

OPTI-1

M.O.S.T. Fiber Optic Head Unit Replacement Module for Mercedes Benz



Replace your old, outdated or broken factory head unit while retaining your amplifier, speakers and sound quality!



COMPATIBILITY:

2005-2008 CLS
2003-2008 E
2004-2006 S
2004-2006 CL
2005-2008 SL
2005-2008 SLK

NAV-TV CORPORATION | 1-866-477-3336 | www.nav-tv.com

*After market head unit and mounting kit not included. Vehicle must have a factory amplifier on M.O.S.T.

Included Parts:



OPTI-1 INTERFACE



Power, RCA input and remote turn on harness



M.O.S.T fiber optic outer coupler



Needed Tools:

Electrical tape



Torx T20



Crimpers



Multi Meter



Strippers



Soft Pry Tools



Necessary Parts NOT Included:

European antenna adapter
Metra 40-EU10 shown



Antenna extension 4 - 6 meters
depending on the vehicle



Custom fabricated or pre-made
aftermarket dash kit. S class shown



Short male to male
RCA cable



Optional Parts NOT Included:

Steering wheel control interface
Metra ASWC shown



Overview

NAV-TV's OPTI-1 is a radio replacement module for compatible Mercedes Benz vehicles equipped with an external M.O.S.T. fiber optic amplifier. The module allows the factory amplifier, speakers and sound quality to be retained when adding a modern aftermarket radio. Other components in the factory system, such as a CD changer, satellite radio, telephone module, DVD player, or any other factory component in the M.O.S.T loop, will not function after the installation.

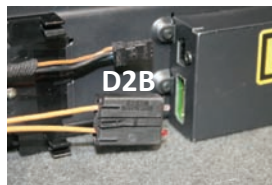
Compatibility and how to verify compatible vehicles

The OPTI-1 has been extensively tested and validated to work with the following model and year vehicles with a M.O.S.T amplifier:

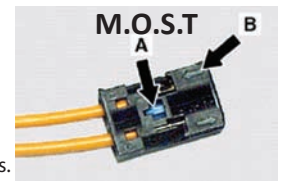
2005-2008 CLS, 2003-2008 E, 2004-2006 S, 2004-2006 CL, 2005-2008 SL & 2005-2008 SLK

To confirm compatibility, remove the radio. With a CD playing in the radio, NOT in an external changer, remove the M.O.S.T fiber optic cable from the radio harness (pictures 1a-1c below). If all sound goes away completely and the vehicle model and year is listed above, the vehicle is compatible with the OPTI-1. It is important to properly validate the vehicle prior to installation, especially in SLK vehicles. It is very rare to have an incompatible vehicle on any other platform than the SLK.

This is D2B and not MOST. This not compatible. If you find this connector, the year or model of the vehicle does not match the verified and compatible vehicles listed above. Notice the red and white ends?



This is M.O.S.T. Notice no red and white ends.



OPTI-1 Electrical Connections

1. Remove the COMAND radio
 2. Disconnect the power harness from the back of the COMAND and remove the optic cable inner plug by gently prying the retaining clip back with a pick tool (see pictures 1a, 1b and 1c below)
 3. Insert the optic cable inner plug into the provided M.O.S.T. outer coupler (see picture 1d below) and plug the completed new assembly into the fiber optic input of the OPTI-1.
 4. Connect the black wire of the OPTI-1 power harness to the ground (brown) wire at the factory radio harness. This wire cannot be used for a radio ground but is sufficient for the OPTI-1.
 5. Connect the red wire of the OPTI-1 power harness to the constant power (usually red with a stripe) wire at the factory radio harness. This wire cannot be used for the radio constant power feed but is sufficient for the OPTI-1.
 6. Connect the blue wire of the OPTI-1 to the amplifier turn on wire of the aftermarket deck (usually blue/white).
 7. Connect a full-range RCA output from the aftermarket deck and connect it to the RCA inputs of the OPTI-1.
- Note: A short RCA cable is sometimes needed in order to position the OPTI-1 in a location that does not hinder the depth of the radio opening.
8. Plug the OPTI-1 power harness into the unit and proceed to the next section "Radio & antenna connections"

1a. Factory radio plug from a CLS, E and SLK



1b. Factory radio plug from a CL, S and SL



1c. Fiber optic cable removed from the factory radio plug



1d. Optics installed in the provided outer coupler



Agreement: End user agrees to use this product in compliance with all State and Federal laws. NAV-TV Corp. would not be held liable for misuse of its product. If you do not agree, please discontinue use immediately and return product to place of purchase. This product is intended for off-road use and passenger entertainment only.

Radio & Antenna Connections

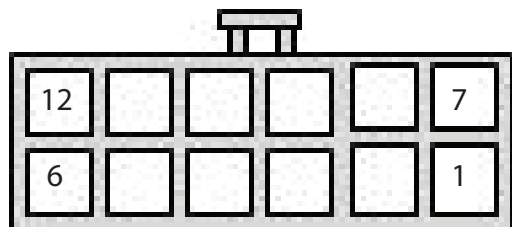
1. Refer to the installation guide from the aftermarket head unit for wiring information.
2. The constant power from the aftermarket head unit (Usually yellow) must be connected to a circuit that can supply the radio with sufficient current (check the specifications in the radio installation manual. Usually the demand does not exceed 10 to 15 AMPS.) Suggested connection points are the driver's side dash fuse box on E, CLS and SLK vehicles, the front or rear fuse box on S and CL vehicles and from the rear fuse and distribution block on the SL (There are two clips on the false floor cover that will allow access to the fuse and distribution block on the SL). **MAKE SURE THAT YOU FUSE THE CONSTANT POWER CONNECTION PROPERLY!**
3. Connect the accessory wire from the aftermarket deck (usually red) to the front cigarette lighter accessory power (black or red with a stripe). Use a multi meter to verify accessory at this location prior to making a connection.
4. Connect the ground (usually black) from the aftermarket radio harness to the ground (brown) wire at the front cigarette lighter.
5. Connect the illumination or dimmer wire from the aftermarket power harness (usually orange or orange/white) to the illumination wire at the front cigarette lighter (grey with a blue stripe). Use a multi meter to verify the wire is illumination prior to making a connection.
6. The AM/FM antenna is located at the audio gateway (AGW). To interface with the factory AM/FM antenna you must use an antenna adapter (Metra 40-EU10, not provided) as well as an antenna extension harness (not provided) which must be run from the AGW to the front of the vehicle and into the antenna input of the aftermarket radio. The location of the AGW varies in each vehicle. The AGW in the SL is located behind the driver's seat in the side panel. On the E & CLS class it is in the driver's side of the trunk behind the carpet and sandwiched between the outer skin and trunk support. On the S & CL class the AGW is located in the driver's side trunk behind the carpet and on the floor. The AGW in the SLK is located in the front of the vehicle below the passenger footwell.

Dash Kits, Radio Mounting and not included accessories

NAV-TV recommends professional installation of this product using MECP accepted practices. Dash kits, either pre made or custom fabricated, as well as the required and optional non included accessories, are available through specialty aftermarket professionals world-wide. For a recommended dealer in your area please call our sales and support team at 1-866-477-3336 (toll free USA and Canada) or 1-561-955-9770 (international and locally). NAV-TV does not offer technical support for dash kits and or custom mounting options, please consult with your local recommended specialist.

OPTI-1 Power Harness diagram and pin locations

View is from the back (wire) side of the connector



1. Red constant power input 12v+
2. Blue remote turn on input 12v+
3. Black heat shrink common audio shield - input
4. NC
5. NC
6. NC
7. Black ground input -
8. Right audio input +
9. Left audio input +
10. NC
11. NC
12. NC

Agreement: End user agrees to use this product in compliance with all State and Federal laws. NAV-TV Corp. would not be held liable for misuse of its product. If you do not agree, please discontinue use immediately and return product to place of purchase. This product is intended for off-road use and passenger entertainment only.

FAQs / Troubleshooting

Q1: The OPTI-1 works fine on AM/FM but as soon as I put a CD or DVD in the unit all sound goes away.

A1: Some aftermarket head units have an amplifier turn on wire as well as a power antenna wire. Normally, an amplifier turn on wire is blue/white and a power antenna remote wire is blue. The power antenna remote wire only outputs voltage when on Am or FM modes. The solution is to connect the blue wire from the OPTI-1 to a wire that outputs 12 volts + in every mode from the aftermarket head unit (blue/white)

Q2: I installed the unit and I have lost all bass response in the vehicle. All the speakers are playing but I have no low end.

A2: Some aftermarket head units have cross-overs built into them that limit either low frequency or high frequency response. Refer to the owners' guide of the aftermarket head unit and turn off any high or low pass electronic crossover in the head unit to ensure a full range output.

Q3: I installed the unit and all I hear is bass but not high frequencies.

A3: Refer to answer 2. Also, make sure that you did not attach the RCA inputs of the OPTI-1 to the subwoofer output from the aftermarket deck.

Q4: The OPTI-1 works and sounds great but I can only get balance left and right to function and not front to back fade.

A4: The OPTI-1 does not support front to back fade due to the lack of any available aftermarket head unit with a communication network. Balance will function but fade will not.

Q5: Will the OPTI-1 work with any aftermarket head unit?

A5: Yes, as long as the unit is capable of a full range RCA pre-amplified audio output and a remote amplifier turn on.

Q6: I purchased an aftermarket steering wheel control interface and cannot get it to work.

A6: Steering wheel controls in every compatible vehicle are on the CAN network. CAN High is brown/red and CAN low is brown in a twisted pair at the audio gateway. Please contact the manufacturer of the device for support.

Q7: Will the OPTI-1 work with any vehicle that is not listed as being compatible?

A7: No, the OPTI-1 is only compatible with the listed model and year vehicles.

Q8: After reading the installation manual over and over I am still having problems. What should I do?

A8: Our highly trained technical support staff can be reached Monday through Friday, 9 A.M. to 6 P.M. EST, at 1-866-477-3336 x 2 (Toll free USA and Canada) or 1-561-955-9770 x 2 (local and international).

Agreement: End user agrees to use this product in compliance with all State and Federal laws. NAV-TV Corp. would not be held liable for misuse of its product. If you do not agree, please discontinue use immediately and return product to place of purchase. This product is intended for off-road use and passenger entertainment only.