# Installation Manual

## Multimedia Interface for Mercedes Benz with NTG 5.5 & NTG 6.0 system

# ·Components
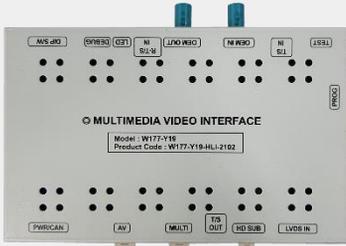


**MAIN BOARD**
*QCPASS1534*

**LCD DUAL FAKRA**
*HLCDCA0058*
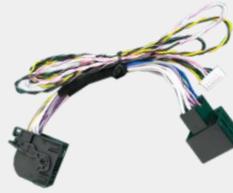
**W177 POWER J BY J**
*HPOWER0272*

**BUTTON CABLE**
*HARETC0001*

**AV CABLE**
*HAVCAB0056*

**MULTI CABLE**
*HARETC0240*

**REAR CABLE**
*HARETC0002*

**UART CABLE**
*HTOUCH0015*

**IR CABLE**
*HIRCAB0002*

**REMOTE CTRL.**
*REMOTE0001*

### HDMI 720P 2Ports SUB Option
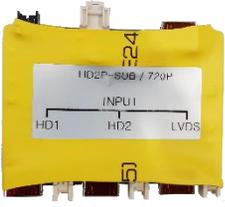


**OPTION**

HD2P-SUB

QCPASS1547



**OPTION**

HD2P-SUB CABLE

HARETC0365



**OPTION**

HDMI CABLE

HARETC0367



**OPTION**

UART CABLE*2

HTOUCH0015



**OPTION**

W222 POWER CABLE

HPOWER0177



**OPTION**

W222 J BY J

HARETC0091

# DIP Switch Setting
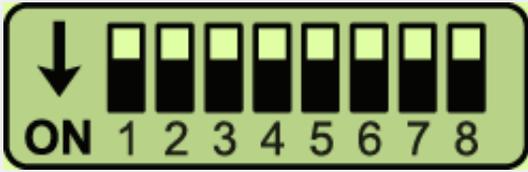
**\* ON : DOWN / OFF : UP**

*Please make sure to disconnect the power cable of the interface and reconnect the power cable again to apply the dip switch changes.*

| PIN | FUNCTION | Dip S/W SELECT |
|---|---|---|
| 1 | LVDS | OFF : LVDS MODE<br>ON : LVDS MODE SKIP |
| 2 | HD1 | OFF : HD1 Mode<br>ON : HD1 Mode Skip |
| 3 | AV1 | OFF : AV1 MODE<br>ON : AV1 MODE SKIP |
| 4 | AV2 | OFF : AV2 MODE<br>ON : AV2 MODE SKIP |
| 5 | Front Camera | OFF : Ext. Front Camera Mode<br>ON : OEM Front Camera Mode |
| 6 | | N/C |
| 7 | REAR CAMERA | OFF : OEM Rear Camera Mode<br>ON : Ext. Rear Camera Mode |
| 8 | LCD Resolution | OFF : 1920 * 720<br>ON : 960 * 540 |
| 9 | | N/C |
| 10 | OEM Touch Screen | OFF : Without OEM Touch Screen<br>ON : With OEM Touch Screen |

**\* HD2 enable is set by OSD menu**. *Default setting is NONE (HD2 Mode Skip).*

*If select other menu on HD2, it will display automatically.*

support@car-solutions.com                                        car-solutions.com

| Key | FUNCTION |
|---|---|
| POWER & PIP | N/C |
| MENU | Activating OSD menu |
| OK | Making a selection,  changing image display |
| ▲ | Moving upward |
| ▼ | Moving downward |
| ◄ | Moving leftward<br>(If you press this button 2 seconds long, you can  access the factory mode) |
| ► | Moving rightward<br>(If you press this button 2 seconds long, you can reset all the data about user environment) |

# •Factory Settings

**IMAGE**

| IMAGE | BRIGHTNESS |
| PARK | CONTRAST |
| FUNC | SATURATION |
| UTIL | HUE |
| INFO | SHARPNESS |

**IMAGE**

*Setting for image display*

| IMAGE | PAS TYPE : PAS ON |
| PARK | PAS SETUP |
| FUNC | REAR TYPE : CAN |
| UTIL | |
| INFO | |
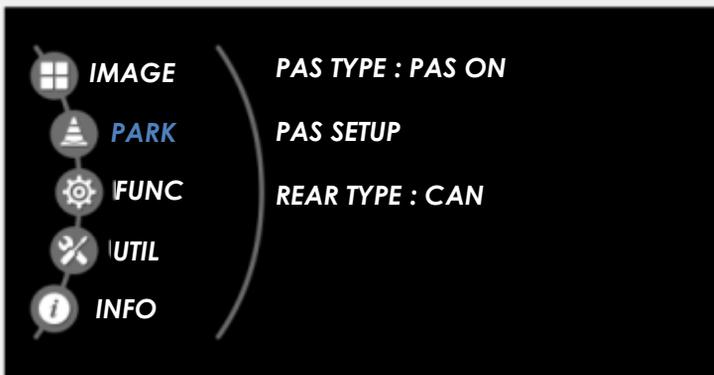
## PARK

**PAS TYPE:** *Select parking line type.*

*NOT USED: Do not use parking line*

*PAS ON: No Use*

*PAS OFF: Use fixed parking line*

**PAS SETUP:** *You can move the position of parking line.*

**REAR TYPE:** *Choose rear camera recognition.*

**CAN:** *Detecting the rear view camera by CAN signal. (Installer must connect "CAN" cable of the power cable to the "CAN" cable of the car)*

**LAMP:** *Detecting the rear view camera via "Grey Rear" wire. (Installer must connect "Rear-C" cable of the power cable to the rear lamp of the car)*

# •Factory Settings

```
IMAGE
PARK
FUNC
UTIL
INFO

CAR MODEL : BENZ
AUTO FCAM : OFF
LVDS MODEL : QX720P
HD1 MODEL : SUNE10
HD2 MODEL : NONE
```

## FUNCTION

**CAR MODEL:**

BENZ

**AUTO FCAM:**

Front Camera Display Setting

**LVDS MODEL:**

Car-play, Navigation Model Setting

**HD1/HD2 MODEL:**

DTV, Navigation Model Setting

```
IMAGE
PARK
FUNC
UTIL
INFO

RESET ALL : NO
AUDIO OUT : DEFAULT
AV1 IR : SE TV
AV2 IR : NOT USED
CAP TOUCH ; SE 12.3"
```
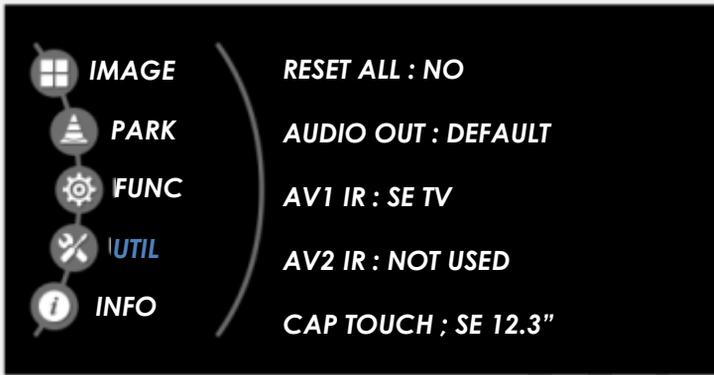
## UTIL

**FACTORY RESET:**

Factory mode reset (YES/NO

**AUDIO OUT:**

Select audio channel transmitted
through AUX (Default/AV1/AV2)

**AV1/AV2 IR:**

Able to control UI remote by touch

**CAP TOUCH:**

Select capacitive touch screen model

```
IMAGE
PARK
FUNC
UTIL
INFO

INFORMATION
SW: 201203
HW: V1.0
```
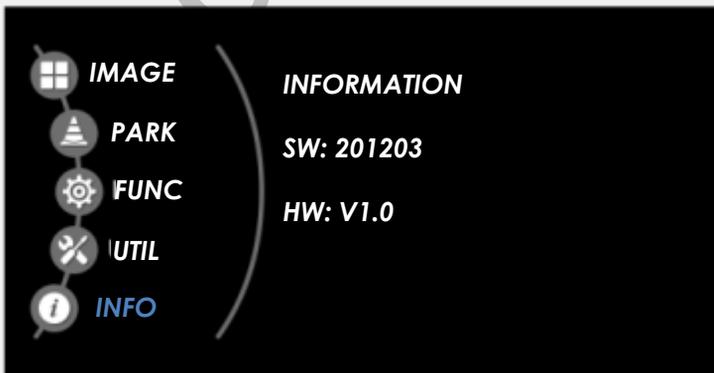
## INFO

System version information

**Please refer next page for LVDS in/out connection**

◎ **MULTIMEDIA VIDEO INTERFACE**

Model : W177-Y19
Product Code : W177-Y19-HLI-2102

DIP S/W | DEBUG LED | R-T/S IN | OEM OUT | OEM IN | T/S IN | TEST

PROG

PWR/CAN | AV | MULTI | T/S OUT | HD SUB | LVDS IN

**T/S OUT Pin#2 is UART-TX for UART Touch**

**Please refer next page for power CAN connection**

**AV in *2
Rear camera in *1
Front camera in *1
Aux out *1
Video out *2**

**HDMI *2 [Optional]**

Q·DIS
CarPlay / Android Auto

*CARPLAY BOX*

**◎ MULTIMEDIA VIDEO INTERFACE**

Model : W177-Y19
Product Code : W177-Y19-HLI-2102

DIP S/W
LED DEBUG
R-T/S IN
OEM OUT
OEM IN
T/S IN
TEST
PROG

PWR/CAN
AV
MULTI
T/S OUT
HD SUB
LVDS IN

*HD2P Sub Board [Optional]*

HD2P-SUB / 720P

INPUT

HD1          HD2          LVDS

*HD1 T/S OUT*          *HD2 T/S OUT*

**HD1 IN**          **HD2 IN**          **LVDS IN**

# •LVDS IN/OUT connection (NTG5.5)



*Please find beige LVDS connector from NTG5.5 head unit for **10"/12.3" screen***

*In case of **10" and 12.3"** screen of NTG 5.5, please use provided LVDS cable HLCDCA0058*

1. *Disconnect the OEM LVDS cable from the backside of head unit*
2. *Connect the OEM cable to the female connector of supplied LVDS Fakra cable*
3. *Connect the male connector of supplied LVDS cable to the backside of monitor*

*LCD DUAL FAKRA*

*HLCDCA0058*
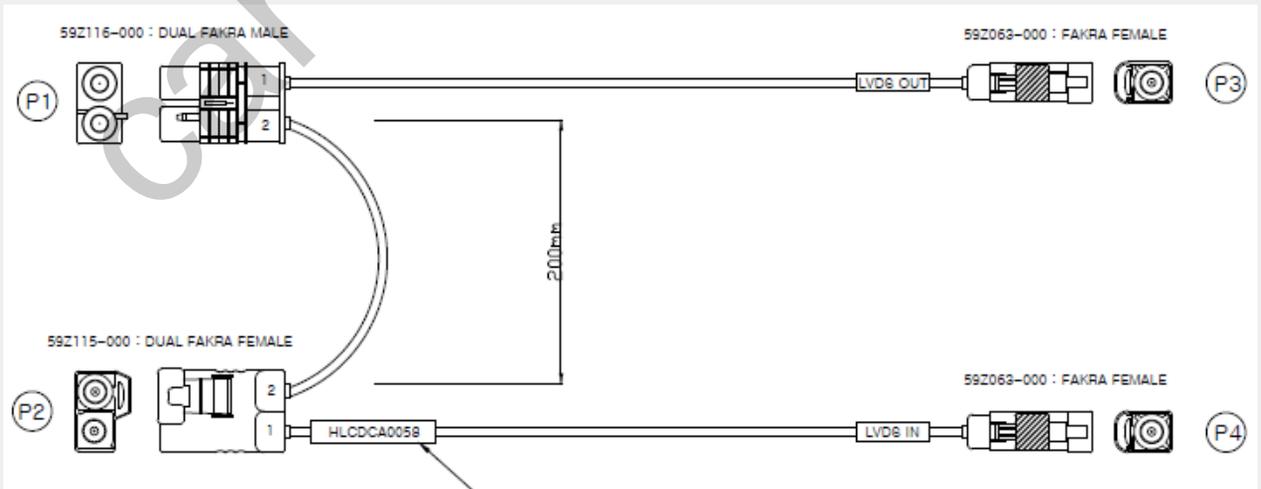
# • LVDS IN/OUT connection (NTG5.5)
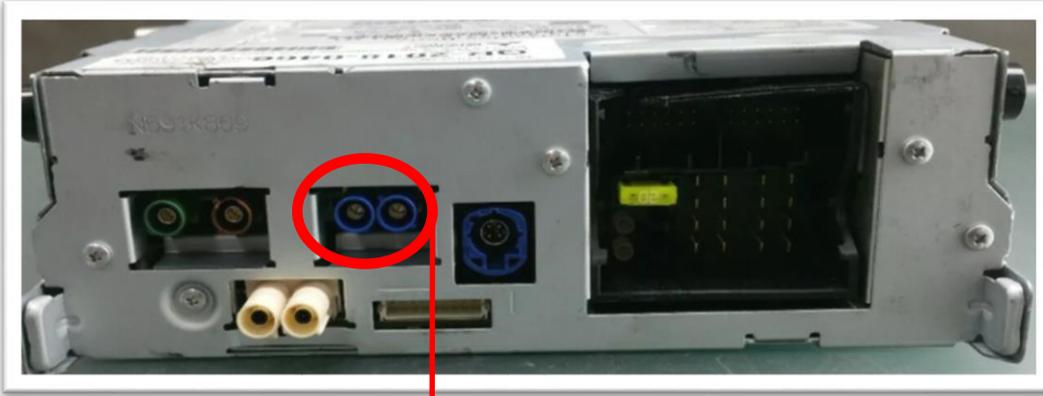


Please find blue LVDS connector from NTG5.5 head unit for **7"/8.4" screen**

In case of **7" and 8.4"** screen of NTG 5.5, please modify the pin location of provided LVDS cable HLCDCA0058, otherwise, screen display will be black.

**\* Swap location #1 and #2 both in male terminal and female terminal.**



LCD DUAL FAKRA
HLCDCA0058
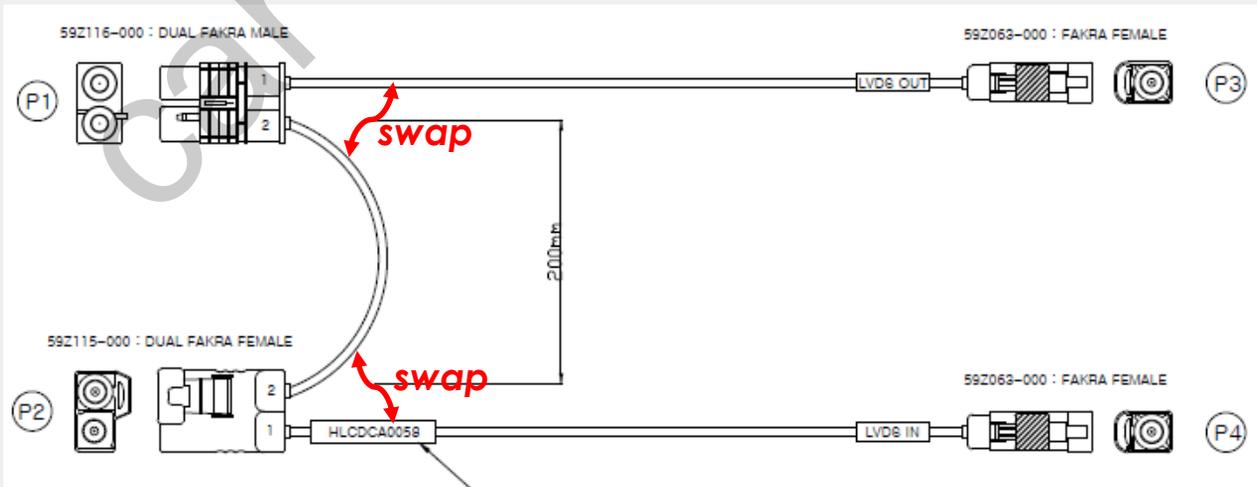
# LVDS IN/OUT connection (NTG6.0)
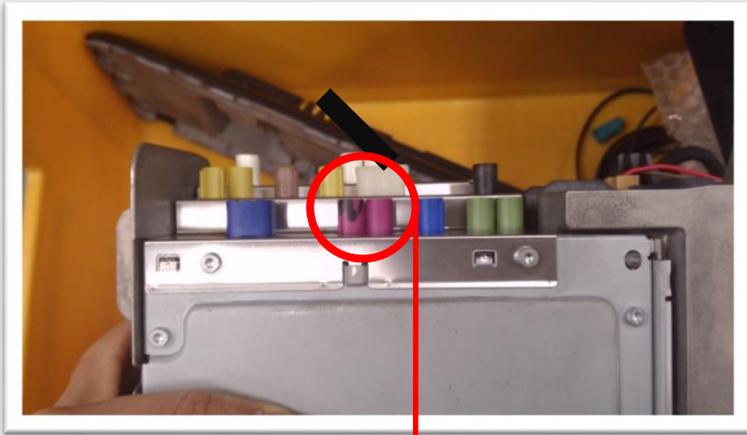


Please find purple LVDS connector from NTG6.0 head unit for **10" screen**

Please use provided LVDS cable HLCDCA0058

1. Disconnect the OEM LVDS cable from the backside of head unit
2. Connect the OEM cable to the female connector of supplied LVDS Fakra cable
3. Connect the male connector of supplied LVDS cable to the backside of monitor

**OEM Cable**

**OEM HU**

Multimedia Video
Interface With Can

Model: QHI-W177TS-MAIN U
Product Code: QHI-W177TS-MAIN-1906-011

# CAN Connection (NTG5.5)

## * CAN IN/OUT connection for NTG5.5

- Find a bunch of wires from the command behind the monitor as shown below



Find a bunch of cables from the command behind
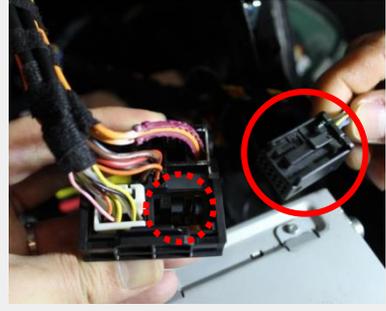


Remove the black connector marked with a red circle



Take away the black connector cover



Connect the OEM connector to the supplied CAN IN/OUT
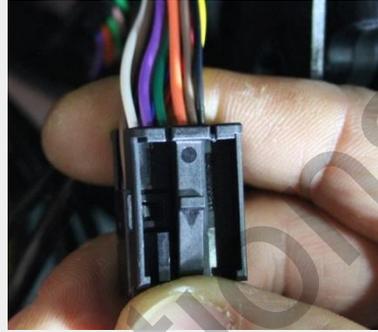


Put the black connector cover onto the supplied CAN IN/OUT cable
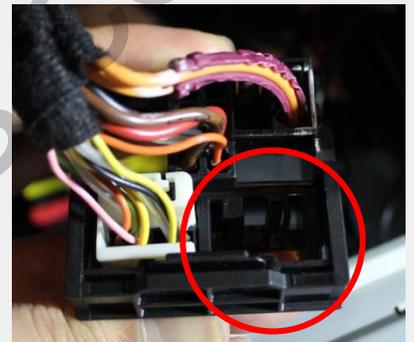


Reconnect the supplied cable where the black connector was removed.

# B+ / GND connection
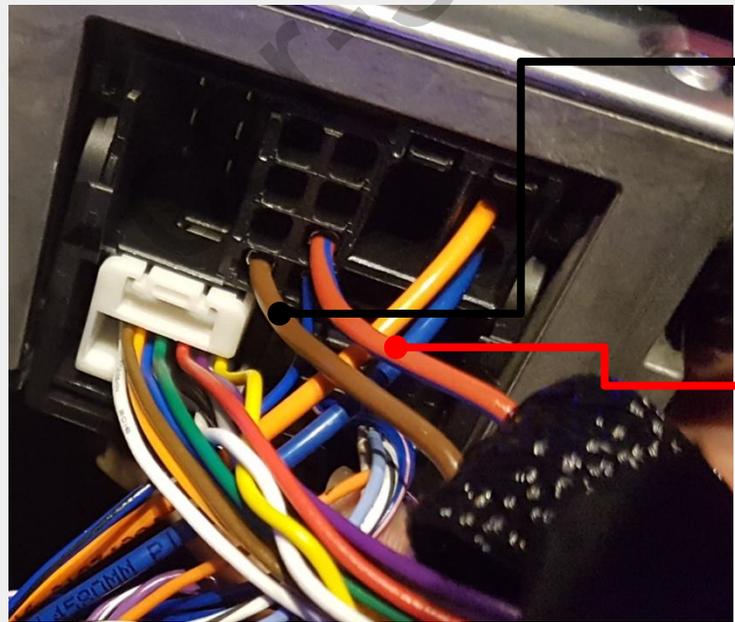


GROUND

* Connect the black ground wire of the supplied power cable to the brown OEM wire

B+

* Connect the red B+ wire of the supplied power cable to the orange/blue OEM wire

**\* CAN IN/OUT Connection for NTG6.0**

1. *Disconnect the OEM power cable from the backside of command*
2. *Connect the OEM cable to the female connector of supplied power cable*
3. *Connect the male connector of supplied power cable to the backside of monitor*

POWER CABLE
*HPOWER0231*

*\* Press high lighted OEM button for 3 seconds long to mode switch*

## 1. Rear Camera Mode Switch

| Monitor | Joy shuttle Direction | Mode | Pushing Joy shuttle | Mode |
|---------|----------------------|------|---------------------|------|
| 12.3inch | ⬅ | Rear, Front Camera mode | Short | Ext. Camera <-> OEM Screen |
| 8.4inch | ⬇ | Rear, Front Camera mode | Short | Ext. Camera <-> OEM Screen |

## 2. DVD, DTV OSD Control

*OSD control remote will appear if the joy shuttle is moved to the left for a short time in DVD, DTV mode*

| Monitor | Direction | Mode | Pushing Joy shuttle | Movement |
|---------|-----------|------|---------------------|----------|
| 12.3inch/ 8.4inch | ⬆ ⬇ ⬅ ➡ | DVD DTV | Short | UP,DOWN,LEFT,RIGHT |
| | ⬅ | | Long | Select |

# ○ OEM buttons (NTG6.0)

*\* Press high lighted OEM button for 3 seconds long to mode switch*

# ◦OEM buttons (NTG6.0)

## 1. Switch to OEM in Rear Camera Mode :

*Short press below high lighted button in Ext. rear camera mode to switch OEM screen*

## 2. DVD, DTV OSD Control ：

*Slide arrow button right and left for DTV and DVD channel up(+) and down(-)*

# Screen Ratio Change on HDMI/AV Mode

*Please press high lighted button for 3secs long to change screen display ratio.*
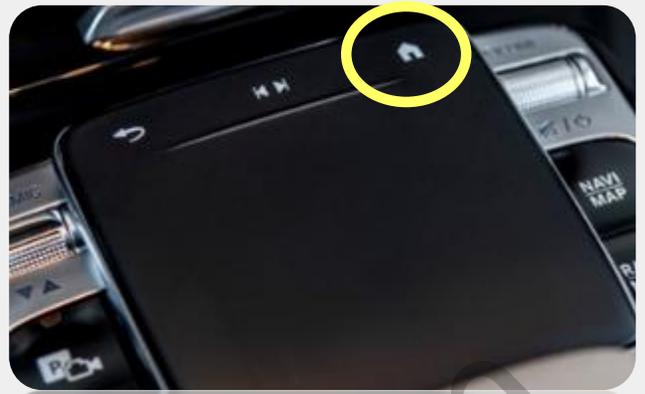


**Full screen display on HDMI, AV Mode**
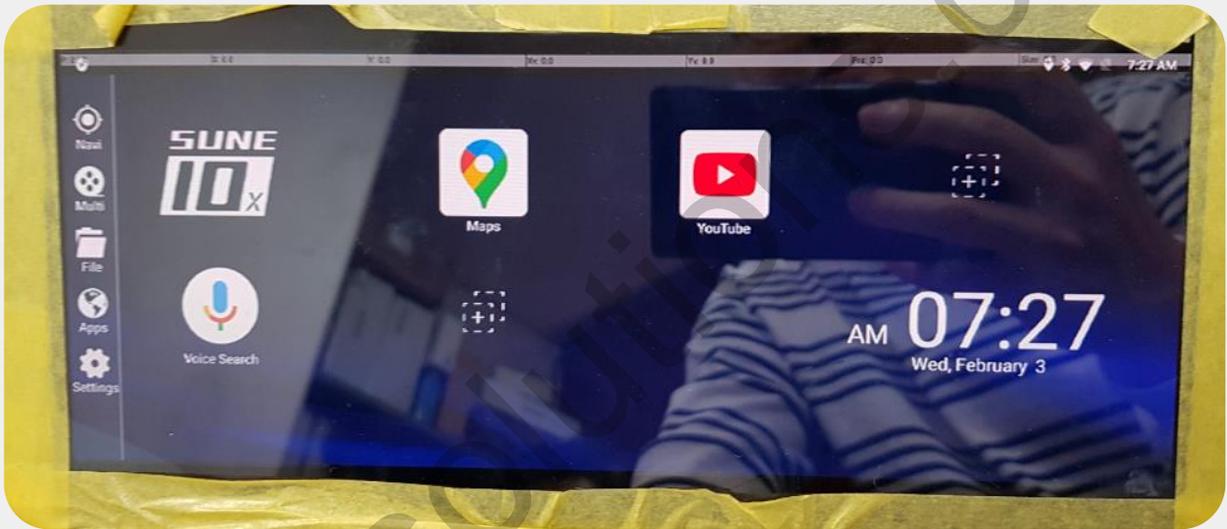


**4:3 ratio screen display on HDMI, AV Mode**



support@car-solutions.com                                    car-solutions.com

# Split Screen on Rear Camera Mode

*Please press high lighted button for 3secs long to change screen display ratio.*
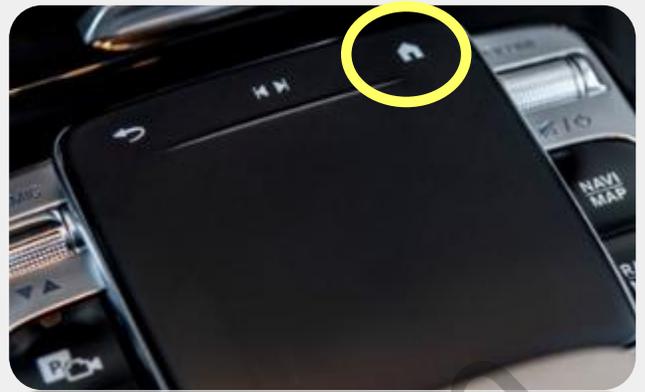


**Full screen display on Rear Camera Mode**



**Split screen display on Rear Camera Mode**

*Please make sure to select NAVI MODEL as SE-CP*

| Section | Button | Operation | Function |
|---------|--------|-----------|----------|
| MMI | HOME/STAR | Short press | Select |
| | | Long press **(3sec)** | Voice Control |
| | JOG LEFT | Short press | Left |
| | JOG RIGHT | Short press | Right |
| | JOG UP | Long press **(3sec)** | Home |
| | JOG DOWN | Long press **(3sec)** | Moving to Android Auto Down Side Menu  |
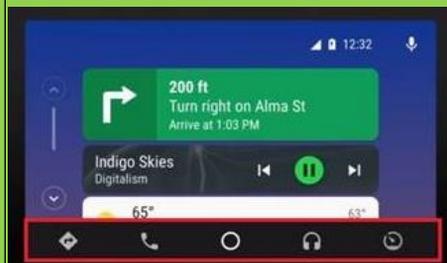
# Cautions Before Installation

1. *Ignition key should be taken off before starting installation, interface power connection must be the last step in installation.*

2. *Power cable should be separated when connecting interface.*

3. *Should be no any electronic devices or magnetic pole around installation place.*

4. *All steps of installation should be done by well-trained specialist.*

5. *Dismantling without manufacturer's permission can not be guaranteed, (No permission to break attached label on the board.)*

6. *Kindly check all parts are in the box, when receiving the product, if anything missing, inform to the supplier or manufacturer.*

7. *According to our sales policy, any problems caused by user's mistake, careless can not be guaranteed.*

# 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)