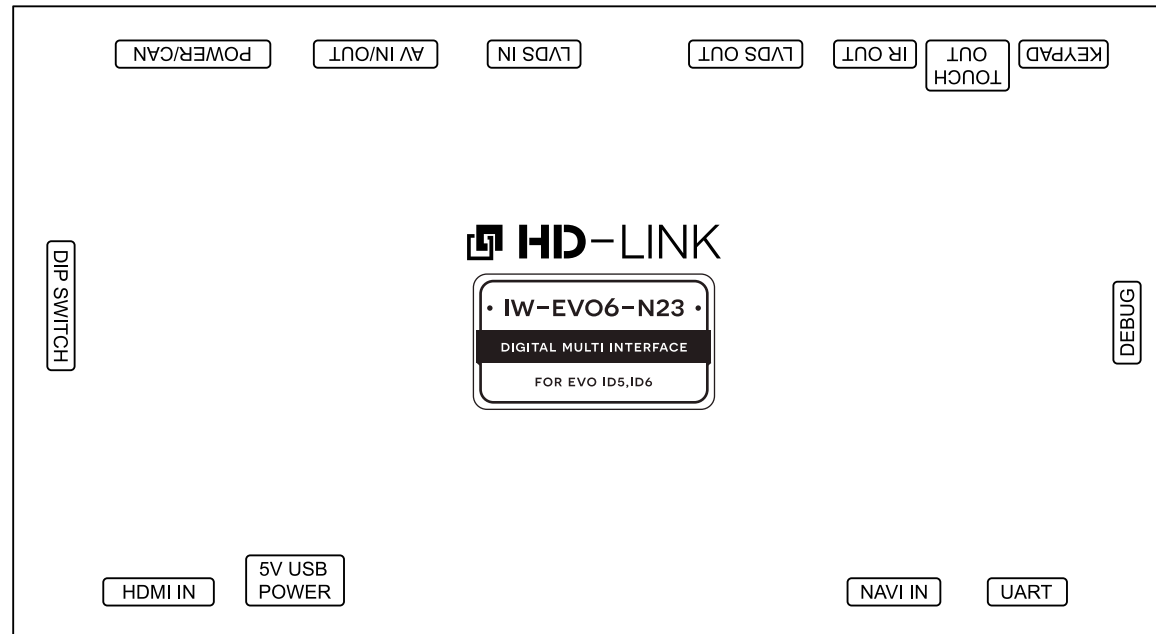


Instruction Manual

High-Definition Link for EVO ID5,ID6 With OEM Touch

IW-EVO6-N23



Model Name	IW-EVO6-N23
Latest Firmware Date	2019 - 01 - 31
Manual Version	Rev. 1.8
Language	English

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- DVB-T Connection Diagram _____ 
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- Settings HDMI _____ 
- Settings HDMI, NAVIGATION _____ 
- Settings REAR VIEW _____ 
- Settings REAR VIEW _____ 
- Settings AV1 (FRONT VIEW) **(OEM Camera delay time setting)** _____ 
- Settings AV2 (DVBT) _____ 
- Settings CUSTOM _____ 

Precautions

- **IW-EVO6-N23 - related**

You should check the names and colors of each wires exactly, before you connect the wires.

ex) CAN HIGH: White wires / CAN LOW: Blue wires

The 'POWER / CAN Cable' should always be connected last and be disconnected first.

The 'Mode Switch' is an optional part to change modes forcibly without CAN-BUS.

Generally, the CAN-BUS wires are connected for changing modes by original buttons.

When the reverse gear is not detected by CAN-BUS,

the 'REVERSE 12V IN wire' should be spliced with 1 2V power of reverse light.

- **HDMI Device-related**

HDMI mode accepts general-screen resolution of HDMI devices.

Generally, '5V 1A Power output(5V USB POWER)' is a standard voltage for charging smartphone.

If you need higher voltage than 5V, you should add a separate power supply.

- **Navigation(GPS) box - related**

When you connect the power wires(B+, ACC) to the navigation(GPS) box,

the 'NAVI 12V OUT' wire supported by IW-EVO6-N23 should be spliced with an ACC wire of navigation box.

The navigation box should be powered off before unplugging the HDMI cable.

Car Compatibility Chart

Car Models	Production Year	Specific Models
5 Series (G30)	2017 -	- NBT EVO i-Drive6 OEM Touch
6 Series (G32)	2017 -	- NBT EVO i-Drive6 OEM Touch
7 Series (G11)	2016 -	- NBT EVO i-Drive5, i-Drive6 OEM Touch



2017 BMW 5Series G30 (ID6)



2016 BMW 7Series G10 (ID5)

Car Models	Production Year	Specific Models
X3 (G01)	2017 -	- NBT EVO i-Drive6 OEM Touch
X5 (F15)	2017 -	- NBT EVO i-Drive6,i-Drive5 OEM Touch
X6 (F16)	2017 -	- NBT EVO i-Drive6,i-Drive5 OEM Touch



2017 5Series G30



2017 6Series G32



2016 7Series G10



2017 X3 G01



2017 X5 F15

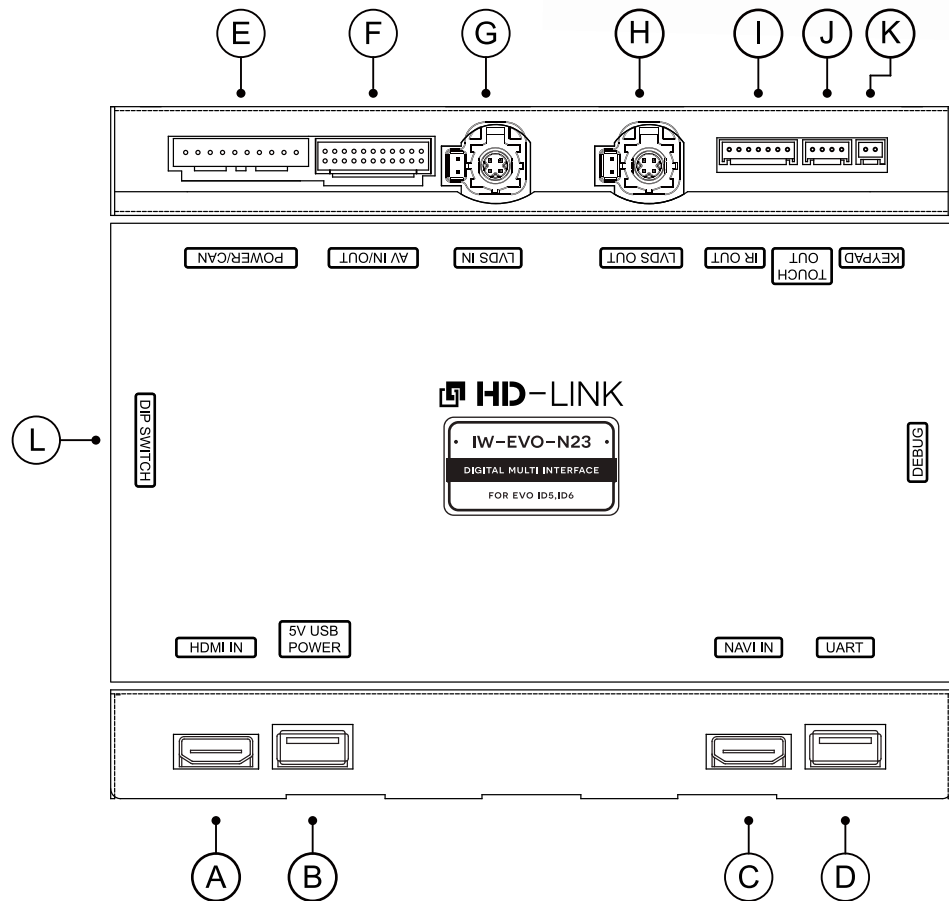


2017 6Series F16

Dimension



Exterior



- (A) HDMI IN
- (B) 5V USB POWER
- (C) NAVI IN
- (D) UART

- (E) POWER/CAN
- (F) AV IN/OUT
- (G) LVDS IN
- (H) LVDS OUT
- (I) IR OUT
- (J) TOUCH OUT
- (K) KEY PAD
- (L) DIP SWITCH

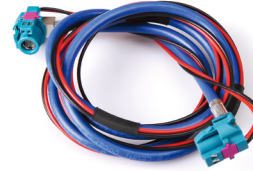
Components



1. Quadlock Connector



2. Power Cable



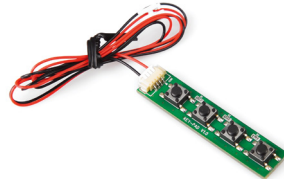
3. LVDS Cable



4. AV Cable



4. IR Cable



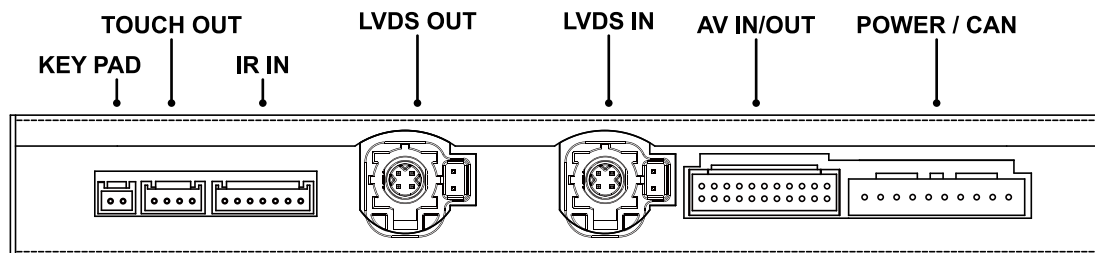
5. KEYPAD

Optional Parts (sold separately at the indiwork)

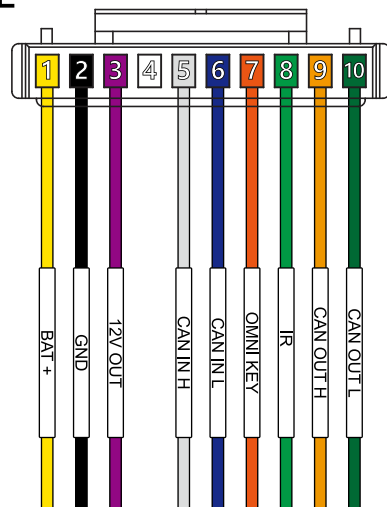


Extend LVDS Cable

Body Connector specifications

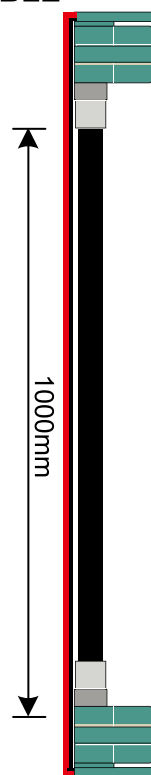


POWER / CAN CABLE

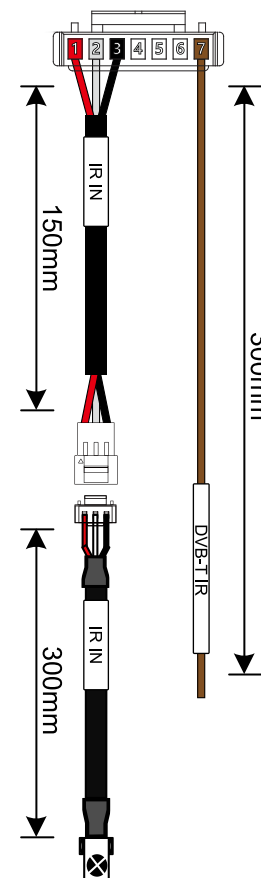


POWER / CAN CABLE			
1	BATTERY POWER INPUT	2	GROUND INPUT
3	12V(ACC) OUT	4	N.C.
5	CAN IN HIGH	6	CAN IN LOW
7	OMNI KEY	8	IR
9	CAN OUT HIGH	10	CAN OUT LOW

LVDS OUT CABLE

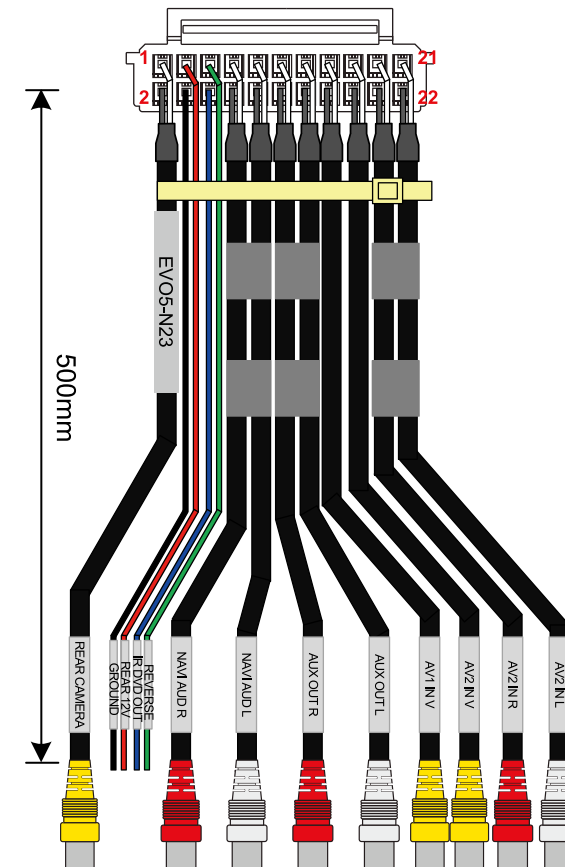


IR CABLE



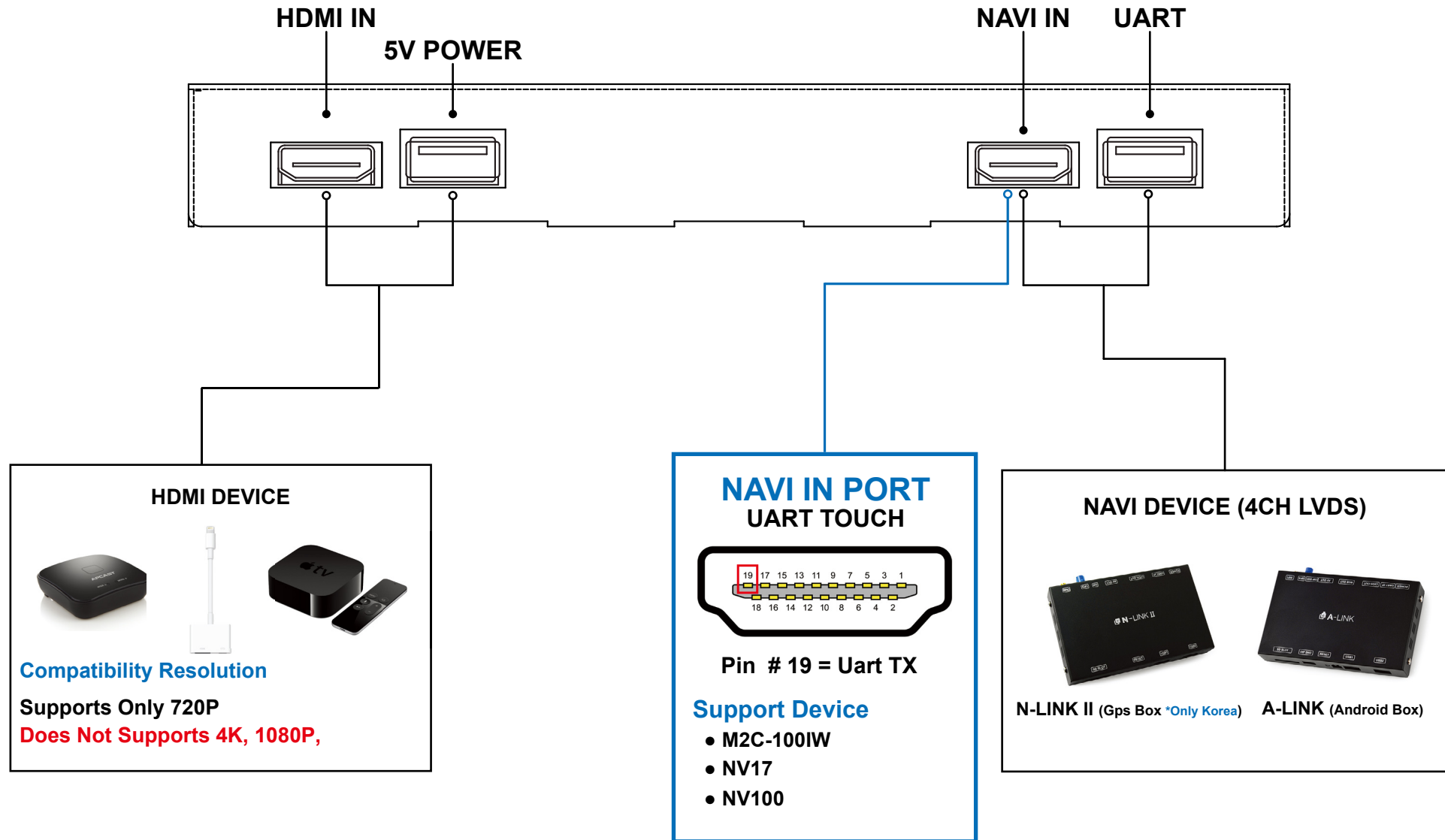
IR CABLE	
1	POWER
2	SIGNAL
3	GROUND
4	
5	
6	
7	DVB-T IR

AV CABLE



AV CABLE			
1	REAR CAMERA	2	NAVI_IN_R_GND
3	NAVI_IN_L	4	NAVI_IN_L_GND
5	AUX_OUT_R	6	AUX_OUT_R_GND
7	AUX_OUT_L	8	AUX_OUT_L_GND
9	CAP_SCL	10	CAP_GND
11	CAP_SDA	12	CAP_VDD_3.3V
13	CAP_INT	14	CAP_RST
15	UART_TX	16	UART_GND
17	UART_RX	18	IR_IN
19	DVB-T_IR	20	IR_GND
21	DVD_IR	22	IR_POWER

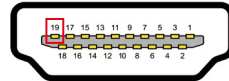
Body Connector specifications



Full Installation Diagram

Click
Go to contents page

NAVI IN PORT UART TOUCH



Pin # 19 = Uart TX

Support Device

- M2C-100IW
- NV17
- NV100

HDMI DEVICE



Compatibility Resolution

Supports Only 720P

Does Not Supports 4K, 1080P,

NAVI DEVICE (4CH LVDS)



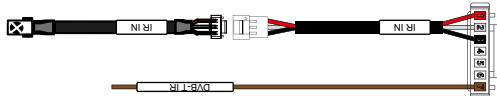
N-LINK II (Gps Box *Only Korea) A-LINK (Android Box)

KEYPAD

It's only for Setting menu



DVB-TV IR

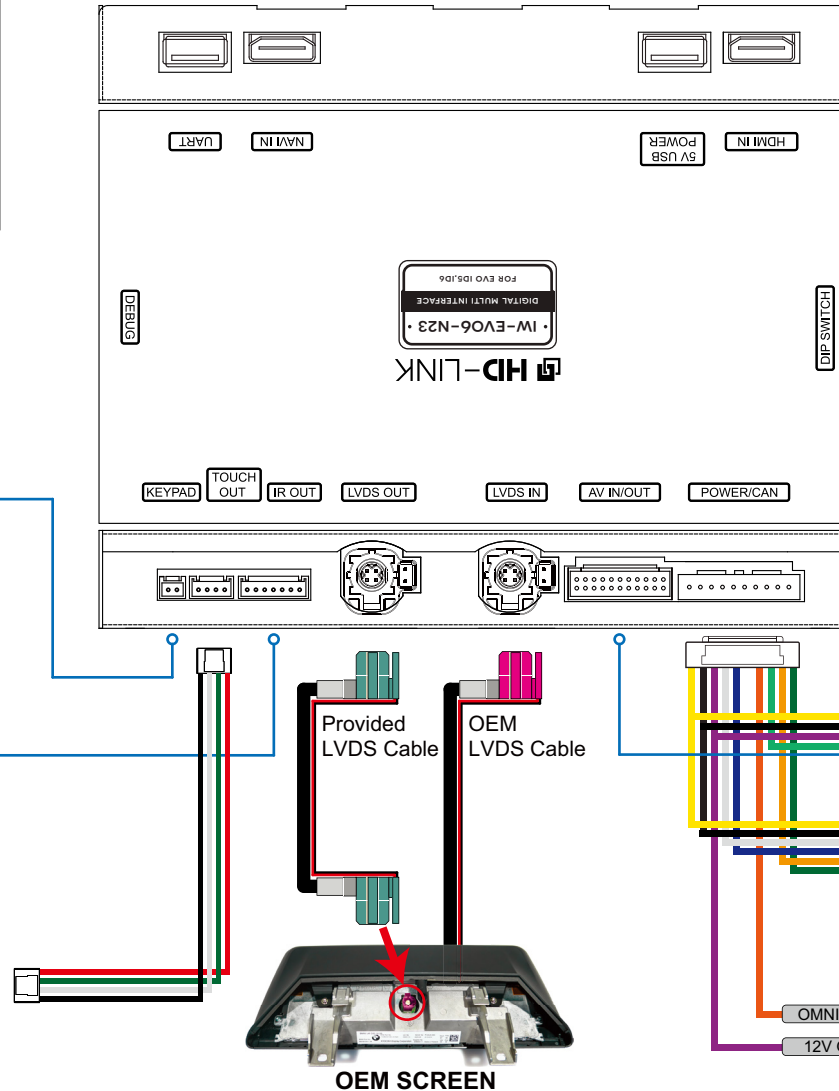


Navi Device

※ N-LINK, A-LINK do not need to connect

Touch Cable Spec

PIN 1	X-	Black
PIN 2	Y-	White
PIN 3	X+	Green
PIN 4	Y+	RED



AV IN 1 CABLE

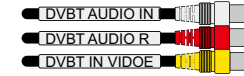
The sounds is automatically
switched (HDMI,NAVI,DVB-T)



AUX IN



A-LINK (Android Box)
N-LINK (GPS BOX)



AV DEVICE



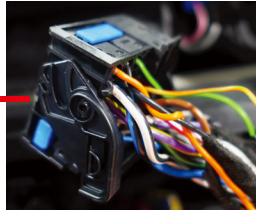
FRONT CAMERA



REAR CAMERA

Extend HDMI LINK

OEM Quadlock Connector

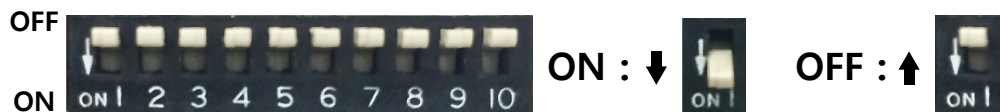


NBT EVO Head Unit



※ When installing the interface for the first time,
press OPTION button for more than 10 seconds to initialize it.

DIP Switch Settings



PIN	ON (▼)	OFF(▲)
1	HDMI Mode	Skip HDMI Mode
2	Navigation Mode	Skip Navigation Mode
3	External Rear View Camera	Original Rear View Mode (OEM CAMERA)
4	External Front View Camera(AV1 Mode)	Skip External Front View Camera(AV1 Mode)
5	AV2(DVBT) Mode	Skip AV2(DVBT) Mode
6	Selection of car model	
7		
8		
9		
10		

	No.6	No.7	No.8	No.9	No.10	Car Model
	OFF(▲)	OFF(▲)	OFF(▲)	OFF(▲)	OFF(▲)	2017~ BMW 5(G30) 10.25inch 2017~ BMW 6(G32) 10.25inch 2016~ BMW 7(G11) 10.25inch 2016~ BMW X3(G01) 10.25inch 2017~ BMW X5 (F15) 10.25inch 2017~ BMW X6 (F16) 10.25inch

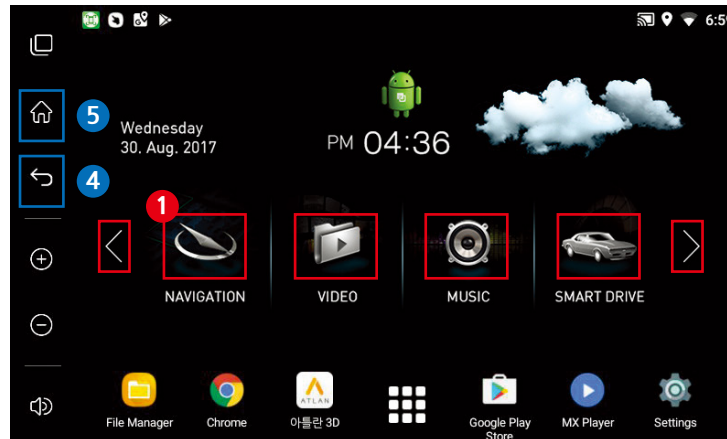
Activation by original buttons



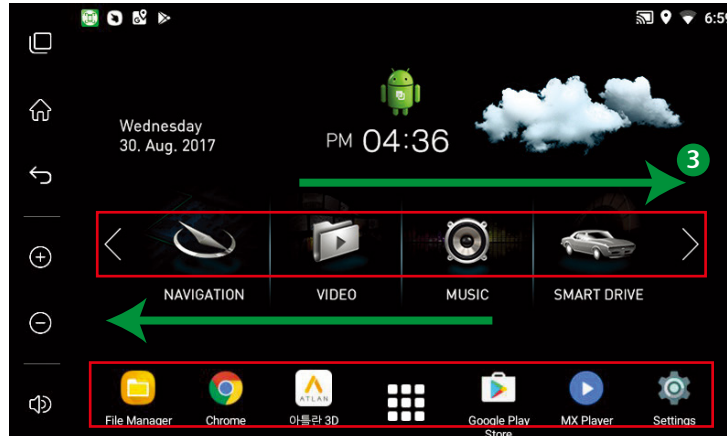
Button	Function	OperationR	emarks
1 MENU	Changing Modes	Press the button 2 seconds	Order : HDMI → HDMI2 → HDMI3 → NAVI → DVB-T →DVD → OEM
i-Drive Buttons	Changing Modes	Press the button short time	Return to the OEM mode in any modes.
2 DIAL UP	FULL 6:4 PIP 4:6 PIP	Move the Upwards 2 seconds	- Full size mode - 6(HDMI, NAVI) : 4(OEM) - 4(OEM : 6(HDMI, NAVI)
3 DIAL DOWN	Changing Modes	Move the downwards 2 seconds	Order : AV1 (Front View Camera)
6 PARKING	Changing Modes	Press the button short time	Return to the OEM mode in any modes.
		When it function activate automatically	Return to the OEM mode in any modes.
7	Changing Modes	Press the button short time	Order : HDMI → HDMI2 → HDMI3 → NAVI → DVB-T →DVD → OEM
4 BACK	Power Reset	Press the button 10 seconds	You can use this function when you get in trouble
5 OPTION	Reset to factory default setting and power.	Press the button 10 seconds	You can use this function when you get in trouble
5 OPTION	Omni View Mode (KOREA Spec)	Press the button	Change the Omni View Mode
2 DIAL UP	VIM	Move the Upwards 5 seconds	Always it need to activation by button for using it function (When you power off It functions will be OFF) Default : OFF

✘ When installing the interface for the first time,
press **OPTION** button for more than 10 seconds to initialize it.

Control Some of Function of **A-LINK** by original buttons



Button	Function	Operation
1	Move Left,Right	Turn the Dial
2	Move Up,Down	Move the dial up or down
3	Next page, Previous page	Move the dial left or right
4 BACK	Back to previous menu when press the button short.	Press the button short time
5 OPTION	Back to Home Main screen	Press the button short time



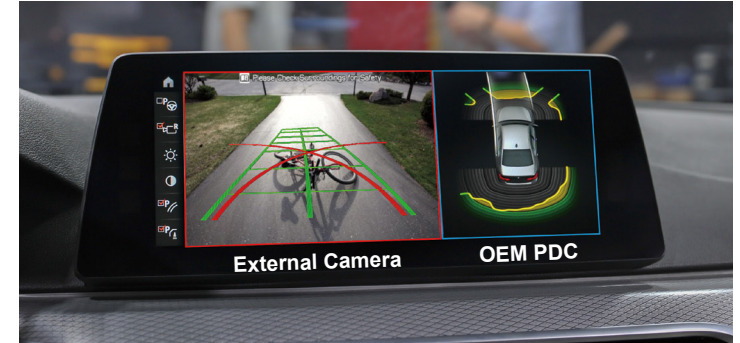
※ Some applications of A-LINK might not be able to operate with i-Drive button.

External Camera Script



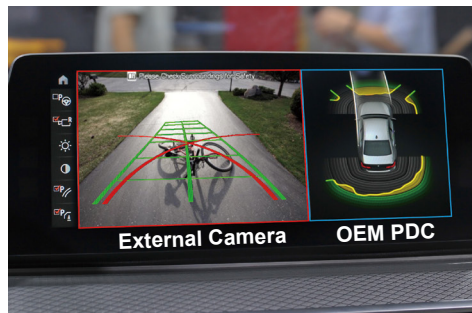
How to setting

IW-BMW-EVO-N23		
HDMI 1	INPUT SOURCE	EXTERNAL CAMERA
HDMI 2	BRIGHT	128
HDMI 3	CONTRAST RED	128
NAVIGATION	CONTRAST GREEN	128
REAR VIEW	CONTRAST BLUE	128
FRONT VIEW	AVM KEEPING TIME R → D	7 Sec
CVBS 1 - DVBT	AVM KEEPING TIME P → D	7 Sec
CVBS 2 - DVD	PGS ON / OFF	OFF
CUSTOM	ADJUST - HORIZONTAL	128
EXIT	ADJUST - VERTICAL	128
DIP SWITCH INFO :		FIRMWARE DATE :
		MAIN : 2018-03-02
		SUB : 2018-03-02
		TW23 : 2018-03-02

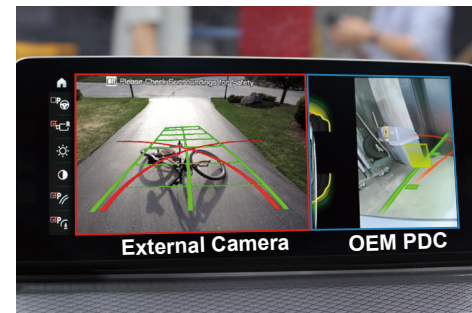


When you shift gear reverse
It screen will be working to PIP
<Left :External Camera> <Right : OEM PDC Sensor>

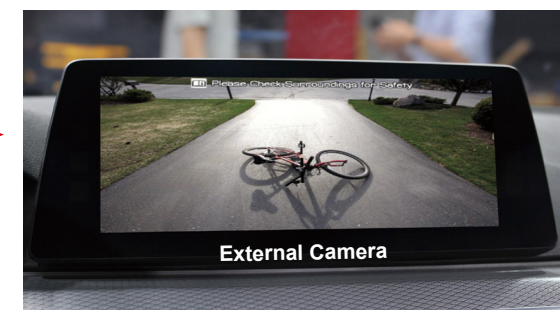
<PIP #1 Size>



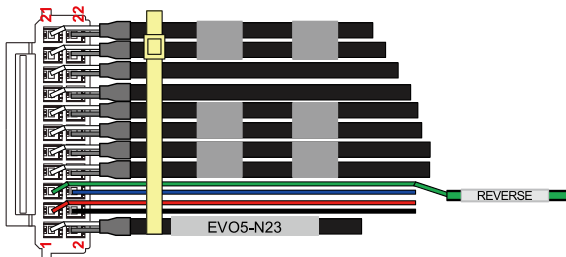
<PIP #2 Size>



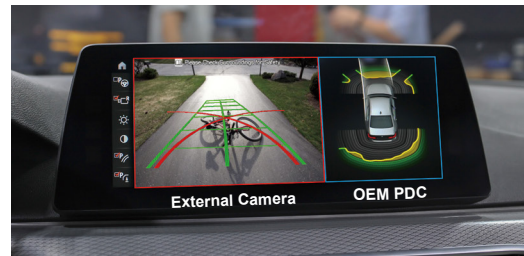
<Full Size>



<AV Cable>



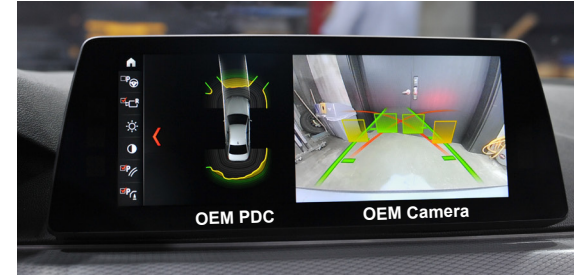
12V IN



If it connected 12V to 'REVERSE 12V IN wire'
The screen will be change to "External Camera mode"

Around View Script

순정 후방카메라 화면

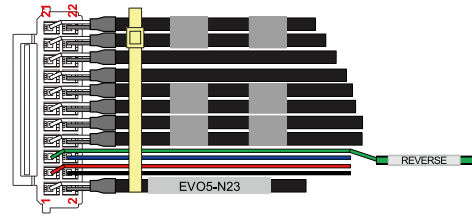


How to setting



IWM-BMW-EVO-N23		
HDMI 1	INPUT SOURCE	AVM (AROUND VIEW)
HDMI 2	BRIGHT	128
HDMI 3	CONTRAST RED	128
NAVIGATION	CONTRAST GREEN	128
REAR VIEW	CONTRAST BLUE	128
FRONT VIEW	AVM KEEPING TIME R → D	7 Sec
CVBS 1 - DVBT	AVM KEEPING TIME P → D	7 Sec
CVBS 2 - DVD	PGS ON / OFF	OFF
CUSTOM	ADJUST - HORIZONTAL	128
EXIT	ADJUST - VERTICAL	128
DIP SWITCH INFO		FIRMWARE DATE
		MAIN : 2018-03-02
		SUB : 2018-03-02
		TW23 : 2018-03-02

<AV Cable>



12V IN

If it connected 12V to 'REVERSE 12V IN wire'
The screen will be change to "AVM mode"



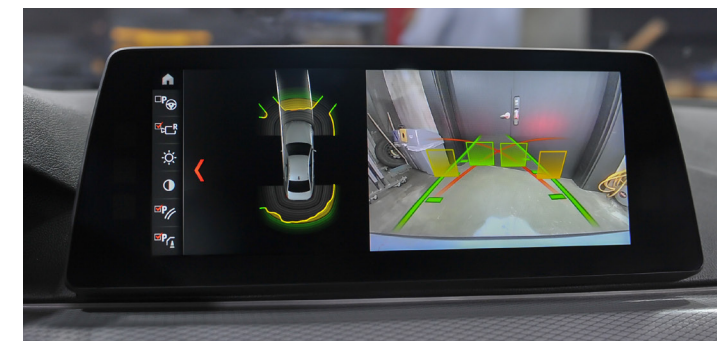
When you shift gear reverse and i-drive button up
External Camera Screen size will be change <PIP Size> <Full Size>



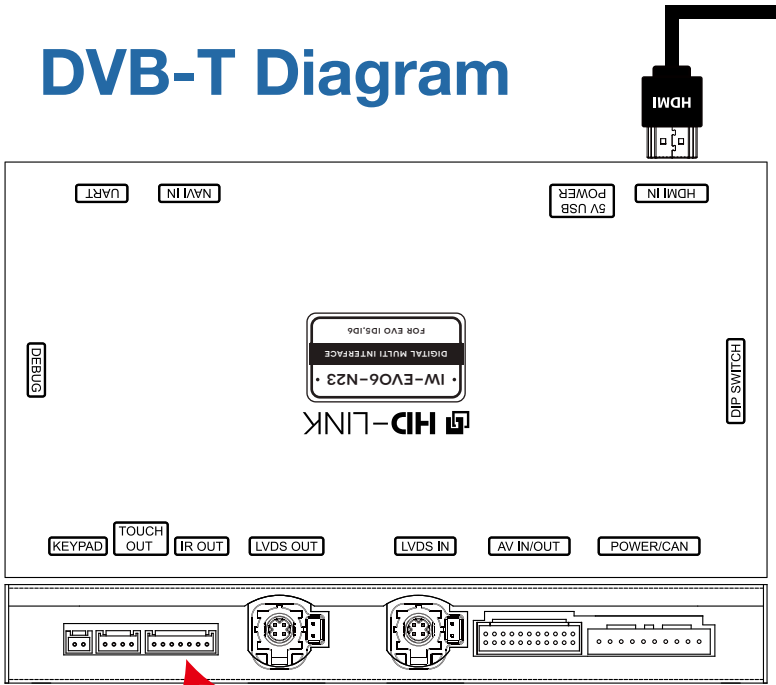
AVM
Screen



OEM
AVM

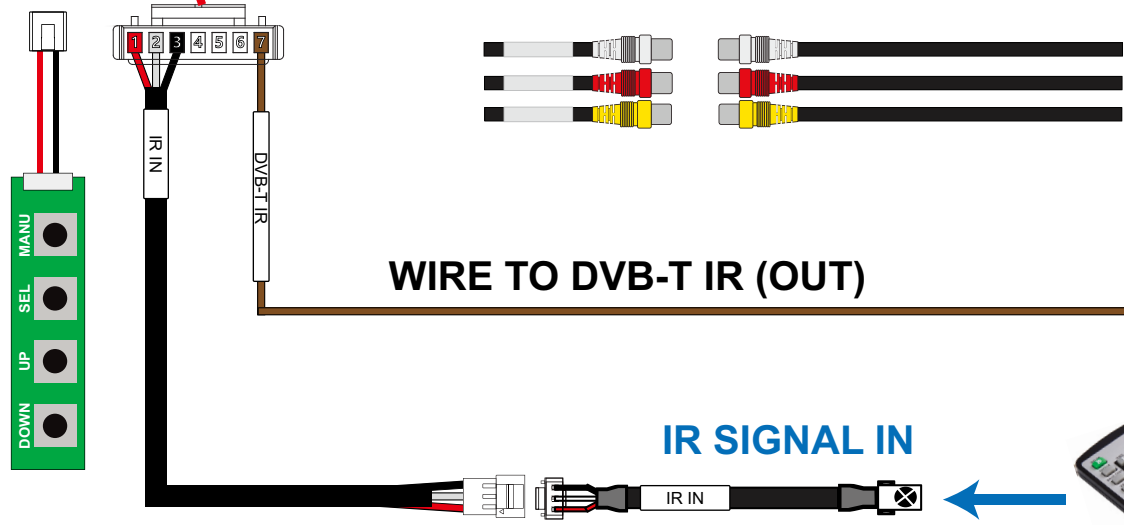


DVB-T Diagram



**HDMI
OR
CVBS**

DTV DEVICE



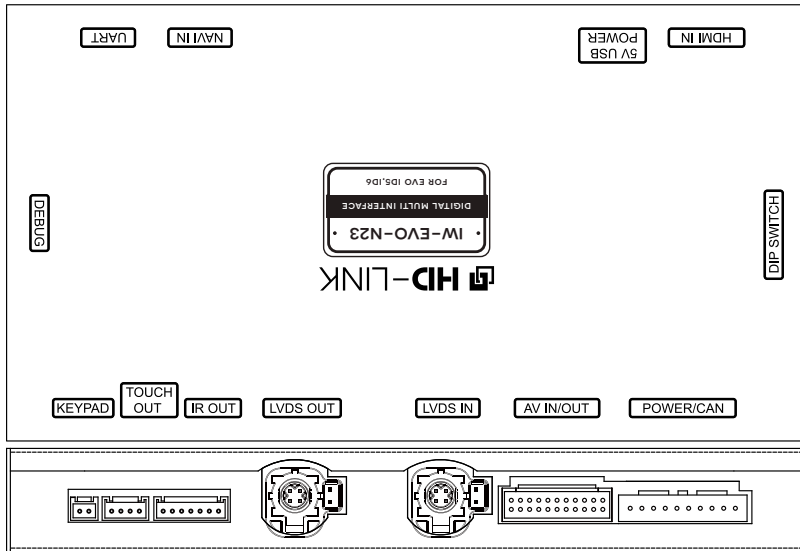
DVB-TV IR Sensor	
Red	POWER
White	SIGNAL
Black	GROUND



 Click
HOW TO SETTING

 Click
Go to contents page

Settings (How To Use KEYPAD)

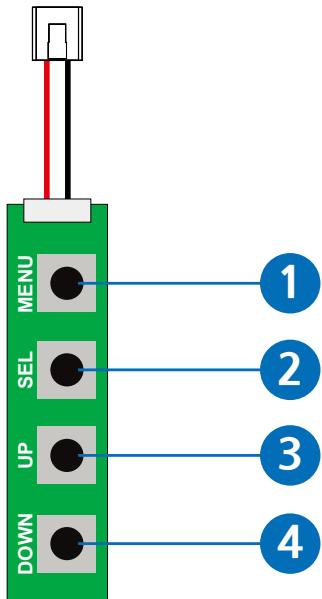


KEYPAD - Function #1

Button	Function	Operation	Remarks
1 MENU	Changing Modes	Press the button short time	Order : HDMI → HDMI2 → HDMI3 → NAVI → DVB-T → DVD → OEM
2 SEL	Enter into the setting menu	Press the button short time	

KEYPAD - Function #2

Button	Function	Operation
1 MENU	Back to previous menu When press the button short.	Press the button short time
2 SEL	Select the setting menu and setting values.	Press the button short time
3 UP 4 DOWN	Move the menu-pointer and adjust the setting values	Press the button short time



Settings

IW-EVO6-N23		
HDMI 1	INPUT SOURCE	DEFAULT
HDMI 2	BRIGHT	AVM
HDMI 3	CONTRAST RED	DTV
NAVIGATION	CONTRAST GREEN	
REAR VIEW	CONTRAST BLUE	
AV1 (FRONT VIEW)		
AV2 (DTV)		
NONE		
CUSTOM		
EXIT		
DIP SWITCH INFO :		FIRMWARE DATE :
		MAIN : 2018-03-02
		SUB : 2018-03-02
		TW23 : 2018-03-02

IW-EVO6-N23		
HDMI 1	INPUT SOURCE	AVM (AROUND VIEW)
HDMI 2	BRIGHT	128
HDMI 3	CONTRAST RED	128
NAVIGATION	CONTRAST GREEN	128
REAR VIEW	CONTRAST BLUE	128
AV1 (FRONT VIEW)	AVM KEEPING TIME R → D	7 Sec
AV2 (DTV)	AVM KEEPING TIME P → D	7 Sec
NONE	PGS ON / OFF	OFF
CUSTOM	PGS - HORIZONTAL	128
EXIT	PGS - VERTICAL	128
	PDC ON / OFF	OFF
DIP SWITCH INFO :		FIRMWARE DATE :
		MAIN : 2018-03-02
		SUB : 2018-03-02
		TW23 : 2018-03-02

HDMI - DEFALUT

- INPUT SOURCE (Hdmi device model select)

- **DEFALUT** (Basic HDMI Device)
- **AVM** (360° Around View Camera)
- **DTV** (Digital Television)

- BRIGHT and CONTRAST

Adjust the values of brightness and contrast

HDMI INPUT - AVM

- BRIGHT and CONTRAST

Adjust the values of brightness and contrast

- AVM KEEPING TIME



If the keeping time set is **"OFF"**
The AVM screen stayed
When the "P" button while active and
When the "P" button will be disabled.
The Screen will be change to previous screen

- When you shift gear 'from reverse to drive' or 'from parking to drive', it just works automatically during the activation time you selected.

- PGS (Parking Guide System)

- Adjust position of parking guide lines and select the lines 'ON or OFF'.

Settings

IW-EVO6-N23		
HDMI 1	INPUT SOURCE	DTV
HDMI 2	BRIGHT	128
HDMI 3	CONTRAST RED	128
NAVIGATION	CONTRAST GREEN	128
REAR VIEW	CONTRAST BLUE	128
AV1 (FRONT VIEW)	REMOTE OSD ON / OFF	ON
AV2 (DTV)	REMOTE TYPE	ALPINE
NONE	MEMORY UP ①	0x807f807f
CUSTOM	MEMORY DOWN ②	0x807f807f
EXIT	MEMORY LEFT ③	0x807f807f
	MEMORY RIGHT ④	0x807f807f
	MEMORY OK ⑤	0x807f807f
	MEMORY MENU ⑥	0x807f807f
	MEMORY EXIT ⑦	0x807f807f
	MEMORY ETC1 ⑧	0x807f807f
	MEMORY ETC2 ⑨	0x807f807f

DIP SWITCH INFO :


FIRMWARE DATE :

MAIN : 2018-03-02

SUB : 2018-03-02

TW23 : 2018-03-02

IW-EVO6-N23		
HDMI 1	NAVIGATION MODEL	DEFAULT
HDMI 2	BRIGHT	128
HDMI 3	CONTRAST RED	128
NAVIGATION	CONTRAST GREEN	128
REAR VIEW	CONTRAST BLUE	128
AV1 (FRONT VIEW)		
AV2 (DTV)		
NONE		
CUSTOM		
EXIT		

DIP SWITCH INFO :


FIRMWARE DATE :

MAIN : 2018-03-02

SUB : 2018-03-02

TW23 : 2018-03-02

HDMI INPUT - DTV

- BRIGHT and CONTRAST

Adjust the values of brightness and contrast

- REMOTE OSD ON / OFF

· You can control to some of function on DTV remote control by OSD UI

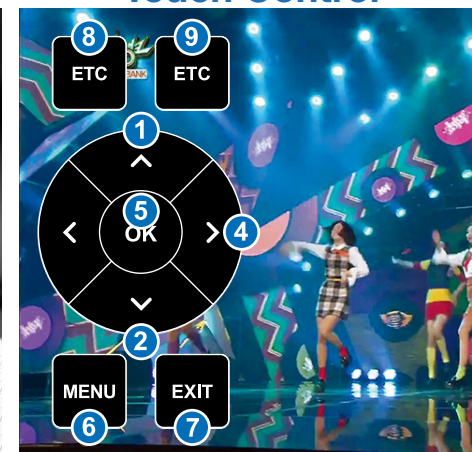
- REMOTE TYPE

· ALPINE - TUE-T500 · Pioneer - GEX909 · HIT7700

i-Drive Control



Touch Control



NAVIGATION

- BRIGHT and CONTRAST

Adjust the values of brightness and contrast

GPS BOX MODEL

< Using for UART in HDMI Navigation model must be setting >

- A-LINK , M2C-100 IW
- NV17
- NV100

Settings

IW-EVO6-N23		
HDMI 1	INPUT SOURCE	OEM CAMERA
HDMI 2	BRIGHT	AVM (AROUND VIEW)
HDMI 3	CONTRAST RED	EXTERNAL CAMERA
NAVIGATION	CONTRAST GREEN	
REAR VIEW	CONTRAST BLUE	
AV1 (FRONT VIEW)		
AV2 (DTV)		
NONE		
CUSTOM		
EXIT		
DIP SWITCH INFO :		FIRMWARE DATE :
		MAIN : 2018-03-02
		SUB : 2018-03-02
		TW23 : 2018-03-02

IW-EVO6-N23		
HDMI 1	INPUT SOURCE	AVM (AROUND VIEW)
HDMI 2	BRIGHT	128
HDMI 3	CONTRAST RED	128
NAVIGATION	CONTRAST GREEN	128
REAR VIEW	CONTRAST BLUE	128
AV1 (FRONT VIEW)	AVM KEEPING TIME R → D	7 Sec
AV2 (DTV)	AVM KEEPING TIME P → D	7 Sec
NONE	PGS ON / OFF	OFF
CUSTOM	PGS - HORIZONTAL	128
EXIT	PGS - VERTICAL	128
	PDC ON / OFF	OFF
DIP SWITCH INFO :		FIRMWARE DATE :
		MAIN : 2018-03-02
		SUB : 2018-03-02
		TW23 : 2018-03-02

REAR VIEW INPUT - OEM CAMERA

- INPUT SOURCE

- OEM CAMERA
- AVM (360° Around View Camera)
- EXTERNAL CAMERA

- BRIGHT and CONTRAST

Adjust the values of brightness and contrast

REAR VIEW INPUT - AVM

- BRIGHT and CONTRAST

Adjust the values of brightness and contrast

- AVM KEEPING TIME



If the keeping time set is "OFF"
 The AVM screen stayed
 When the "P" button while active and
 When the "P" button will be disabled.
 The Screen will be change to previous screen

- When you shift gear 'from reverse to drive' or 'from parking to drive', it just works automatically during the activation time you selected.

- PGS (Parking Guide System)

- Adjust position of parking guide lines and select the lines 'ON or OFF'.

Settings

IW-EVO6-N23		
HDMI 1	INPUT SOURCE	EXTERNAL CAMERA
HDMI 2	BRIGHT	128
HDMI 3	CONTRAST RED	128
NAVIGATION	CONTRAST GREEN	128
REAR VIEW	CONTRAST BLUE	128
AV1 (FRONT VIEW)	PGS ON / OFF	OFF
AV2 (DTV)	PGS - HORIZONTAL	128
NONE	PGS - VERTICAL	128
CUSTOM	PDC ON / OFF	OFF
EXIT		
DIP SWITCH INFO :		FIRMWARE DATE :
		MAIN : 2018-03-02 SUB : 2018-03-02 TW23 : 2018-03-02

REAR VIEW INPUT - EXTERNAL CAMERA

- BRIGHT and CONTRAST

Adjust the values of brightness and contrast

- PGS (Parking Guide System)

· Adjust position of parking guide lines and select the lines 'ON or OFF'.

Settings

IW-EVO6-N23		
HDMI 1	INPUT SOURCE	OEM CAMERA
HDMI 2	CAM KEEPING TIME R → D	7 Sec
HDMI 3	CAM KEEPING TIME P → D	7 Sec
NAVIGATION		
REAR VIEW		
AV1 (FRONT VIEW)		
AV2 (DTV)		
NONE		
CUSTOM		
EXIT		
DIP SWITCH INFO :		FIRMWARE DATE :
       		MAIN : 2018-03-02 SUB : 2018-03-02 TW23 : 2018-03-02

AV1 (FRONT VIEW INPUT) - OEM CAMERA

- CAM KEEPING TIME

- When you shift gear 'from reverse to drive' or 'from parking to drive', it just works automatically during the activation time you selected.

IW-EVO6-N23		
HDMI 1	INPUT SOURCE	EXTERNAL CAMERA
HDMI 2	BRIGHT	128
HDMI 3	CONTRAST RED	128
NAVIGATION		
REAR VIEW		
AV1 (FRONT VIEW)		
AV2 (DTV)		
NONE		
CUSTOM		
EXIT		
DIP SWITCH INFO :		FIRMWARE DATE :
       		MAIN : 2018-03-02 SUB : 2018-03-02 TW23 : 2018-03-02

AV1 (FRONT VIEW INPUT) - EXTERNAL CAMERA

- BRIGHT and CONTRAST

Adjust the values of brightness and contrast

- FRONT CAM KEEPING TIME

- When you shift gear 'from reverse to drive' or 'from parking to drive', it just works automatically during the activation time you selected.

Settings

IW-EVO6-N23		
HDMI 1	INPUT SOURCE	DTV
HDMI 2	BRIGHT	128
HDMI 3	CONTRAST RED	128
NAVIGATION	CONTRAST GREEN	128
REAR VIEW	CONTRAST BLUE	128
AV1 (FRONT VIEW)	REMOTE OSD ON / OFF	ON
AV2 (DTV)	REMOTE TYPE	ALPINE
NONE	MEMORY UP ①	0x807f807f
CUSTOM	MEMORY DOWN ②	0x807f807f
EXIT	MEMORY LEFT ③	0x807f807f
	MEMORY RIGHT ④	0x807f807f
	MEMORY OK ⑤	0x807f807f
	MEMORY MENU ⑥	0x807f807f
	MEMORY EXIT ⑦	0x807f807f
	MEMORY ETC1 ⑧	0x807f807f
	MEMORY ETC2 ⑨	0x807f807f

DIP SWITCH INFO :

FIRMWARE DATE :
MAIN : 2018-03-02
SUB : 2018-03-02
TW23 : 2018-03-02

AV2 DTV

- BRIGHT and CONTRAST

Adjust the values of brightness and contrast

- REMOTE OSD ON / OFF

· You can control to some of function on DTV remote control by OSD UI

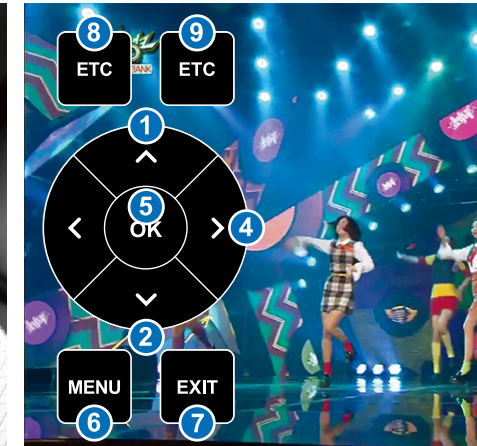
- REMOTE TYPE

· ALPINE - TUE-T500 · Pionner - GEX909 · HIT7700

i-Drive Control



Touch Control



Settings

IW-EVO6-N23		
HDMI 1	IDRIVE ON / OFF	ON
HDMI 2	VOLUME PIP	ON
HDMI 3		
NAVIGATION		
REAR VIEW		
AV1 (FRONT VIEW)		
AV2 (DTV)		
NONE		
CUSTOM		
EXIT		
DIP SWITCH INFO : FIRMWARE DATE : MAIN : 2018-03-02 SUB : 2018-03-02 TW23 : 2018-03-02		

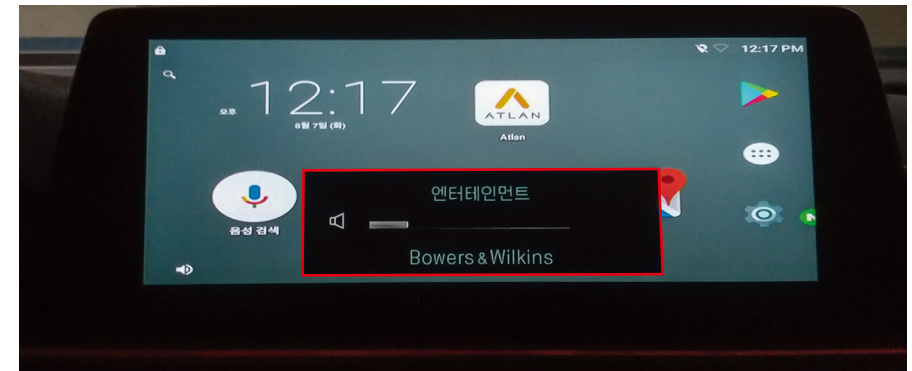
CUSTOM

- IDRIVE ON / OFF

- **ON** - When you use A-LINK. If you use i-drive buttons.
The OEM function will be not working by i-drive buttons

- VOLUME PIP ON / OFF

- You can control to some of function on DTV remote control by OSD UI



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