



### Manual Date : 2016.02.11

# Installation Manual

HDMI Interface for Mercedes Model : QHI-LVTX-W222



# Specification

Car Compatibility : New S-Class(W222), New C-Class(W205) New CLA Class, New GLE Class

**Components** : Interface\* 1ea, Sub-board\*1ea

### Multimedia interface Input/output spec

Input : HDMI\*2, Analog RGB\*1, A/V\*1, CVBS(Rear view Camera)\*1, CVBS(Front camera)\*1 Output : To LCD\*1

### **Power spec**

Input power : 8VDC ~ 18VDC Consumption : 5WATT

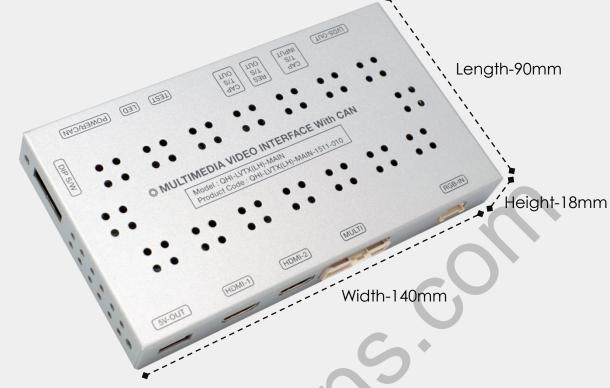
### Switch input mode

- External video sources skip function : able to control input videos on and off via DIP switches.
- Able to switch videos via the remote, button switch, and original buttons.
- Able to detect the rear view camera (back up camera) via Lamp or CAN.

## Features

- Able to output high resolution video via HDMI input
- Control external videos sources (DVD, DTV) via Multi Media Touch
- Adjust external videos screen position
- Check the improved Screen Display (User Friendly Interface)
- Switch modes via original OEM button
- Supply power to connect rear view camera (Back up camera)
- Assist your parking via Dynamic PAS(Parking Assistance System), PDC(Parking Distance Control), moving parking line according movement of steering wheel

# Product exterior



5V-OUT(Power supply for Mirroring device) | HDMI-1 | HDMI-2 | MULTI | RGB-IN(RGB Navigation input) LVDS-OUT(Connection to Sub-board) | CAP T/S INPUT(Original touch cable connection) | RES T/S OUT(NOT FOR USE) | CAP T/S OUT(TOUCH CABLE CONNECTION-ONLY ITS PRODUCT) | TEST(NOT FOR USE) | LED | POWER/CAN(Power / CAN connection) | DIP S/W(DIP switch setting)

# Components





Subboard \* 1ea POWER \* 1ea (HPOWER0088)

JACK BY JACK \* 1ea (HARETC0091)







MULTI \* 1ea (HAVCAB0038)

RGB \* 1ea (HRGBCA0018)

LVDS \* 1ea (HLVDSC0028)













BUTTON \* 1ea IR \* 1ea (HARETCO001) (HIRCAB0002) www.car-solutions.com

Remote \* 1ea (REMOTE0001)

# • DIP SWITCH

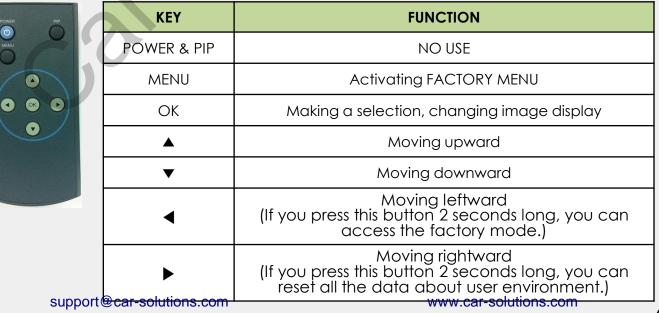


### \* ON : DOWN / OFF : UP

PIN	FUNCTION	Dip S/W SETTING
1	RGB INPUT MUTE	OFF : RGB DISPLAY ON : Skipping RGB Mode
2	HDMI1 MODE MUTE	OFF : HDMI1 DISPALY ON : Skipping HDMI1 Mode
3	AV MODE MUTE	OFF : AV DISPLAY ON : Skipping AV Mode
4	FRONT CAM MUTE	OFF : Front camera function on ON : Front camera function off
5	C-Class Monitor Size	OFF : 965x540(8.4") ON : 800x480(7")
6	Car Model	OFF : W205(C-Class) ON : W222(S-Class)
7	REAR MODE	OFF : OEM Rear Camera ON : External Rear Camera
8	Command type	ON : NTG 5.1 OFF : NTG 5.0

\* Please make sure to disconnect the power cable of the interface and reconnect the power cable again to apply the dip switch setting whenever changing DIP switch. Otherwise, DIP switch setting will not be applied.

# **REMOTE CONTROL SETTING**



# Factory setting

FUNCTION UTIL INFO	<b>W</b> UTIL	H-POSTION V-POSTION	
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### Adjust a current screen position and size.

H-POSITION : Move display horizontally V-POSITION : Move display vertically



### Adjust rear view camera setting.

PAS TYPE : Select type of parking guide line

- NOT USED : No use parking guide line
- PAS ON : Selecting Dynamic parking guide line
- PAS OFF : Selecting fixed parking guide line

PAS SETUP : Adjusting the position of the parking guide line



<h-position>

REAR TYPE : Choose rear camera recognition.

- CAN : By connecting to "CAN" cable of the car gear, changing to rear camera mode when shifting into reverse. (Connect "CAN" cable of the power cable to the "CAN" cable of the car gear.)
- LAMP : By connecting to the rear lamp of the car, switch to rear camera mode when shifting into rear. (Connect "Rear-C" cable of the power cable to the rear lamp of the car.)
- SAFE ENABLE : If it is enable, HDMI, RGB, and A/V mode doesn't show up while driving. (Default : OFF)

RADAR ENABLE : Setting up parking distance alarm sensor. (ON/OFF)

# Factory setting



CALIBRATE REMOTE SELECT

IR MEMORY FACTORY RESET

PARK

IITII

IMAGE

PARK

FUNCTION

FUNCTION

### Navigation & Car model setting up

NAVIMODEL : Setting up RGB Navigation. (Default, Q-roi RGB, WP9230, HDMI(WVGA))

HDMI MODEL

: Setting up HDMI1 Navigation. (Q-roi RGB, WP9230)

CAR MODEL

HDMI2 SKIP : Skipping HDMI mode when switching modes.
AVOUT SELECT : Selecting background sound through car AUX. HDMI1, HDMI2, AV)

: Selecting the car model for PAS settings.

- When Dip switch #8 is On
  - NTG5.1 B-Class
  - NTG5.1 CLS
- When Dip switch #8 is OFF
  - NTG5.0(EXT REAR)
  - : Aftermarket rear camera
  - NTG5.0(OEM REAR)
  - : Factory rear camera

## Other options setting up

**CALIBRATE** : Able to calibrate touch screen **REMOTE SELECT** : Able to use remote control on

DVD, DTV by selecting "User" after IR memory registered. (Default, User)

IR MEMORY

: Registering IR memory (Remote control values) of DTV, DVD.

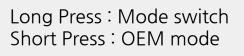
FACTORY RESET : Factory mode reset.

### System version information

SYSTEM VERSION

(MAIN - 130723) MCU : L1.5.10.28

# How to use OEM buttons





#### IR REMOTE

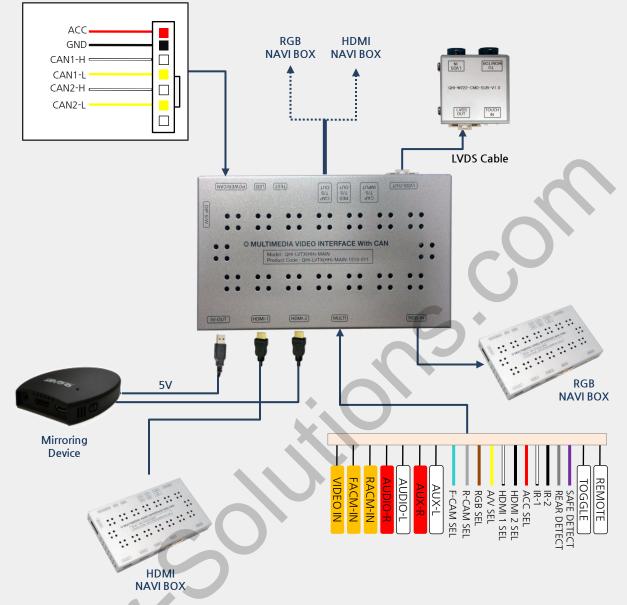
- $\uparrow\downarrow$  : Remote button move
- ← : Remote button choice

<New S-Class Jog shuttle>



**New C-Class Jog shuttle** 

# Installation Diagram



\* HDMI NAVI must be connected to HDMI-1.

# CAN Installation

#### \* In case of connecting Gear CAN Only



\* Find original cables at the back of monitor or command.

Cut a connector of supplied power cable. The position of cutting connector is where supplied Jack by Jack cable will be connected. Then, wire OEM cable and supplied power cables together

- OEM CAN LOW (Yellow)  $\rightarrow$  supplied CAN-L-GEAR&HANDLE (Yellow)

- OEM CAN HIGH(Yellow+White)→ supplied CAN-H-GEAR&HANDLE(White)

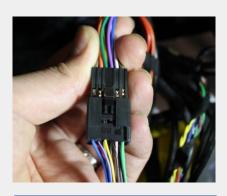
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# CAN Installation

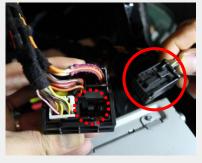
 In case of connecting both Gear CAN&Button CAN, find CAN IN/OUT cables
Disassemble the gear exterior part and find the cables inside which are connected to command



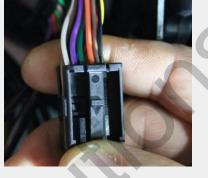
Find the connector behind the command.



Connect OEM cables to the supplied CAN IN/OUT cables



Remove the black connector which is marked in Red





Disassemble the black plastic cover



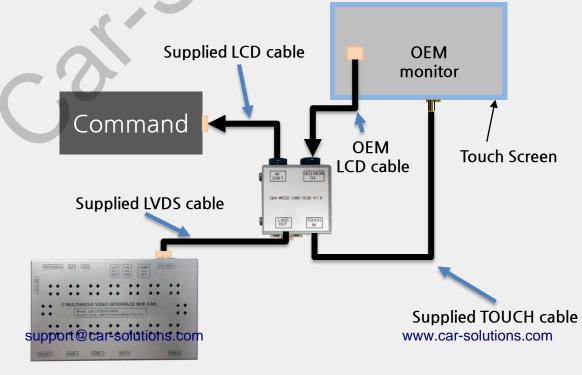
Insert the supplied CAN cables into the marked place

# Installation Diagram for Subboard

CAN IN/OUT cables together.

Put the black plastic

cover and the supplied



# Trouble shooting

### Q. I cannot change mode

A. Check connection of Ground cable and IR Cable. Check LED lamp is on, if not check connection of POWER cable.

### Q. All I got on the screen is black.

 A. Check second LED lamp of the interface is on, if not, check A/V sources connected are working well.
(Second lamp indicates AV sources connected works well.) Check interface connection has been done well.

### Q. Displayed image color is not proper (too dark or unsuitable color)

A. Press ► button on the remote control for 2 seconds and check how it goes, if it does not work, inform to manufacturer.

#### Q. I cannot watch the rear camera on the screen

A. Set the DIP switch #7 as state "ON".

#### Q. Set mode not appear

A. Check DIP Switch.

#### Q. OEM image is not displayed.

A. Check interface's LCD In/Out cable connection. If the status keeps on, inform to manufacturer.

### Q. Screen only displays white color.

- A. Check LCD out cable is connected well, if this status keeps, inform to manufacturer.
- Q. If no image is shown on screen after connecting CAN wire with Park gear.
- A. Go on the "FACTORY MODE", check "UTIL-Rear Select". If "LAMP", change the setting as "CAN" with the remote control. (\* when connecting Rear-C wire of LAMP power cable to Backup lights, Setting should be like this / CAN : if controlling rear camera with CAN wire)