

# **Installation Manual**

Interface for Porsche / Audi / Volkswagen

# CAR COMPATIBILITY SHEET



BRAND	MODEL	SCREEN	YEAR
PORSCHE	Cayenne	12"	2019~
	Macan	12"	2019~
	911	12"	2019~
	Panamera	12"	2018~
AUDI	A1	10.1" / 8.8"	2020~
	A4/A5	10.1"	2020~
VOLKSWAGEN	Passat	9.2"	2019

### **INTERFACE SPEC**

#### 1 INPUT

- Digital RGB In (HDMI Port) X 1
- Analog RGB In (7pin) X 1
- CVBS Audio/Video In X 2
- CVBS Front Cam In X 1
- CVBS Rear Cam In X 1
- LVDS In Command System X 1

### 2 OUTPUT

- CVBS Video Out X 2
- CVBS Audio Out X 1
- LVDS Out Operation X 1

#### **3** POWER

- Input Power : 8VDC ~ 24VDC
- Consumption Power : 12Watt, Max

#### **4** SWITCH INPUT MODE

- Video source control via Dip Switch
- Vehicle model selection via Dip Switch
- Mode change with OEM button using CAN

# **EXTERNAL DEVICE SPECIFICATIONS**





- REAR CAMERA IN
- FRONT CAMERA IN
- DVB-T or DVD IN
- CVBS OUT
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### **CONNECTOR PIN ASSIGNMENT**



No	PORT		INFORM			
				Ċ		
		No. Color	Signal Assignment	No. Color	Signal Assignment	
	DOWED	1 Red	ACC	2		
1	POWER	3 Brown	REAR DET	4 Blue	FRONT DET	
	/CAN	5 White	CAN LOW	6 Purple	CAN HIGH	
		7 Blue	CAN LOW	8 Red	CAN HIGH	
		9 Green	CAN LOW	10 Orange	CAN HIGH	
		11		12 Red	REAR VCC	
		13 Red	FRONT VCC	14		
		15 Black	GND	16		
2	тоисн		Red Green Blue White	)- )- )- Y X		
	0	0000				
		1	Red	R DAT	Ά	
	RGB	2	Green	G DAT	·A	
3	NAVI	3 Blue BDATA			Ά	
		4	White	SYN	c	
		5	Black	GND		
		6	Green	DVB-T	IR	
		7	Orange	DVD I	R	
			1			

### **DIP SWITCH SETTING**

DIN	EUNCTION	IN	FORMATION
FIIN	FUNCTION	▲ OFF	▼ ON
1	NAVIGATION		Do not use
2	AV1 (DVB-T)	USE 2	2 Do not use
3	AV2 (DVD)	USE 3	Do not use
4	No function		
5		ON 5 6 7 8 Cay	RSCHE (2019~) enne / 911 - 12" RSCHE (2019~)
6	Car Type	ON 5 6 7 8 Mad ON 5 6 7 8 AU	an - 12" DI (2020~) \4 - 10.1"
7		AUI ON 5 6 7 8 A5 -	DI (2020~) 10.1" DI (2020~)
		ON 5 6 7 8 RS4	– 10.1"
		ON 5 6 7 8 Pan	RSCHE (2019~) amera - 12" (LVDS reverse type)
8		AU ON 5 6 7 8 A1-	DI (2020~) - <b>8.8" (LVDS reverse type)</b>
		ON 5 6 7 8 Pas	-KSWAGEN (2019~) sat – <mark>9.2" (LVDS reverse type</mark> )



BUTTON	OPERATION	FUNCTION
HOME or NAV	LONG PRESS	OEM screen to interface screen Interface screen to the OEM screen
Other Buttons	PRESS	Return OEM Dispaly
► Warning		

- Screen change sequence : **OEM > NAVI > AV1 > AV2 > OEM**
- You can choose "<u>HOME</u>" or "NAV" <u>button</u> on OSD menu



BUTTON	OPERATION	FUNCTION
NAV	LONG PRESS	OEM screen to interface screen Interface screen to the OEM screen
Option	PRESS	Changing the screen ratio in AV1 and AV2 modes
► Warning		

- Screen change sequence : **OEM > NAVI > AV1 > AV2 > OEM**
- To use a Return button, You need to enable the <u>NAV</u> in the button selection in the OSD options



BUTTON	OPERATION	FUNCTION
RETURN	LONG PRESS	OEM screen to interface screen Interface screen to the OEM screen
► Warning		

- Screen change sequence : OEM > NAVI > AV1 > AV2 > OEM
- To use a Return button, You need to enable the <u>RET</u> in the button selection in the OSD options



BUTTON	OPERATION	FUNCTION
RETURN	LONG PRESS	OEM screen to interface screen Interface screen to the OEM screen
► Warning		

- Screen change sequence : OEM > NAVI > AV1 > AV2 > OEM
- To use a Return button, You need to enable the <u>RET</u> in the button selection in the OSD options



BUTTON	OPERATION	FUNCTION
MENU SCROLL	LONG PRESS	OEM screen to interface screen Interface screen to the OEM screen
► Warning		

- Screen change sequence : OEM > NAVI > AV1 > AV2 > OEM
- To use a Return button, You need to enable the <u>RET</u> in the button selection in the OSD options

# **PARKING CONTROL**

**FrontCam Rcv Option** 



M or

### **DIGITAL NAVIGATION**



#### **%** Please set in the OSD menu

MENU	Option		NAVI
Config	NAVI-RGB	"NAVIGAT	ION MODEL"
Option	DVB-T (DMB)		
Image	DVD		
Screen	RearCam		
Parking	FrontCam		

MENU	Option	NAVI
Config	NAVI-COM	GU
Option	Reset	
Image		
Screen		
Parking		

### **ANALOG NAVIGATION**



#### Please set in the OSD menu

MENU	Option	NAVI
Config	NAVI-RGB	"NAVIGATION MODEL"
Option	DVB-T (DMB)	
Image	DVD	
Screen	RearCam	
Parking	FrontCam	

DVB-T (DMB)



#### Please set in the OSD menu

MENU	Option	NAVI	MENU	MENU Option	MENU Option
Config	NAVI-RGB		Config	Config	Config
Option	DVB-T (DMB)	"DMB MODEL"	Option	Option	Option
Image	DVD		Image	Image	Image
Screen	RearCam		Screen	Screen UI DVB-T(DMB)	Screen UI DVB-T(DMB) On
Parking	FrontCam		Parking	Parking UI DVD	Parking UI DVD

DVD LED PROGRAM [IMAGE] DIP\_S/W LVDS-IN POWER/CAN TOUCH DIGITAL



LVDS-OUT

#### Please set in the OSD menu

MENU	Option	NAVI	MENU	Option		N
Config	NAVI-RGB		Config			
Option	DVB-T (DMB)		Option			
Image	DVD	"DVD MODEL"	Image			
Screen	RearCam		Screen	UI DVB-T(DMB)		
Parking	FrontCam		Parking	UI DVD	On	O

**REAR CAM** 

LED PROGRAM (IMAGE) (DIP_S/W)	LVDS-IN	LVDS-OUT	
PCM5.0	TDC3		
POWER/CAN TOUCH DIGITAL	NAVI	A/V	$\mathbf{G}$
REAR POWER REAR DETECT CAR	AR ERA		

#### Please set in the OSD menu

MENU	Opti	on NAVI
Config	NAVI-RGB	AVM-VIDEO
Option	DVB-T (DMB)	AVM-DIGITAL
Image	DVD	Default
Screen	RearCam	
Parking	FrontCam	

### **FRONT CAM**



#### Please set in the OSD menu



# **INSTALL MANUAL**

### INSTALLATION LVDS CONNECTION



Head Unit (Commander)

### **INSTALL MANUAL Choose one of two methods**

**INSTALLATION LVDS CONNECTION – PANAMERA / A1, Q3 / PASSAT** 



Cut and connect the connector of INTERFACE

# **INSTALL MANUAL**

### INSTALLATION CAN CONNECTION



Remove the original gray connector.



Check the gray area



Be careful of the protruding part, connect the connector



Be careful of the protruding part, connect the connector

### **Basic information**



1	MENU	2	Mode State 3	Interface Status
4	First Menu	5	Second Menu	Third Menu



No		OSD(On Screen Display) Board Control
7	MENU	<ul> <li>The OSD screen can be switched ON/OFF</li> <li>Return to previous menu</li> </ul>
8	SEL	<ul> <li>Select the currently active item</li> <li>If the OSD screen is off, mode changes can be made.</li> </ul>
9	UP	<ul> <li>Move up from the menu</li> <li>Increase the selected item value</li> </ul>
10	DOWN	<ul> <li>Move down from the menu</li> <li>Decrease the selected item value</li> </ul>

Config		
MENU	Reset	MAVI
Config	NAVI-RGB	DIGITAL
Option	DVB-T(DMB)	NET-770
Image	DVD	ELT-980XU Slim
Screen	RearCam	Default
Parking	Reset	Execute Cancel

First Menu	Second Menu	Third Menu	Description	
Config	NAVI-RGB	DIGITAL : :	Setting the Connected NAVI Model	
	DVB-T(DMB)	Default : :	Setting the Connected DVB-T Model	
	DVD	Default : :	Setting the Connected DVD Model	
	RearCam	Default :	Setting the Connected RearCam Model	
	Reset	Execute Cancel	Reset to default value of Config menu	

Option			
	MENU	RearCam-Ty	pe <mark>NAVI</mark>
0	Config	NAVI COM	KPLAY
	Option	RearCam-Type	OEM ExtDevice
	Image	RearCam-Power	Auto
	Screen	RearCam-Det	GEAR
	Parking	AV Mode	Off

First Menu	Second Menu	Third Menu	Description
Option	NAVI COM		Set up manufacturer of woodworking device for UART Touch use
		Off	Disable feature
	PoorCom Typo	OEM	Original Camera
	KearCam-Type	ExtDevice	Equipped with external camera
		On	+ 12V continuous supply
	RearCam-Power	AUTO	+ 12V supply only in Rear camera mode
		Off	+ 12V off
		PDC	
	RearCam Dat	GEAR	Detected by CAN
	RearCam-Det	WIRE	Detected by Rear-Det Wire
		Off	Disable feature
	AV Mode	HMS FINE :	Output setting of device connected to "FROTN" of the board
		Off	Disable feature

Option			
	MENU	FrontCam-Ty	ype NAVI
C	onfig	FrontCam-Type	OEM ExtDevice
0)	ption	FrontCam-Power	Auto
I	mage	FrontCam-Det	ExtWire
S	creen	FrontCam-RcvOpt	Os
P	arking	AV Out	USER

First Menu	Second Menu	Third Menu	Description
Ontion		OEM	Original Camera
option	FrontCam-Type	ExtDevice	Equipped with external camera
		On	+ 12V continuous supply
	FrontCam-Power	Auto	+ 12V supply only in Rear camera mode
	Off		Disable feature
	FrontCam-Det	OEM	
	Trontcam-Det	ExtDevice	Detected by Front-Det Wire
	FrontCam-	On	The time (1-30 seconds) that FrontCam is displayed before returning to the previous state in RearCam
	RcvOpt	Off	Disable feature
		AV1	In the OEM, NAVI, AV1, FRONT, and REAR modes, the output of AV OUT is set to AV1
	AV Out	AV2	In the OEM, NAVI, AV2, FRONT, and REAR modes, the output of AV OUT is set to AV2
	$\mathbf{A}$	USER	In the OEM, NAVI, FRONT, and REAR modes, output the output of AV OUT to the final screen

Option					
	MENU	SteeringWhee	lBtn	NAVI	
	Config	SteeringWheelBtn	On	Off	
	Option	Mode Button	HOME		
	Image	Button Option	Long		
	Screen	UI DVB-T(DMB)	On		1
	Parking	UI DVD	On		

First Menu	Second Menu	Third Menu	Description
Option	SteeringWheel	On	Original Camera
option	Btn	Off	Disable feature
		НОМЕ	Set the mode change button to HOME
	Mada Button	NAVI	Set the mode change button to NAVI
	Mode Button	RET	Set the mode change button to RETURN
		OFF	Disable feature
	Button Option	Short	Short press the NAV button to switch screens
	Button Option	Long	Long press(1 second) the NAV button to switch screens
		On	DVB-T device control UI output function
		Off	Disable feature
		On	DVD device control UI output function
		Off	Disable feature
,	Reset	Execute	Option Menu all Reset

Image			
	MENU	Brightnes	s NAVI
	Config	Brightness	50
	Option	Contrast	50
	Image	Saturation	50
	Screen	Hue	50
	Parking	Sharpness	25

First Menu	Second Menu	Third Menu	Description
Image	Brightness		Adjust the value of brightness
	Contrast		Adjust the value of contrast
	Saturation		[AV / REAR / FRONT / DVD / DVBT MENU] Adjust the value of Saturation
	Hue		[AV / REAR / FRONT / DVD / DVBT MENU] Adjust the value of Hue
	Sharpness		[AV / REAR / FRONT / DVD / DVBT MENU] Adjust the value of Sharpness
	Color-RED		[NAVI MENU ONLY] Adjust the value of RED
	Color-GREEN		[NAVI MENU ONLY] Adjust the value of GREEN
	Color-BLUE	2	[NAVI MENU ONLY] Adjust the value of BLUE
	Reset	Execute	Image Menu all Reset
	0		

Screen			
	MENU	Horizonta	1 NAVI
	Config	Horizontal	50
	Option	Vertical	50
	Image	Scale X Up	50
	Screen	Scale X Down	50
	Parking	Scale Y Up	50

First Menu	Second Menu	Third Menu	Description
Screen	Horizontal		Output screen horizontal movement
	Vertical		Output screen vertical movement
	Scale X Up		Reduce / instance subjut coroon width
	Scale X Down		Keude / niciease output screen width
	Scale Y Up		Reduce / Increase Output Screen Height
	Scale Y Down		Reduce / increase output Screen neight
	Reset		Screen menu all reset
	0	5	

Parking					
	MENU	OPS Displa	ly 📔	REAR	
С	onfig	OPS Display	Off		
0	ption ,	Line Display	Off		
I	mage	Warnings Lang	English		
S	creen	Horizontal		50	
P	arking	Vertical		60	

First Menu	Second Menu	Third Menu	Description
Parking	OPS Display	On	Show OPS
	or o bisplay	Off	Do not show OPS
	l ine Display	On	Show parking line
		Off	Do not show parking lines
	Warnings Lang		Set warning text language
	Horizontal		Moving a parking line horizontally
	Vertical		Moving a parking line vertically
	Transparency	2	Parking line transparency
	Reset		Parking menu all reset
	0		

OSD			
	MENU	Horizonta	I NAVI
	OSD	Horizontal	50
	IR-Ctrl	Vertical	50
	Utility	Display Time	10s
		Transparency	30
		Language	English

First Menu	Second Menu	Third Menu	Description	
OSD	Horizontal	value	OSD Menu Horizontal Shift	
	Vertical	value	OSD menu vertical Shift	
	Display Time	value	OSD Menu Display Time (in seconds)	
	Transparency	value	OSD menu transparency	
	Language		OSD menu display language	
	Reset	Execute	Initialize OSD settings	
Keset Execute Initialize OSD settings				

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IR-Ctrl					
	MENU	DVB-T(DMB	)	NAVI	
	OSD	DVB-T(DMB)	Sel Learn	Cancel	
	IR-Ctrl	DVD	Sys		
	Utility	DVR	Sys		

First Menu	Second Menu	Third Menu	Description
IR-Ctrl		Sel	
	DVB-T(DMB)	Learn	29
		Cancel	
		Sel	
	DVD	Learn	
		Cancel	
Notice			

In order to work with the IR learning function, a separate IR cable is required.

1. In DVB-T / DVD menu, select User in Sys (OSD list) or User (learned contents).

2. Select Learn from the OSD menu.

- 3. Before using IR learning function, select All-Clear to delete existing stored data.
- 4. Press the remote control button to be used in each ICON once in New Code, press once again in Cfm Code

to confirm it is the same and save it.



MENU	IR-Ctrl / DVB-T(DMB) DVB-T
OSD	New Code:
IR-Ctrl	Cfm Code:
Utility	
	Save Clr Cancel

4. Press the remote control button to be used in each ICON once in New Code, press once again in Cfm Code to confirm it is the same and save it.



### **Question and Answer**

**Q** If there is a problem with the interface

- First, check the LED
  - Green LED blinking: No problem
  - Red LED: Bad interface
  - No LED: Check power and CAN connection

**Q** If the screen is black

• LVDS Cable is bad or bad contact