

NAV-TV

INTERFACING THE FUTURE

Nissan & Infiniti Navigation System NTX-Nissan/Infiniti Installation Manual



Included Parts:



NTX-54 Navigation system
and GPS antenna



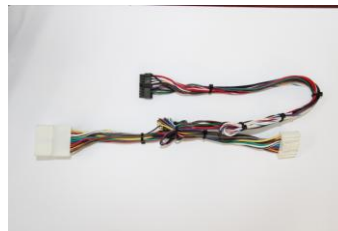
NIS/INF Integration Module



Touch Screen Monitor



24 Pin to 24 Pin NIS/INF to Navigation



20 Pin Power Plug T-Harness



24 Pin Video T-Harness



Needed Tools:

Long Phillips Screwdriver



Plastic Pry tools



right angle pick



Zip Ties



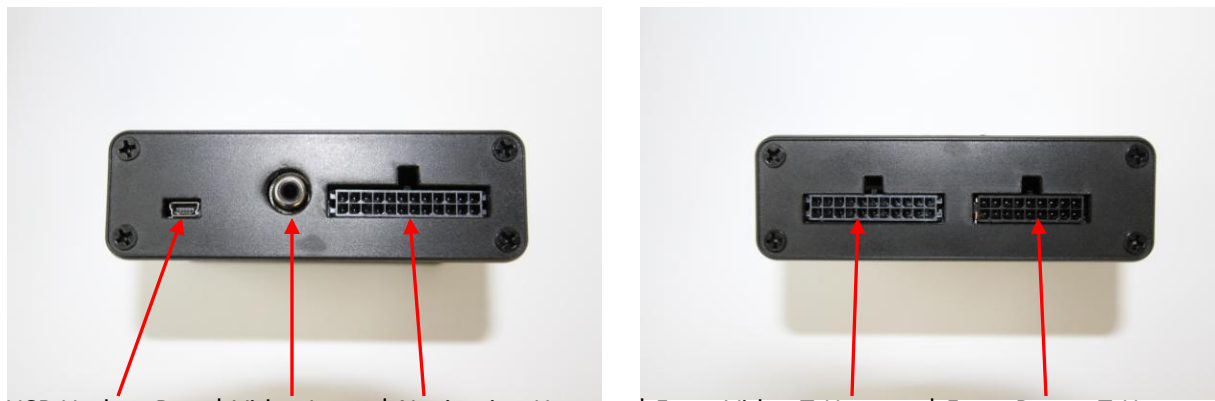
Velcro



Telescoping Magnet

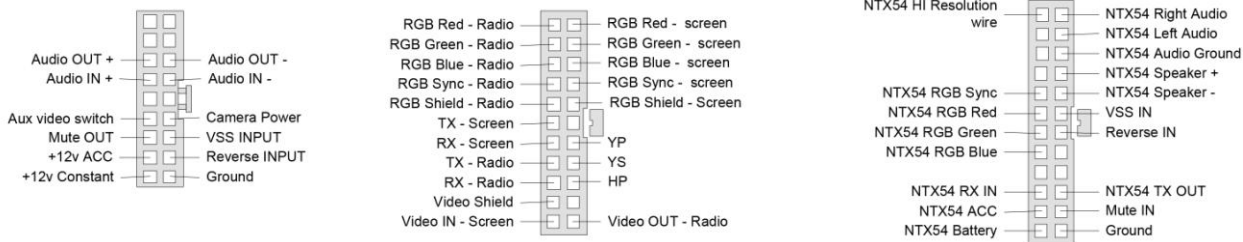


MODULE CONNECTOR EXPLANATION

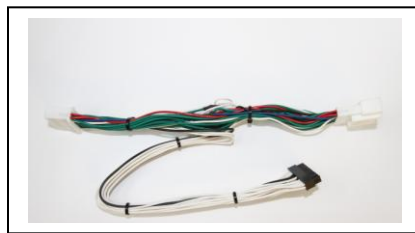
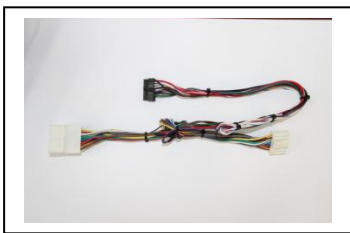


USB Update Port | Video Input | Navigation Harness | From Video T-Harness | From Power T-Harness

NTX Nissan/Infiniti connector pin out (wire side)



The connector pin outs above are for the black mini Molex connectors that plug into the NTX-NIS/INF interface module. The view is from the back side of the Molex connectors (the view you would see if the connectors were plugged into the NTX-NIS/INF module). From left to right is the 18 pin mini Molex from the 20 pin power plug T-harness, the 22 pin mini Molex from the 24 pin video T-harness and the 24 pin mini Molex from the 24 pin to 24 pin NTX-NIS/INF module to the NTX-54 navigation module. The corresponding harnesses can be seen below from left to right.



Overview:

The NTX Nissan/Infiniti is a touch screen Navigation interface for compatible 2008 to current Nissan and Infiniti vehicles. The module will also allow the integration of a video source or rear view or a front facing camera. During the installation the original color LCD monitor will be replaced. **The installation is performed entirely AT THE RADIO and not at the monitor.** FAILURE TO FOLLOW THESE INSTRUCTIONS MAY LEAD TO PRODUCT FAILURE OR AN AIRBAG MALFUNCTION LIGHT.



G37 Radio & Screen Removal:



Remove the plastic trim ring around the shifter using a plastic pry tool.



Insert a pick tool into the shift lock hole and remove the plug.



Insert the pick tool or a small screwdriver into the shift lock hole and depress the shift lock mechanism



Make sure that the emergency brake is engaged and then move the shifter into reverse.

The accessory of the vehicle must be off during the next several steps. Make sure that either the key is removed from the key cylinder or that the push to start switch is in the off position. If this step is ignored you will have an airbag light warning!



Remove the screws from the left and right bottom corners and pull the HVAC panel from the bottom up and away from the dash.



Gentle pull the top section back and away from the dash to release the top clips. Make sure that the vehicle is off and disconnect all the harnesses from the back of the HVAC panel. DO NOT turn the key or push the push to start button until after the HVAC panel has been plugged back in during later steps.



Remove the screws on the bottom left and right that hold the monitor trim in place. These screws were hidden by the HVAC panel.



Pull the monitor shroud up and back towards the rear of the vehicle and remove it. The ribbon cable attached to the shroud should have already been removed in step 6.



Remove the two screws holding the top of the radio bracket and the bottom of the monitor brackets.



Using a long phillips screwdriver, remove the two screws holding the bottom of the radio bracket. You may need the magnet to retrieve these screws if they drop inside the dash.



Pull the radio out of the dash, disconnect all wiring and set it aside.



Swing the bottom of the monitor upwards to release the top of the monitor brackets from their U shaped top mount. Note: There are no top bolts and only a locking mount. Disconnect the monitor and set it aside.



Armada Radio & Screen Removal: Warning! The ignition MUST be off



Using a soft pry tool remove the cover below the HVAC panel by prying gently around it to dislodge it from the retaining clips. Disconnect all plugs and set it aside.



Remove the two screws at the bottom left and right with a phillips screwdriver. Above and at a 45 degree angle behind these two screws are 2 more screws. You must use a long phillips screwdriver to access them. Remove these screws as well.



Using a soft pry tool, pry around the outside of the HVAC fascia to release the clips all the way around. Pull the entire fascia towards the back of the vehicle to release the clips, disconnect all the wiring harnesses and set aside.



All other Nissan & Infiniti vehicle Radio & Screen Removal: Warning! The ignition MUST be off



Unscrew the screws around the monitor bracket, unplug the and monitor and set the monitor and bracket aside.

The removal of all other Nissan and Infiniti vehicle radios are similar to either the G37 or Armada. Remove the radio and screen from the vehicle and then proceed to the next steps. ***MAKE SURE that the ignition is off in all Nissan/Infiniti vehicles as the airbag indicator light is on the part of the dash that you will be removing. Although it will cause no damage to the vehicle, the air bag indicator malfunction light will illuminate if the ignition is turn on while this indictor light is unplugged.***



Screen Replacement ALL VEHICLES EXCEPT FX.



Mark the bracket on the side with an angle



Mark the bracket on the side where the monitor has an angle. Remove and retain the 2 screws on each side of the factory monitor and remove it from the bracket.

Mount the included touch screen monitor into the bracket, making sure that the angle side is facing the mark, secure it with the factory screws and reinstall the monitor back into the vehicle.



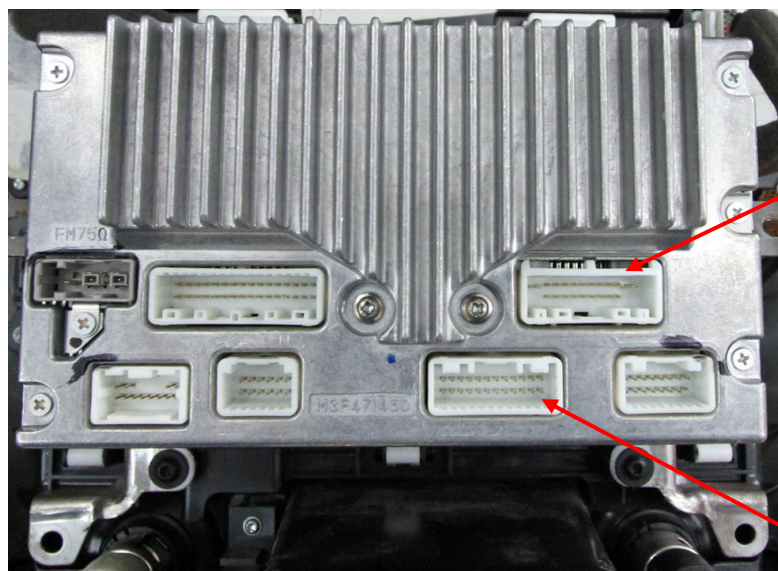
Screen Replacement FX.

1. Follow the directions on the previous page under "Screen Replacement All Vehicles Except FX" to remove the factory monitor from the mounting bracket.
2. The original monitor in the FX has an oversized monitor housing. In order to replace the original monitor with the new touch screen monitor you must use the included (FX Kit only) shims and longer replacement screws to center the new monitor in the mounting brackets.
3. Reinstall the new monitor and mounting bracket back into the vehicle and place the included (FX Kit only) trim fascia around the new monitor. Note: The fascia is a pressure fit and does not require adhesive to stay in place.



Plug-and-play installation is performed at the radio for ALL VEHICLES.

BACK OF ALL RADIOS



20 Pin Power
Connector

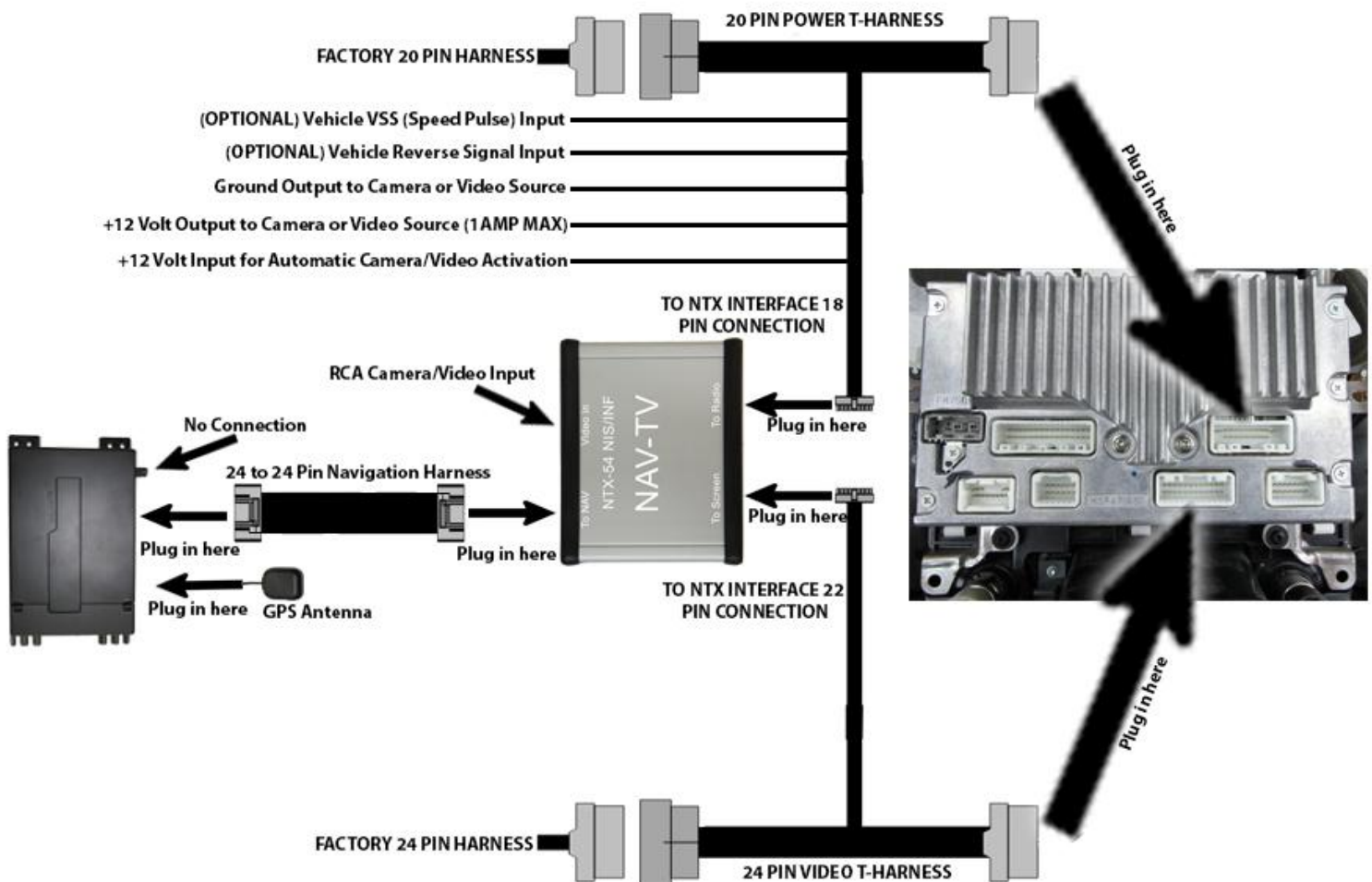
24 Pin Video
Connector

At this stage the monitor should be reinstalled in the vehicle with the factory connector plugged into the monitor. If you have failed to follow these instructions and ANY aftermarket harness is plugged in at the screen, disconnect it and insert the factory plug. In vehicles where the screen mounts behind the fascia, like the Armada, the screen can be reattached with the factory screws and mounted permanently. In vehicles like the G37 where the radio top mounts are in the same location as the monitor bottom screws, reattach the top mechanical hinge mount but leave the bottom retaining screws out until the installation is completed and only reattach during final reassembly.



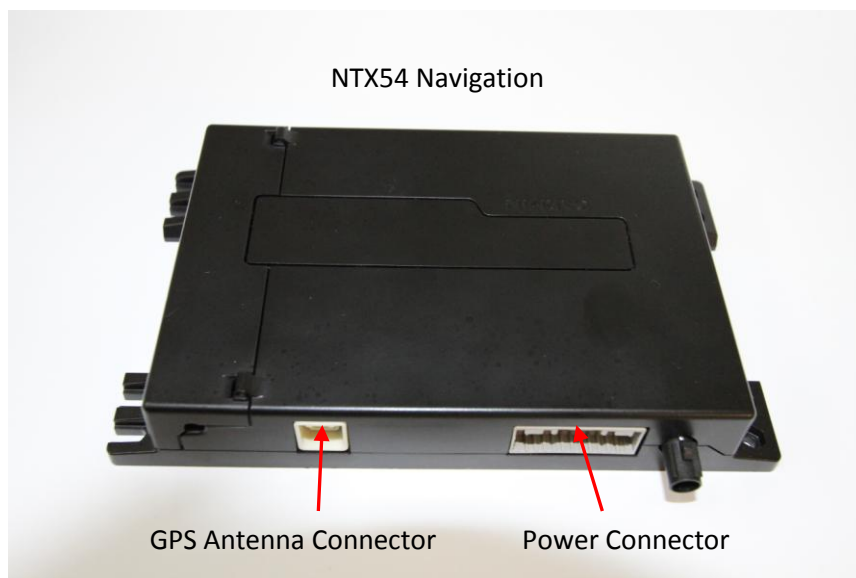
Installation of the T-harnesses for all vehicles

1. Plug the female end of the 24 pin Video T-Harness into the factory male 24 pin plug behind the radio.
2. Plug the female end of the 20 pin Power T-harness into the factory male 20 pin plug behind the radio.
3. Run both the extension harnesses with the 22 pin and 18 pin black mini Molex ends to a location near the radio with enough room to properly house and mount the NTX-NIS/INF integration module.
4. ***If installing a video source, or a front or rear camera continue with instruction 5. If no camera or video source is being installed skip to instruction 8.***



5. If installing a video source or front camera, connect the RCA from the device to the NTX-NIS/INF interface at the "video in" RCA connection. As long as your device does not draw in excess of 1 AMP you may connect the power and ground of the device to the wires on the 20 to 20 pin T-harness labeled "ground" and "12v+ CAM out". If in doubt measure the current demand or use a relay.

6. If installing a reverse camera, connect the RCA from the rear view camera to the NTX-NIS/INF interface at the "video in" RCA connection. When installing the rear view camera, run an additional wire with the power, ground and RCA from the camera that you will tie in to the reverse wire at the rear of the vehicle. This wire will connect to the "12 Volt+ Activation" wire on the 20 pin to 20 pin T-harness. Whenever the "12 Volt+ Activation" wire sees 12 volts + the video input will be seen automatically on the monitor. Attach the power and ground of the rear view camera to the "ground" & "12v+ CAM out" at the 20 pin to 20 pin T-harness. If the rear view camera requires more than 1 amp of current make sure to use a relay.
7. **AREAS WITH TUNNELS, PARKING GARAGES AND TALL BUILDINGS (OPTIONAL).** The NTX54 navigation system operates via a technology called "dead reckoning", utilizing only GPS satellite information to detect speed and location. In some areas with a large amount of obstacles that may block the GPS antennas ability to receive GPS coordinates, such as tunnels, parking garages and tall buildings, the NTX54's performance may be affected. If you experience issues in these areas we recommend connecting the vehicle VSS (speed sense wire) and the vehicle reverse signal to the "VSS in" and "VRS in" at the 20 pin to 20 pin T-harness.
8. Plug the 22 pin extension harness black molex plug into the NTX-NIS/INF integration module labeled "screen"
9. Plug the 18 pin extension harness black molex plug into the NTX-NIS/INF integration module labeled "radio"
10. Plug the black 24 pin molex of the Navigation harness into the NTX-NIS/INF integration module labeled "Navigation"
11. If the vehicle **DOES NOT** have Bose, the turn-by-turn directions and all audio commands will be heard automatically through the driver's front speaker. You may skip to step 13 for all NON BOSE sound systems.
12. **BOSE:** Locate the factory center channel speaker and cut the speaker wires in half. These wires will loop through the NTX module. The NTX will act as a switcher box to introduce turn-by-turn audio into the center channel speaker. Find the white, white/black, grey and white/grey wires on the 18 pin black molex (T-harness section of the 20 pin power T-harness) Cut them as far away from the 18 pin black Molex as possible. You should now have 4 wires that are only connected to the NTX 18 pin plug. Do not use the wires connected to the 20 pin power T-harness. Attach the white wire to the speaker + and the white/black wire to the speaker -. Attach the grey wire to the + speaker wire coming from the amplifier & attach the white/grey wire to the - speaker wire from the amplifier.
13. Locate a spot near the mounting location of the NTX-NIS/INF integration module with enough room to house and mount the NTX54 navigation brain. Run the Navigation harness from the NTX-NIS/INF integration module to the NTX54 navigation module and plug it in.



14. The included GPS antenna needs to be installed right side up in a location with a clear line of sight to the sky. The antenna can be mounted on top of the dash or below the plastic dash pad as long as there is no metal obstruction. To avoid the antenna from moving we recommend mounting it with either Velcro or double sided tape.
15. Run the GPS antenna cable to the NTX54 navigation box and plug it into the GPS antenna connector jack. Excess cable should be looped neatly into a circle to eliminate kinking of the cable and zip tied securely inside the dash or kick panel.
16. Secure the NTX54 navigation and NTX-NIS/INF integration module in their mounting spots with Velcro. For added stability a large zip tie may also be used.
17. Secure all cabling to existing wiring harnesses or bracket with zip ties making sure that they are not routed near moving parts or sharp metal surfaces.
18. Reinstall the radio and dash bezel in the reverse order of removal and test the Navigation and camera functions.
Make sure that the ignition is not turned on until after the HVAC panel is fully plugged in. Operation instructions can be found below.

Operation:

1. Tap anywhere on the screen to switch to Navigation mode.
2. Any time you are in Navigation mode the touch screen is active and controls the NTX54 navigation system by pressing the on-screen GUIs.
3. To exit Navigation mode press the bottom left corner of the touch screen for one second. If a route has been plotted prior to exiting the Navigation mode the Navigation screen will automatically come back up whenever there is turn-by-turn guidance.
4. To activate the aftermarket front or rear camera while in motion touch and hold the upper left corner of the touch screen for 1 second. **NOTE: This will only force the AFTERMARKET camera on and does not force the factory rear view camera on if equipped.**
5. To exit the aftermarket camera mode tap anywhere on the touch screen.



Figure 1

FAQ's



Q1: After reassembly I have an Airbag light on.

A:

Flashing Blinking Airbag Warning Light Reset Procedure

1. Turn the key from off to on.
2. Watch the airbag light closely. It will stay on for a few secs. and then as soon as it blinks off (the start of the flashing), turn the key off instantly.
3. Wait 5 seconds
4. Repeat steps 1-3 two more times until you have done the cycle three times.
5. Now turn the key on and watch the light. It will start blinking in a different, slower manner. This is diagnostic mode. You can watch this for a little while, no hurry.
6. Now turn the key off again, wait 5 seconds, and turn back on.
If the procedure worked, the airbag light will not be flashing.

Q2: I installed the unit on a vehicle with BOSE and I am not getting any turn-by-turn prompts.

A: Refer to page 10, instruction 12. You will need to cut the factory center channel speaker wires and feed them through the NTX-NIS/INF to allow turn-by-turn directions to be heard through the factory center channel speaker.

Q3: After installation my radio will not turn on or I have controls that are not working.

A: Most likely there is something that you did not plug back in or pins may have been bent upon reassembly. Disassemble and visually inspect the installation.

Q4: I've read the instructions over and over but I am still having problems.

A: We are here to help you. Please call our technical support staff at 1-866-477-3336 M-F between the hours of 9-6 EST.