

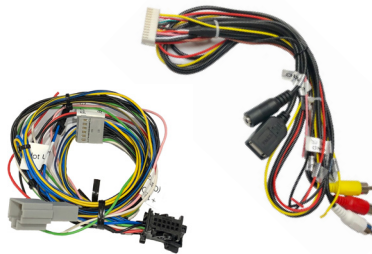
PRODUCT FEATURES:

- Smart-Play Integration system allows connection of Android and other devices to the Audi infotainment system.
- Control Apps using smartphone's voice control feature or the factory MMI knob.
- Adds a USB port to play music and videos. USB port can also charge the smartphone.
- Adds front and rear-view camera inputs.
- Picture-in-picture mode combining after-market rear-view and front camera picture(s) with factory parking sensor graphics.
- Interactive parking guide lines with calibration function.
- Simultaneous use of picture-in-picture factory parking sensor graphics and interactive parking guide lines.
- Built-in on-screen display and setup.
- Includes a AMI to RCA adapter cable to input audio into the factory Audi audio system.
- Provides a trigger output (+12V max. 1A) for the camera power.

PARTS INCLUDED:



ACPAD-81Y Module



Power Harnesses



Video Harness



LVDS1 Cable (to Vehicle)



LVDS2 Cable (to Headunit)



Smartphone Interface Module



USB Extension Cable



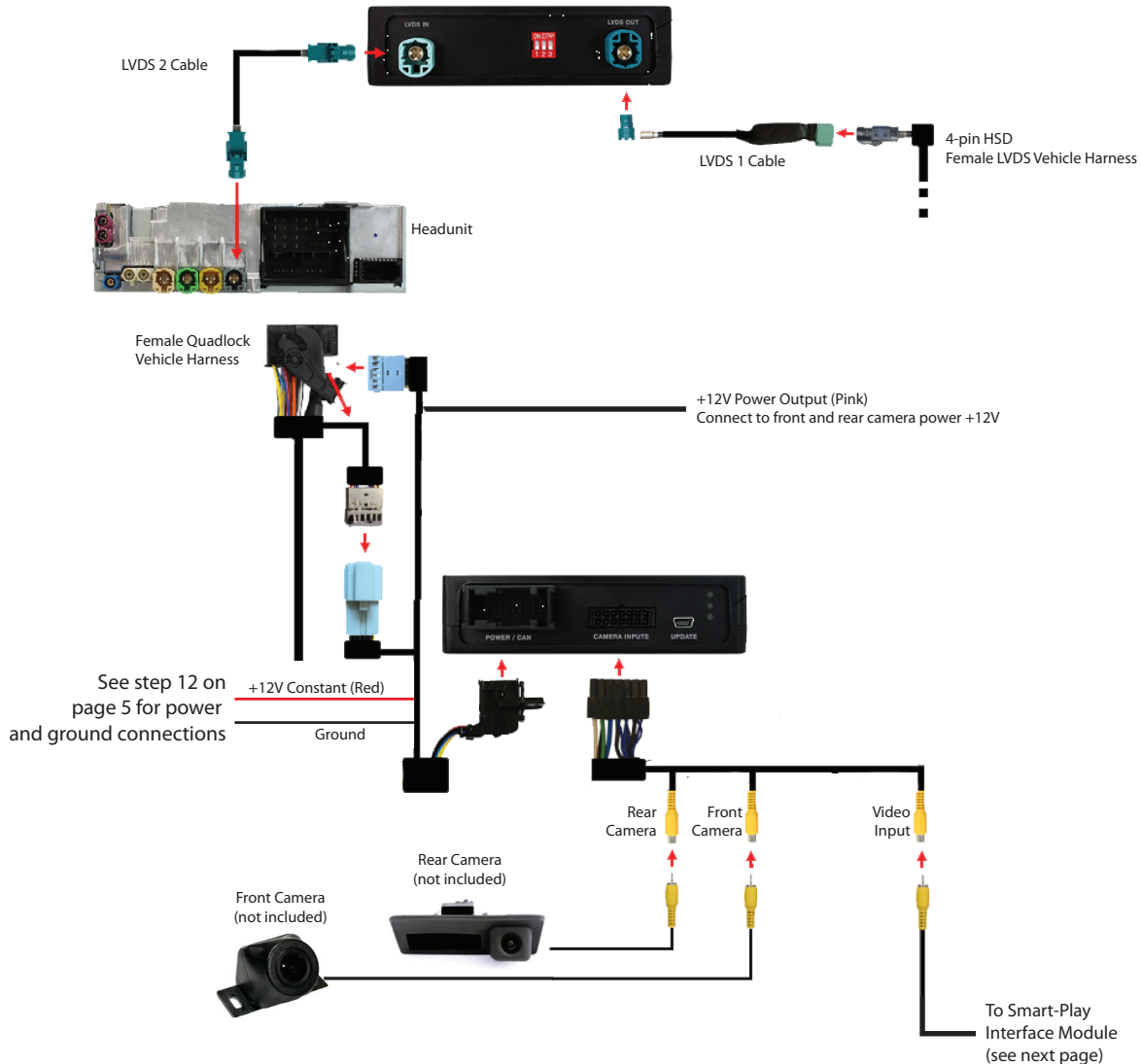
Mic



AMI Audio Adapter Cable



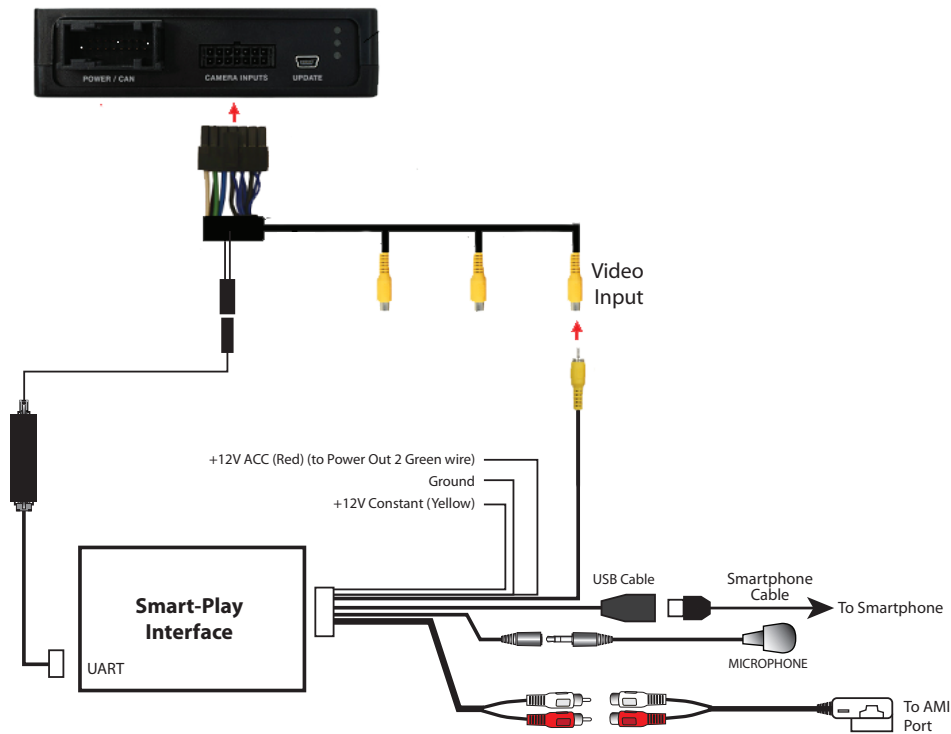
INSTALLATION DIAGRAM:



DIP SWITCH SETTINGS:

VEHICLE	MONITOR SIZE	DIP 1	DIP 2	DIP 3
Audi A3 (8V)	7"	ON	OFF	OFF
Audi A4 (8W)	8.3"	ON	ON	ON
Audi Q7 (4M)	8.3"	ON	OFF	ON
Audi Q7 (4M)	7"	ON	OFF	OFF



Smart-Play Interface Wiring Diagram

1. Clip the microphone to the desired location. We recommend clipping it on the A pillar. Run the cable towards the Smart-Play Interface and plug in to female 3.5mm jack.
3. Locate the AMI port on the vehicle. Two possible locations are in the center armrest or in the glove box. Plug the AMI to RCA adapter cable to the AMI port and run the cable towards the Smart-Play interface. Plug the RCAs to the audio RCAs on the ACPAD-81Y harness.



4. Plug in the USB extension cable provided in the kit and run the female end to an easily accessible location. Note that the Smart-Play interface requires the use of the original smartphone charging/data cable. The USB port can also be used to play music and videos on a USB thumb drive.
5. Plug in the male RCA plug of the Smart-Play interface harness to the ACPAD-81Y Video In RCA.
6. Connect the Red wire of the Smart-Play harness to the Green Power Out 2 wire of the ACPAD-81Y harness. Connect the Black wire to ground and the Yellow wire to +12V Constant. See step 12 on page 5 to see where to tap +12V constant and ground from the vehicle harness.



INSTALLATION INSTRUCTIONS:



1. Installation is done behind the media player in the glove compartment.



2. Remove the dashboard side panel.



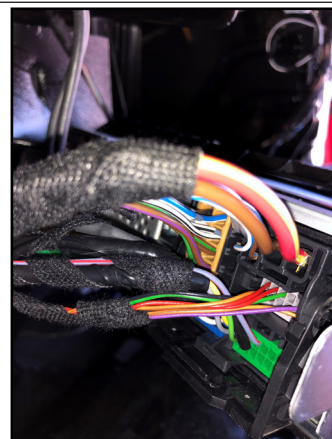
3. Remove the screw that holds the glove compartment.



4. Remove the other screws holding the glove compartment.



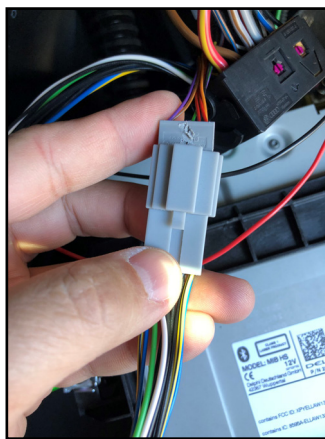
5. Pull down the glove compartment to show the media player.



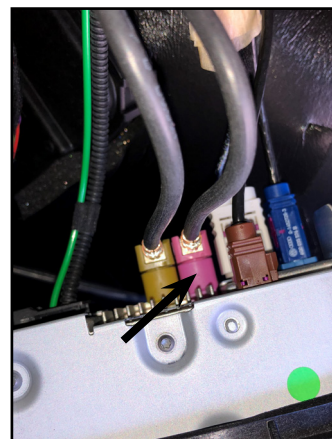
6. Remove the media player to gain access to the connectors on the back.



7. Unplug the Gray connector from the Quadlock connector.

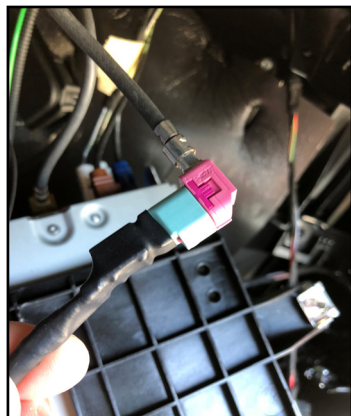


8. Plug in the Gray connector to the mate on the ACPAD-81Y harness.

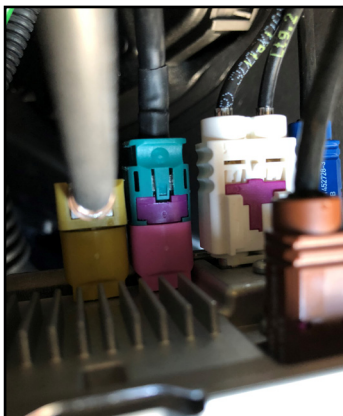


9. Locate the Pink LVDS connector and unplug this.





10. Plug the Pink LVDS cable to the LVDS 1 cable. Plug the other end of the LVDS 1 cable to the module LVDS OUT.



11. Plug one end of the LVDS 2 cable to the Pink LVDS port on the media player. Plug the other end of the LVDS 2 cable to the module LVDS IN.



12. Tap the Yellow and Black wires of the ACPAD-81Y harness to power & ground on the Quadlock connector:
Yellow to RED/YELLOW
Black to BROWN



13. Tape the connections well to avoid short circuits.

14. Install the cameras that will be used in the install. Run the camera cables towards the radio. The RCAs and camera power wires will be connected to the ACPAD-81Y harness.

Video Inputs

Reverse Camera
Front Camera

Power Wire

Pink
Pink



15. Connect the camera power wires to the PINK power output 1 wire.



16. Plug in connectors to the ACPAD-81Y module.



17. Test the communication. Turn on the ignition and check if LEDs are on.

18. Proceed to the OSD settings on the next page.

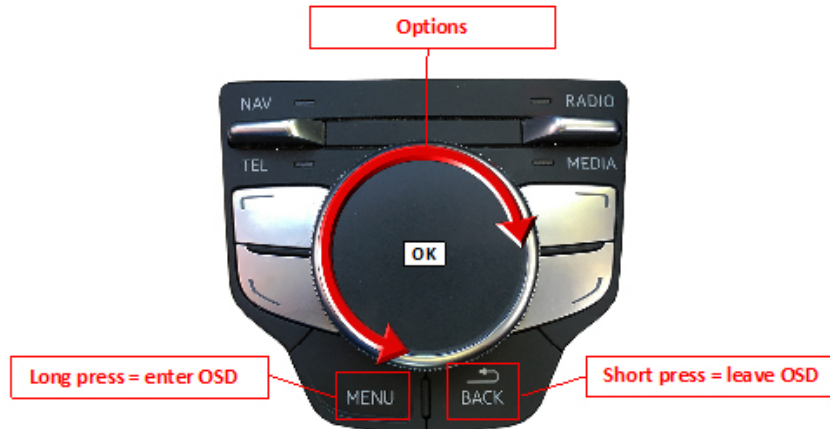
19. Test the cameras installed and Smart-Play. Put gear in reverse and check for rear camera image on screen. Go to Smart-Play mode and test for functionality. Once the cameras and Smart-Play validation is complete, mount the ACPAD-81Y and Smart-Play modules, reinstall the media player in the glove compartment.



OSD SETTINGS:

OSD Menu

Use the following buttons on the Audi MMI to enter the ACPAD-81Y OSD Menu:



SETTING THE SMART-PLAY INTERFACE:

Use the “Video Input” on the ACPAD-81Y video harness to plug in the Smart-Play interface video out RCA. Please note that the vehicle needs to have a factory AUX Input for audio to be heard through the factory sound system. An AMI to RCA adapter cable is included in the kit. Locate the AMI port on your Audi vehicle which is located either in the center arm rest or in the glove box.

Go to the OSD menu and set “Input”, menu item “Left VC/AV” to “RC43”. This step is very important otherwise the Smart-Play controls will not work.



Go to the OSD menu and set “Option 1”, menu item “Power Out 2” to “CAN”.



OSD Menu	Menu Item	Setting	Description
Input	Left VC/AV	RC43	Smart-Play control
Option 1	Power Out 2	CAN	Smart-Play automatic turn on



SETTING THE CAMERAS:

Use the PINK wire to power the Front and Rear cameras. Set the OSD as follows:

Option 1 = CAM



Setting the Front Camera

(Use the PINK (Output 1) wire to power the Front camera)



OSD Menu	Menu Item	Setting	Description
Input	FVC	OFF	Front camera deactivated
		ON	Switches to front camera if parking process is enabled and reverse gear is released
Option 1	Park Logic	Intelligent	For vehicles with front-PDC. Enabled while parking process and up to 12 mph
		RGearOnly	Enabled while parking process (not suitable for front camera operation)
		RGearSpeed	Enabled while parking process and up to e.g. 7 mph (speed adjustable)
		RGearTime	Enabled while parking process and up to 20 seconds
Option 2	R/F Cam ON	XX	Speed setting for deactivating of the camera image
Option 2	PDC Graphic	OFF	OEM PDC display of the vehicle deactivated
		Horizontal	Vehicles with horizontal OEM PDC display
		Vertical	Vehicles with vertical OEM PDC display

Note: You can deactivate the camera image by a long press (2 sec.) of the rotation knob.



Setting the Rear Aftermarket Camera

(Use the PINK (12V Output 1) wire to power the Rear camera)

In the OSD Menu, set "Option 1" > menu item "Power Out 2" to "CAM"



OSD Menu	Menu Item	Setting	Description
Input	RVC	OFF	Rear View camera deactivated
		ON	Switches to rear-view camera if reverse gear is engaged or PDC is activate
Option 1	Park Logic	Intelligent	For vehicles with PDC. Enabled while parking process and up to 12 mph (not suitable for front camera operation for vehicles without front PDC)
		RGearOnly	Enabled while parking process (not suitable for front camera operation)
		RGearSpeed	Enabled while parking process and up to e.g. 7 mph (speed adjustable)
		RGearTime	Enabled while parking process and up to 20 seconds
Option 1	RVC Lines	ON	Interactive lane lines activated
Option 2	R/F Cam Till	XX	Speed setting for deactivating of the camera image
Option 2	PDC Graphic	OFF	OEM PDC display of the vehicle deactivated
		Horizontal	Vehicles with horizontal OEM PDC display
		Vertical	Vehicles with vertical OEM PDC display
Option 2	Cam Trigger	CAN	Rear gear and blinker signal detection over CAN Bus
		Analog	Rear gear signal detection over analog +12V signals

Note: You can deactivate the camera image by a long press (2 sec.) of the MMI knob.



OSD Menu	Menu Item	Setting	Description
Input	RVC	OEM	If a factory rear-view camera is present. The interface turns off, if reverse gear is enabled and it displays factory rear-view camera
Option 1	Park Logic	Intelligent	For vehicles with front-PDC. Enabled while parking process and up to 12 mph.
		RGearSpeed	Enabled while parking process and up to e.g. 7 mph (speed adjustable)
		RGearTime	Enabled while parking process and up to 20 seconds
Option 2	R/F Cam Till	XX	Speed setting for deactivating of the camera image

Configuring the Trigger Outputs

Configure the +12V trigger outputs in the OSD menu to supply power to the cameras and the Smart-Play interface. The PINK wire (12V OUTPUT 1) is Power Out 1 for the front and rear cameras and Power Out 2 is for the Smart-Play module.



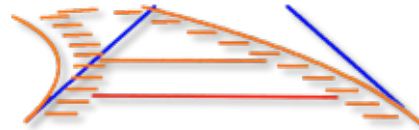
OSD Menu	Menu Item	Setting	Description
Option	Power Out 1 (PINK)	CAN	+12V when the interface is on (red LED on)
		ACC	+12V when ignition is on
		Cam	+12V when camera input is activated (manually or automatically)
	Power Out 2 (Smart-Play)	CAN	Smart-Play power ON
		OFF	Trigger output deactivated

Tip: We recommend for all camera to use power out setting "CAM" and for the Smart-Play interface (Power Out 2) to use the power out setting "CAN".



Interactive Parking Guide Lines

The ACPAD-81Y includes an Interactive Parking Guide Lines function that is added to the aftermarket rear view camera. Use the OSD menu to activate this feature.



OSD Menu	Menu Item	Setting	Description
Option	RVC Lines	OFF	Interactive lane lines deactivated
		ON	Interactive lane lines activated
	Car Type	AUDI A3 / AUDI A4 / AUDI Q7	Vehicle Type Selection

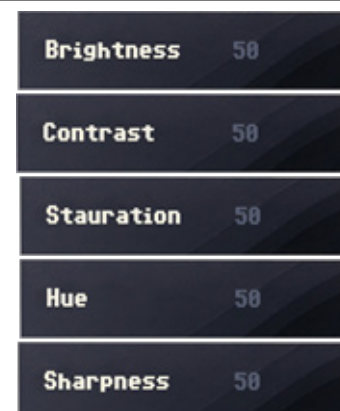
Interactive Lane Lines Settings

The height and width of the interactive lane lines can be set in the OSD menu. For this setting you must first activate the rear view camera level and push the “MENU” button for 2 seconds to activate the settings menu. With the rotation knob you can select the menu point “Line Height” to change the height of the interactive lane lines and with menu point “Line Width” the width of the lines. Click “Exit” to leave the settings menu.



Picture Settings

The camera picture can be set in the OSD menu. For this setting you must first activate the camera level and push the “MENU” button for 2 seconds to activate the settings menu. With the rotation knob you can select and change the “Brightness”, “Contrast”, “Saturation”, Hue” and “Sharpness”. Click “Exit” to leave the settings menu.



Note: The picture settings will be retained for every camera input separately.



OSD Settings

You can change the basic configurations of the interface in the OSD (on screen display).



OSD Menu	Menu Item	Setting	Description
OSD	POS. X	0-xxx	Horizontal position of the OSD
	POS. Y	0-xxx	Vertical position of the OSD
	Size	Small	Small OSD menu window
		Large	Large OSD menu windows
	Osd TimeOut	2-20	Time setting for automatic OSD shutoff
Info	Version	X.XX.XX	Displays the current SW-version
Option 1	Factory Reset		Reset to factory default settings

CONNECTING THE SMART-PLAY INTERFACE:

The ACPAD-81Y will work with Apple or Android devices and will require the smartphone's OEM charging/data cable. The USB port on the ACPAD-81Y can be used to play videos or music from a USB thumb drive.

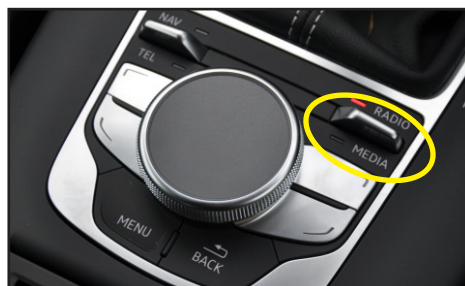
Using the ACPAD-81Y Input Selection

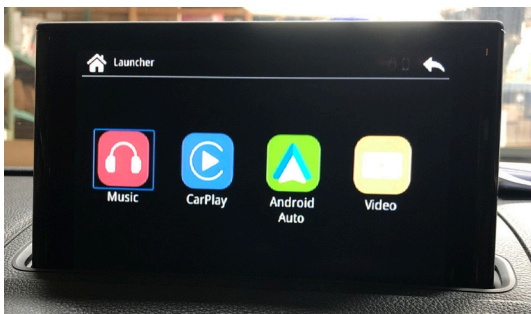
In the vehicle's Media menu, activate AUX Input to get the Smart-Play sound through the vehicle's audio system. Press the "MEDIA" button again for 3 to 5 seconds to go to the ACPAD-81Y's AV mode.

A short press of the "MEDIA" button will toggle through the video sources. Each short press will toggle to the next enabled input. If all inputs are enabled the order is:

Rear CAM > Front CAM > Video Input (Smart-Play) > ... Inputs which are not enabled are skipped.

To exit AV mode, press the "MEDIA" button for 3 to 5 seconds or by a short press of "RADIO/NAV/TEL/PHONE/CAR" button.

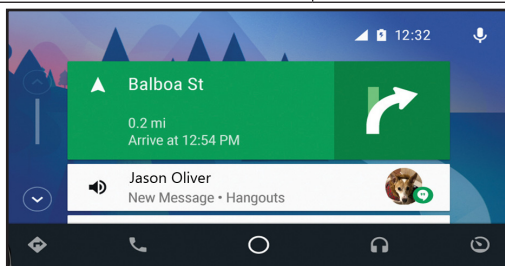




1. Picture above shows the HOME screen of the Smart-Play interface. Music and Video is used in conjunction with a USB thumb drive plugged in to the USB port.



2. Plug in the smartphone's original charging/data cable to the USB port on the ACPAD-81Y harness. Image above shows the "Home Screen" for Apple device once the smartphone is connected.



3. Image above shows the "Home Screen" for Android devices once the smartphone is connected.

VEHICLE APPLICATIONS:

Audi		
2013 - Up	A3 (8V)	MMI Navigation Plus with MMI touch 7" or 8.3" MIB/MIB II main unit
2016 - Up	A4 (8W)	
2018 - Up	Q5 (B9)	
2015 - Up	Q7 (4M)	



2015 A3



2017 A4

