

Installation Manual

HDMI Interface for Mercedes Benz NTG5.5 & NTG6.0



• Specification

Compatibility: **E-Class 8.4"/12.3" 2016~**
S-Class 12.3" 2018~
Sprinter 7"/10" 2019~
C class 7"/10" 2019~
A Class 7"/10" 2019~

Components: Interface Main board *1

Interface Input / Output specification:

Input: LCD INPUT(CAR SYSTEM) *1
HDMI *1
Analog RGB *1
A/V *2
CVBS(Front Camera) *1
CVBS(Rear Camera) *1

Output: LCD OUTPUT(CAR SYSTEM) *1
AUDIO OUTPUT *1
VIDEO OUTPUT *2

Power Spec:

Input Power: 8VDC ~ 18VDC

Consumption: 5WATT

Switch input mode:

1. External video sources skip function: Able to control input videos on and off via Dip switches
2. Able to switch videos via the remote and button switch
3. Able to detect the rear view camera by CAN

Components



MAIN BOARD
QCPASS1371



LCD DUAL FAKRA
HLCDCA0058



AV CABLE
HAVCAB0056



RGB CABLE
HRGBCA0013



MULTI CABLE
HARETC0240



REAR CABLE
HARETC0002



UART CABLE
HTOUCH0031



Res. T/S CABLE
HTOUCH0009



BUTTON CABLE
HARETC0001



IR CABLE
HIRCAB0002



REMOTE CTRL.
REMOTE0001

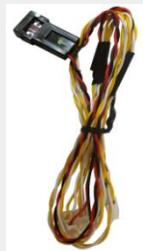
* Power cable for NTG6.0



W177 POWER J BY J
HPOWER0231

support@car-solutions.com

* Power cable for NTG5.5 [OPTION]



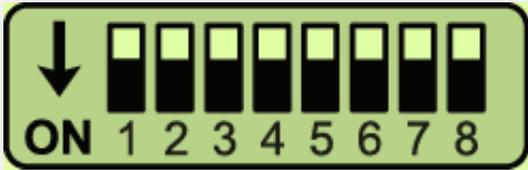
W222 POWER CABLE
HPOWER0177



W222 J BY J
HARETC0091

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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	RGB	OFF : RGB MODE ON : RGB MODE SKIP
2	HDMI	OFF : HDMI MODE ON : HDMI MODE SKIP
3	AV1	OFF : AV1 MODE ON : AV1 MODE SKIP
4	AV2	OFF : AV2 MODE ON : AV2 MODE SKIP
5	LCD Resolution	OFF : 1920 * 720 ON : 960 * 540
6	LCD TYPE(CAR MODEL)	OFF : Without OEM T/S : C-CLASS(10") With OEM T/S : A-CLASS(10"), SPRINTER(7")
		ON : Without OEM T/S : E-CLASS(8.4"/12.3"), S-CLASS(12.3"), C-CLASS(7") With OEM T/S : GLE(10"), A-CLASS(7")
7	REAR CAMERA	OFF : OEM Rear Camera Mode ON : Ext. Rear Camera Mode
8	OEM Touch Screen	OFF : Without OEM Touch Screen ON : With OEM Touch Screen

Remote Control



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

• Factory Setting



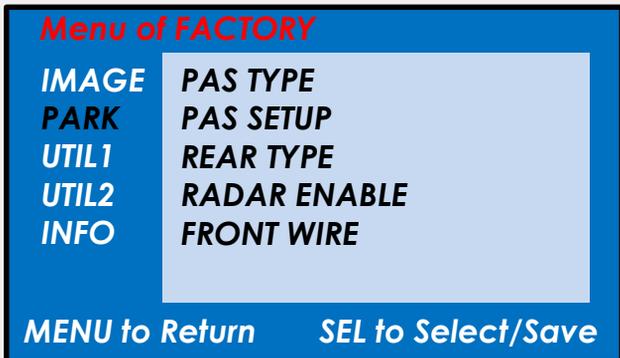
IMAGE

H-POSITION: Move the screen left and right.

V-POSITION: Move the screen up and down.

H-SIZE (NAVI):

Adjust the left and right size of navigation.



PARK

PAS TYPE: Select parking line type.

- NOT USED: Do not use parking line
- PAS ON: Use Flexible Parking Lines
- PAS OFF: Use fixed parking line

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

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)

RADAR ENABLE: Parking distance alarm sensor shows in Ext. Rear camera mode
RCAM+PDC(S); RCAM+PDC(M); RCAM FULL

FRONT WIRE: (FCAM/ACC)

FCAM: for front camera detecting usage

ACC: for car ACC on/off detecting and switch to OEM screen before power off

• Factory Setting

Menu of FACTORY

IMAGE	FACTORY RESET
PARK	AUTO FCAM
UTIL1	FCAM FUNC
UTIL2	NAVI MODEL
INFO	HDMI MODEL
	AVOUT SELECT

MENU to Return SEL to Select/Save

UTIL1

FACTORY RESET: Factory mode reset

AUTO FCAM: Front camera display setting

FCAM FUNC: Select OEM FCAM or EXT. FCAM

NAVI MODEL:

Android, Car-play, Navigation Model Setting

HDMI MODEL: DTV, Android Model Setting

AVOUT SELECT:

Select audio channel transmitted through AUX
(Default/AV1/AV2/AV3/HDMI)

Menu of FACTORY

IMAGE	REMOTE DATA
PARK	REMOTE CONTROL
UTIL1	IR MEMORY
UTIL2	MODE BUTTON
INFO	CTOUCH TYPE
	OEM SKIP

MENU to Return SEL to Select/Save

UTIL2

REMOTE DATA: Select registered IR data model
controlled by touch UI (NO USE)

REMOTE CONTROL: Show Touch UI with
registered IR data (OFF/ON)

IR MEMORY: Register IR memory of remote
control for (DTV/DVD)

MODE BUTTON: (HOME/RETURN)

CTOUCH TYPE: Select Cap. T/S model

OEM SKIP: Skip OEM screen and switch to Ext.
mode after car booting (YES/NO)

Menu of FACTORY

IMAGE	SYSTEM VERSION
PARK	
UTIL1	MAIN : 211108
UTIL2	MCU : 211110
INFO	

MENU to Return SEL to Select/Save

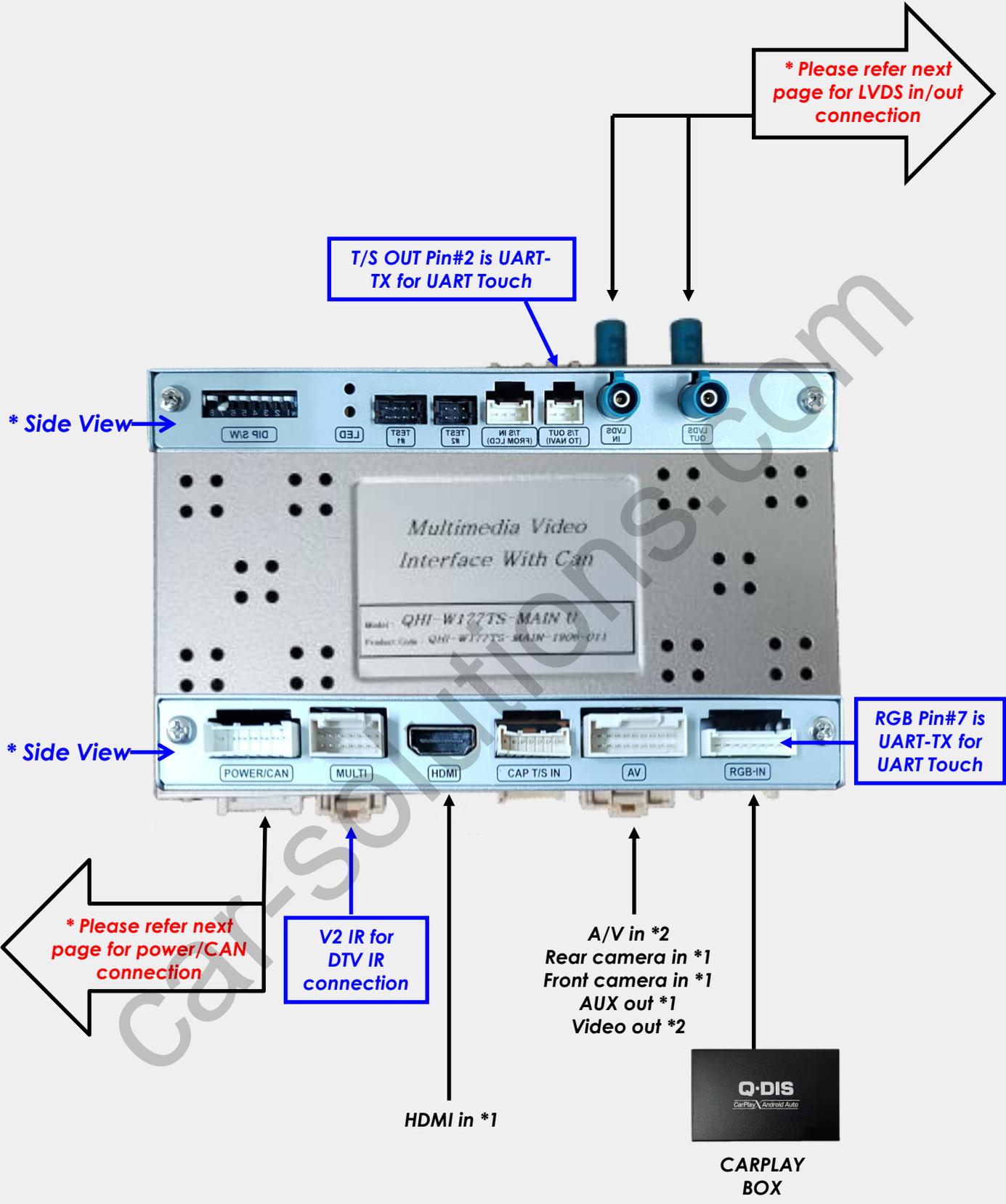
System version information

Main Board Side View

* Side View for QHI-W177TS



Installation Diagram



• LVDS IN/OUT connection (NTG5.5)



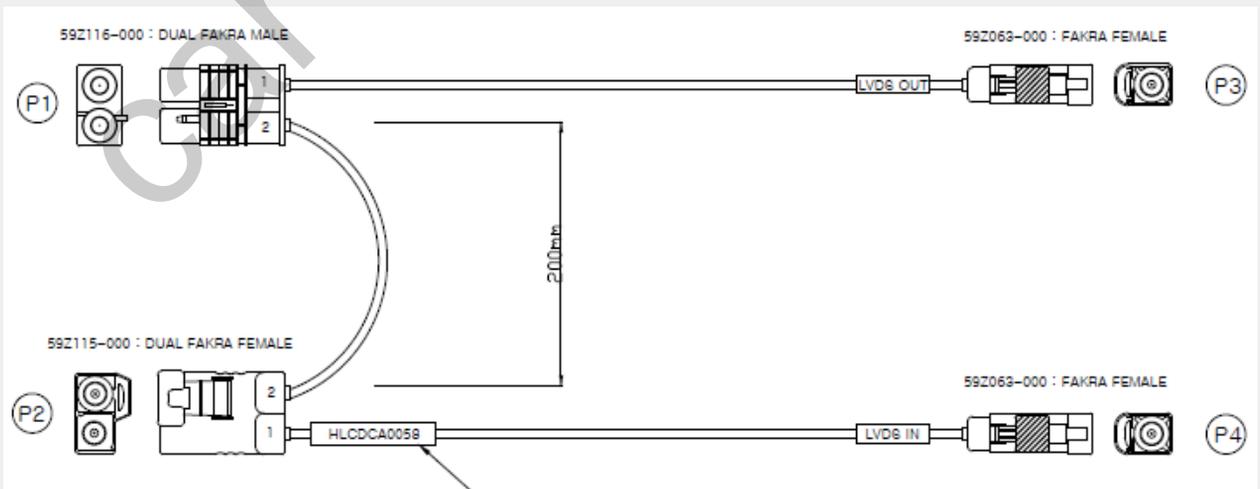
Please find beige LVDS connector from NTG5.5 head unit for **10"/12.3" screen**

In case of **10" and 12.3"** screen of NTG 5.5, please use provided LVDS cable [HLCDCA0058](#)

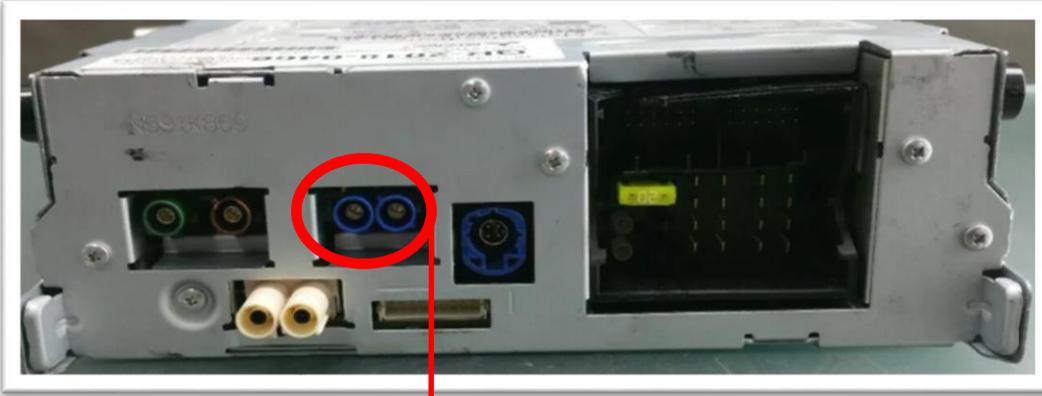
1. Disconnect the OEM LVDS cable from the backside of head unit
2. Connect the OEM cable to the female connector of supplied LVDS Fakra cable
3. Connect the male connector of supplied LVDS cable to the backside of monitor



LCD DUAL FAKRA
[HLCDCA0058](#)



• LVDS IN/OUT connection (NTG5.5)



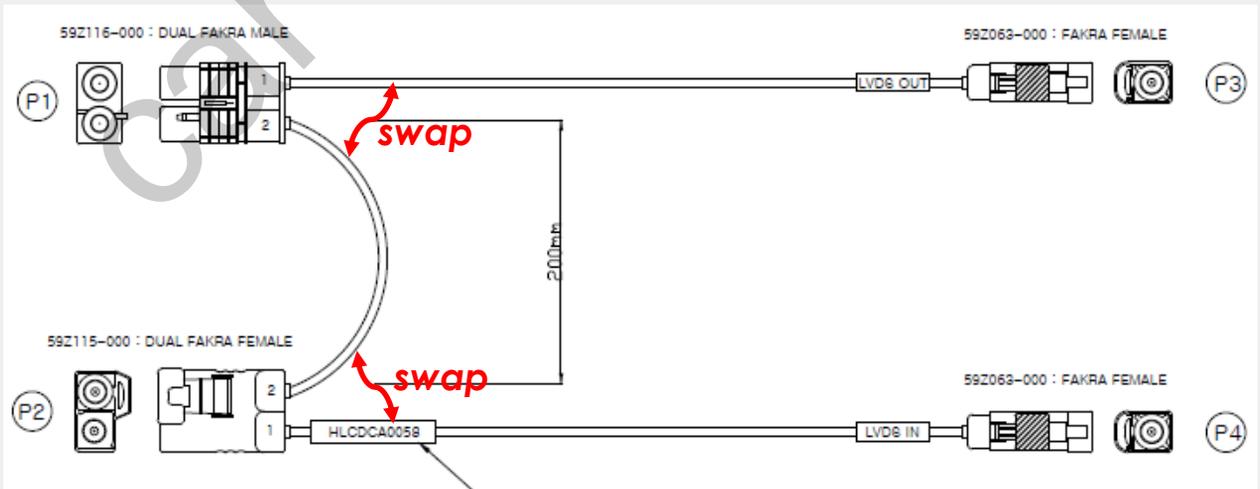
Please find blue LVDS connector from NTG5.5 head unit for **7"/8.4" screen**

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.

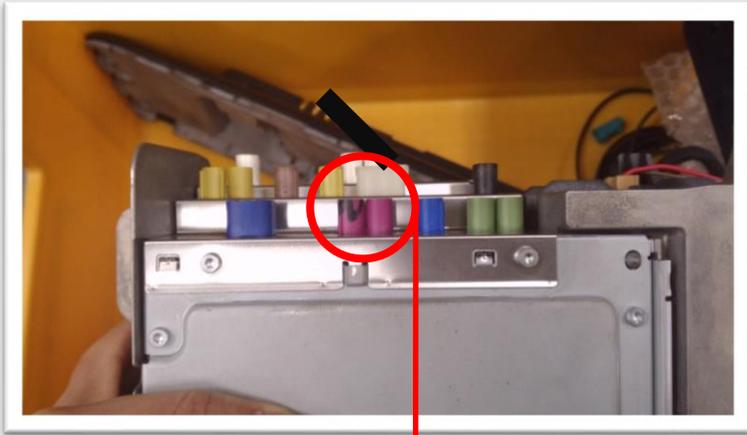


*** Swap location #1 and #2 both in male terminal and female terminal.**

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

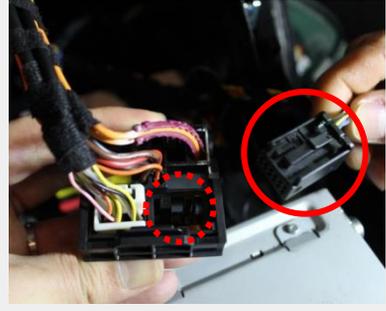
• CAN Connection (NTG5.5)

* 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



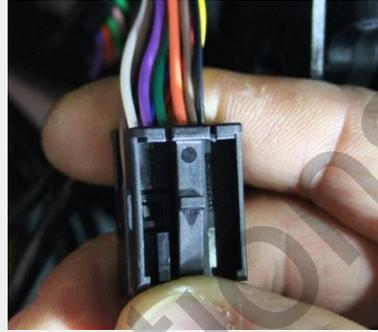
Remove the black connector marked with a red circle



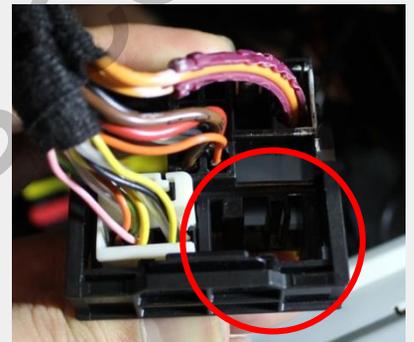
Take away the black connector cover



Connect the OEM connector to the supplied CAN IN/OUT

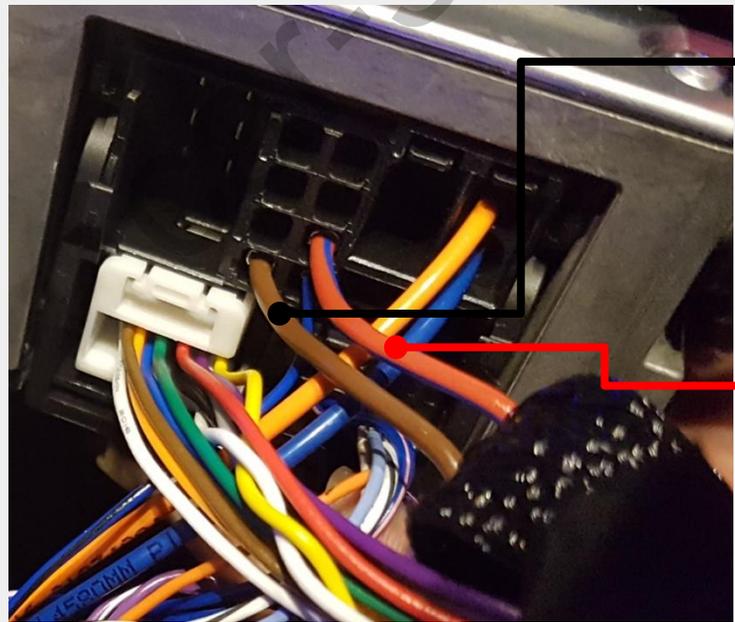


Put the black connector cover onto the supplied CAN IN/OUT cable



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 Connection (NTG6.0)

* 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

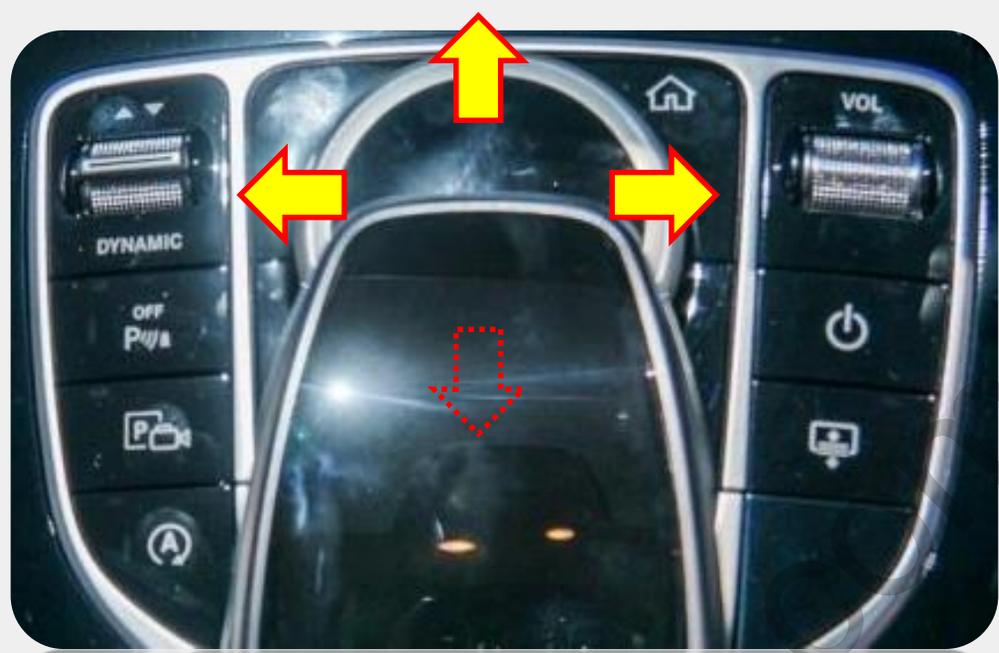


• OEM buttons (NTG5.5)

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



• OEM buttons (NTG5.5)



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 Button Activation_ NTG6.0

* Please short press 360 camera button in the external mode to switch OEM 360 camera screen.

* And short press again this button to switch back to previous mode.



• 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(-)



Split Screen on Rear Camera Mode_ NTG6.0

On Rear Camera Mode, press high lighted button for 3secs long to change screen display ratio.

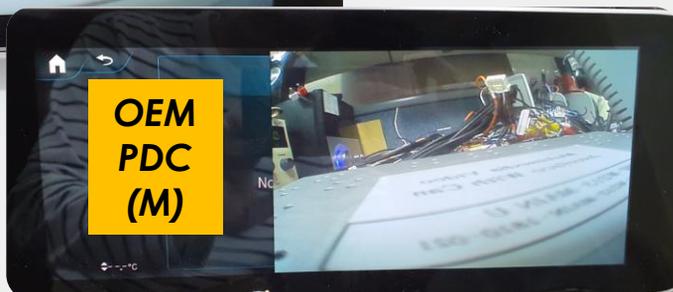
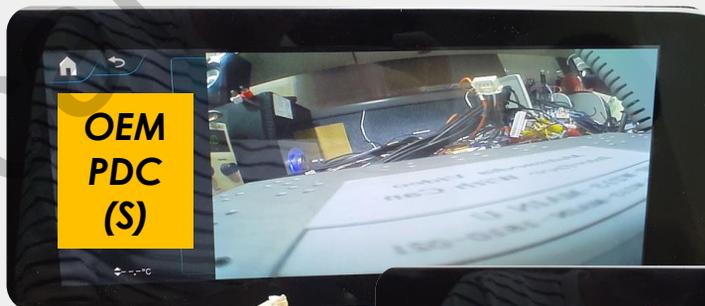
* Remote Control PIP button also make split screen on rear camera mode.



OSD MENU-> PARK -> RADAR ENABLE ->RCAM FULL Mode



OSD MENU-> PARK -> RADAR ENABLE ->RCAM+PDC(S) and RCAM+PDC(M) Mode

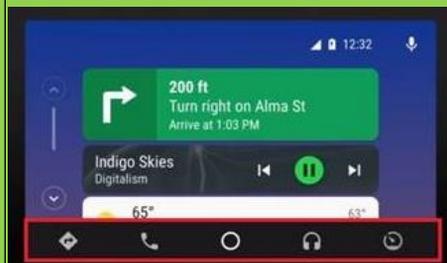


• Activate Car-play & Android Auto by OEM Buttons

* These functions can be used when SE-CP(NAVI MODEL – SE-CP(WVGA) installed.



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



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)