified one.  
Doing so might cause heating, inflammation or failure.**

**NOTICE**

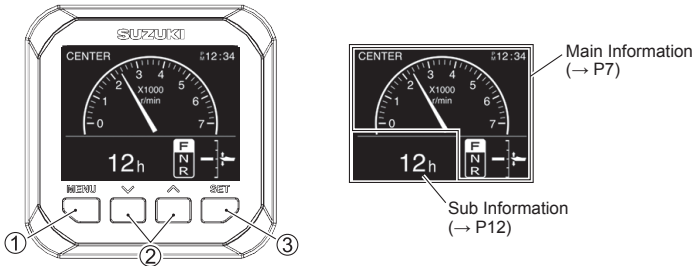
- **Before installation, take care not to splash water on the back side of the gauge.  
After installation, it is still only water resistant and not completely waterproof if completely submerged in water.  
Take care not to dip this gauge in water.**
- **Do not to apply excessive force to the display face for it may be damaged if it is exposed to such force.**
- **To clean the display face use a piece of soft cloth and lightly wiping the display face.**

# Contents


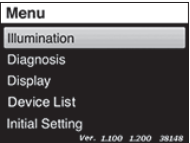
	Page
<b>1. Function</b>	5
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# 1. Function

## Locations



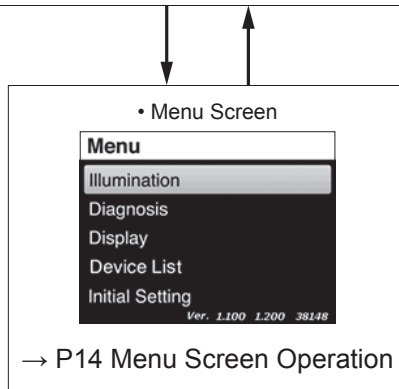
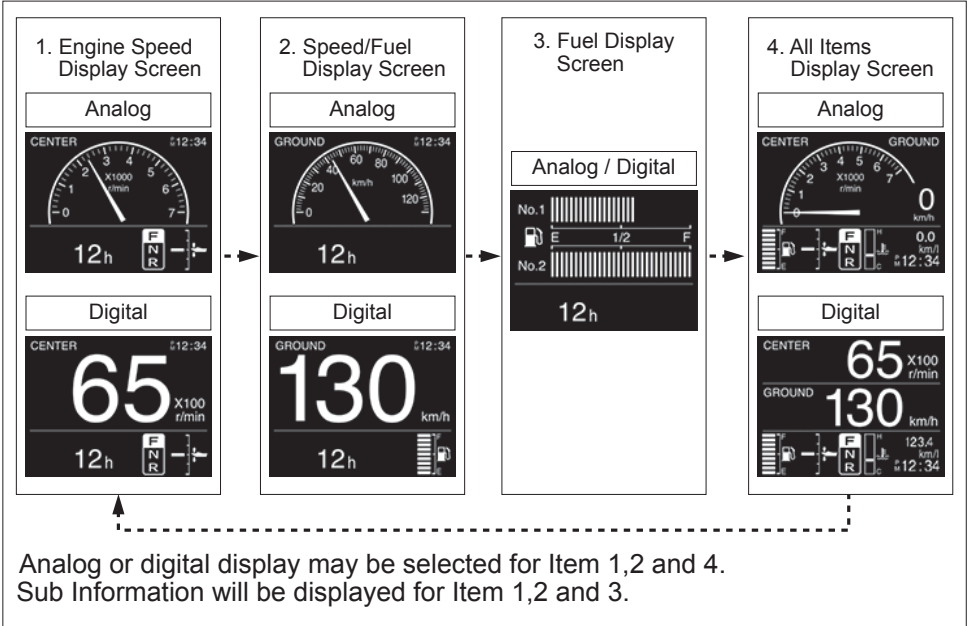
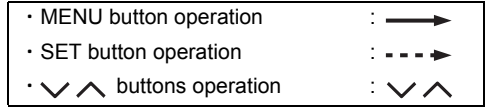
## Function of Each Button

		• Gauge screen 	• Menu screen 
①	MENU button	Change to the menu screen	Change to the previous / Gauge screen
②	✓ ^ buttons	a) Change to Sub Information b) Press and hold either of the buttons ( → P13 Reset the display value) c) *Press and hold both buttons ( → P17 Data Output)	Move the cursor
③	Set button	a) Change to Main Information b) Press and hold button ( → P15 Day or Night)	Proceed / Confirm

\*All items Display Screen only. ( → P6)

## 2. Gauge Screen

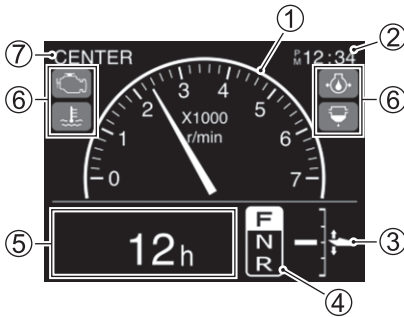
- The following figures show the display screen and the operation flow.



## 2-1. Main Information

### (1) Engine Speed Display Screen

[Analog]

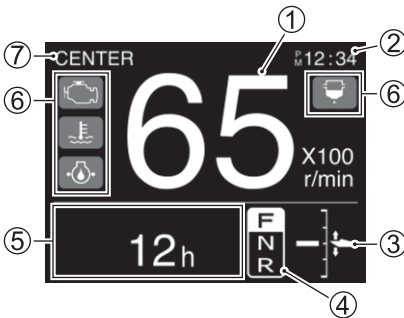


• Display information

- ① Engine speed
- ② Clock ( → P22 Initial Setting)
- ③ Trim position

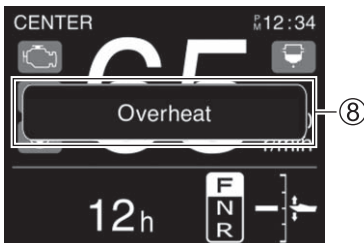
④ Shift position		Forward	Neutral	Reverse
Shift Position Sensor	with	F N R	F N R	F N R
	without		N	

[Digital]



- ⑤ Sub Information ( → P12 Sub Information) ( → P22 Initial Setting)
- ⑥ Caution alarm icon ( → P25 Alarm)
- ⑦ Engine position

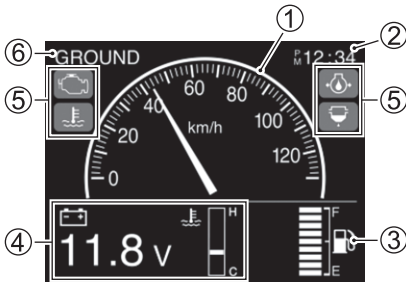
[Caution message]



- ⑧ Caution message ( → P25 Alarm)

## (2) Speed / Fuel Display Screen

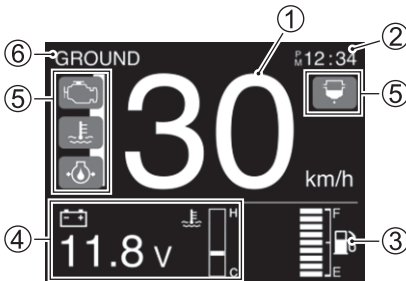
[Analog]



• Display information

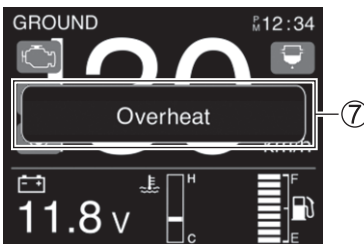
- ① Speed ( → P22 Initial Setting)
- ② Clock ( → P22 Initial Setting)
- ③ Remaining fuel volume  
Indicates the total remaining fuel volume of the connected tank.
- ④ Sub Information  
( → P12 Sub Information)  
( → P22 Initial Setting)

[Digital]



- ⑤ Caution alarm icon  
( → P25 Alarm)
- ⑥ a) GROUND: Ground speed  
b) WATER: Water speed

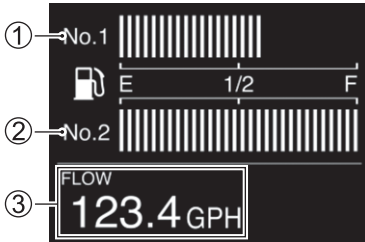
[Caution message]



- ⑦ Caution message  
( → P25 Alarm)

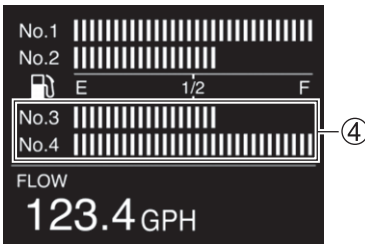


### (3) Fuel Display Screen

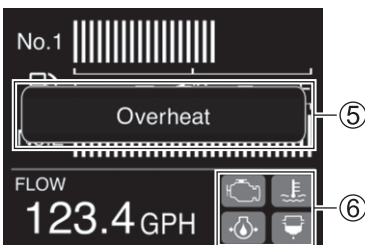


- Display information

- ① Remaining fuel volume (Tank 1)
- ② Remaining fuel volume (Tank 2)
- ③ Sub Information  
( → P12 Sub Information)  
( → P22 Initial Setting)



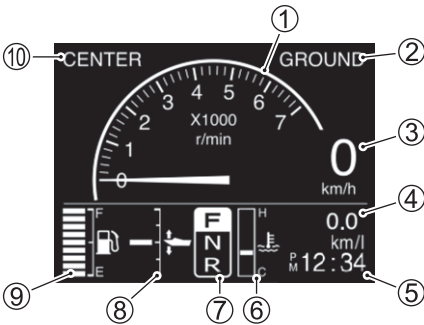
- ④ Remaining fuel volume (Tank 3)  
Remaining fuel volume (Tank 4)  
\*In case of single engine, you can set up dual tank.  
In case of multiple engines, you can set up quadruple tank.



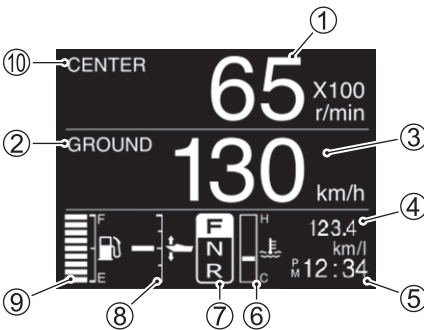
- ⑤ Caution message  
( → P25 Alarm)
- ⑥ Caution alarm icon  
( → P25 Alarm)

#### (4) All Items Display Screen

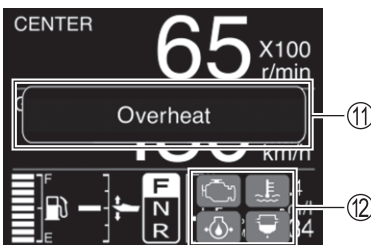
[Analog]



[Digital]



[Caution message]



• Display information

- ① Engine speed
- ② a) GROUND: Ground speed  
b) WATER: Water speed
- ③ Speed ( → P22 Initial Setting)
- ④ Total instantaneous fuel flow ( → P22 Initial Setting)
- ⑤ Clock ( → P22 Initial Setting)
- ⑥ Cooling water temperature

⑦ Shift position		Forward	Neutral	Reverse
Shift Position Sensor	with			
	without			

- ⑧ Trim position
- ⑨ Remaining fuel volume  
Indicates the total remaining fuel volume of the connected tank.

- ⑩ Engine position
- ⑪ Caution message ( → P25 Alarm)
- ⑫ Caution alarm icon ( → P25 Alarm)

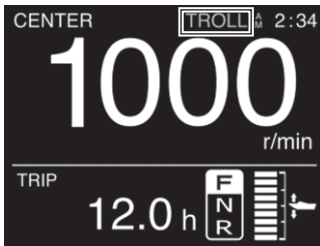
## (5) Troll Mode

When the troll mode of the outboard motor is set to ON, the display of the "Engine speed display" and "All items display" change to an exclusive troll mode digital display screen.

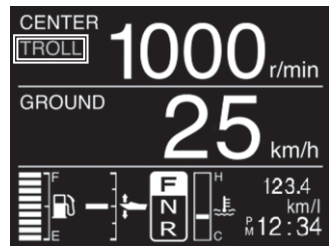
On the gauge screen, "TROLL" will be indicated.

\*Please refer to Owner's Manual for operating the Troll Mode.

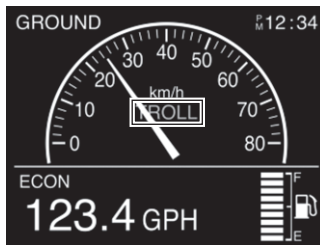
- Engine Speed Display Screen



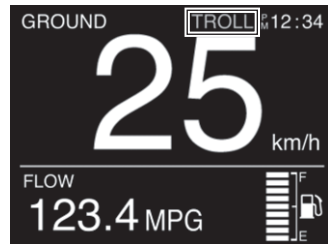
- All Items Display Screen



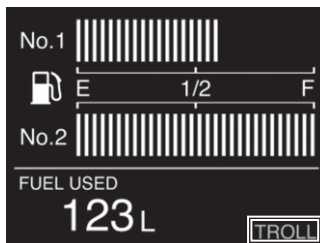
- Speed / Fuel Display Screen [Analog]



- [Digital]









- Fuel Display Screen










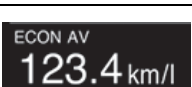


## 2-2. Sub Information

• The following figures below show the display screens and the operation flow. ( → P22 Initial Setting)



- MENU button operation : 
- SET button operation : 
-   buttons operation :  



- The detail is as follows.

Types of Sub Information		
Display screen	Item	Description
	Total operating hours	The total operating hours from brand-new engine are displayed.
	Trip time	This screen indicates the trip time since it was reset last time.
	Trip distance	This screen indicates the trip distance since it was reset last time. *Separate GPS module or water speed sensor is required.
	Battery voltage / Cooling water temperature	The cooling water temperature and battery voltage are displayed.
	Instantaneous fuel flow	This screen indicates the instantaneous fuel flow of each outboard motor.
	Total instantaneous fuel flow	This screen indicates the instantaneous total fuel flow of all outboard motor.
	Instantaneous fuel economy	This screen indicates the total instantaneous fuel economy of all outboard motors installed. *Separate GPS module or water speed sensor is required.
	Average fuel economy	This screen indicates the total average fuel economy of all outboard motors installed. *Separate GPS module or water speed sensor is required.
	Total fuel used	This screen indicates the total fuel used of all outboard motors installed.
	Latitude / Longitude	The latitude and longitude of current boat position are displayed. *Separate GPS module is necessary.

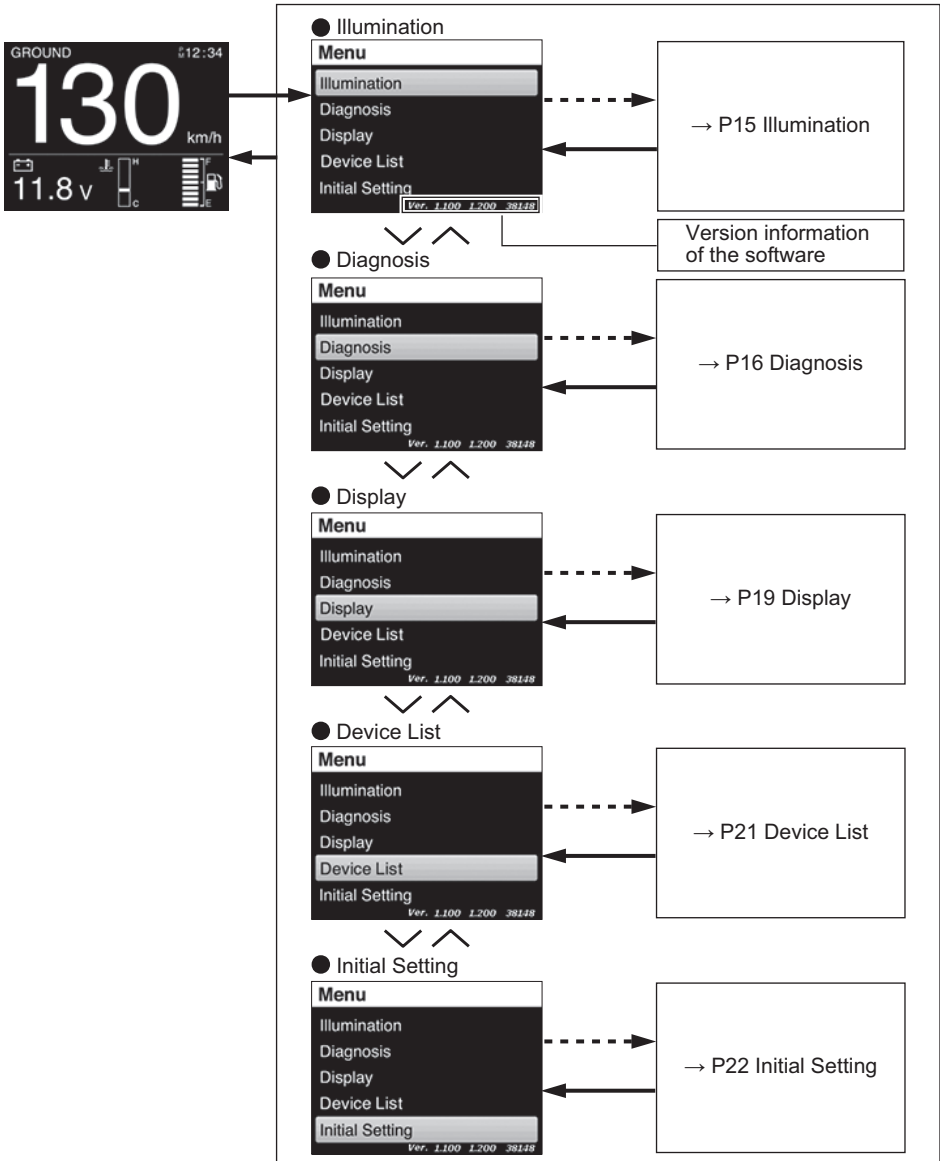
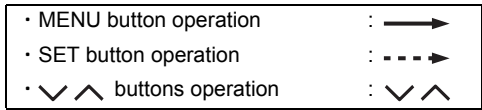
- Reset the display value

The display value of the Trip time, Trip distance, Average fuel economy and total fuel used can be reset by press and hold the  or  button until a buzzer sound is heard, except menu screen.

(Display values other than those displayed will also be reset at the same time.)

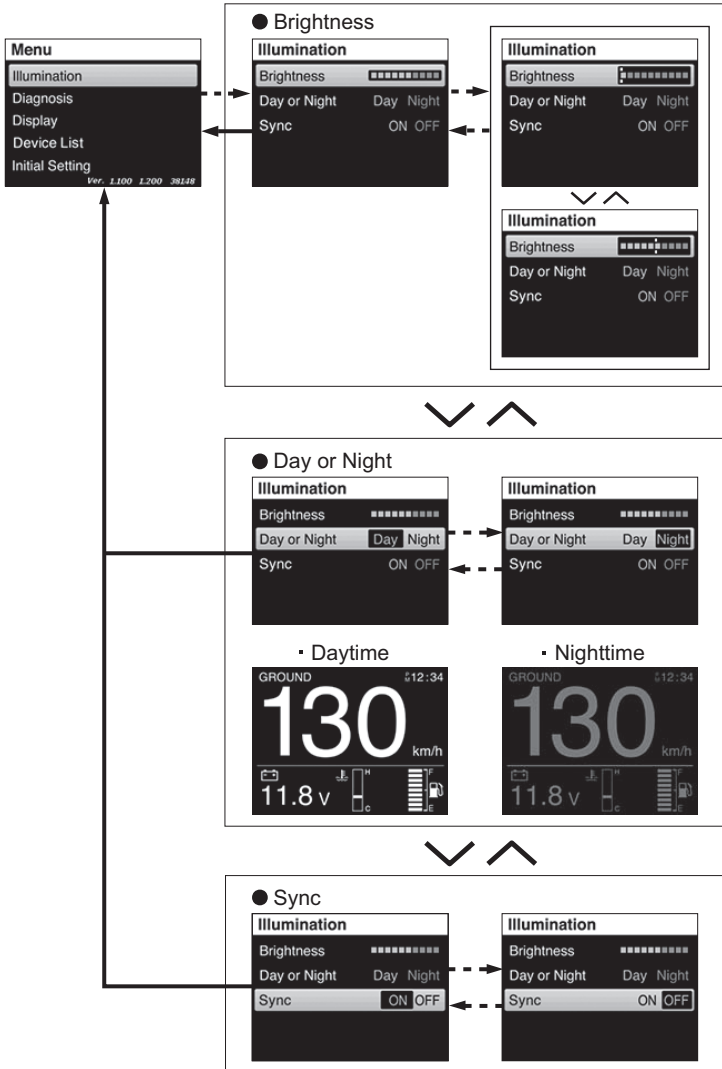
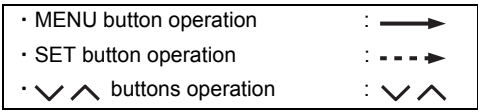
### 3. Menu Screen Operation

- By pressing the MENU button the display will change to the MENU screen.



### 3-1. Illumination

- Configures the illumination setting and day / night setting.



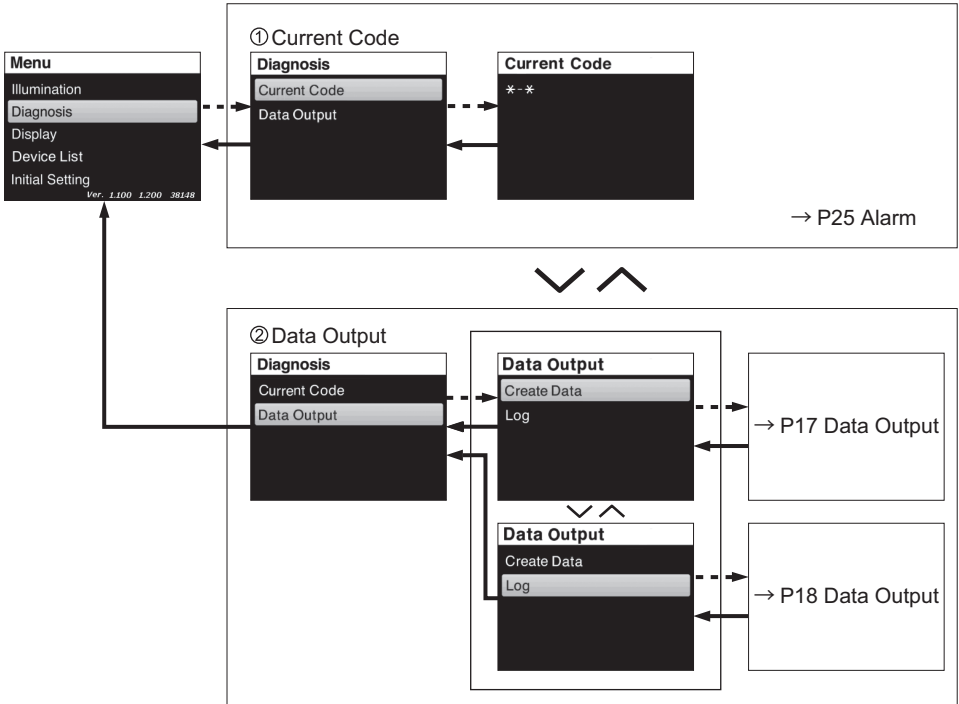
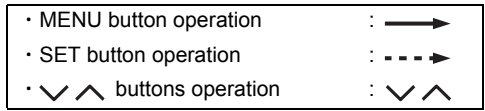
- The Brightness can be adjusted in 10 steps.

- You can select “Daytime display” or “Nighttime display” by press and hold the SET button, except for menu screen.

- You can Synchronize the brightness setting and the Day or Night setting of gauges when the Sync is ON.

### 3-2. Diagnosis

- ① Current Code  
Display the activated alarm.





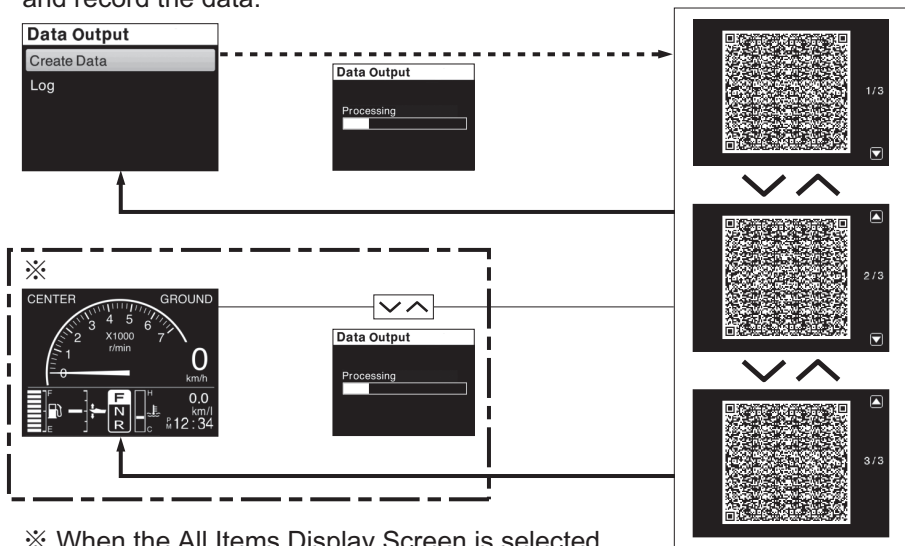
## ② Data Output

- Acquire the engine information, then record and readout the data with SUZUKI Diagnostic System Mobile.

• MENU button operation	: →
• SET button operation	: - - - →
• ∨ ∧ buttons operation	: ∨ ∧

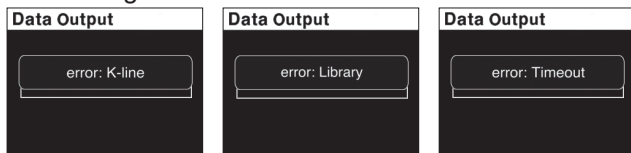
### • Create Data

Acquire the engine information, then, convert to QR code and record the data.



※ When the All Items Display Screen is selected, you can create the QR code by press and hold both ∨ ∧ buttons simultaneously.

### Processing Error

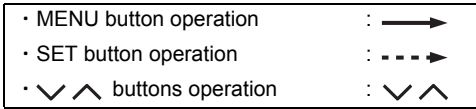


Caution message (→ P25 Alarm)

If your smart phone could not scan the QR code(s), please try the followings.

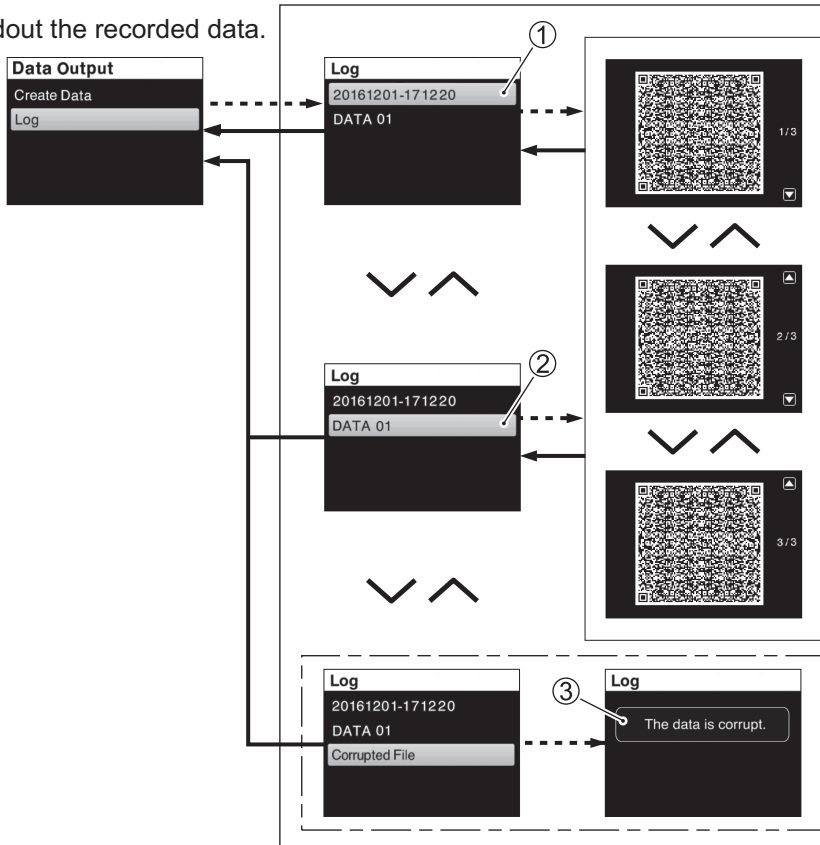
- Adjust the Brightness of the multi-function gauge.
- Shut off the direct sunlight from the multi-function gauge.

[QR code is registered trademark of DENSO WAVE INCORPORATED.]



• Log

Readout the recorded data.

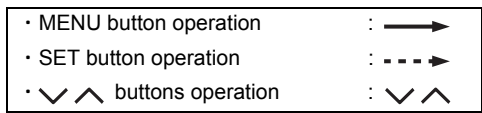


- ① Display the time of the data acquired from the GPS module.
- ② Display "DATA \*\*" when could not acquire the time of the data from the GPS module.
- ③ Caution message (→ P25 Alarm)

\*Be able to store 15 set QR codes at maximum.  
The oldest data shall be deleted automatically one by one.

### 3-3. Display

- Configures the settings of the Gauge screen.



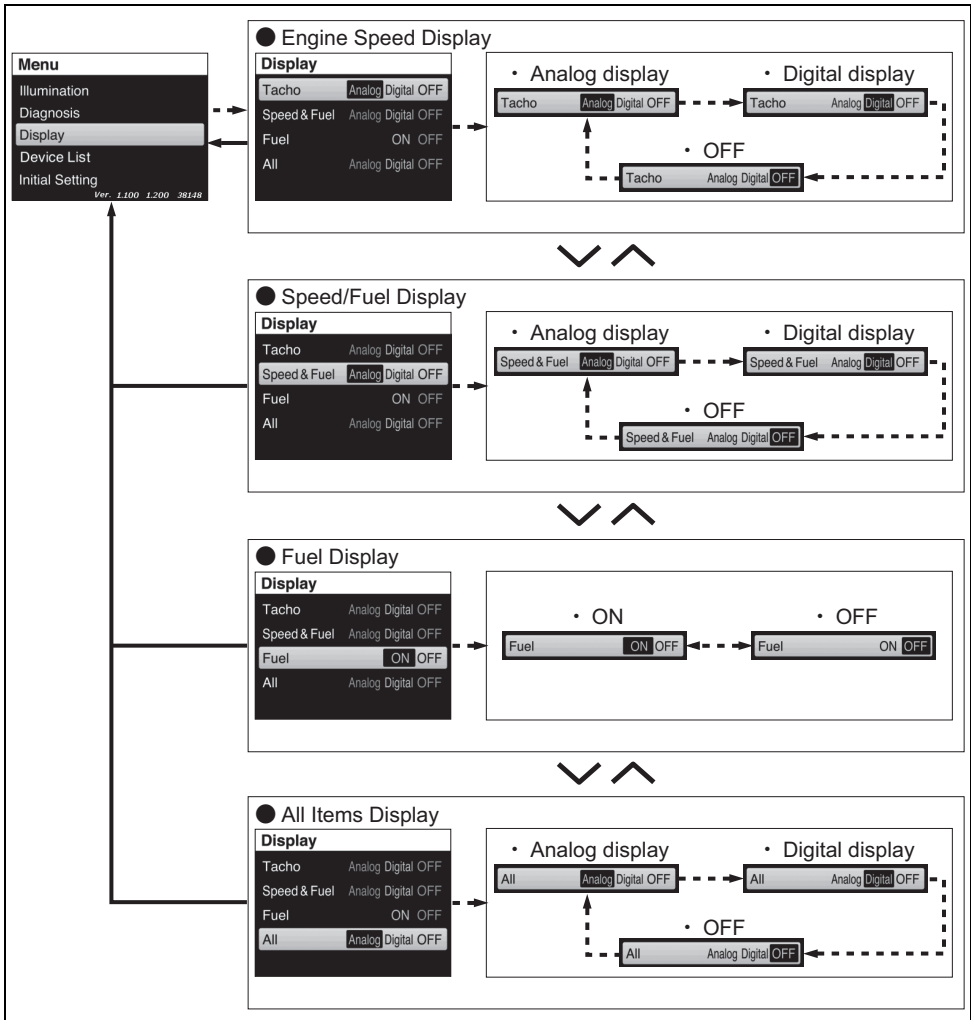
Selection Item

Analog : Analog display





Digital : Digital display

OFF : Selected display is skipped.

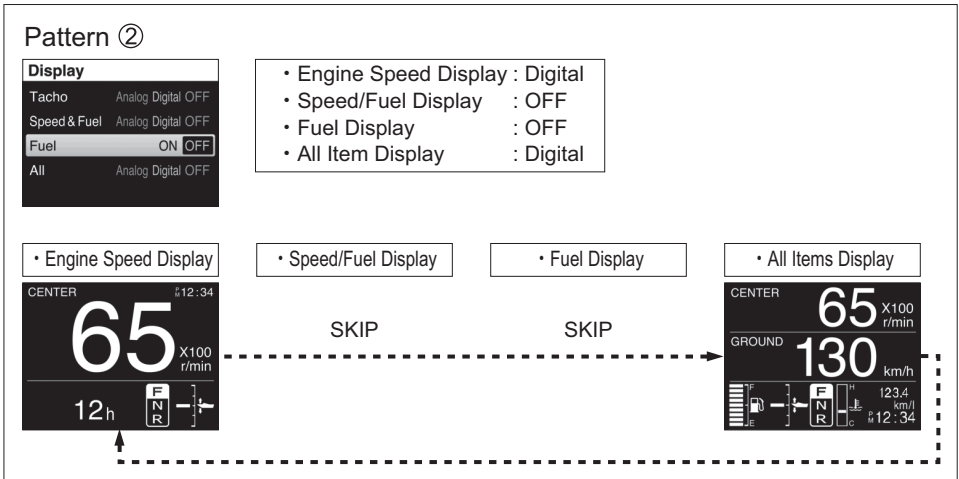
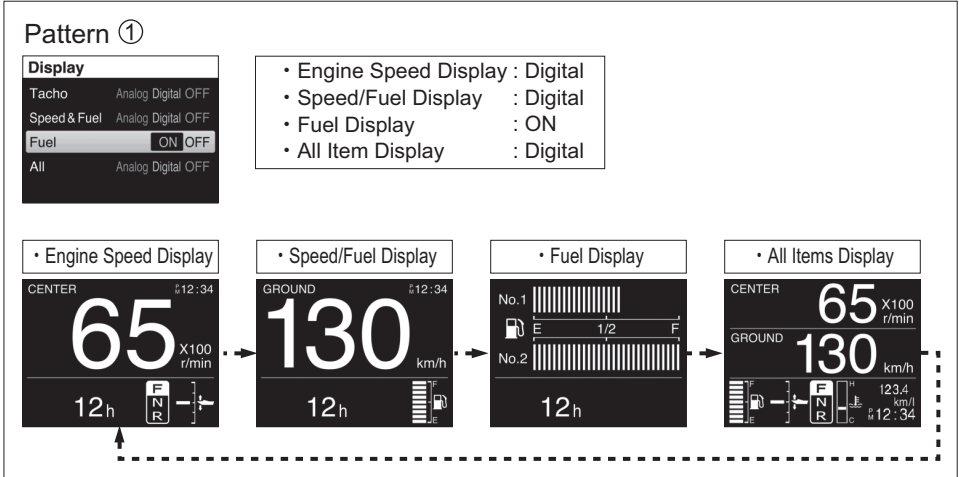
(Select at least one.)



• Display example of the gauge screen

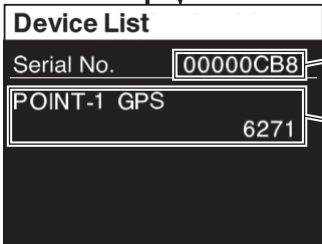
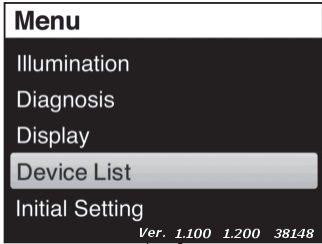
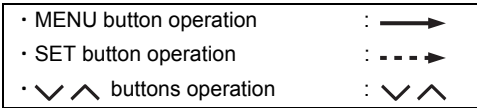
- MENU button operation : 
- SET button operation : 
- $\nabla$   $\blacktriangle$  buttons operation :  

Example



### 3-4. Device List

- Display the information of the connected device.



Display the multi-function gauge serial number.

Display the name and the serial number of the connected device(s).

### 3-5. Initial Setting

The settings related to the following items are configured in Initial Setting.

- Unit : Unit setting
- Time : Time setting

Only for Dealer

- Position : Gauge position, Engine position, Engine serial No settings
- Sensor Setting : Sensor setting
- Tank : Tank setting

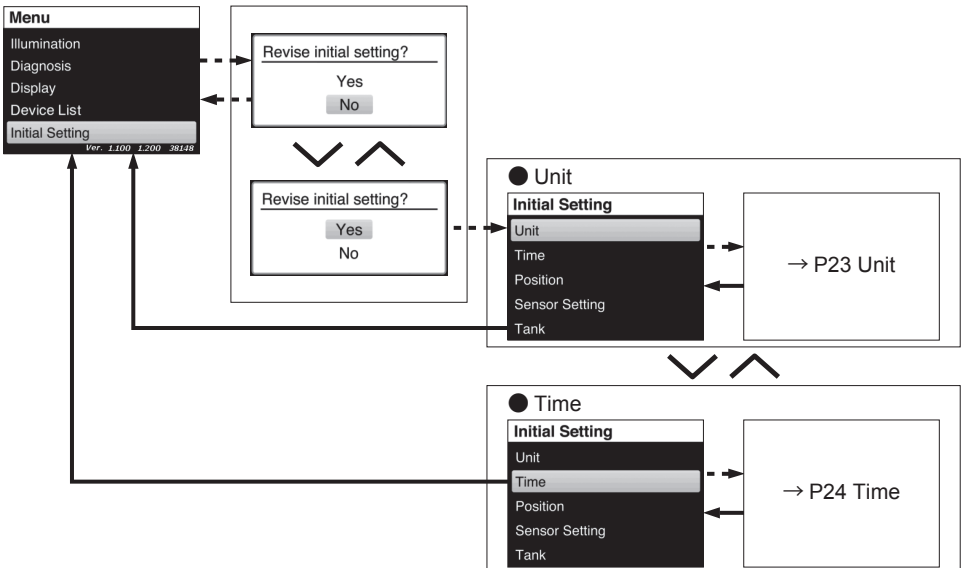
#### **NOTICE**

- **Position, Sensor Setting and Tank are used by the dealer during the initial setting.**
- **If the setting is changed, the current information may not be displayed any more.**

Some of the items in Initial Setting may be important during the initial setting. A confirmation screen to draw your attention will be displayed.

- MENU button operation :
- SET button operation :
- $\nabla$   $\blacktriangle$  buttons operation :

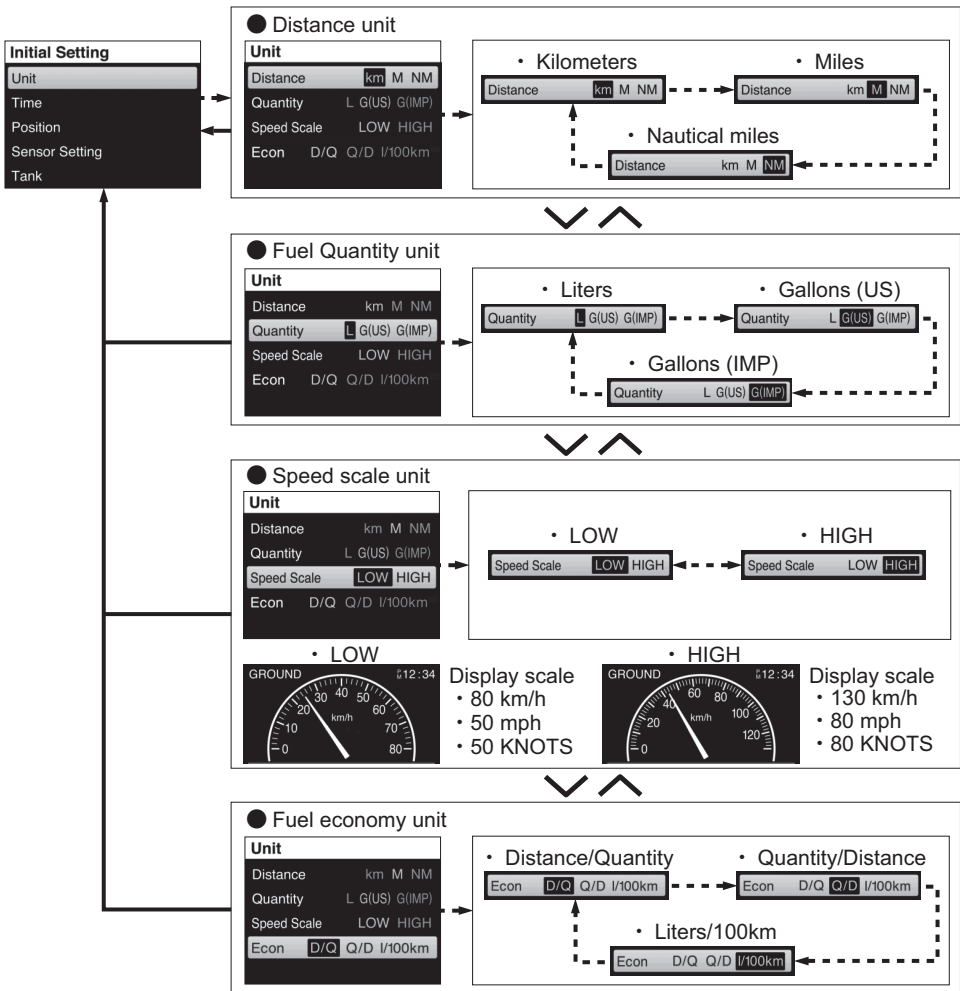
#### ● Menu screen



# (1) Unit

- Setting for the following units.

• MENU button operation	: →
• SET button operation	: - - - →
• √ ∨ buttons operation	: √ ∨



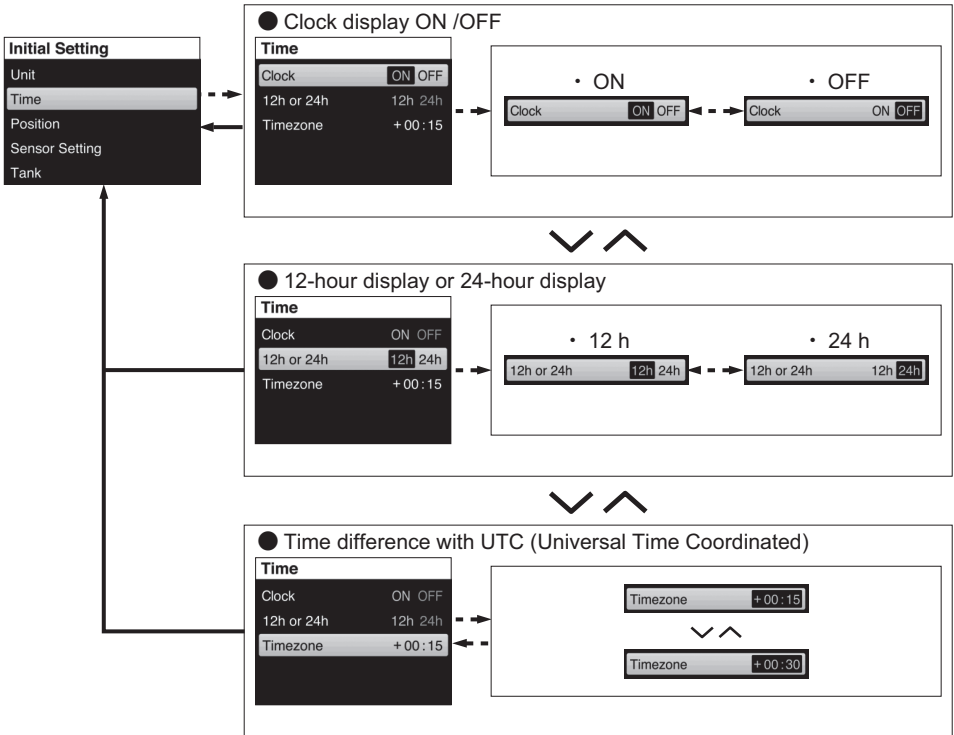
## ⚠ CAUTION

Select units of measurement which you will prefer and recognize.  
Selecting units you do not recognize may cause judgment errors.

## (2) Time

- Setting for the time indication.  
The range can cover from -12:00 to +14:00.

• MENU button operation	: →
• SET button operation	: - - - →
• ∨ ∧ buttons operation	: ∨ ∧



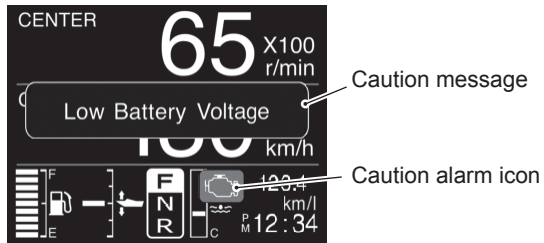
If the gauge is not connected to a GPS module, "--:--" will be displayed.  
Press the ∨ or ∧ button briefly to change the time by 15 minutes.  
If you press and hold the ∨ or ∧ button, the time will be changed in 15 minute units continuously.



## 4. Alarm









If an alarm occurs, the gauge screen will display the caution message and the caution alarm icon immediately.  
 The caution message clears when any of the buttons are pressed on the gauge.  
 However, the caution alarm icon is displayed until eliminating the cause.  
 The buzzer sound also stops when the cause is eliminated.

Example: Low battery voltage (All Items Display Screen)



- List of Caution message

Caution message	Caution alarm icon	Description
Low Battery Voltage *1		This system is activated when the battery voltage deficiency which could impair your motor's performance occurs. Adopt the appropriate measure according to the Owner's Manual.
Check Engine * - * *1 *2		If abnormal conditions exist in any sensor signal being input to the control unit, the self-diagnostic system warns of the abnormal condition. Adopt the appropriate measure according to the Owner's Manual.
Low Oil Pressure *1		This system operates when the engine lubricating oil pressure drops below the correct level. Adopt the appropriate measure according to the Owner's Manual.
Overheat *1		This system is activated when the cylinder wall temperature is too high due to insufficient water cooling. Adopt the appropriate measure according to the Owner's Manual.
Water in Fuel *1		This engine is equipped with an integral fuel filter / water separator and associated alert system. Adopt the appropriate measure on how to drain away the water according to the Owner's Manual.
Rev Limit *1	—	This system is activated when engine speed exceeds maximum recommended speed for more than 10 seconds. In addition, "Rev Limit" is displayed on screen. Adopt the appropriate measure according to the Owner's Manual.
Over Revolution *1	—	If you continue to run, engine speed will automatically be reduced to approximately 3000 r/min, simultaneously the buzzer sounds. Then the display will be changed into "Over Revolution". Adopt the appropriate measure according to the Owner's Manual.
Change Oil *1	—	This system informs the operator of the time for replacing engine oil on the basis of the maintenance schedule.

Caution message	Caution alarm icon	Description
High Oil Temp *1		This system is activated when the engine oil temperature is too high due to insufficient oil cooling or deterioration in quality of engine oil. Adopt the appropriate measure according to the Owner's Manual.
Keyless Unit Battery Low		This system is activated when the 12 volt battery voltage to the keyless control unit drops to a point which could impair the keyless control unit performance. Adopt the appropriate measure according to the Keyless Start System Operation Manual.
Remote Key Battery Low		The caution system is activated when key-fob battery voltage drops to a point which could impair key-fob performance. Adopt the appropriate measure according to the Keyless Start System Operation Manual.
Check Remote Key		The caution system is activated when key-fob identification error. Adopt the appropriate measure according to the Keyless Start System Operation Manual.
Check Shift Control *1		This system is activated in the event of an error of the control system of the electronic shift. Adopt the appropriate measure according to the Owner's Manual.
Check Throttle System *1		This system is activated in the event of an error of the control system of the electronic throttle. Adopt the appropriate measure according to the Owner's Manual.
Check Control Unit C. *1		This system is activated in the event of an error in the control system of the electronic throttle and shift systems. Adopt the appropriate measure according to the Owner's Manual.
Check 2nd Station *1		This system is activated in the event of an error in the control system of the 2nd station. Adopt the appropriate measure according to the Owner's Manual.
Check Gauge C. *1	—	This system activates when there is a communication error of the gauge. Adopt the appropriate measure according to the Owner's Manual.
The data is corrupt.	—	This Log data is corrupt and cannot be used.
error: K-line	—	This system activates when there is a communication error of the gauge. Check the connection of the wiring.
error: Library	—	An error occurred in process of creating the QR code. Re-create the QR code. Consult with your Suzuki Marine Dealer.
error: Timeout	—	An error occurred in process of creating the QR code. Re-create the QR code. Consult with your Suzuki Marine Dealer.

\*1: This is also displayed in the gauge installed in the 2nd station.

\*2: A number indicating the fault location is displayed in \* \_ \*.  
(The number is displayed in the 1st station only.)

## 5. Gauge Screen List

Main Information		Engine speed display screen	Speed / Fuel display screen	Fuel display screen	All Items display screen
Engine speed		* ○	—	—	* ○
Clock *1		○	○	—	○
Trim position		* ○	—	—	* ○
Shift position		* ○	—	—	* ○
Engine position		* ○	—	—	* ○
Speed Ground speed *1 Water speed *2		—	○	—	○
Remaining fuel volume	Total	—	○	—	○
	Tank 1 / Tank 2 Tank 3 / Tank 4 *5	—	—	○	—

Sub Information		Engine speed display screen	Speed / Fuel display screen	Fuel display screen	All Items display screen
Total operating hours		* ○	* ○	* ○	—
Trip time		○	○	○	—
Trip distance *3		○	○	○	—
Battery voltage / Cooling water temperature		* ○	* ○	* ○	* △
Fuel economy information	Instantaneous fuel flow	○	○	○	—
	Total instantaneous fuel flow	○	○	○	—
	Instantaneous fuel economy *3	○	○	○	○
	Average fuel economy *3	○	○	○	—
Total fuel used		○	○	○	—
Latitude / Longitude *1		○	○	○	—
Caution alarm icon / Caution message *4		* ○	* ○	* ○	* ○

\* ○ Displays information on the outboard motor connected.

\*1: Requires input from GPS module.

\*2: Requires input from water speed sensor module.

\*3: Requires input from GPS module or water speed sensor module.

\*4: Displays all items for the 1st station only.

\*5: In case of more than dual engine application.

\* △ Display cooling water temperature only.

## 6. Specifications

1	Display size	3.5 inch Color display
2	Resolution	320 x 240
3	Power voltage	DC8 - 16 V
4	Display screen	Horizontal
5	Dimensions without cover	105 (W) x 105 (H) x 16 (D) mm
6	Dimensions with cover	108 (W) x 110 (H) x 20 (D) mm
7	Weight	0.3 kg
8	Power consumption	2 W
9	Operating temperature range	-20 - 65 °C
10	Others	Built-in buzzer Includes protective cover NMEA 2000 output

## Declaration of Conformity

**Product :** Multi function gauge  
**Model :** 34200-96L1 \*

**Manufacturer**  
Rhythm Watch Co., Ltd  
299-12, Kitabukurocho 1-chome,  
Omiya-ku, Saitama-shi, Saitama 330-9551  
Japan

**Authorised representative**  
Suzuki Motor Corporation  
Suzuki Marine European Liaison Office  
Minervastraat 16, 1932 Zaventem, Belgium

The object of the declaration described above is in conformity with the relevant EU legislation.

2014/30/EU                      EMC Directive                      (EMC)

Standard used for comply

EMC Directive                      EN60945-2002 CLAUSE 9.2 , 9.3 , 10.3 , 10.4 , 10.5 , 10.8 , 10.9

**Date of issue :** Apr. 20 , 2016

**Signature of Responsible Person:**

*Tomotaka Saitoh*

Tomotaka Saitoh  
General Manager  
Electronic Development Dept.

· Suzuki Parameter Group Number (PGN)

Signal	NMEA2000 PGN / hex	Mode
RPM	127488/1F200	RX/TX
Trim Position	127488/1F200	RX/TX
Gear Position	127493/1F205	RX/TX
Water Speed	128259/1F503	RX
GPS Speed	129026/1F802	RX
Voltage	127489/1F201	RX/TX
Fuel flow	127489/1F201	RX/TX
Tank size	127505/1F211	RX/TX
Fuel level	127505/1F211	RX/TX
Engine hours	127489/1F201	RX/TX
Alarm data	127489/1F201	RX/TX
GPS Position	129029/1F805	RX
ISO Acknowledge	059392/E800	RX/TX
ISO Request	059904/EA00	RX
ISO Address claim	060928/EE00	RX/TX
Manufacturer ID	060928/EE00	RX/TX
Product info	126996/1F014	RX/TX

RX: Multi Function Gauge receives specified PGN

TX: Multi Function Gauge transmits specified PGN