Appendix 6.

User manual

Rearview Monitor
Model : RVM-804

USER MANUAL(Ver 1.0)

Table of Contents

- Thank you for purchasing our touchscreen vehicle monitor.
- Please read this manual before you use the product.
- The product may be different than described in the manual;
  depending on renewal and/or upgrade of S/W version and
  performance it can be altered without notice.

Home page:
Product inquiry:

1. Caution

⚠️

● For your safe operation, please read this manual before you start to use the product. We inform you that our company shall not be responsible for failures and troubles that are occurred due to misuse or neglect of the cautions written on this manual.

● Operating this equipment when driving a vehicle might cause an. accident. Use the equipment after parking or stopping the vehicle in a safe area.

● When wiping off the dust, use a soft fabric instead of liquid solvents (thinner, benzene etc.) solution or a wet rag.

● Do not press the liquid crystal screen hard. It might be damaged by hard pressure.

● Do not drop or give shock. It might cause breakdown or damage.

● Do not dismantle the product arbitrarily. We do not supply free after service for an arbitrarily dismantled product.

● Touching the power with a wet hand causes electric shock. Caution required.

● For accessories or cables to connect with the product, it is recommended to use proper goods from our company. We are not responsible for any problems caused by wrong articles.

● Do not disconnect the power cable during using the product. It might cause damage to the product.

● Please conform the failure of the User's Guide and precautions, If a fault occurs in the operations.

Amplified explanation is as follows.
● Caution: This part inform what to keep in mind or understand and what caution is required to use the product.

● Ref(reference): Reference is about functional explanation.

2.Components of the product

①Touch Screen

● By touching one of the small picture during multi screen mode, the concerning small picture will be enlarged into full screen mode.
● By touching the screen it is possible to control the equipment or to change the settings.

②Power On/Off

● Press the power button for 0.5 seconds to turn on the screen.

● Press the power button for 0.5 seconds to turn on the screen when it is turned on.

③illuminance sensor

● Behind this window a sensor detects the actual light conditions in the area around the screen. When activated via the menu settings, this sensor automatically controls the brightness of the screen. (Day/Night control)

④ Bluetooth phone menu On/Off

● Bluetooth phone menu screen appears when you touch the button.

⑤ LCD Display On/Off

● Lcd screen appears when you touch the button.

⑥ Split Screen

● A split screen appears.

⑦ Menu Button

● The main menu appears.

Rear Panel

①Power Input

● Connect the power cable. (VCC/GND/TRG1~TRG5/Speed SW)

②Camera Input

● Connect the camera cable. (Cam1 ~ Cam4)

③ AUX In

● AUX in 2 port

④ Ext. MIC / Speaker

● Connect an external mic and speake..

● Please check that you have the correct contents before using this Product.

● If any items are missing, please contact your dealer.

Top Case

Bottom Case

Manual

Power + Camera Cable

Caution : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

3. How to use the product

Start screen

● When the booting is ready, the multi screen as below will be displayed

When the small window is touched, it is enlarged.
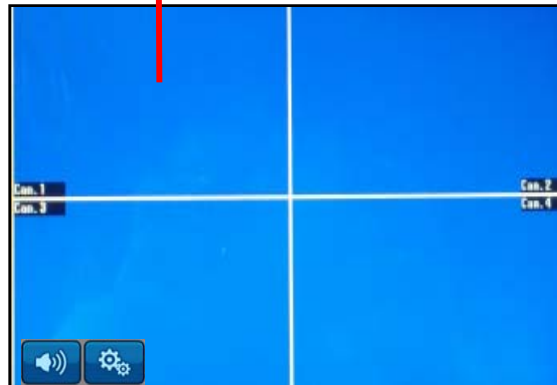
● When the small window on the multi screen are touched, the channel is enlarged into full screen mode. One more touch returns it back to the multi screen mode.

● 🔊 : Adjust the volume of the speaker.

● ⚙ : Setting menu.

.

Volume Control

● 🔊 Press the button to display volume Pop-up.
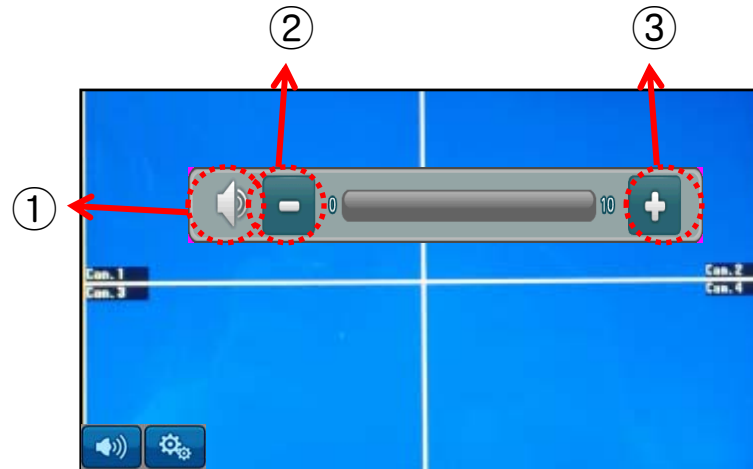
① Press the button to mute.

② Press the button to increase the volume.

③ Press the button to decrease the volume.

Multi screen

● Press the multi screen button to divide the screen.

Press multi screen
Button once:
Cam1,Cam2

Press multi screen
Button 3 times:
Cam1,2,3,4
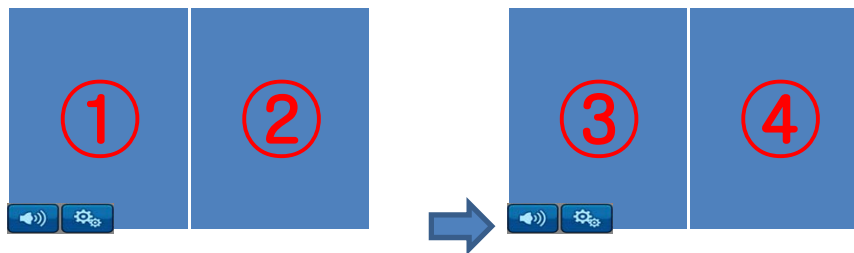
Press multi screen
button twice:
Cam3,Cam4

Setting Mode

● ⚙ Press the setting menu button to open the setting screen.

Display	Function	System

Screen Adjustments   Register Ch. Name   Camera Setting

Screen Position Setup   RearView Trigger Setup   Auto Scan Time

Border Line Setup   Parking lines Setup

Screen Adjustments

Brightness

CAM   0 ———————— 10

AUX   0 ———————— 10

Contrast

0 ———————— 10

OK   Cancel
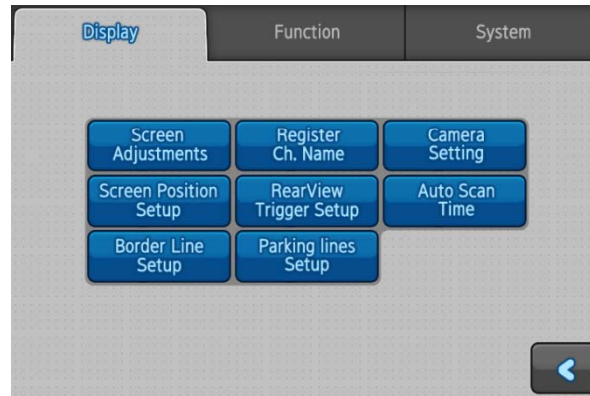
● CAM : Adjust brightness of Camera input screen

● AUX : Adjust brightness of AUX screen

Display

Register Ch. Name

Input the name into each channel.

Ch. Name Change	Display Ch. Name
Ch.1	⦿ On
Ch.2	⦿ Off
Ch.3	
Ch.4	OK Cancel

Camera Setting

	Mirror	Reverse	Shutter
Cam.1	○	○	○
Cam.2	○	○	○
Cam.3	○	○	○
Cam.4	○	○	○

Yes   No

● Mirror : Mirror image or normal image

● Reverse : Mirror image or reverse image

● Shutter : Enable to operate Shutter/Heater Camera

Display

Screen Position Setup

Setup screen position of each channel

※ Caution: Cam1and AUX1 cannot be setup at the same time.

RearView Trigger Setup

Setup the screen on each trigger.

Display

Auto Scan Time

Display the full screen according to each Channel setup when setting up On

Scan Time (0~9sec)   ◉ On   ◉ Off

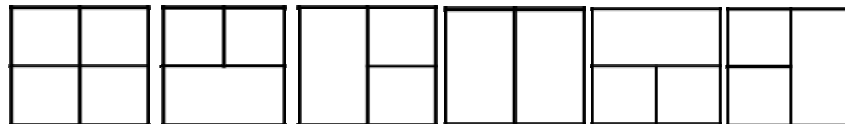| Quad	Ch.1	Ch.2	Ch.3	Ch.4	Aux1	Aux2	⌃
							⌄

OK   Cancel

Border Line Setup

Display the dividing lines of the screen

Border Line

◉ On   ◉ Off

OK   Cancel

Display

Parking lines Setup

Adjust Parking line of each Trigger.

	Display	Calibration	Thickness
Trig.1	○	○	● Thin
Trig.2	○	○	○ Thick
Trig.3	○	○	
Trig.4	○	○	

OK　Cancel

Calibration   Trig.1   Front & Rear

OK　Cancel
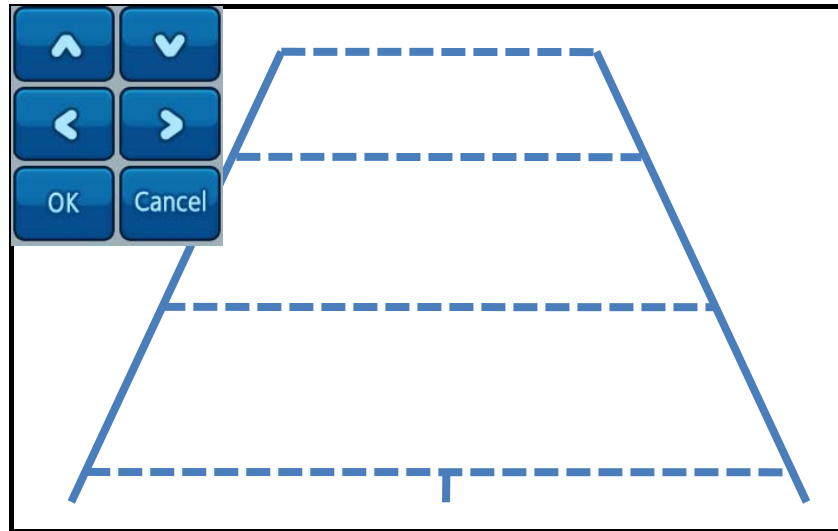
Function

Auto Power — The screen is turned On automatically When starting the vehicle

전원 Off 전의 화면Mode로 On됩니다.

Dimmer — Automatic brightness adjustment by sensor in the front housing

Sensitivity of automatic brightness adjustment, level 0 to 10 controlled by actual light conditions (Day/Night)

Function

Trigger Delay Time

Keep Trigger activated during setup time after Trigger off in order to bridge temporary powerloss, e.g. from vehicle's turnlight signal

Trigger Delay Time (0~9 sec)

Trig.1	Trig.2	Trig.3	Trig.4	Trig.5

OK Cancel

Touch Calibration
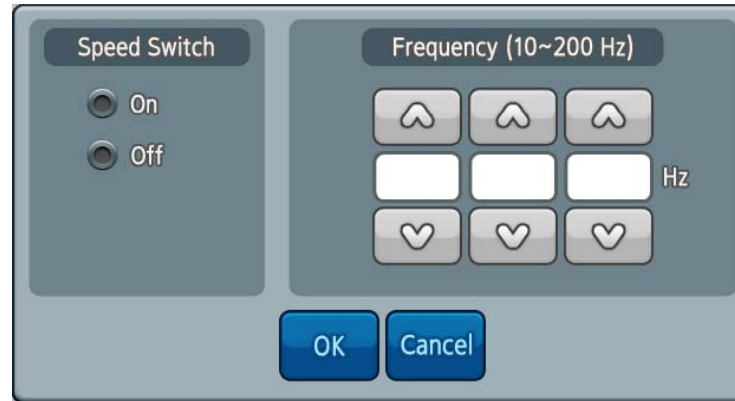
Re-adjust center Point of Touch panel

+

STEP 1 of 3
Click on center of '+' icon
for Touch screen calibration.
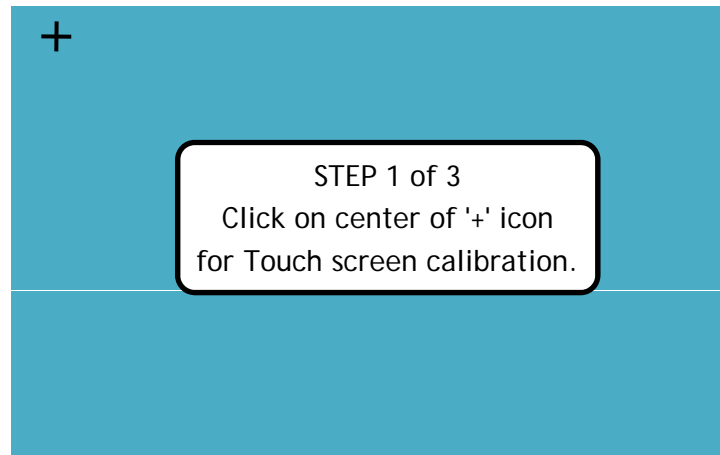
Function
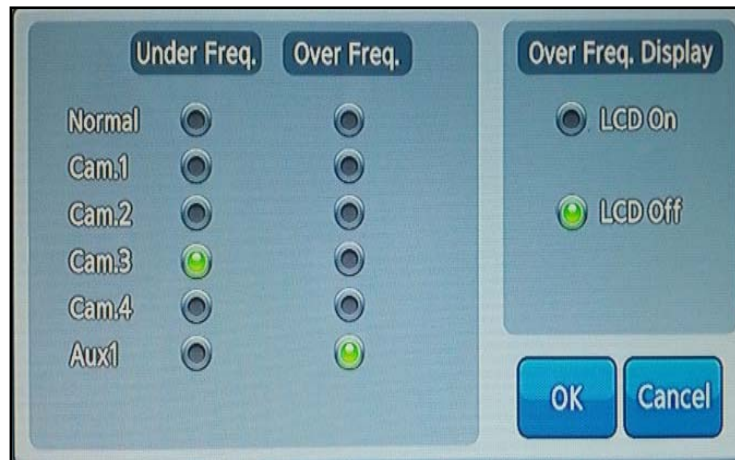
Speed Switch Setup   Detect speed of a vehicle from 10 to 200Hz

Speed Switch — On / Off

Frequency (10~200 Hz) — Hz

OK   Cancel

Speed Switch Display   To switch automatically into the screen ON mode, by detecting a speed signal (tacho signal)

	Under Freq.	Over Freq.	Over Freq. Display
Normal	●	●	● LCD On
Cam.1	●	●	
Cam.2	●	●	● LCD Off
Cam.3	●	●	
Cam.4	●	●	
Aux1	●	●	

OK   Cancel

System

| Menu Display Time | Set time displaying the Menu screen. |

Menu Display Time

◉ On	◉ 3 sec	◉ 5 sec
◉ 10 sec	◉ 15 sec	◉ 1 min

[OK] [Cancel]

| Screen On Time | Set time displayed on the screen. |

Screen On Time

◉ On	◉ 1 min	◉ 2 min
◉ 3 min	◉ 5 min	◉ 10 min

[OK] [Cancel]

설정시간 동안 Touch등 Key 입력이 없으면 화면이 꺼집니다.

System

Menu Lock

Set a password to lock the Menu button.

Menu Lock

Set | New Password

OK | Cancel
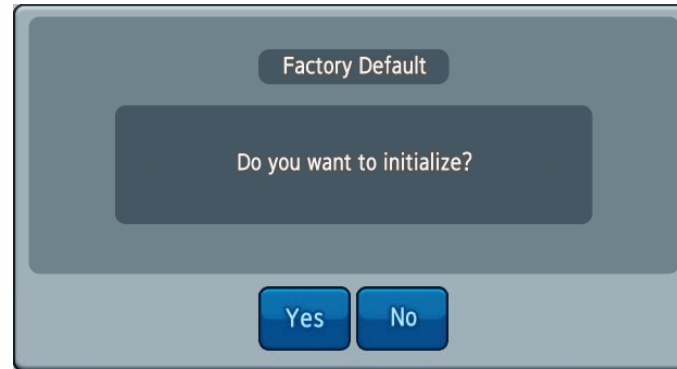
Language

Support languages for each country. (Option)

Language Setting

- ○ English
- ○ Japanese
- ○ Français
- ○ Deutch
- ○ Chinese
- ○ Italiano
- ○ Español
- ○ Korean
- ○ Suomi

OK | Cancel

System

Factory Default	Initializing set points of Menu

Factory Default
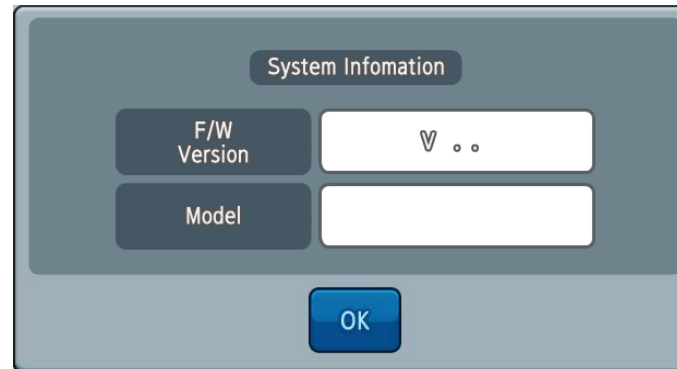
Do you want to initialize?

Yes　No

Sys-Info.	Display Firmware Version and Model name

System Infomation

F/W Version	V ₒ ₒ
Model	

OK
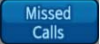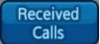
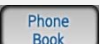## Bluetooth Phone

● 📞 Press the button to start Bluetooth.

Screen of Bluetooth start
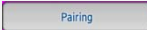
Start-up screen displays the Phone Book list of phone paired.

Missed Calls : Displays call lists during absence.

Received Calls : Displays phone call lists received.

Dialed Calls : Displays phone call lists sent.

Dialing : Use for making a call dialing numbers.

Phone Book : Displays a Phonebook list.

Setup : Setup of Bluetooth.

✖ : Finishes Bluetooth.

Bluetooth Phone

● Enter the Pairing Mode for Paring with Bluetooth by pressing the [Setup] button

1. Pairing mode is set by pressing the [Pairing] button.

2. Connect Bluetooth to a cell phone you want searching Bluetooth device.(Enter the Pin code depending on type of cell phones)
3. Message is displayed when it is connected as below.

4. Return to the start-up screen of Bluetooth by pressing the [<] button.

Bluetooth Phone

● **Paired device** : Displays devices Paired.

* Display devices paired up to 8 devices

• Displays devices paired

• Deletes devices connected by the **Del** button
• Connects devices by pressing the **Connect** button
• Deletes all devices by pressing the **All Delete** button

< Devices paired are connected automatically in order >

Bluetooth Phone

● Auto Answer :Connection automatically when receiving a call

Setup

Pairing
Paired device
Auto Answer
Information

1   5   10   15   20
         sec

On   Off

● Information :Incoming call automatically after a set time
when receiving a call from the set on the state.

Setup / Information

Name [   ]   New
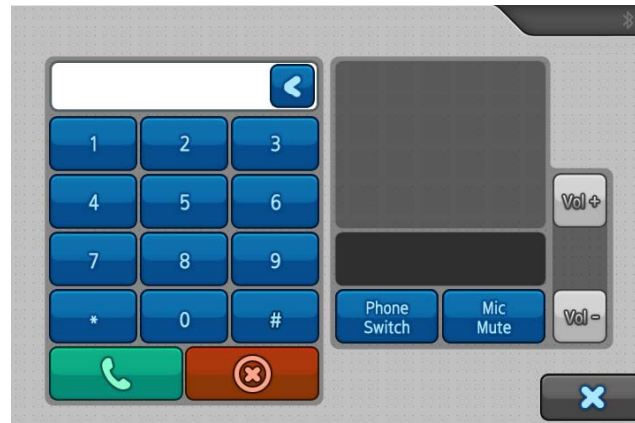Address [   ]
SW Version [   ]
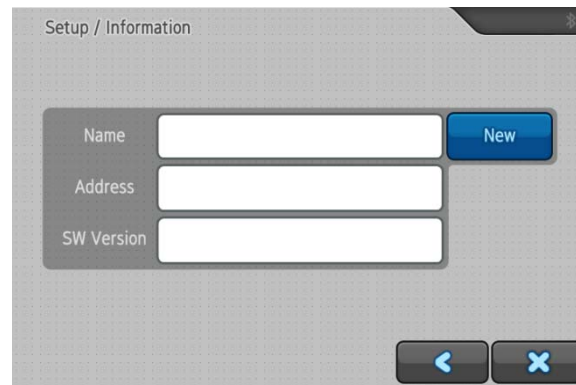
•Name : Phone on display during Pairing is the name of that
instrument.
• Address : Bluetooth Address.

• Bluetooth Soft ware Version is displayed.

Bluetooth Phone

● Down load phonebook list after pairing succeed.
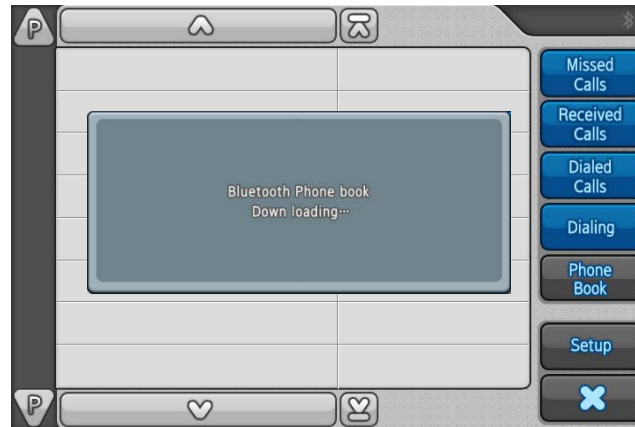
•Call after press the number in the list.

4. Installation

6.Specification

- LCD : Built in 8" TFT LCD (WVGA 800x480, with Touch Panel)

- Camera : 4Ch input (1 Vp-p, 75Ω) /NTSC, PAL (Video & Audio)

- Audio Output 1Ch

- AUX1, AUX2

- Trigger 5 input (Cable Input : 12 ~ 24V)

- ALS Sensor (Night & Daytime Brightness detection)

- Power : 12~24Vdc (12Vdc 1.3A)

- Operating Temp. : -20'C ~ 55'C

- Storage Temp. : -30'C ~ 85'C

- Dimensions (W x H x D) : 218mm x 150mm x 59mm

- Weight : 약 1775g

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.

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.