



2012~2014 MERCEDES BENZ

NTG4.5

WIRELESS CARPLAY

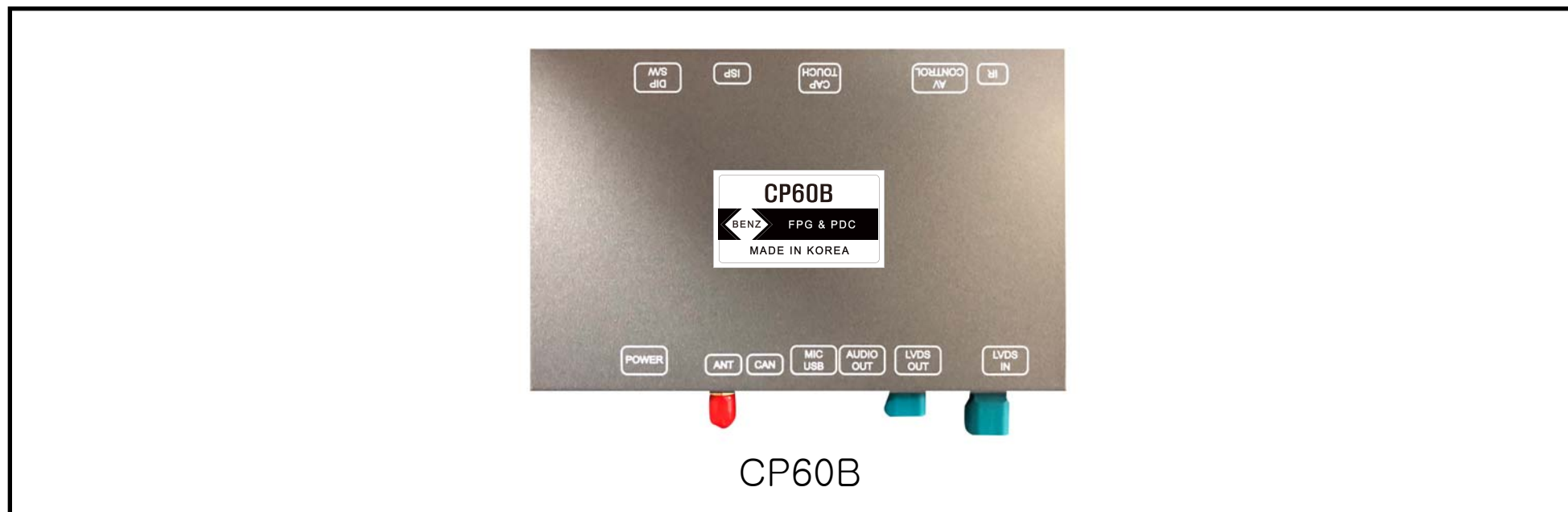
WIRED CARPLAY

WIRED ANDROID AUTO

CARPLAY INTERFACE MANUAL

CP60B

MAIN BOARD



Car Brand	Model	Year Range	System
MERCEDES BENZ	CP60B	2012~2014	NTG4.5

COMPONENTS

<p>1 MAIN UNIT</p>	<p>2 POWER CABLE</p>	<p>3 USB&MIC CABLE</p>	<p>4 LVDS OUT CABLE</p>
<p>5 ANTENNA</p>	<p>6 AV IN/OUT CABLE</p> <p>※ OPTION ※</p>	<p>7 AV GENDER CABLE</p> <p>※ OPTION ※</p>	<p>8 AV GENDER BOARD</p> <p>※ OPTION ※</p>
<p>9 IR CABLE</p> <p>※ OPTION ※</p>	<p>10 INTERFACE R/C</p> <p>※ OPTION ※</p>	<p>11 EXTERNAL AMP SPEAKER</p> <p>※ OPTION ※</p>	
<p>12 RESISTIVE CPR TOUCH CABLE</p> <p>※ OPTION ※</p>	<p>13 CAPACITIVE CPC TOUCH CABLE</p> <p>※ OPTION ※</p>		

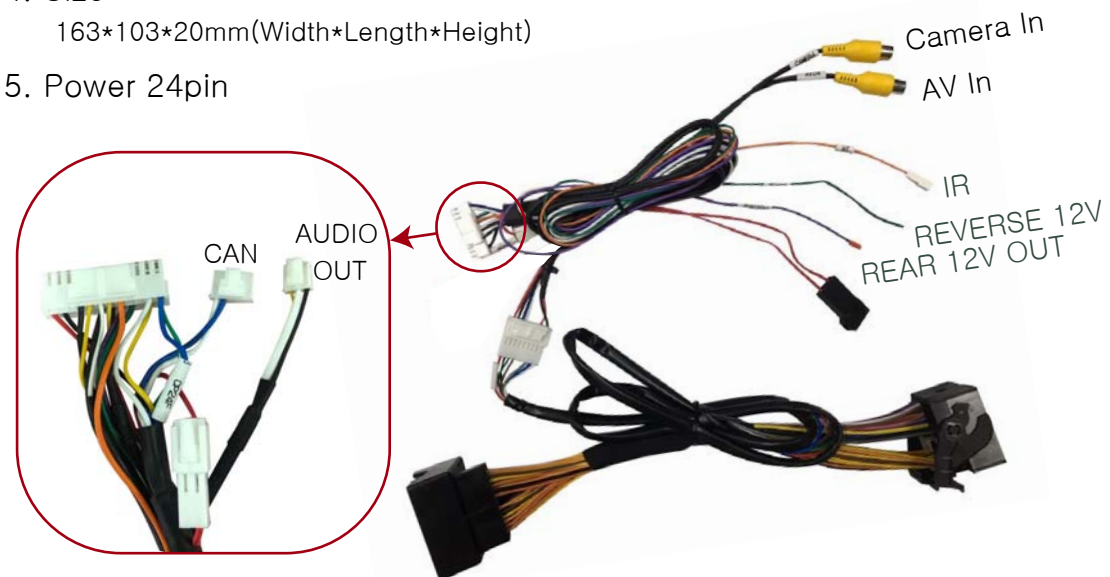
DIP S/W

<p>OFF ON</p> <p>5 6 7 8 9 10</p> <p>C, E, G, SLK-CLASS 5.8"</p>	<p>OFF ON</p> <p>5 6 7 8 9 10</p> <p>C, E, G, SLK-CLASS 7"</p>
<p>OFF ON</p> <p>5 6 7 8 9 10</p> <p>A, B, CLA, ML-CLASS 5.8"</p>	<p>OFF ON</p> <p>5 6 7 8 9 10</p> <p>A, B, CLA, ML-CLASS 7"</p>

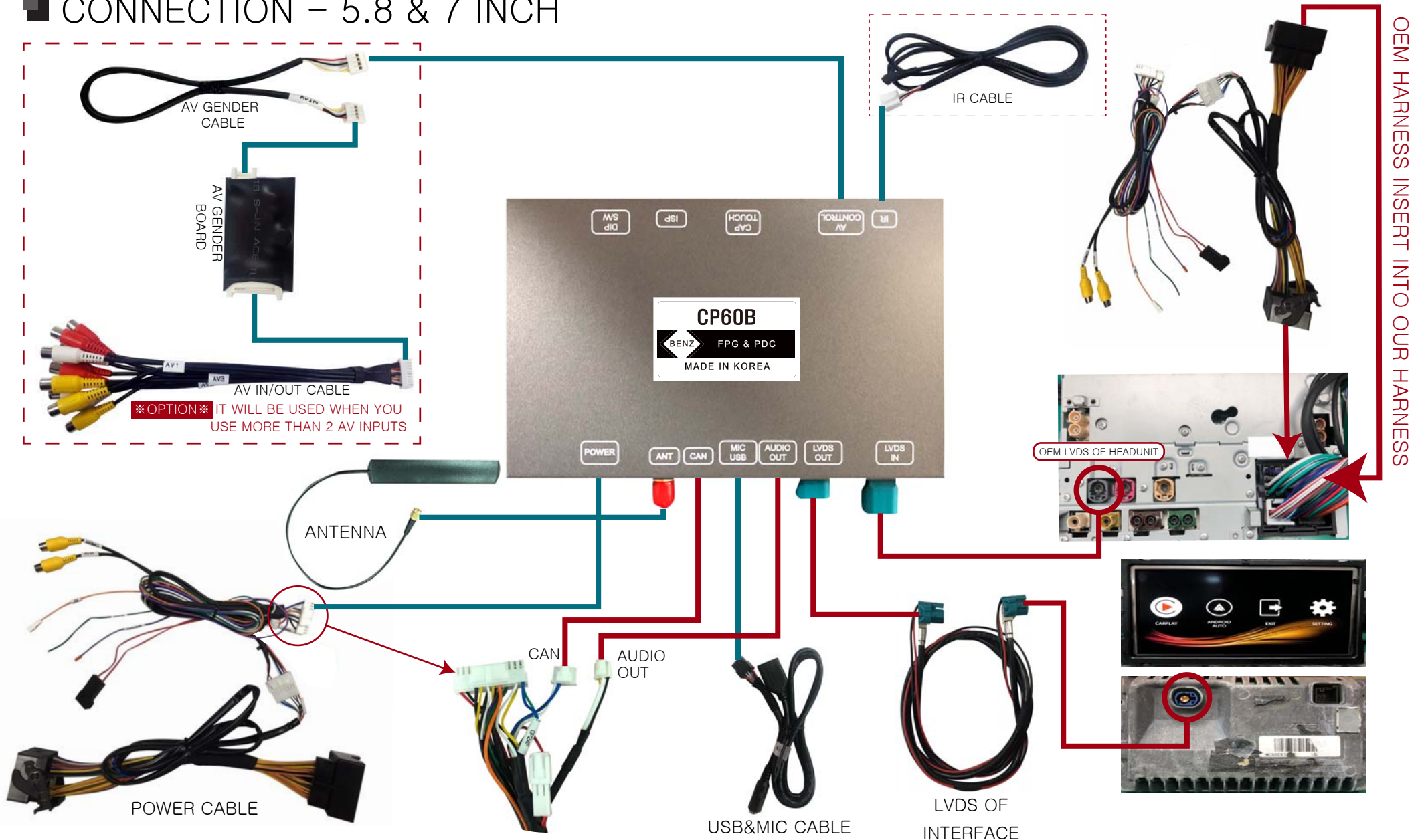
PIN	FUNCTION	DIP S/W SETTING
1	External Navigation	OFF
		ON
2	OFF	
3	OFF	
4	Rear Camera	OFF : OEM Camera
		ON : Aftermarket Camera
5	OFF	
6	CAN Setting	
7	Vehicle Setting	
8	Vehicle Setting	
9	Resolution Setting	
10	ON	

CP60B SPEC.

- INPUT
 - 1 x LVDS output
 - 1 x CVBS(rear camera)
 - 1 x CVBS(front camera or A/V)
 - 3 x A/V Input(Option)
- Output
 - 1 x CVBS
 - 1 x Audio L/R
- Power
 - Input power : 8VDC ~ 18VDC
 - Consumption : 6.5 Watt
 - Ampere : 0.53A
- Size
 - 163*103*20mm(Width*Length*Height)
- Power 24pin



CONNECTION – 5.8 & 7 INCH



FUNCTIONS OF BUTTONS



RETURN : 1. HOLD 2S TO SWITCH MODE (OEM-NETPLAY-AV-OEM...)

2. SHORT PRESS TO SWITCH BACK TO LAST MODE

3. HOLD OVER 10S TO RESET NETPLAY

C : SHORT PRESS TO SWITCH BACK MAIN MENU

ENTER : 1. SHORT PRESS TO ENTER

2. HOLD 2S TO ACTIVE "SIRI" OR "OK GOOGLE"

UP : 1. SHORT PRESS TO MOVE CURSOR TO MAIN MENU OF ANDROID AUTO

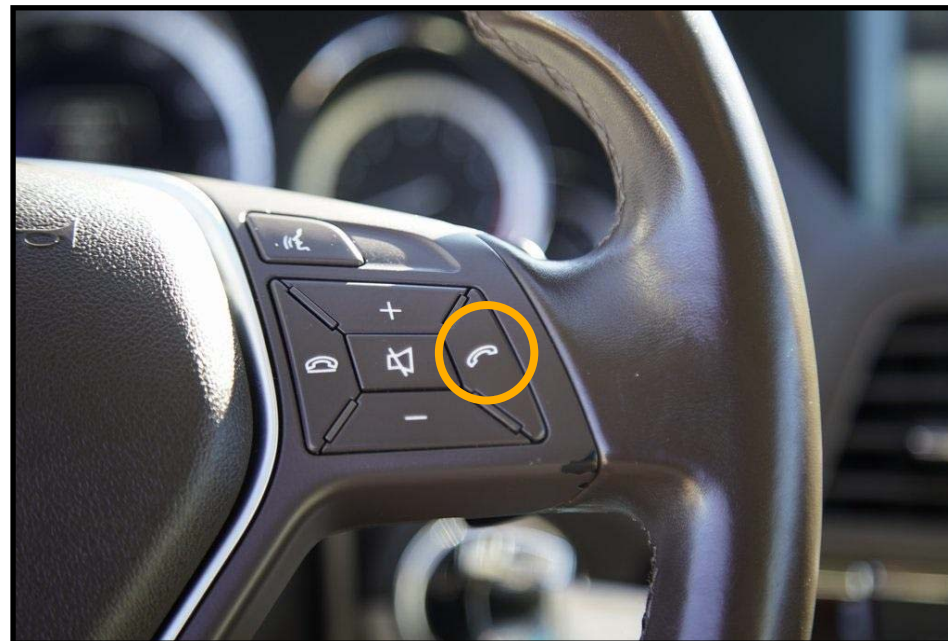
DOWN : SHORT PRESS TO MOVE CURSOR TO UNDER BAR OF ANDROID AUTO

LEFT : SHORT PRESS TO MOVE CURSOR 1 STEP TO LEFT

RIGHT : SHORT PRESS TO MOVE CURSOR 1 STEP TO RIGHT

ROTATE CLOCKWISE/ANTI CLOCKWISE TO MOVE CURSOR

FUNCTIONS OF STEERING WHEEL BUTTONS



PHONE : 1. SHORT PRESS TO ACCEPT PHONE CALL

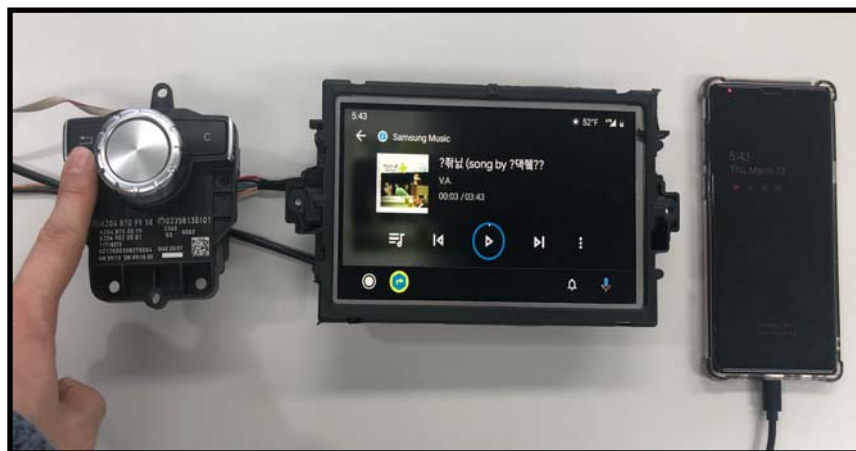
2. HOLD 3S TO REJECT PHONE CALL

RETURN : 1. SHORT PRESS TO SWITCH MODE

2. HOLD 10S TO RESET NETPLAY

UP : HOLD 2S TO SWITCH TO AV DIRECTLY

FUNCTIONS OF BUTTONS IN ANDROID AUTO

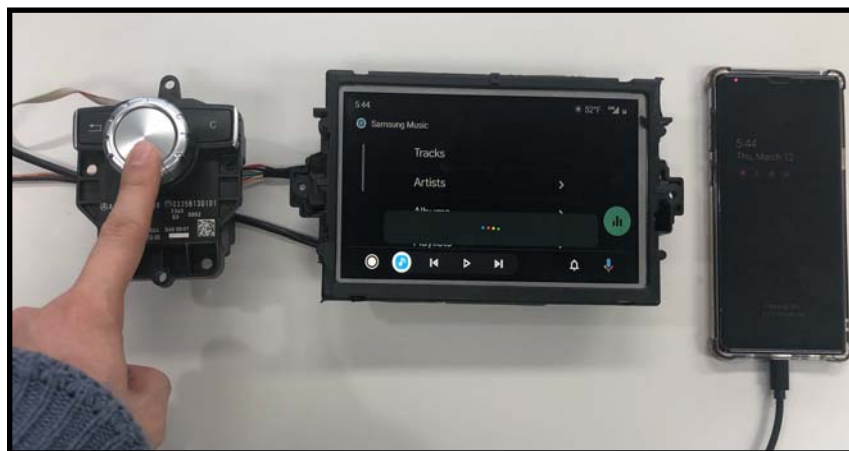


PRESS "BACK" BUTTON TO BACK TO LAST MODE



PRESS "UP" & "DOWN" TO MOVE CURSOR BETWEEN MAIN MENU AND UNDER BAR

FUNCTIONS OF BUTTONS IN ANDROID AUTO



HOLD “ENTER” BUTTON TO ACTIVE “OK GOOGLE”

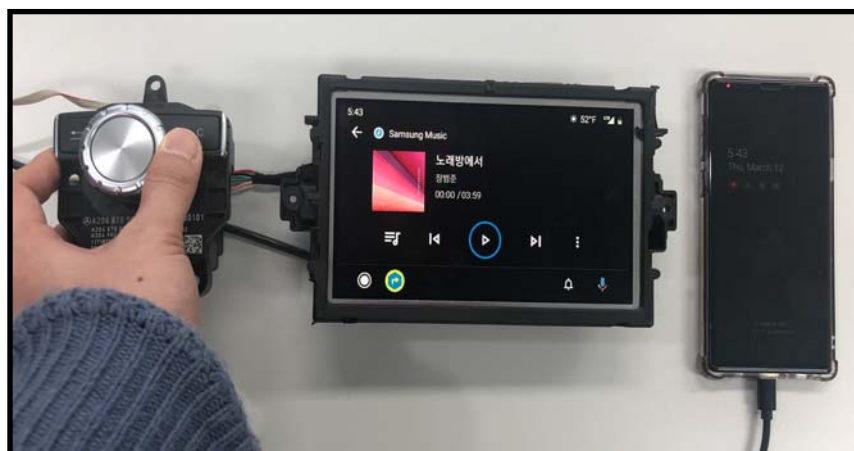


PRESS “C” BUTTON TO BACK TO MAIN MENU

FUNCTIONS OF BUTTONS IN ANDROID AUTO



HOLD “C” BUTTON 10S TO ENTER TO OSD MENU



HOLD “LEFT” OR “RIGHT” TO SELECT LAST SONG OR NEXT SONG

FUNCTIONS OF BUTTONS IN ANDROID AUTO



SELECT "EXIT" OF ANDROID AUTO AND PRESS
ENTER" TO MAIN MENU OF NETPLAY



SELECT "EXIT" OF NETPLAY AND PRESS
"ENTER" TO FACTORY DISPLAY



FACTORY DISPLAY



HOLD "RETURN" BUTTON OF IDRIVE
TO SWITCH TO NETPLAY DISPLAY



SELECT "ANDROID AUTO"
AND PRESS ENTER TO CARPLAY



ANDROID AUTO

FUNCTIONS OF BUTTONS IN CARPLAY



HOLD "ENTER" BUTTON TO ACTIVE "SIRI"



PRESS "C" BUTTON TO BACK TO MAIN MENU

FUNCTIONS OF BUTTONS IN CARPLAY



HOLD “C” BUTTON TO ENTER TO OSD MENU



HOLD “LEFT” OR “RIGHT” TO SELECT LAST SONG OR NEXT SONG

FUNCTIONS OF BUTTONS IN CARPLAY



THERE IS “BLUETOOTH CALL” FUNCTION IN SETTING MENU OF INTERFACE. YOU CAN SET TIMER “3S~6S OR CONTINUE”. THEN CALLING IMAGE WILL DISPLAY 3S~6S OR ALL THE TIME UNTIL YOU ACCEPT OR REJECT. WHEN IN FACTORY DISPLAY. (THIS FUNCTION JUST LET CUSTOMER KNOW WHO IS CALLING TO YOU)

FUNCTIONS OF BUTTONS IN CARPLAY



SELECT "EXIT" OF CARPLAY AND PRESS
ENTER" TO MAIN MENU OF NETPLAY



SELECT "EXIT" OF NETPLAY AND PRESS
"ENTER" TO FACTORY DISPLAY



FACTORY DISPLAY



HOLD "RETURN" BUTTON OF IDRIVE
TO SWITCH TO NETPLAY DISPLAY

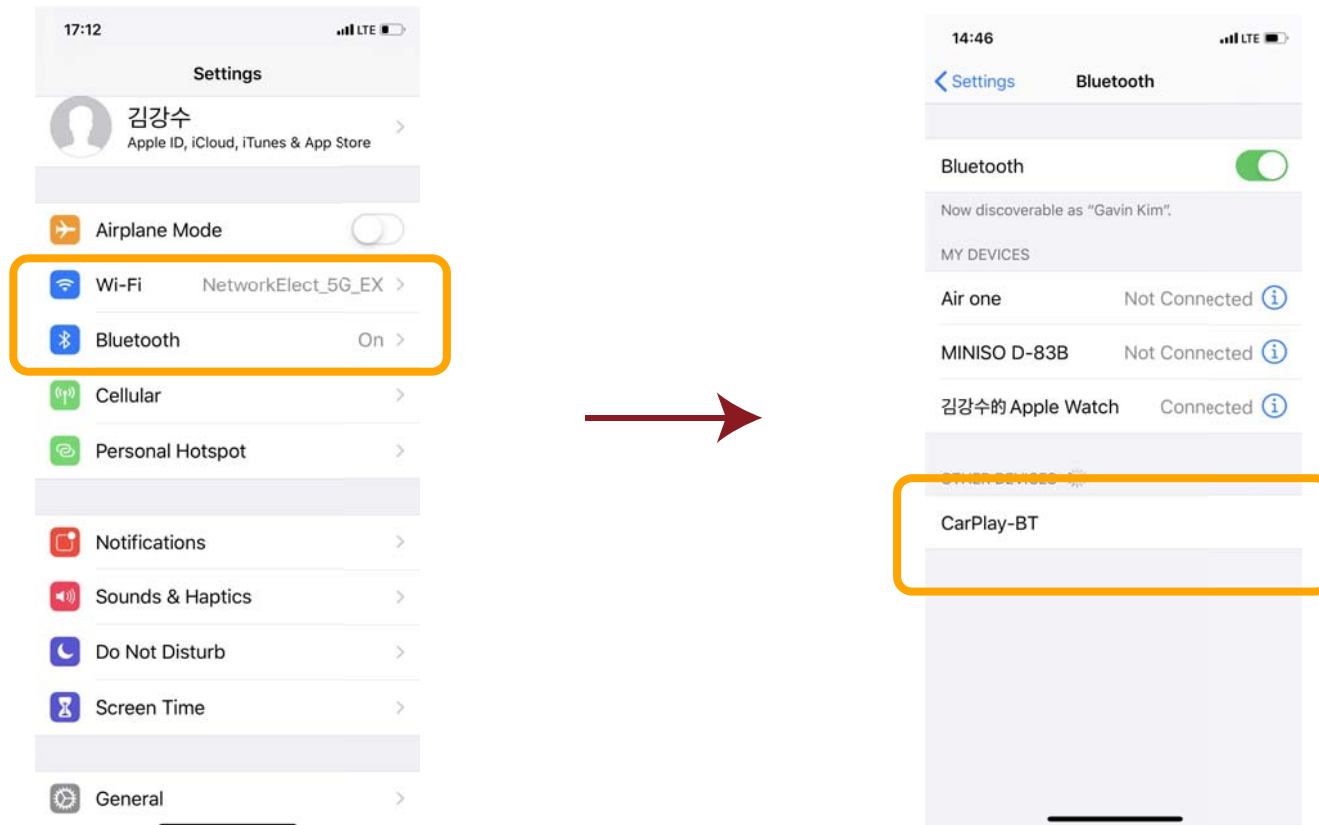


SELECT "CARPLAY"
AND PRESS ENTER TO CARPLAY



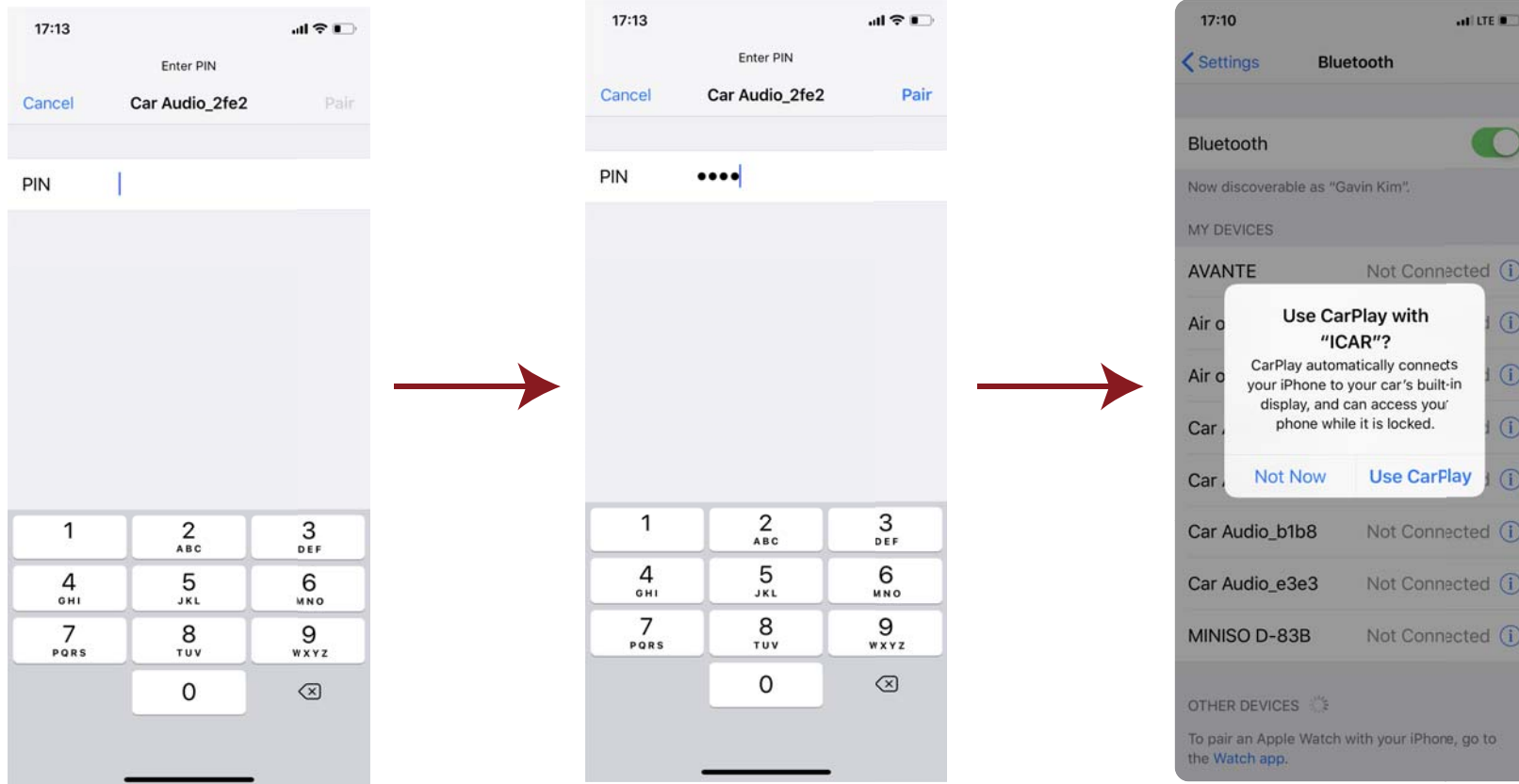
CARPLAY

METHOD OF CONNECTING BT BETWEEN IPHONE AND NETPLAY



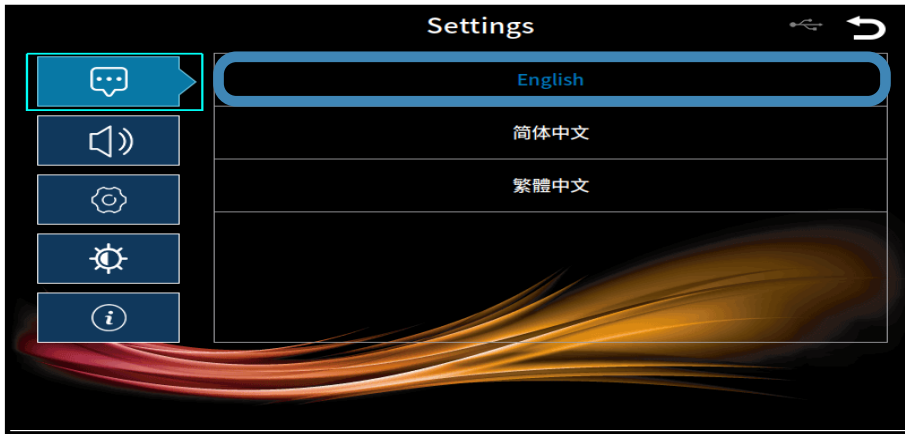
PLEASE SET WIFI AND BLUETOOTH “ON” AT SETTING OF IPHONE,
AND THEN PLEASE SEARCH DEVICE “CARPLAY-BT” IN BLUETOOTH

SETTING OF NETPLAY

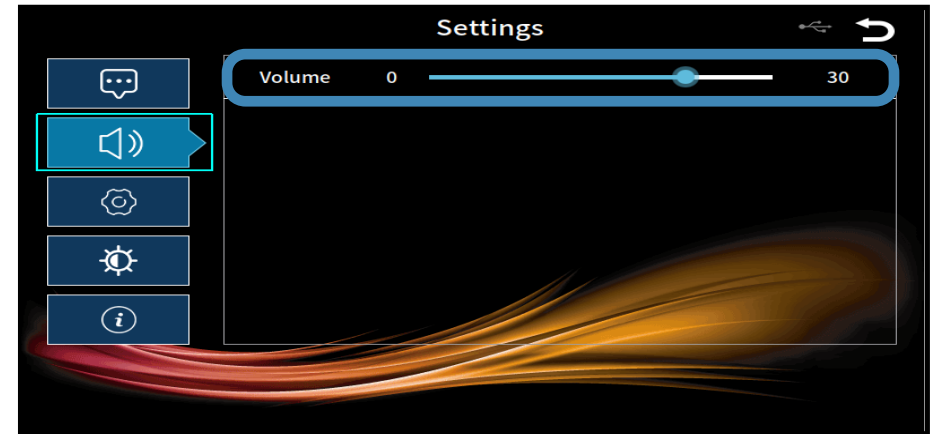


PIN CODE IS "0000". PLEASE FILL IN PIN CODE AND SELECT "PAIR". PLEASE SELECT "USE CARPLAY" AFTER PAIRING.

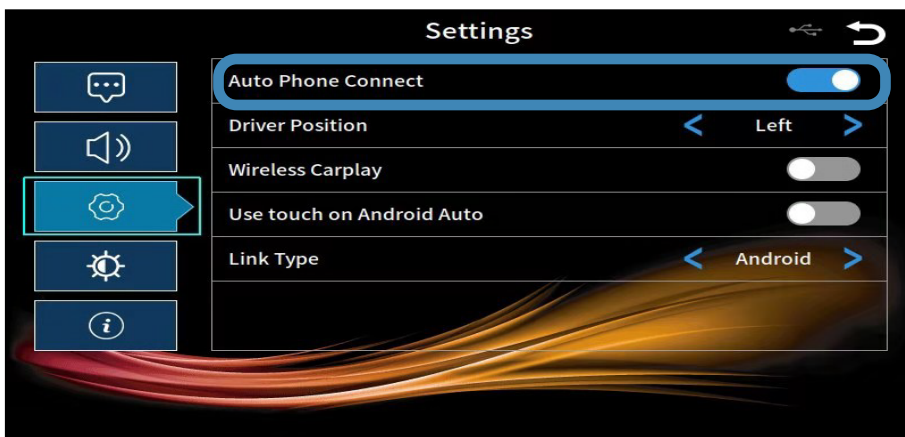
SETTING OF NETPLAY



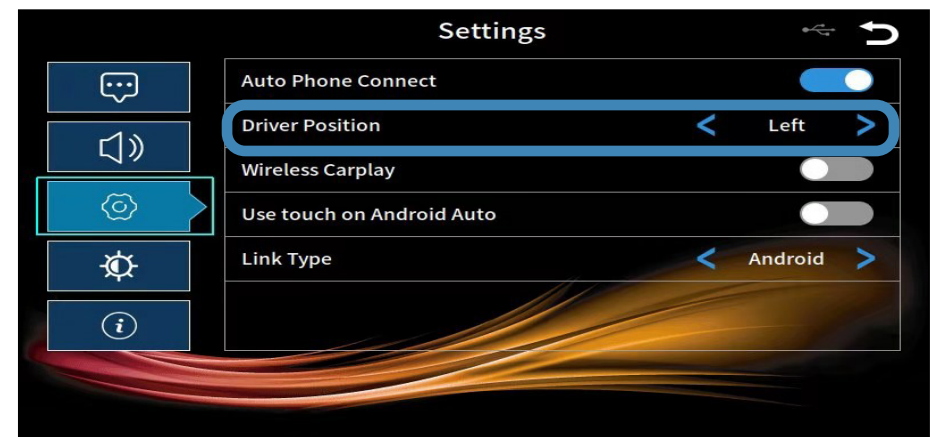
LANGUAGE SETTING



VOLUME SETTING

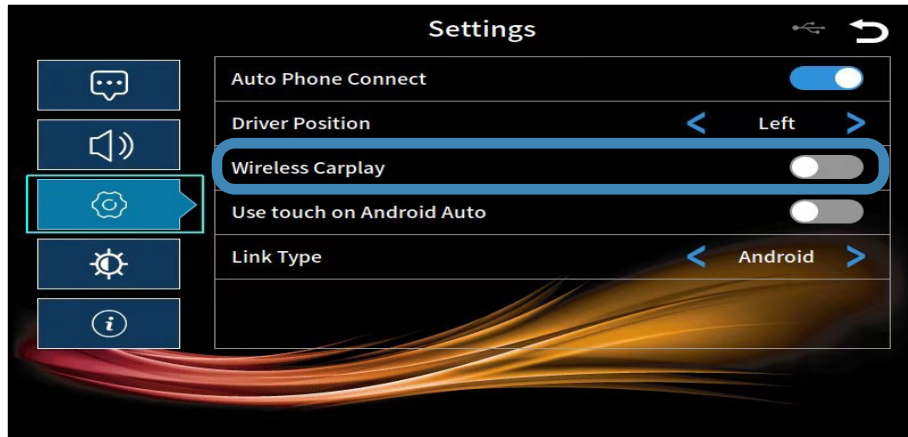


SELECT AUTO PHONE CONNECT TO CONNECT YOUR SMART PHONE AUTOMATICALLY

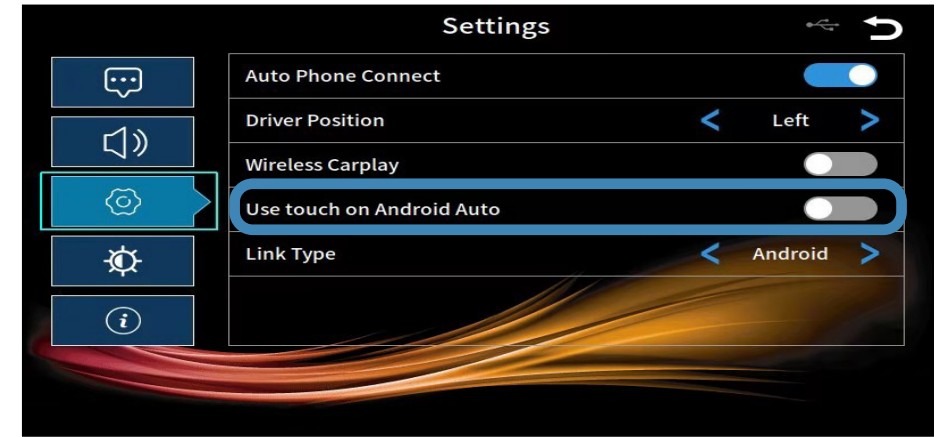


SELECT POSITION OF STEERING WHEEL (LEFT OR RIGHT) THEN BAR OF CARPLAY WILL CHANGED

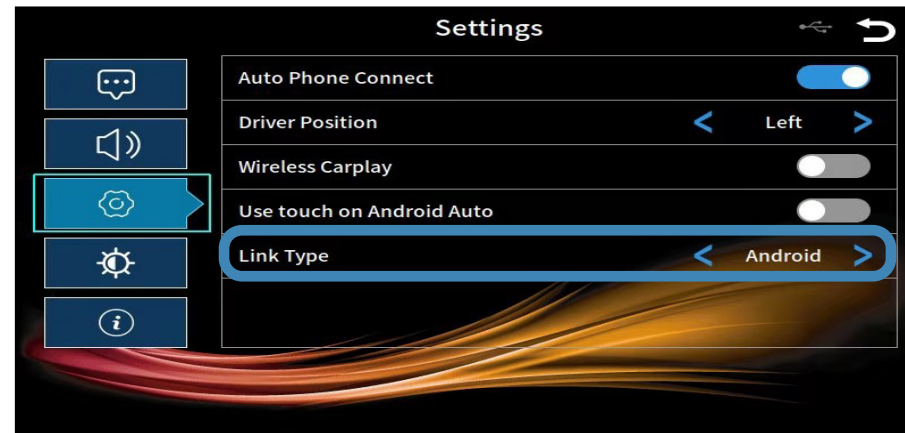
SETTING OF NETPLAY



SELECT WIRELESS CARPLAY “ON” TO ACTIVE WIRELESS CONNECTING

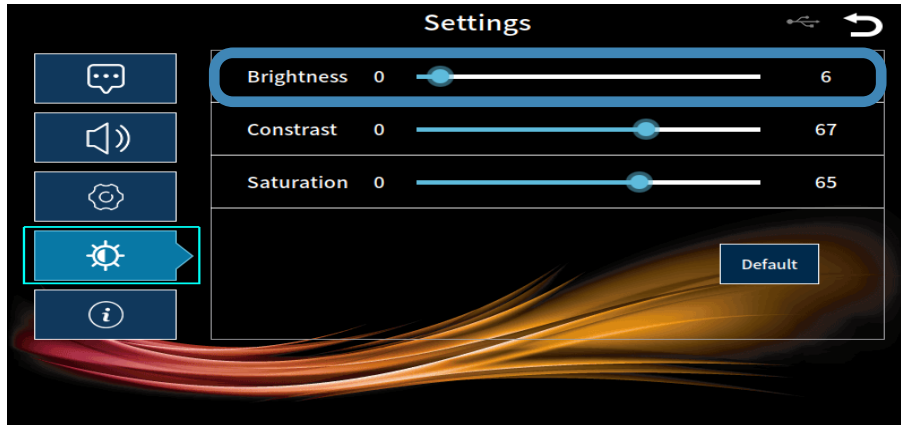


SELECT THIS FUNCTION “ON” WHEN YOU USE TOUCH SCREEN FOR ANDROID AUTO



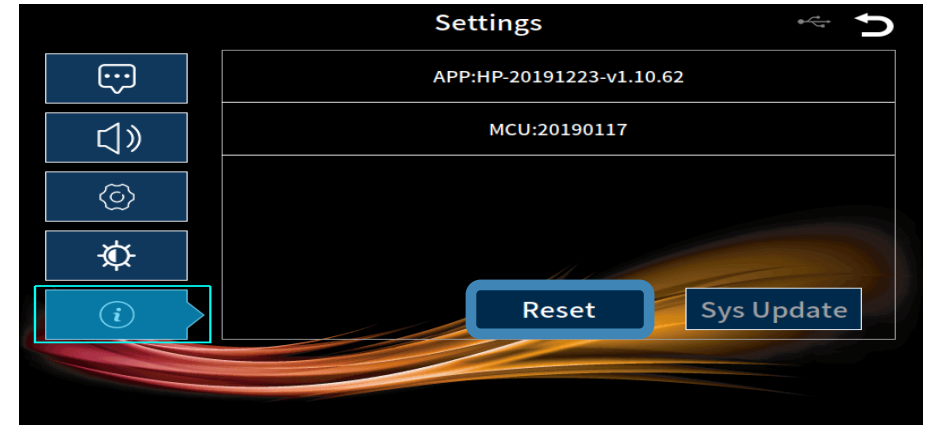
SELECT LINK TYPE

SETTING OF NETPLAY



BRIGHTNESS SETTING

IN NETPLAY MAIN MENU ONLY

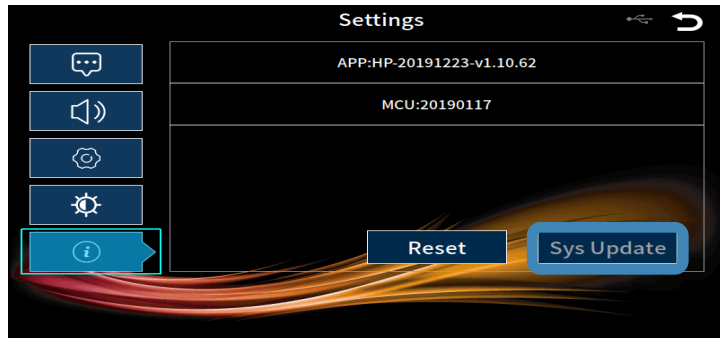


RESET & UPDATE NETPLAY



HOLD "RETURN" BUTTON OF IDRIVE CONTROLLER OVER 10S
IN NETPLAY MODE CAN RESET NETPLAY AS WELL.

UPDATE METHOD

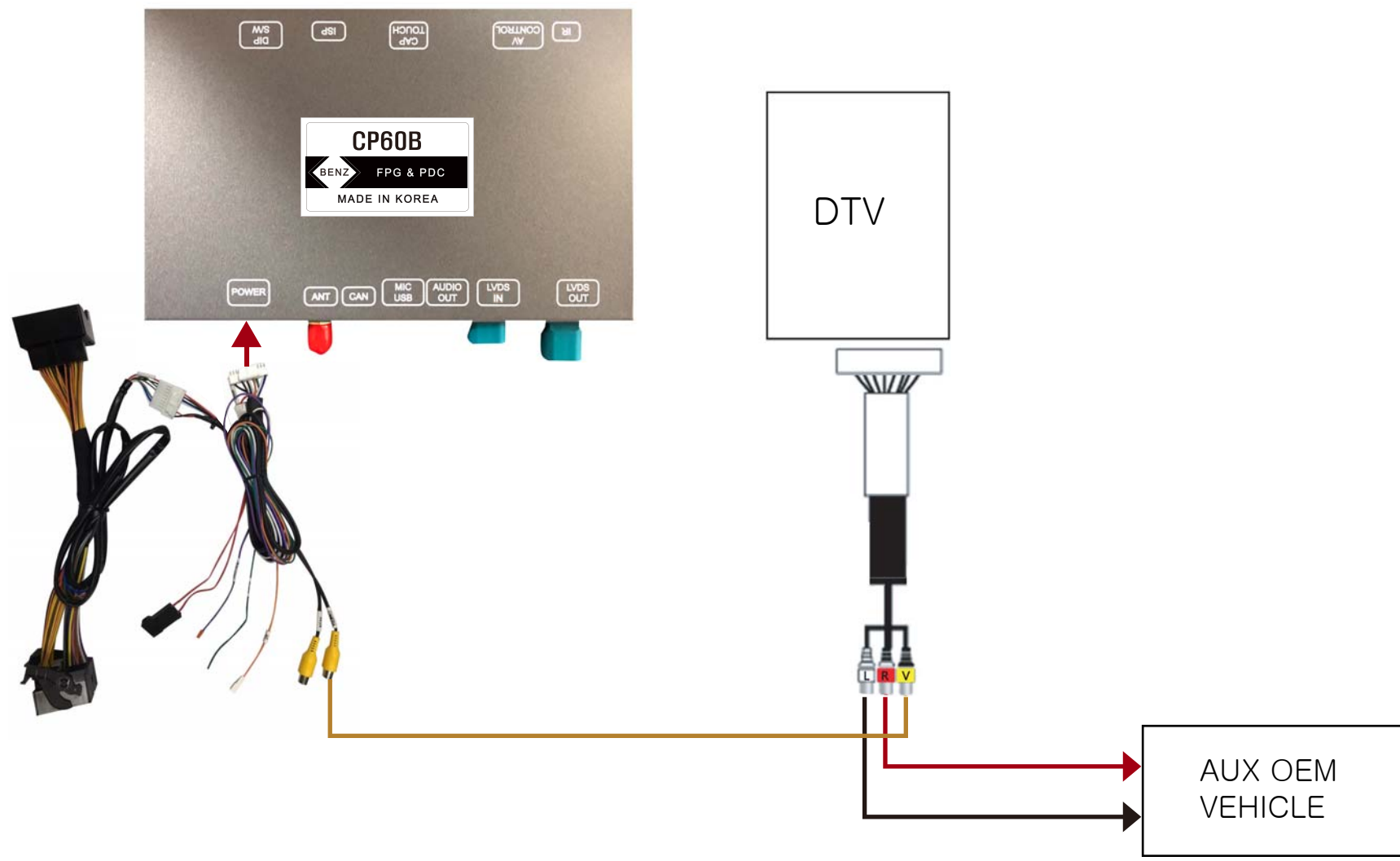


THERE ARE 2 WAYS TO UPDATE NETPLAY AS BELOW :

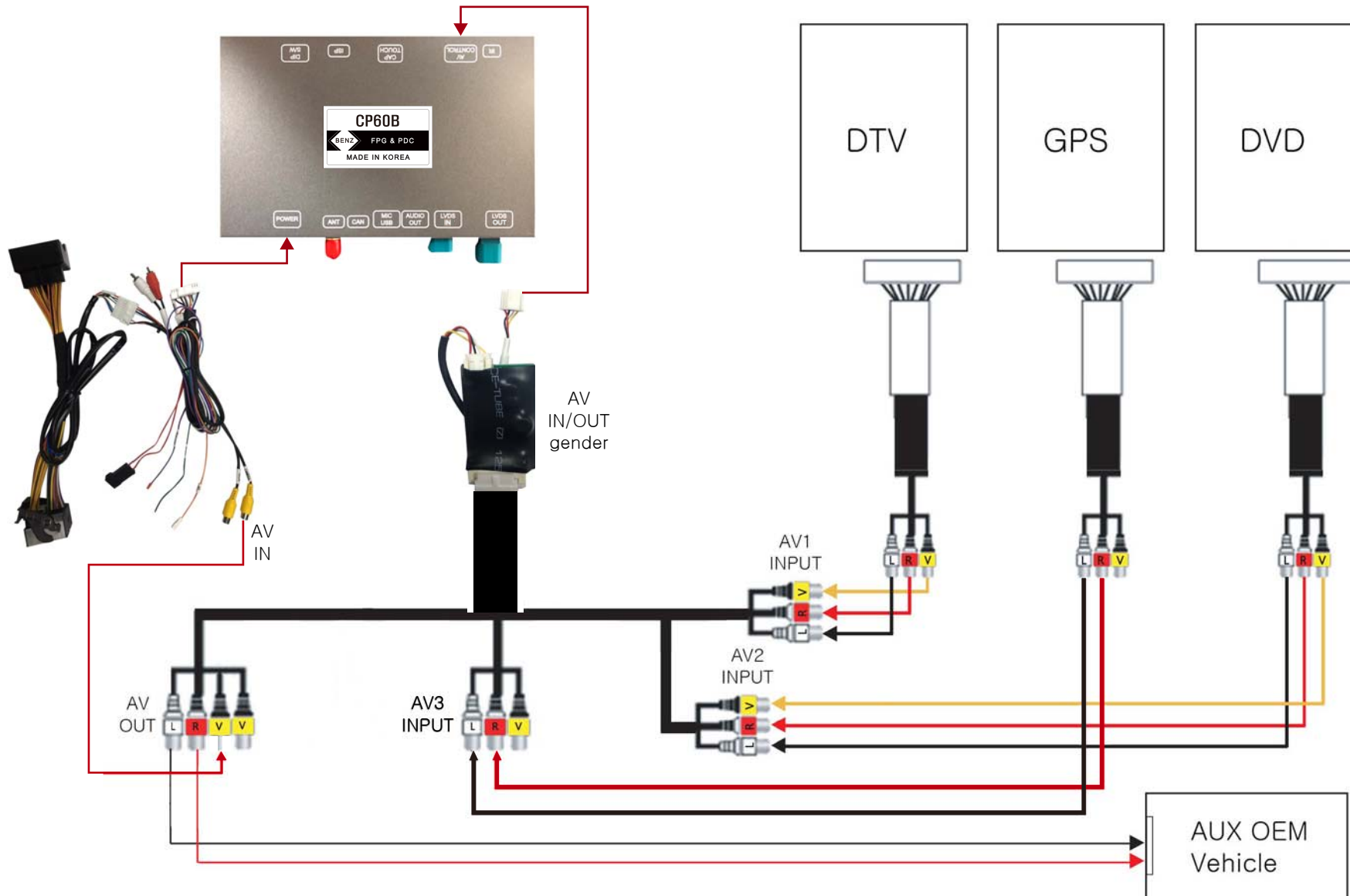
- 1) INSERT USB MEMORY CARD INTO USB PORT
- 2) CONNECT POWER CABLE
- 3) SCREEN WILL SHOW “UPDATING...” IN NETPLAY
- 4) NETPLAY WILL REBOOT ITSELF, THEN PLEASE DISCONNECT USB MEMORY CARD WHEN YOU SEE MAIN MENU

- 1) INSERT USB MEMORY CARD INTO USB PORT
- 2) ENTER TO SETTING OF NETPLAY
- 3) SELECT “SYS UPDATE”
- 4) NETPLAY WILL REBOOT ITSELF, THEN PLEASE DISCONNECT USB MEMORY CARD WHEN YOU SEE MAIN MENU

HOW TO CONNECT VIDEO AUDIO WHEN YOU ONLY USE ONE AV INPUT



HOW TO CONNECT VIDEO AUDIO WHEN YOU USE MORE THAN 2 AV INPUTS

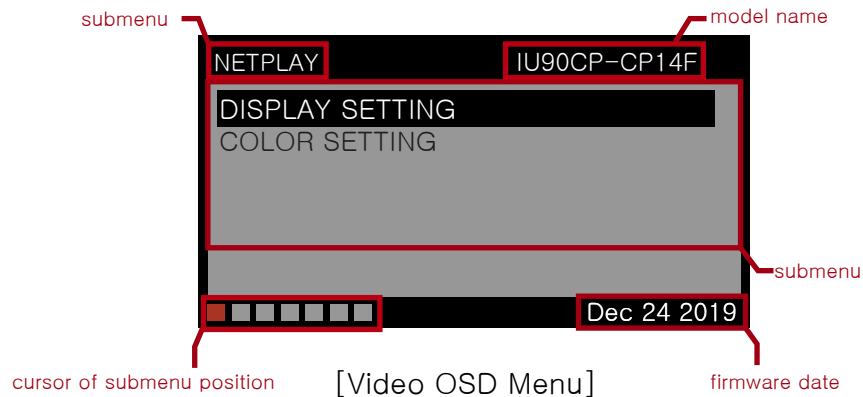


1. OSD MENU

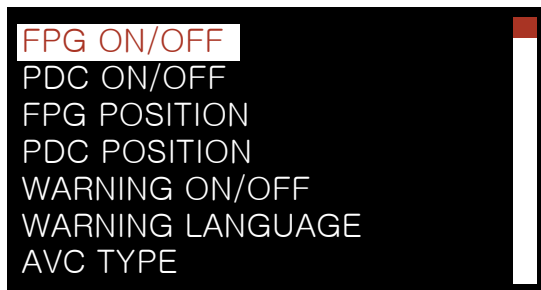
There are two types of OSD menu as followed pictures.

[Video OSD Menu] is use for setting NAVI, AV1/2/3, video of HDMI and detailed features.

[Rear OSD Menu] is use for setting detailed features of rear camera mode.



[Video OSD Menu]



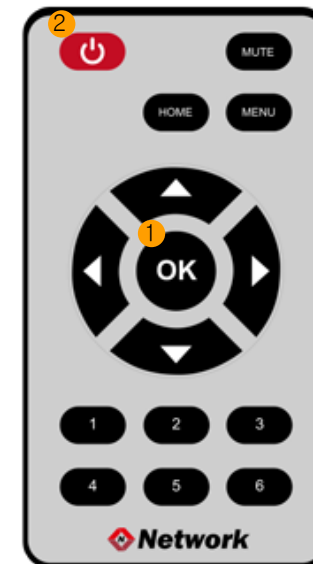
[Rear OSD Menu]

※ METHOD HOW TO ENTER TO OSD MENU ※

[Video OSD Menu] The method how to enter to Video OSD Menu is press ¹ button 4 times when in Navi, AV1, AV2, AV3, HDMI modes. Numbers will display per press on screen. Please press ² button to enter when the screen appear number 4.

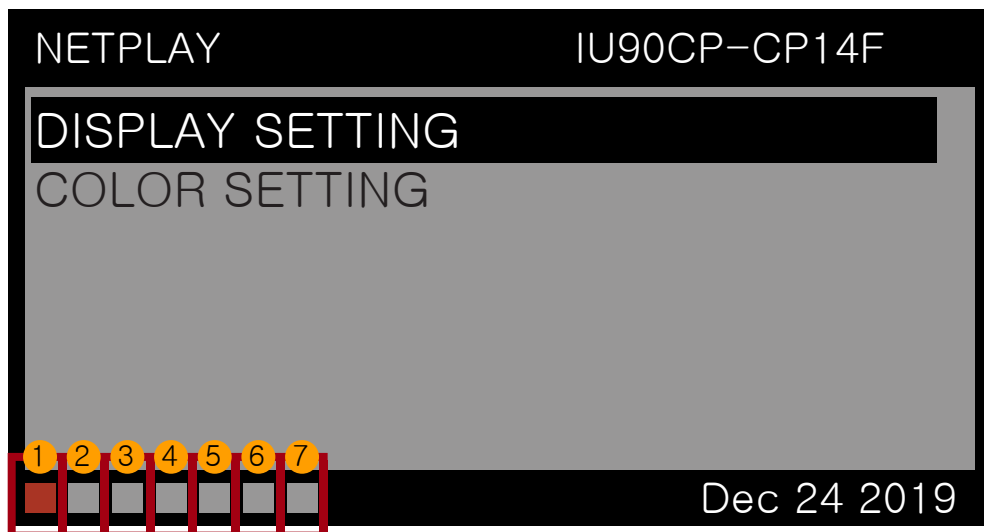
[Rear OSD Menu] The method how to enter to Rear OSD Menu is same as above method.

(Please put reverse gear to move the rear camera mode first.)



[INTERFACE R/C]

2. DETAILED FEATURES OF [OSD MENU]



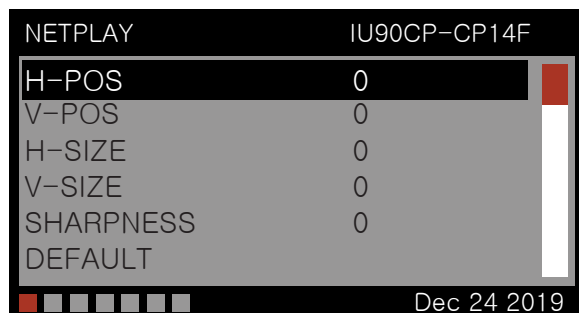
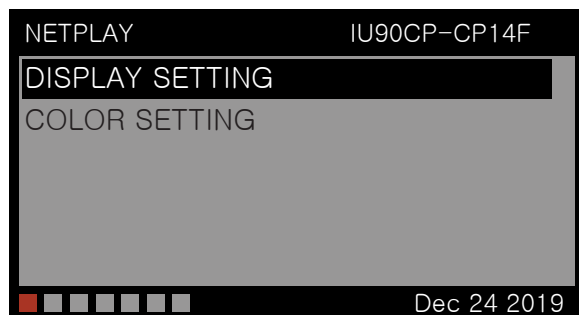
[NETPLAY SETTING]

- ① NETPLAY SETTING
- ② AV1 SETTING
- ③ AV2 SETTING
- ④ AV3 SETTING
- ⑤ FRONT CAMERA SETTING
- ⑥ INFORMATION
- ⑦ EXIT

2-1. NETPLAY

2-1(1). DISPLAY SETTING

These are adjustment functions for video output of GPS Box which can't compatible with Display screen size.

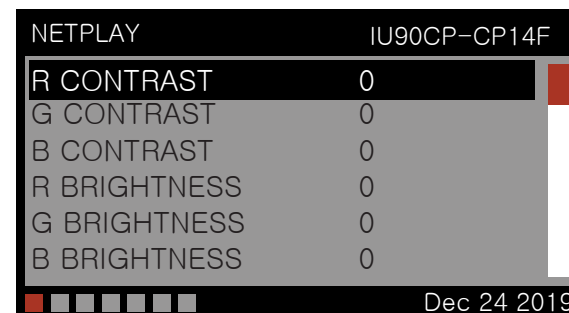
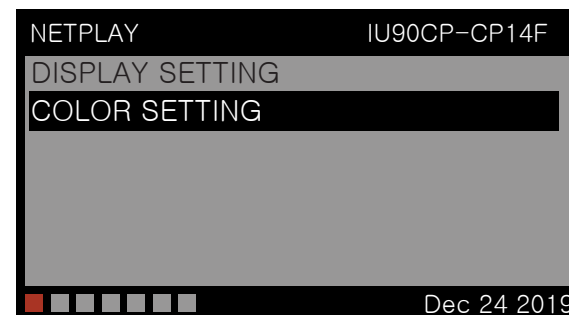


- H-POS : Horizontal movement
- V-POS : Vertical movement
- H-SIZE : Horizontal enlargement or reduction
- V-SIZE : Vertical enlargement or reduction
- SHARPNESS : adjust the sharpness
- DEFAULT : Initialization

2-1. NETPLAY

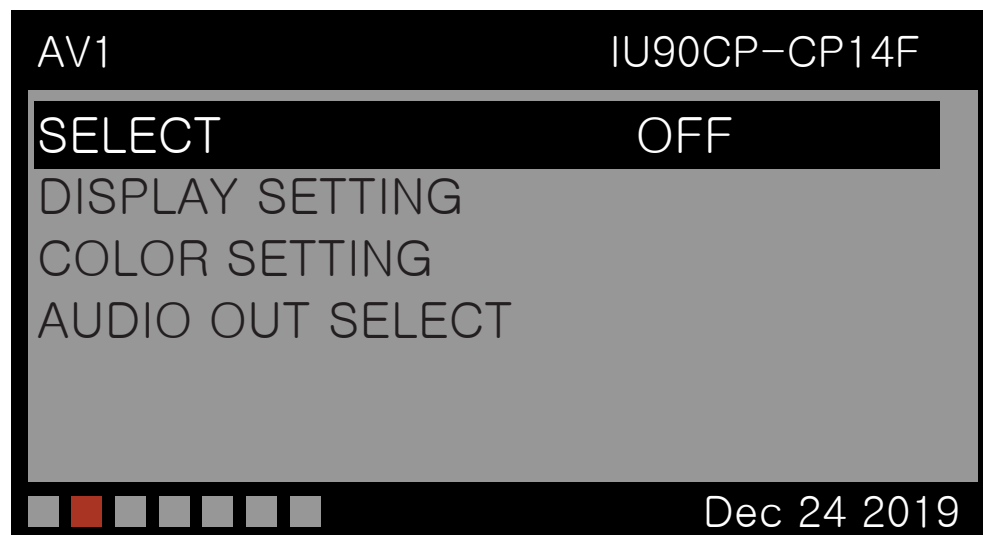
2-1(2). COLOR SETTING

These are adjustment function for video contrast and video brightness of GPS Box.



- R CONTRAST : adjust red of contrast
- G CONTRAST : adjust green of contrast
- B CONTRAST : adjust blue of contrast
- R BRIGHTNESS : adjust red of brightness
- G BRIGHTNESS : adjust green of brightness
- B BRIGHTNESS : adjust blue of brightness
- DEFAULT : Initialization

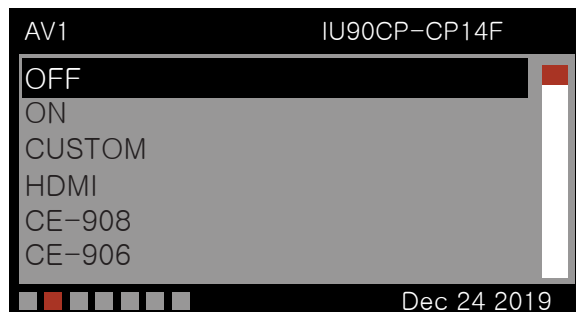
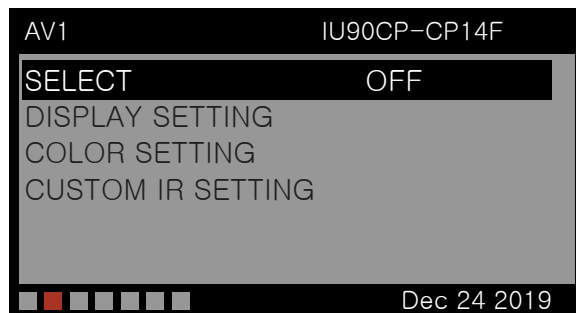
2-2. AV1(DTV)/ AV2(DVD)/AV3(RECORDER)



2-2. AV1(DTV)/ AV2(DVD)/ AV3(RECORDER)

2-2(1). SELECT

PLEASE USE AV MODES, OR SELECT CONNECTED DEVICE OF AV IN ORDER TO CONTROL.

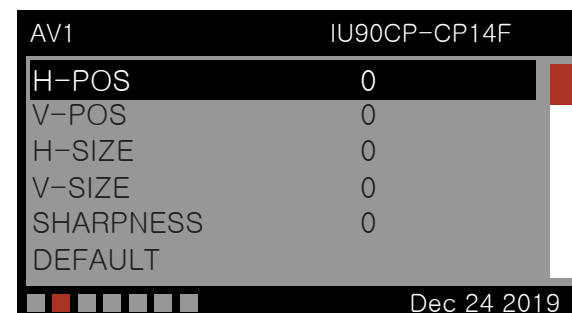
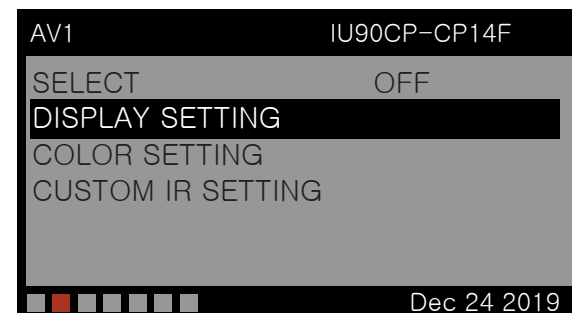


- OFF : DO NOT USE AV MODES
- ON : USE AV MODES
- CUSTOM : USE AV MODES AND CONTROL BY CUSTOM.
- MODEL LIST : USE AV MODES AND CONTROL SELECTED AV MODEL BY IR.

2-2. AV1(DTV)/ AV2(DVD)/ AV3(RECORDER)

2-2(2). DISPLAY SETTING

THESE ARE ADJUSTMENT FUNCTIONS FOR VIDEO OUTPUT OF AV WHICH CAN'T COMPATIBLE WITH DISPLAY SCREEN SIZE.

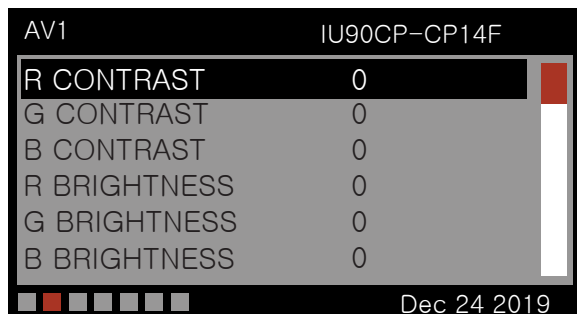
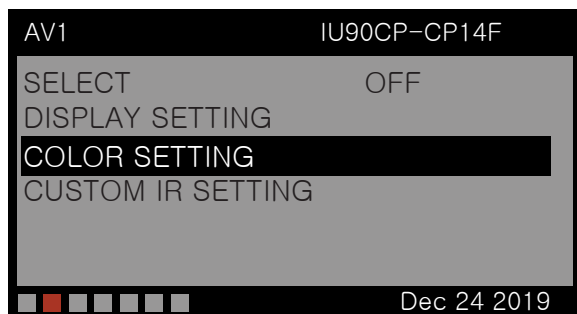


- H-POS : HORIZONTAL MOVEMENT
- V-POS : VERTICAL MOVEMENT
- H-SIZE : HORIZONTAL ENLARGEMENT OR REDUCTION
- V-SIZE : VERTICAL ENLARGEMENT OR REDUCTION
- SHARPNESS : ADJUST THE SHARPNESS
- DEFAULT : INITIALIZATION

2-2. AV1(DTV)/ AV2(DVD)/ AV3(RECORDER)

2-2(3). COLOR SETTING

THESE ARE ADJUSTMENT FUNCTIONS FOR VIDEO CONTRAST VIDEO BRIGHTNESS OF AV.

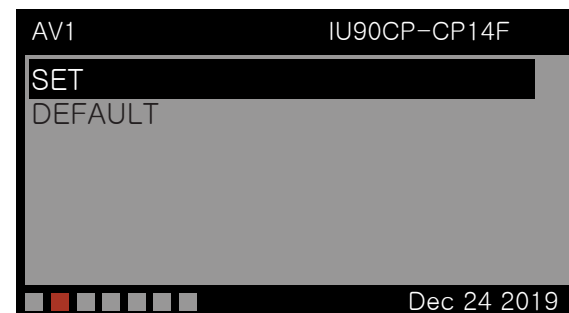
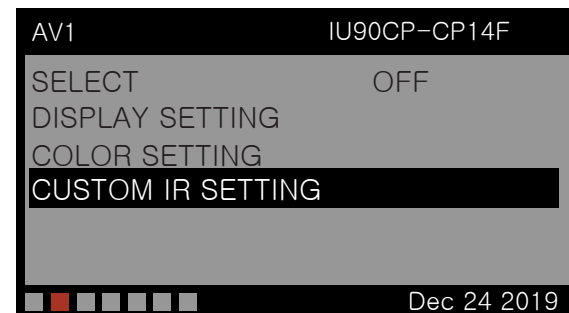


- R CONTRAST : ADJUST RED OF CONTRAST
- G CONTRAST : ADJUST GREEN OF CONTRAST
- B CONTRAST : ADJUST BLUE OF CONTRAST
- R BRIGHTNESS : ADJUST RED OF BRIGHTNESS
- G BRIGHTNESS : ADJUST GREEN OF BRIGHTNESS
- B BRIGHTNESS : ADJUST BLUE OF BRIGHTNESS
- DEFAULT : INITIALIZATION

2-2. AV1(DTV)/ AV2(DVD)/ AV3(RECORDER)

2-2(4). CUSTON IR SETTING

IN ORDER TO USE IR CONTROL WHICH MODEL CAN NOT SUPPORT ON [SELECT MENU]. USER CAN INPUT IR CODE BY THEMSELVES.

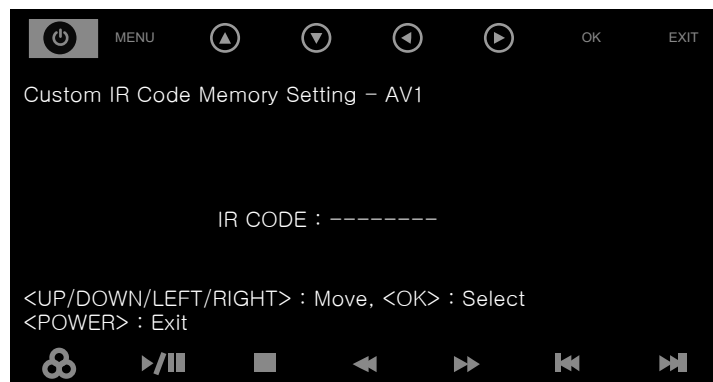


- SET : USERS CAN INPUT IR CODE BY THEMSELVES IN ORDER TO CONTROL CONNECTED AV INPUTS.
- DEFAULT : INITIALIZATION

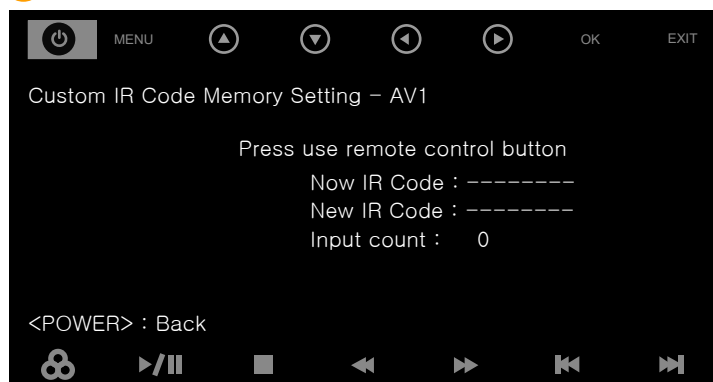
2-2. AV1(DTV)/ AV2(DVD)/ AV3(RECORDER)

2-2(5). CUSTON IR SETTING

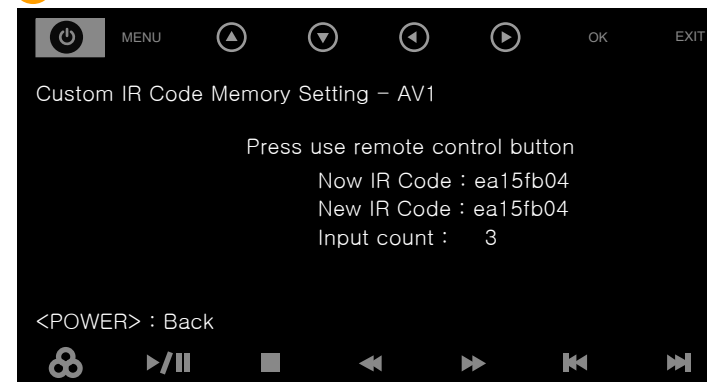
1 [ICON SELECT]



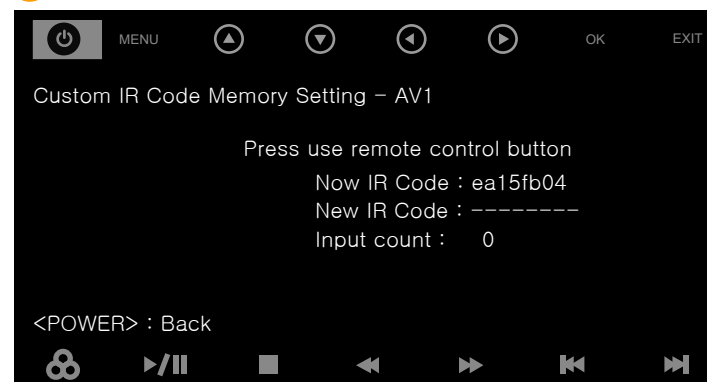
2 [IR CODE INPUT]



3 [IR CODE INPUT]



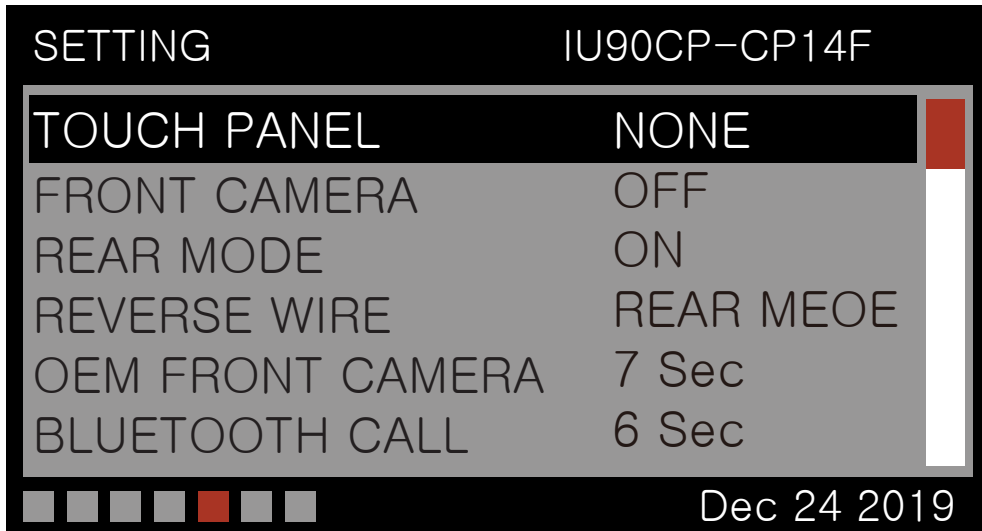
4 [IR CODE INPUT FINISHED]



- PLEASE SELECT THE SET MODE, IF SCREEN DISPLAY SAME AS ABOVE SCREENS. PLEASE SELECT ONE ICON AND INPUT YOUR IR CODE. NUMBERS WILL DISPLAY PER PRESS FM 1 TO 0 WHEN YOU FILL INRO IR CODE, IT WILL DISPLAY ON “NOW IR CODE”. IF YOU FINISH SETTING ALL ICONS YOU WANT. PLEASE PRESS BUTTON TO FINISH SETTING.

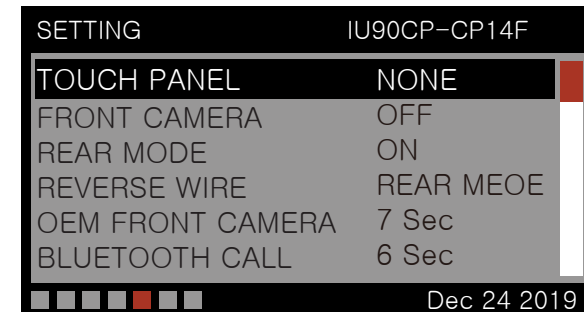
※PLEASE SELECT [CUSTOM], IN ORDER TO USE INPUT FUNCTIONS ON [CUSTOM]※

2-3. SETTING



2-3. SETTING

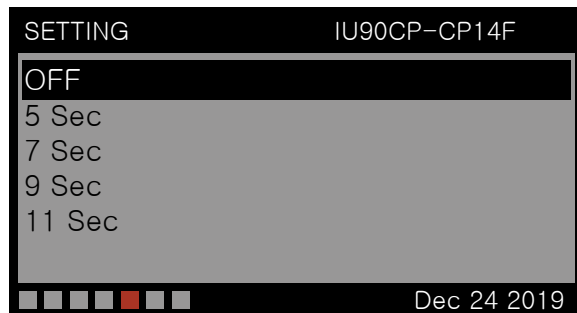
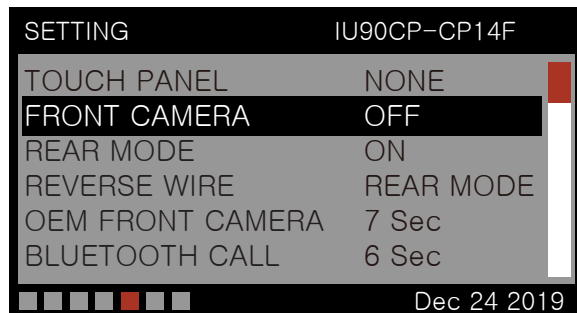
2-3(1). TOUCH PANEL



2-3. SETTING

2-3(2). FRONT CAMERA

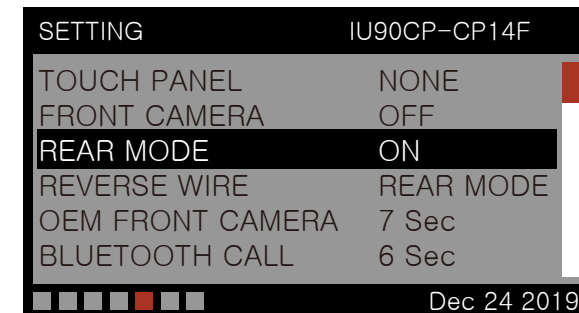
THIS SETTING FUNCTION USES FOR FRONT CAMERA.
 IT WILL DISPLAY REAR CAMERA INPUT WHEN PUT THE REVERSE GEAR. AND IT WILL DISPLAY FRONT CAMERA INPUT AUTOMATICALLY WHEN PUT BACK TO DRIVE GEAR.
 IT ALSO DISPLAY FRONT CAMERA INPUT AUTOMATICALLY FOR FEW SECONDS WHEN YOU ARE DRIVING.



- OFF : DO NOT USE FRONT CAMERA
- 5 Sec : DISPLAY FRONT CAMERA INPUT FOR 5 SECONDS
- 7 Sec : DISPLAY FRONT CAMERA INPUT FOR 7 SECONDS
- 9 Sec : DISPLAY FRONT CAMERA INPUT FOR 9 SECONDS
- 11 Sec : DISPLAY FRONT CAMERA INPUT FOR 11 SECONDS

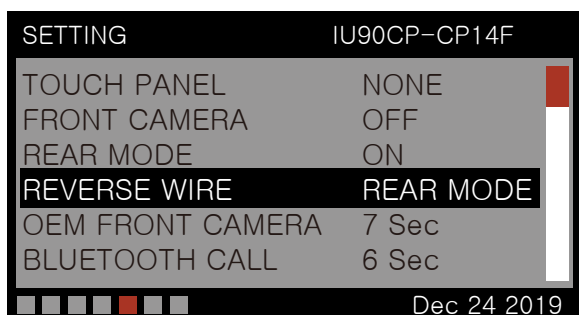
2-3. SETTING

2-3(3). REAR MODE



2-3. SETTING

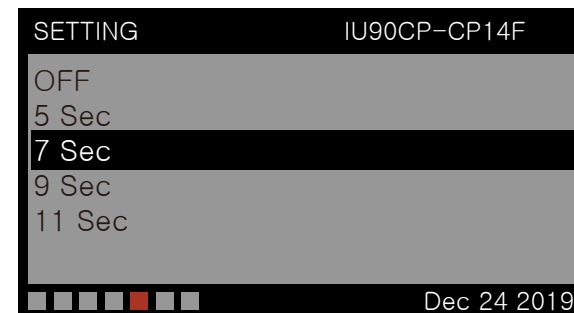
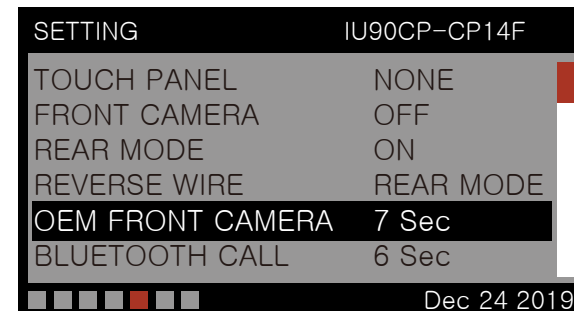
2-3(4). REVERSE WIRE



2-3. SETTING

2-3(5). OEN FRONT CAMERA

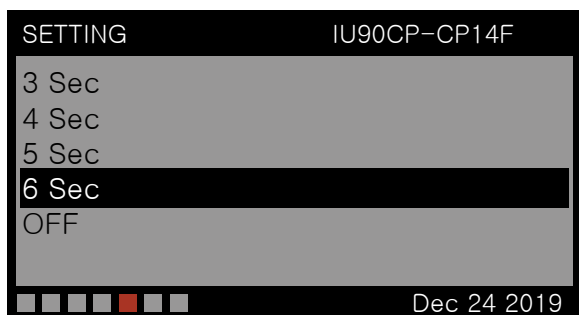
THESE ARE SETTING FUNCTIONS FOR USING FRONT CAMERA OF OEM.



- OFF : DO NOT USE FRONT CAMERA OF OEM
- 5 Sec : DISPLAY OEM FRONT CAMERA INPUT FOR 5 SECONDS
- 7 Sec : DISPLAY OEM FRONT CAMERA INPUT FOR 7 SECONDS
- 9 Sec : DISPLAY OEM FRONT CAMERA INPUT FOR 9 SECONDS
- 11 Sec : DISPLAY OEM FRONT CAMERA INPUT FOR 11 SECONDS

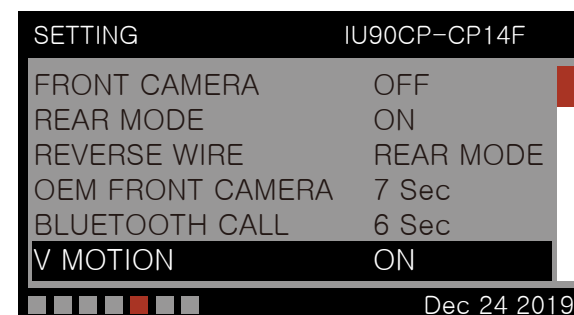
2-3. SETTING

2-3(6). BLUETOOTH CALL



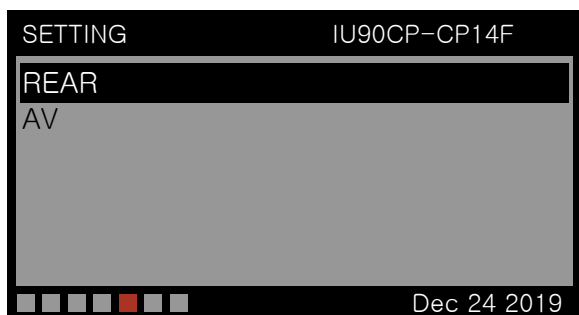
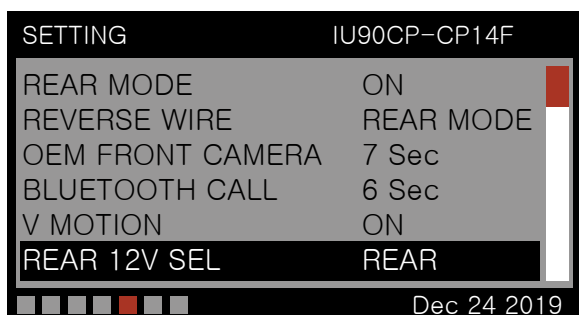
2-3. SETTING

2-3(7). V MOTION



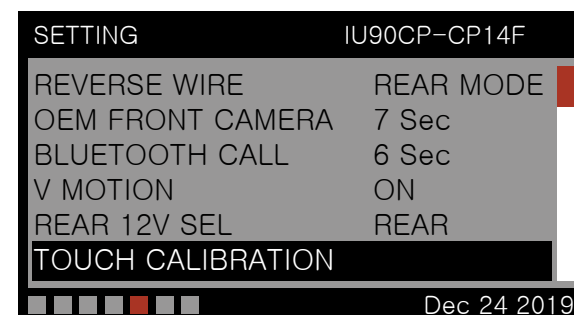
2-3. SETTING

2-3(8). REAR 12V SEL



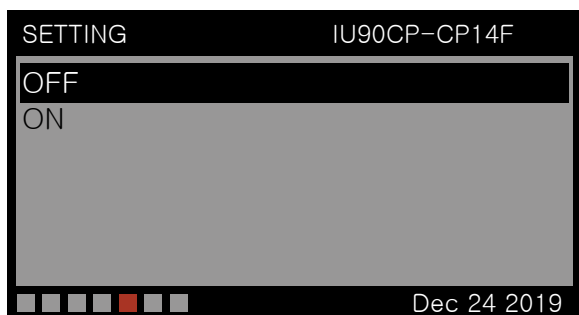
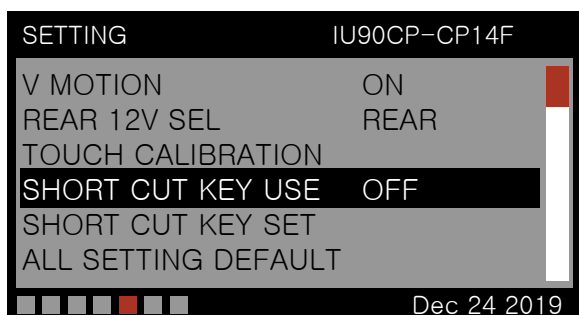
2-3. SETTING

2-3(9). TOUCH CALIBRATION



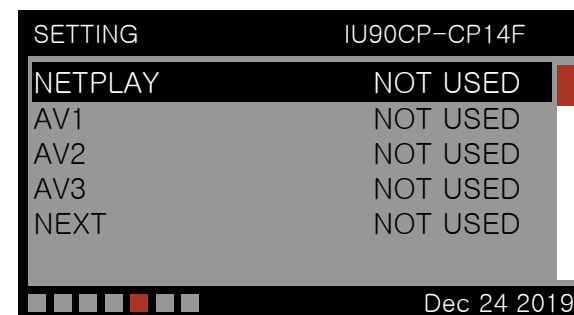
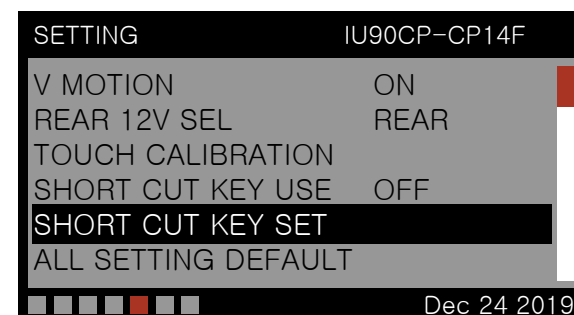
2-3. SETTING

2-3(10). SHORT CUT KEY USE



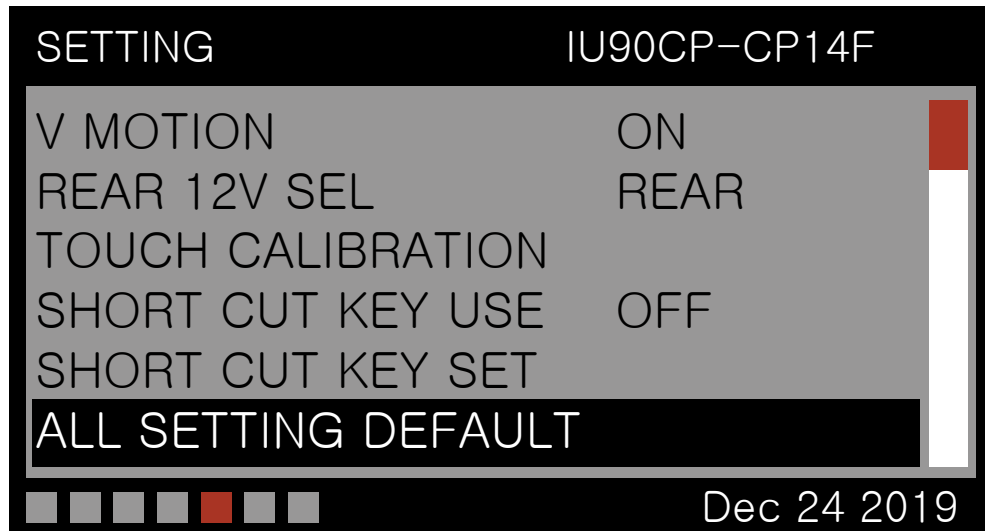
2-3. SETTING

2-3(11). SHORT CUT KEY SET

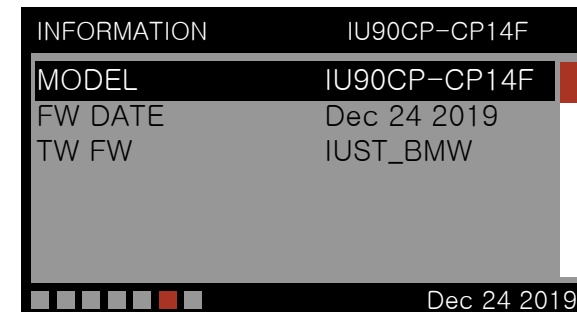


2-3. SETTING

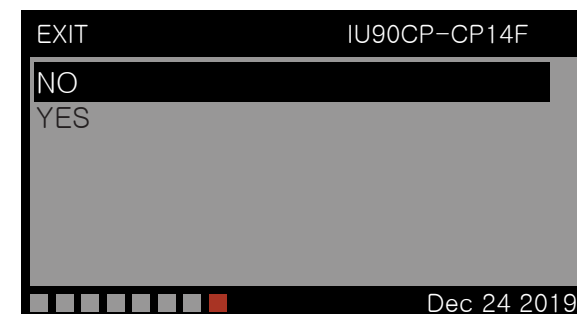
2-3(12). ALL SETTING DEFAULT



2-4. INFORMATION



2-5. EXIT



※ METHOD HOW TO ENTER TO OSD MENU ※

[Video OSD Menu] The method how to enter to Video OSD Menu is press ¹ **OK** button for 4times by R/C, on Navi, AV1, AV2, AV3, HDMI modes. numbers will display per press on screen. Finally, Please press ² **Power** button to enter when the screen appear number 4.

[Rear OSD Menu]The method how to enter to Rear OSD Menu is same as aboce method.

(pulting reverse gear to move the rear camera mode.)

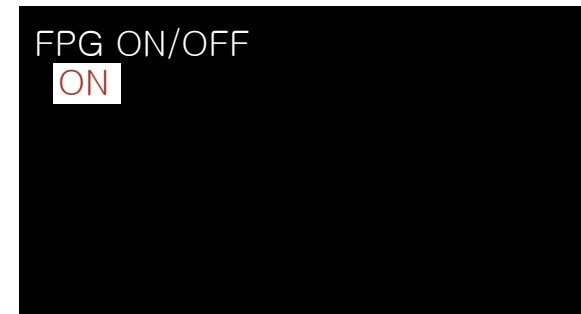
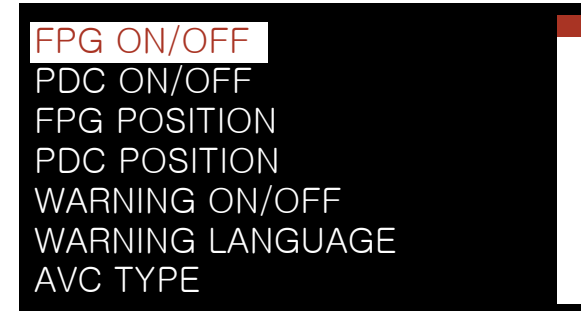


[INTERFACE R/C]

3. REAR OSD DETAILED FEATURES

3-1. FPG ON/OFF

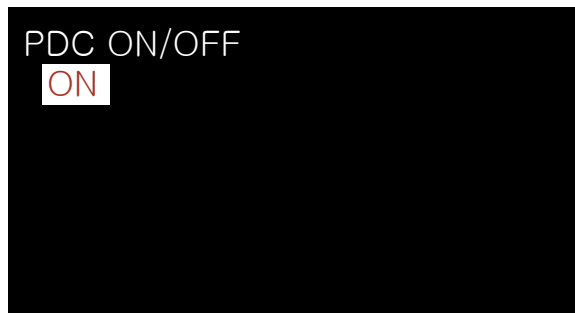
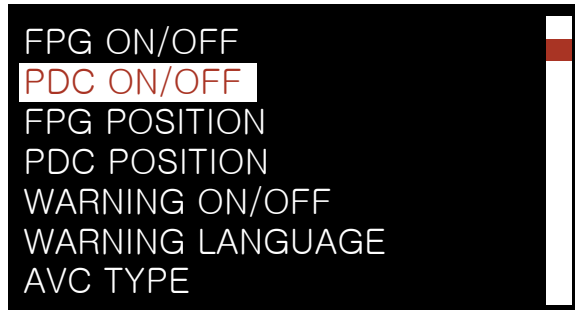
SETTING FPG LINE ON/OFF.



- ON : DISPLAY FPG LINE
- OFF : DO NOT DISPLAY FPG LINE

3-2. PDC ON/OFF

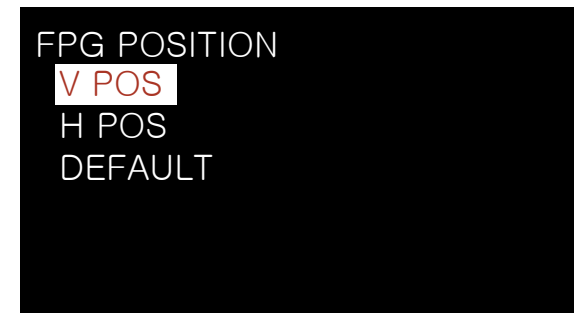
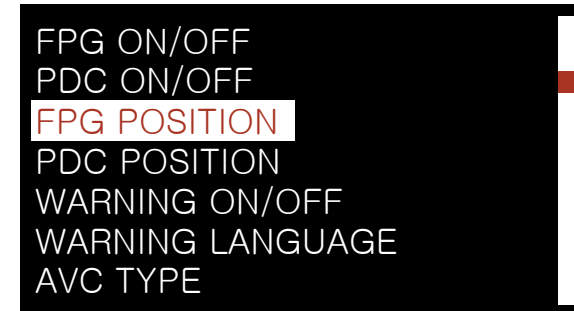
SETTING PDC ON/OFF.



- ON : DISPLAY PDC
- OFF : DO NOT DISPLAY PDC

3-3. FPG POSITION

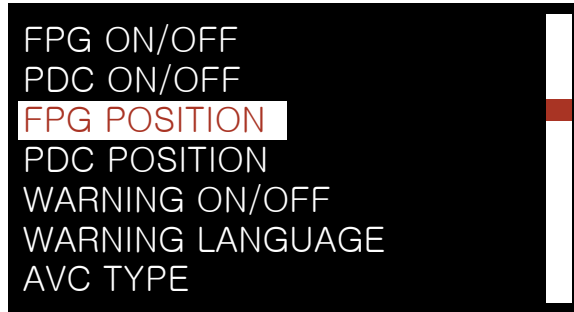
ADJUST THE POSITION OF FPG LINE.



- V POS : MOVE VERTICAL DIRECTION OF FPG LINE
- H POS : MOVE HORIZONTAL DIRECTION OF FPG LINE
- DEFAULT : INITIALIZATION

3-4. PDC POSITION

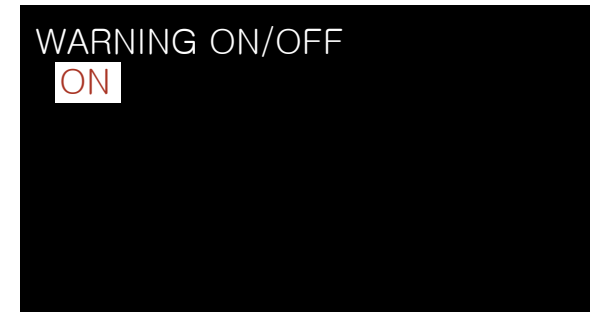
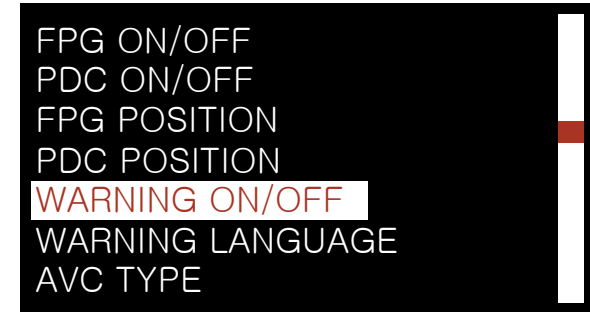
ADJUST THE POSITION OF PDC.



- RIGHT TOP : PDC DISPLAY ON THE UPPER RIGHT OF SCREEN
- LEFT TOP : PDC DISPLAY ON THE UPPER LEFT OF SCREEN

3-5. WARNING ON/OFF

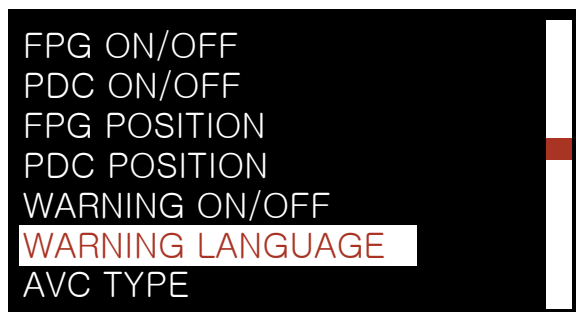
SETTING WARNING ON/OFF.



- ON : DISPLAY REAR WARNING
- OFF : DO NOT DISPLAY REAR WARNING

3-6. WARNING LANGUAGE

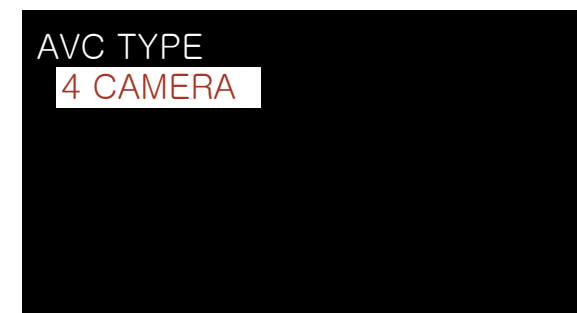
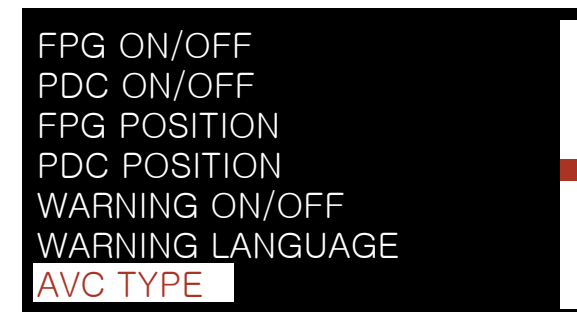
SETTING WARNING LANGUAGE.



- ENGLISH
- KOREAN
- CHINESE

3-7. AVC TYPE

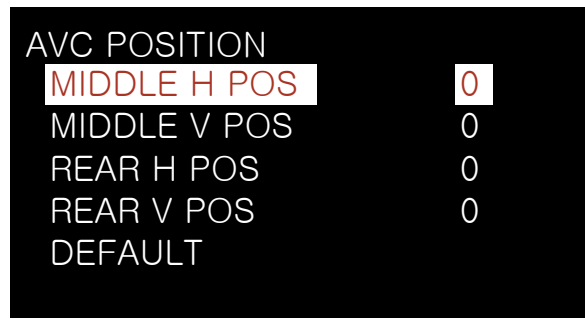
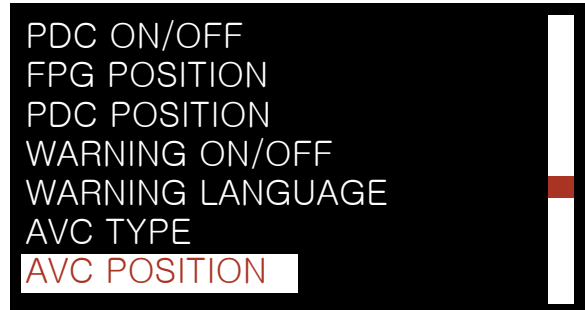
SETTING AROUND VIEW MODE.



- OFF : DO NOT USE AROUND VIEW MODE
- OMNIVUE : USE AROUND VIEW BY OMNIVUE
(SUPPORT AROUND VIEW PARKING LINE)
- 4 CAMERA : USE AROUND VIEW BY CHINESE 4 CAMERA
(SUPPORT AROUND VIEW PARKING LINE)

3-8. AVC POSITION

ADJUST THE POSITION OF AROUND VIEW LINE.



- MIDDLE H POS : ADJUST SIDE LINE HORIZONTAL POSITION ON AVC
- MIDDLE V POS : ADJUST SIDE LINE VERTICAL POSITION ON AVC
- REAR H POS : ADJUST REAR LINE HORIZONTAL POSITION ON AVC
- REAR V POS : ADJUST REAR LINE VERTICAL POSITION ON AVC
- DEFAULT : INITIALIZATION

3-9. AVC TIME

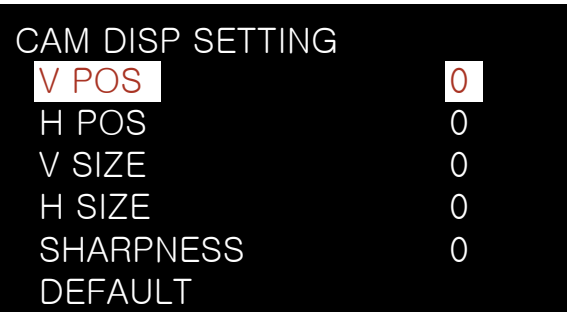
THESE ARE SETTING METHOD WHEN USING AVC.
IT WILL DISPLAY AVC WHEN PUT THE REVERSE GEAR, AND IT WILL STILL ACTIVE FOR PRE-DIFINED AMOUNT OF TIME, ONCE VEHICLE LEAVES REVERSE GEAR..



- MIN : SETTING FOR MINUTES
- SEC : SETTING FOR SECONDS
- DEFAULT : INITIALIZATION

3-10. CAM DISP SETTING

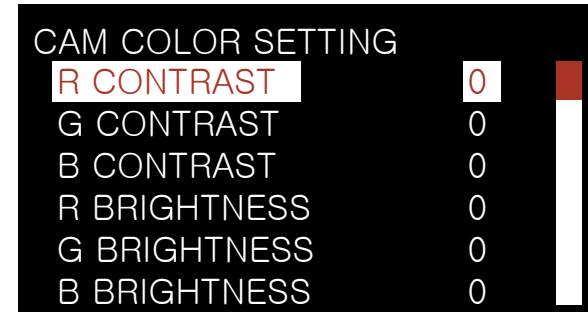
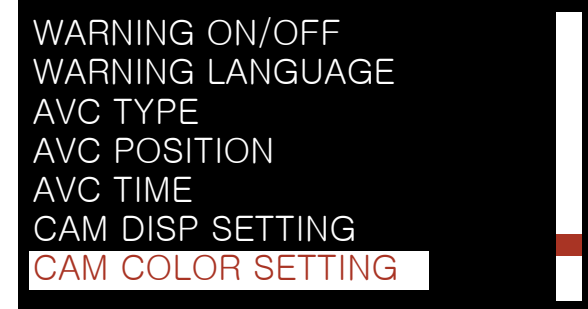
THESE ARE ADJUSTMENT FUNCTIONS FOR VIDEO OUTPUT OF REAR CAMERA WHICH CAN'T COMPATIBLE WITH DISPLAY SCREEN SIZE.



- V POS : VERTICAL MOVEMENT
- H POS : HORIZONTAL MOVEMENT
- V SIZE : VERTICAL ENLARGEMENT OR REDUCTION
- H SIZE : HORIZONTAL ENLARGEMENT OR REDUCTION
- SHARPNESS : ADJUST THE SHARPNESS
- DEFAULT : INITIALIZATION

3-11. CAM COLOR SETTING

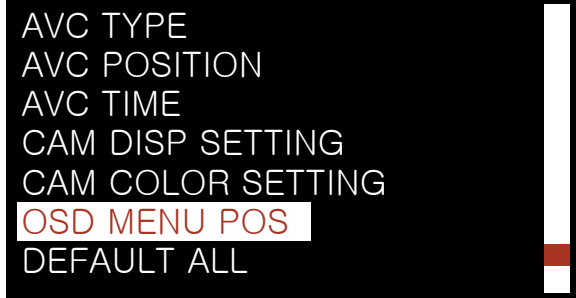
THESE ARE ADJUSTMENT FUNCTIONS FOR VIDEO CONTRAST AND VIDEO BRIGHTNESS OF GPS BOX.



- R CONTRAST : ADJUST RED OF CONTRAST
- G CONTRAST : ADJUST GREEN OF CONTRAST
- B CONTRAST : ADJUST BLUE OF CONTRAST
- R BRIGHTNESS : ADJUST RED OF BRIGHTNESS
- G BRIGHTNESS : ADJUST GREEN OF BRIGHTNESS
- B BRIGHTNESS : ADJUST BLUE OF BRIGHTNESS
- DEFAULT : INITIALIZATION

3-12. OSD MENU POS

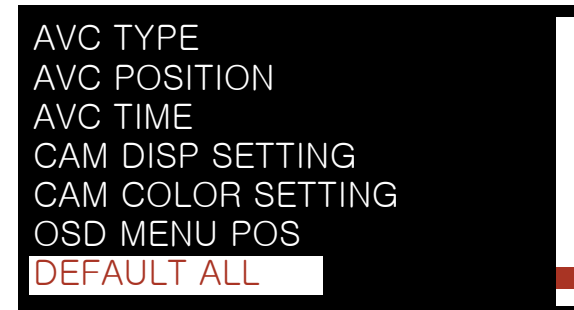
THESE ARE ADJUSTMENT FUNCTIONS FOR MOVING POSITION OF OSD MENU. IT WILL BE USED WHEN OVERSHADOWED SETTING IMPOSSIBLE.



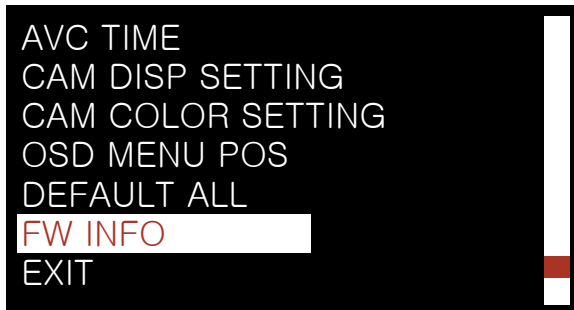
- RIGHT TOP : OSD MENU DISPLAY ON UPPER RIGHT OF SCREEN
- LEFT TOP : OSD MENU DISPLAY ON UPPER LEFT OF SCREEN

3-13. DEFAULT ALL

INITIALIZE ALL MODES OF REAR OSD MENU SETTING.



3-14. FW INFO



3-15. EXIT

INITIALIZE ALL MODES OF REAR OSD MENU SETTING.

