

Smart-Play Integration with Multi Camera Inputs for Select Mercedes Benz Vehicles with NTG5 System

PRODUCT FEATURES:

- Smart-Play Integration system allows connection of Android and other smartphones to the Mercedes Benz NTG5 infotainment system.
- Integrates wired/ wireless Android Auto and carplay
- Adds front and rear aftermarket camera inputs.
- Retains functionality of the OEM backup camera if present.
- Includes a USB-3.5MM auxiliary audio adapter.

PARTS INCLUDED:



ACPMB-50W Module



Video Harness



4K HDMI Cable



3.5mm Aux Cable



Vehicle Harnesses



LVDS Cable



Microphone



Optional USB Cable (Sold Seperately)



Smart-Play Interface Module



USB to Aux Adapter



OSD Controller



Smart-Play Module Power Harness

rev.051222



1 of 11 Crux Interfacing Solutions • Chatsworth, CA 91311 phone: (818) 609-9299 • fax: (818) 996-8188 • www.cruxinterfacing.com



Smart-Play Integration with Multi Camera Inputs for Select Mercedes Benz Vehicles with NTG5 System

WIRING DIAGRAM:



DIP SWITCH SETTINGS:



Note: ON is down and OFF is up

| <u>DIP</u> | <u>SETTING</u> | <u>SYSTEM</u> | SCREEN SIZE | VEHICLE |
|------------|----------------|---------------|-------------|-------------------------------|
| 1 to 8 | ALL OFF | NTG5.1 | 8″ | A, B, CLA, CLS, GLA, GLE, GLS |
| 1 to 8 | ALL OFF | NTG5.1 | 7″ | A, B, CLA, CLS, GLA, GLE, GLS |
| 4 | ON | NTG5.2 | 8.4″ | C, GLC |
| 4&7 | ON | NTG5.2 | 7″ | C, V, GLC |
| 3 | ON | NTG5.5 | 12.3″ | S Class |





Smart-Play Integration with Multi Camera Inputs for Select Mercedes Benz Vehicles with NTG5 System

INSTALLATION INSTRUCTIONS:



1. Remove plastic trim.



2. Remove the 2 T20 torx screws.



3. Carefully pull out up the whole center panel.



4. Remove the 2 screws holding the 5. P radio.



5. Pull out the radio.



6. Unplug the Quadlock connector.



7.Remove the 12-pin connector (black) from the Quadlock connector.



8. Remove the insert from the 12pin connector.



9. Install the 12-pin insert from the ACPMB-50W harness to the 12-pin connector.



10. Plug the 12-pin connector back to the Quadlock connector.



11. Plug in the factory 12-pin insert to the ACPMB-50W harness mate.



12. Plug the Quadlock connector back to the radio.





Smart-Play Integration with Multi Camera Inputs for Select Mercedes Benz Vehicles with NTG5 System



13. Tap the power wires on the ACPMB-50W harness to the Quadlock connector wires as follows: RED to Red (Battery) Black to Brown (Ground)





14. Unplug the blue LVDS connector from the radio and plug it to the left side

LVDS port on the module. Note every vehicle might not have the same color LVDS connector.





15. Plug one end of the LVDS cable provided in the kit to the right side LVDS port on the module.



16. Plug the other end of the LVDS

cable to the radio.

17. Install the front and rear cameras (if applicable) and power using the power wires provided.



18. Tap the Smart-Play module power wires to the cigarette lighter wires as follows: RED to Red (ACC) Black to Brown (Ground)



19. Plug in the 4K HDMI cable provided with the kit to the Smart-Play module.



20. Plug the 2 pin power wire connector to the Smart-Play module.









Smart-Play Integration with Multi Camera Inputs for Select Mercedes Benz Vehicles with NTG5 System



21. Plug the other end of the 4K HDMI cable to the ACPMB-50W module HDMI port (left side).



22. Plug in the optional USB extension cable to the Smart-Play module for wired AA/ Carplay



23. Run the other end of the USB extension cable to an accessible location.



24. Plug one end of the Aux cable to the Smart-Play module and other the factory USB port. end to the USB to Aux adapter.



25. Plug the USB to Aux adapter to



26. Plug in the main power harness to the ACPMB-50W module.



OPERATION:



To enter and exit the Smart-Play mode, press the back button 1 on the steering wheel controls for 2 seconds.



- 1 = Short press for Voice Command
- 2 = Short press for Return
- 3 = Rotate and push knob for Smart-Play navigation



5 of 11 Crux Interfacing Solutions • Chatsworth, CA 91311 phone: (818) 609-9299 • fax: (818) 996-8188 • www.cruxinterfacing.com



Smart-Play Integration with Multi Camera Inputs for Select Mercedes Benz Vehicles with NTG5 System

ON SCREEN DISPLAY (OSD) SETTINGS:

The OSD Setting Screen automatically pops up when the OSD Control Pad is connected.



Use the OSD menu to make the necessary settings. Remember to Run Save&Reboot after the settings are made. Unplug the OSD Control Pad after setting the cameras and keep it in a secure location in case it is needed to change the settings.

SMART-PLAY SETTING



After plugging in the OSD controller, navigate down toLVDS Input and set to ON. Push RIGHT button to go to the next menu.



Set Navi Brand to NV17



Navigate the OSD back the main menu and go to Save&Reboot then Run.





Smart-Play Integration with Multi Camera Inputs for Select Mercedes Benz Vehicles with NTG5 System

WIRELESS CARPLAY/WIRELESS ANDROID AUTO CONNECTION SETTINGS

Android Auto Wireless connection

Have Android AutoLink OFF

| | | | | < |
|---------------------------|----------|------------|----|---|
| SW Version: v1.0.13 | System | m Volume: | | > |
| BT Name: NV17W-BT-5ad0 | < VR Vo | lume: | 48 | > |
| WIFI: NV17W-WIFI 66668888 | 🕻 Navi \ | Volume: | 48 | > |
| Right Hand Drive | CP cal | Il Volume: | 48 | > |
| Android AutoLink | AA cal | II Volume: | 48 | > |
| | | | | |



Apple Carplay Wireless Connection







Smart-Play Integration with Multi Camera Inputs Mercedes Benz Vehicles with NTG5 System

SMARTPHONE MIRRORING CONNECTION

Smartphone Mirroring Connection for Iphones



Smartphone Mirroring Connection for Androids





8 of 11 Crux Interfacing Solutions • Chatsworth, CA 91311 phone: (818) 609-9299 • fax: (818) 996-8188 • www.cruxinterfacing.com



Smart-Play Integration with Multi Camera Inputs for Select Mercedes Benz Vehicles with NTG5 System

REAR AND FRONT CAMERA SETTING

| [OSD setting] (1/1) Rear Camera ON → Front CameraOFF LVDS Input ON | < [Rear Camera] (1/1) Rear Mode REAR → | <[Rear Mode] (1/1) Rear Input OEM → |
|---|--|---|
| 12V Output Constant Advance SET > Save&Reboot Run | | |



DYNAMIC PARKING GUIDE LINES





To turn ON the Dynamic Parking Guide Lines, go the Rear Input > Rear Set and turn ON Warning LANG. Go back to the root menu and Run Save&Reboot. Re member to unplug the OSD Control Pad otherwise the unit will not function properly. Set the parking brake on, start the car, put the gear in reverse, turn the steering wheel all the way to the left and all the way to right then put it in the center. The ACPMB-50W will calibrate automatically.





9 of 11 Crux Interfacing Solutions • Chatsworth, CA 91311 phone: (818) 609-9299 • fax: (818) 996-8188 • www.cruxinterfacing.com



Smart-Play Integration with Multi Camera Inputs for Select Mercedes Benz Vehicles with NTG5 System



The front Camera will automatically show on the screen when the gear is put to Drive from Reverse. Set the delay time on the OSD menu. Delay time can be set from 1 to 60 seconds after a putting the car to drive from reverse.

VEHICLE APPLICATIONS:

| Mercedes Benz | | | |
|---------------|----------------|-------------|------------|
| 2015 - 2017 | A-class (W176) | 2017 - Up | GL (X166) |
| 2015 - 2018 | B-class (W24) | 2015 - Up | GLA (X156) |
| 2015 - Up | C-class (W205) | 2015 - Up | GLC (X253) |
| 2015 - 2018 | CLA (C117) | 2015 - Up | GLE (C292) |
| 2015 - 2017 | CLS (W218) | 2015 - 2018 | ML (W166) |
| 2015 - 2016 | E-class (W212) | 2016 - 2018 | SL (R231) |
| 2017 - Up | G (W463) | 2016 - 2018 | SLC (R172) |
| | 1 | 1 | 1 |



Android Auto Screen

CarPlay Screen



10 of 11 Crux Interfacing Solutions • Chatsworth, CA 91311 phone: (818) 609-9299 • fax: (818) 996-8188 • www.cruxinterfacing.com



Smart-Play Integration with Multi Camera Inputs for Select Mercedes Benz Vehicles with NTG5 System

TROUBLESHOOTING

*If your call audio does not use car's bluetooth, manually change it on the phone to select the vehicle during the call, then the phone should remember the last used setting



| Select the services to use on the device: iPhone | |
|--|-----------|
| U Phone | Connected |
| Audio Player | Connected |
| Connect as a Phone | |

Changing the call audio routing setting to "BLUETOOTH HEADSET"

Go to Settings - Accessibility - Touch - Call Audio Routing. Keep it at "Automatic"

- 1. IF the screen is black & not showing factory infotainment screen or the CarPlay/Android Auto Screen
 - Confirm secure connection of LVDS cables to the top monitor.
 - Confirm LVDS cables are not damaged, pinched, kinked or bent.
- 2. No trigger issue /No click heard when long hold applied on BACK button on steering wheel
 - Check and confirm proper connection of the Main Car Interface Harness,
 - CAN bus board, and 30-pin Car Interface Harness.

- Check and confirm no loose pins or damage to the harness. Green/RED LED Light should be visible from the Metal Box

3. When long hold is applied on BACK button on steering wheel, black screen appears

- Confirm proper secure connection of the HDMI Cable.

- Confirm power wire is connected on the CarPlay Box. Red LED light should be visible from the CarPlay Box.

4. Screen image glitching or distorted

- Confirm correct dip switch setting.

5. Hands free call quality noise and echo

- For iPhone, confirm the phone is connected to your vehicle via Bluetooth and

- "Call Audio Routing setting" Keep it at "Automatic"
- For Android, confirm Bluetooth is being used for calls by observing phone's call audio output.

6. No sound

- Confirm AUX cable connection, which is on the HDMI side of the CarPlay Box.

- Confirm Car Media Source is in AUX mode. Confirm sound output from the phone to CarPlay module.

7. Siri does not recognize my voice

- Confirm Microphone jack connection (3.5mm), which is on the USB side of the CarPlay Box.
- Confirm that there are no wire damage.



11 of 11 Crux Interfacing Solutions • Chatsworth, CA 91311 phone: (818) 609-9299 • fax: (818) 996-8188 • www.cruxinterfacing.com