

Nulth 70-5521

Nulth 70-5521 Radio Wire Harness Adapter and 16-Pin Car Radio Wiring Harness User Manual

Model: 70-5521

1. INTRODUCTION

This manual provides detailed instructions for the installation and use of the Nulth 70-5521 Radio Wire Harness Adapter and 16-Pin Car Radio Wiring Harness. This product is designed to facilitate the installation of an aftermarket car stereo using existing factory wiring, specifically for compatible Ford, Lincoln, Mercury, and Hyundai vehicles, and various Pioneer stereo models. Please read this manual thoroughly before beginning installation.

Important Note: This product is not compatible with non-amplified factory systems.

2. PRODUCT OVERVIEW AND PACKAGE CONTENTS

The Nulth 70-5521 kit includes two main components:

- **Radio Wire Harness Adapter (70-5521):** Designed to connect to the vehicle's factory wiring.
- **16-Pin Car Radio Wiring Harness:** Designed to connect to compatible Pioneer aftermarket stereos. This harness includes RCA plugs for subwoofer input.



Image 2.1: Overview of the Nulth 70-5521 Radio Wire Harness Adapter and 16-Pin Car Radio Wiring Harness with RCA plugs.

These harnesses allow for a clean and efficient installation of an aftermarket radio, utilizing the existing factory wiring without the need for cutting or splicing OEM wires.

NUITH CAR RADIO WIRING HARNESS WITH RCA PLUG



Replace your factory or broken radio/ auto stereo CD player



Install aftermarket radio using existing factory wiring

Image 2.2: The Nulth car radio wiring harness with RCA plug, designed for replacing factory radios and installing aftermarket units using existing wiring.

3. COMPATIBILITY

The 70-5521 Radio Wire Harness Adapter is compatible with selected vehicle models, and the 16-Pin Car Radio Wiring Harness is compatible with specific Pioneer stereo models. Please verify your vehicle and stereo model against the lists below.

3.1 Vehicle Compatibility (70-5521 Adapter)

RADIO WIRE HARNESS ADAPTER FITMENT:



• Compatible with Ford:

2003-2010 Crown Victoria, 2006-2007 Escape, 2005 Excursion, 2004-2014 Expedition, 2004-2010 Explore, 2004-2010 F-150, 2005-2012 F-250 / F-350, 2005-2007 Five Hundred, 2005-2011 Focus, 2004-2007 Freestar, 2005-2007 Freestyle, 2004-2009 Mustang, 2008-2009 Taurus X, 2007-2010 Edge, 2008-2009 Ford fusion SE

• Compatible with Lincoln:

2006-2008 Mark LT, 2003-2006 Navigator, 2003-2011 Town Car

• Compatible with Mercury:

2003-2011 Grand Marquis, 2003-2006 Marauder, 2005-2007 Mariner, 2005-2008 Montego, 2004-2006 Monterey, 2006-2010 Mountaineer

• Compatible with Hyundai:

Sonata 2006-2008.

Image 3.1: Visual representation of compatible vehicle models for the radio wire harness adapter.

• Compatible with Ford:

- 2003-2010 Crown Victoria
- 2006-2007 Escape
- 2005 Excursion
- 2004-2014 Expedition
- 2004-2010 Explorer
- 2004-2010 F-150, 2005-2012 F-250 / F-350
- 2005-2007 Five Hundred
- 2005-2011 Focus
- 2004-2007 Freestar
- 2005-2007 Freestyle
- 2004-2009 Mustang

- 2008-2009 Taurus X
- 2007-2010 Edge
- 2008-2009 Ford Fusion SE

- **Compatible with Lincoln:**

- 2006-2008 Mark LT
- 2003-2006 Navigator
- 2003-2011 Town Car

- **Compatible with Mercury:**

- 2003-2011 Grand Marquis
- 2003-2006 Marauder
- 2005-2007 Mariner
- 2005-2008 Montego
- 2004-2006 Monterey
- 2006-2010 Mountaineer

- **Compatible with Hyundai:**

- 2006-2008 Sonata

3.2 Pioneer Stereo Compatibility (16-Pin Harness)

The 16-pin wiring harness is compatible with a wide range of Pioneer AVIC, AVH, and DEH series stereos. Please refer to the list below to confirm compatibility with your specific Pioneer model.

COMPATIBLE WITH PIONEER RADIO MODELS

DEH-5	DEH-3700MP	DEH-P6600	DEH-P3700
DEH-6	DEH-P25	DEH-P470MP	DEH-P3700MP
DEH-7	DEH-P26	DEH-P480MP	DEH-P3800MP
DEH-11E	DEH-P35	DEH-P490IB	DEH-P4000UB
DEH-15	DEH-P45MP	DEH-P510UB	DEH-P4100UB
DEH-16	DEH-P250	DEH-P550MP	DEH-P4500MP
DEH-17	DEH-P310UB	DEH-P560MP	DEH-P4700MP
DEH-27	DEH-P350	DEH-P570MP	DEH-P4800MP
DEH-27MP	DEH-P350MP	DEH-P600UB	DEH-P4900IB
DEH-270	DEH-P360	DEH-P650	DEH-P5000UB
DEH-1100MP	DEH-P370MP	DEH-P660	DEH-P5600MP
DEH-1500R	DEH-P390MP	DEH-P670MP	DEH-P5650MP
DEH-1600	DEH-P400UB	DEH-P750MP	DEH-P5700MP
DEH-1650	DEH-P401HD	DEH-P760MP	DEH-P6500
DEH-1700	DEH-P410UB	DEH-P2500	
DEH-1800	DEH-P450MP	DEH-P2600	
DEH-1900MP	DEH-P460MP	DEH-P2900MP	
DEH-2000MP	DEH-P500UB	DEH-P3000IB	
DEH-2100IB	DEH-P770MP	DEH-P3500	
DEH-2700	DEH-P4600MP	DEH-P3550MP	
DEH-2800MP	DEH-P5500MP	DEH-P3600	



Image 3.2: Comprehensive list of Pioneer radio models compatible with the 16-pin wiring harness.

- **Pioneer AVH Series:** AVH-X1500DVD, AVH-X2500BT, AVH-X3500BHS, AVH-X4500BT, AVH-X5500BHS, AVH-X8500BHS; AVH-100DVD, AVH-200BT; AVH-P1400DVD, AVH-P2400BT, AVH-P3400BH, AVH-P4400BH, AVH-P8400BH, AVH-P3200, AVH-P3300, AVH-P3100, AVH-P4100, AVH-P4200, AVH-P2300.
- **Pioneer AVIC Series:** AVIC-X940BT, AVIC-Z140BH, AVIC-X910BT, AVIC-X920BT, AVIC-X930BT, AVIC-Z120BT, AVIC-Z130BT.
- **Pioneer DEH Series:** DEH-5, DEH-6, DEH-7, DEH-11E, DEH-15, DEH-16, DEH-17, DEH-27, DEH-27MP, DEH-270, DEH-1100MP, DEH-1500R, DEH-1600, DEH-1650, DEH-1700, DEH-1800, DEH-1900MP, DEH-2000MP, DEH-2100IB, DEH-2700, DEH-2800MP, DEH-3700MP, DEH-P25, DEH-P26, DEH-P35, DEH-P45MP, DEH-P250, DEH-P310UB, DEH-P350, DEH-P350MP, DEH-P360, DEH-P370MP, DEH-P390MP, DEH-P400UB, DEH-P401HD, DEH-P410UB, DEH-P450MP, DEH-P460MP, DEH-P500UB, DEH-P770MP, DEH-P4600MP, DEH-P5500MP, DEH-P6600, DEH-P3700, DEH-P3800MP, DEH-P4000UB, DEH-P4100UB, DEH-P4500MP, DEH-P4700MP, DEH-P4800MP, DEH-P4900IB, DEH-P5000UB, DEH-P5600MP, DEH-P5650MP, DEH-P5700MP, DEH-P6500, DEH-P660, DEH-P670MP, DEH-P750MP, DEH-P760MP, DEH-P2500, DEH-P2600, DEH-P2900MP, DEH-P3000IB, DEH-P3500, DEH-P3550MP, DEH-P3600.

4. INSTALLATION INSTRUCTIONS

Before beginning installation, ensure the vehicle's battery is disconnected to prevent electrical shorts. This harness is designed for a direct plug-and-play connection where applicable, but some wiring may be required to match the aftermarket stereo's specific functions.

4.1 Preparation

1. **Disconnect Battery:** Always disconnect the negative terminal of the vehicle's battery before starting any electrical work.
2. **Remove Factory Radio:** Carefully remove the existing factory radio from the dashboard. Refer to your vehicle's service manual for specific instructions on dash disassembly.
3. **Identify Factory Harness:** Locate the factory wiring harness connected to the back of the original radio.

4.2 Wiring Connection

The Nulth 70-5521 harness features pre-stripped, color-coded wires for easy connection to your aftermarket Pioneer stereo's harness. Match the wires by color and function.

PRE-STRIPPED MAKE INSTALLATION QUICKLY AND EASILY



Color
code



Install
Safety



No cutting
OEM wiring



Image 4.1: Close-up of the pre-stripped, color-coded wires designed for simplified and safe installation without cutting OEM wiring.

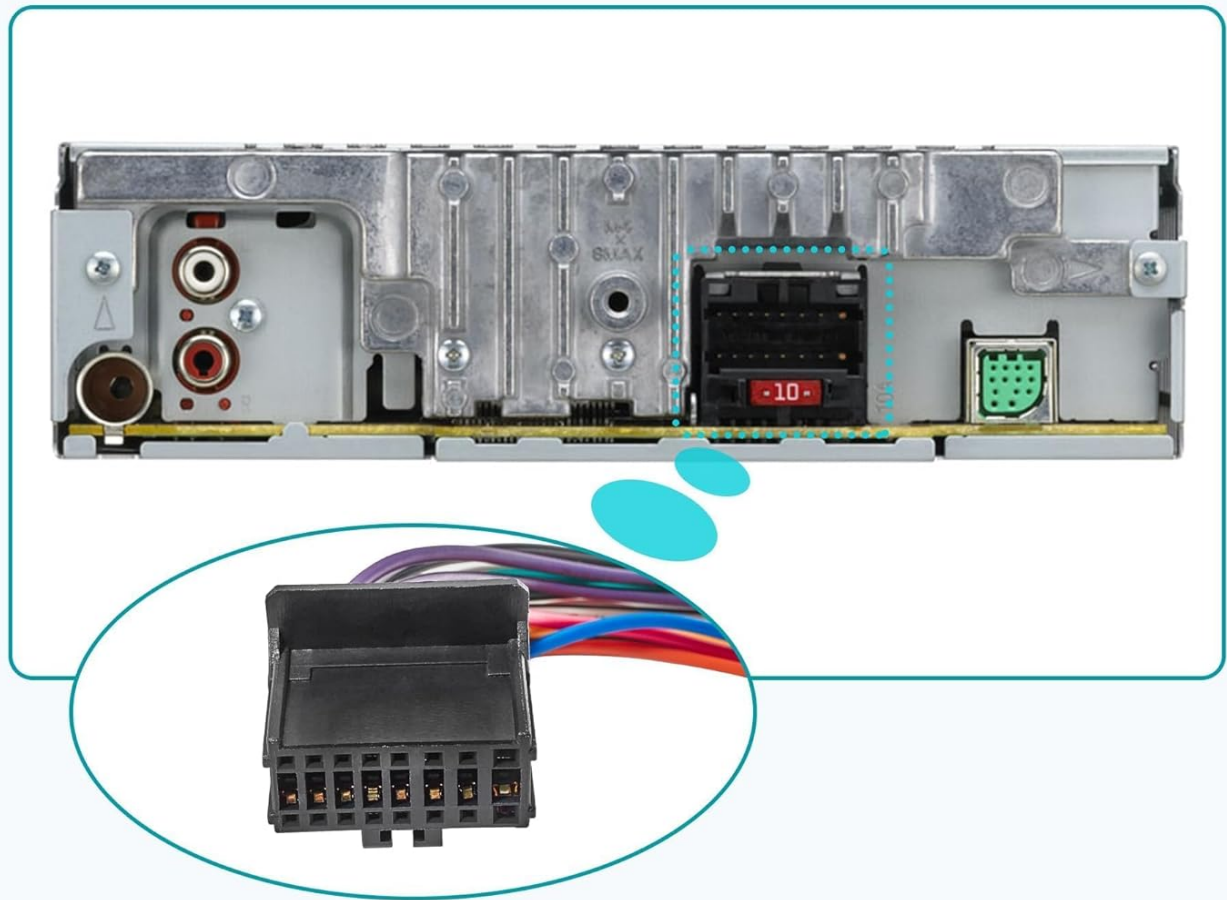
4. **Connect Harnesses:**

- Connect the 16-pin Pioneer-compatible harness to the back of your aftermarket Pioneer stereo. Ensure the connection is secure.
- Connect the 70-5521 vehicle-specific adapter harness to the factory wiring harness in your vehicle. This connection should be a direct plug-in.

5. **Wire Matching:** Carefully match the corresponding wires from the 16-pin Pioneer harness to the 70-5521 vehicle adapter harness. Use crimp connectors or solder for secure and reliable connections. Ensure all connections are insulated with electrical tape or heat shrink tubing.

6. **RCA Connections:** If your aftermarket stereo and vehicle system utilize a subwoofer, connect the red and white RCA plugs from the 16-pin harness to the corresponding subwoofer input jacks on your Pioneer stereo.

16 PIN STEREO WIRING HARNESS



Note: Please check carefully to see if your Pioneer fuse is the same as this circle show

Image 4.2: The 16-pin stereo wiring harness connected to the rear of a Pioneer radio, highlighting the fuse location for verification.

Note: Always check the fuse on your Pioneer stereo to ensure it matches the required specifications, as indicated in the image above.

4.3 Final Steps

7. **Test Connections:** Before fully reassembling the dashboard, reconnect the vehicle's battery and test the aftermarket stereo's functionality (power, audio, balance, fader, subwoofer output, etc.).
8. **Secure Wiring:** Once all functions are verified, neatly bundle and secure all wiring to prevent rattles or interference.
9. **Reassemble Dashboard:** Carefully reassemble the dashboard components and secure the new stereo in place.

ALLOWS INSTALLATION OF AN AFTERMARKET RADIO WIRING AND CONNECTORS

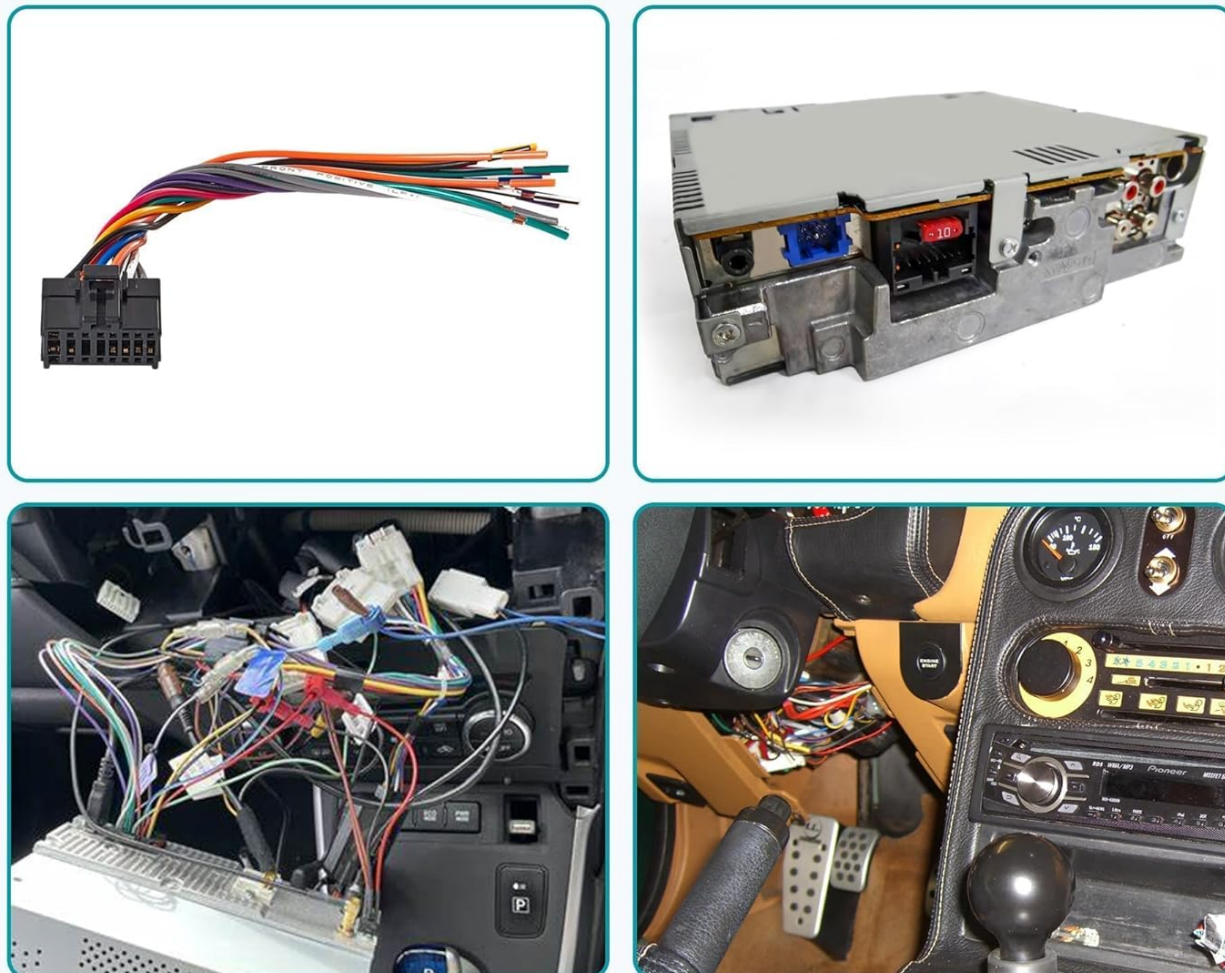


Image 4.3: Examples illustrating the process of installing aftermarket radio wiring and connectors within a vehicle's dashboard.

5. WIRING DIAGRAM (GENERAL)

Below is a general color-coding guide for standard car audio wiring. Always refer to your specific aftermarket stereo's manual for its exact wiring diagram, as colors can vary slightly between manufacturers.

Wire Color	Function
Yellow	Constant 12V (Memory)
Red	Switched 12V (Accessory)
Black	Ground
Blue	Power Antenna / Remote Turn-On
Orange	Illumination / Dimmer

Wire Color	Function
White	Front Left Speaker (+)
White/Black	Front Left Speaker (-)
Gray	Front Right Speaker (+)
Gray/Black	Front Right Speaker (-)
Green	Rear Left Speaker (+)
Green/Black	Rear Left Speaker (-)
Violet	Rear Right Speaker (+)
Violet/Black	Rear Right Speaker (-)

The RCA connectors (Red and White) are typically for subwoofer pre-outs or auxiliary inputs, depending on your stereo's configuration.

6. TROUBLESHOOTING

If you encounter issues after installation, review the following common troubleshooting steps:

- **No Power to Stereo:**

- Check the vehicle's fuse box for blown fuses.
- Verify the yellow (constant 12V) and red (switched 12V) wires are correctly connected and receiving power.
- Ensure the black (ground) wire has a secure connection to a metal chassis point.

- **No Sound:**

- Confirm all speaker wires are correctly connected and not shorting.
- Check the stereo's fader and balance settings.
- Ensure the amplifier (if present) is receiving a remote turn-on signal (blue wire).

- **Subwoofer Not Working:**

- Verify the RCA cables are securely connected to the correct subwoofer output on the stereo and input on the amplifier.
- Check the subwoofer amplifier's power and remote turn-on connections.
- Ensure subwoofer settings are enabled on the Pioneer stereo.

- **Intermittent Power/Sound:**

- Inspect all wire connections for looseness or poor crimps/solder joints.
- Ensure no wires are pinched or damaged during dashboard reassembly.

- **Compatibility Issues:**

- Re-verify that your vehicle and Pioneer stereo model are listed as compatible in Section 3.
- Confirm that your factory system is not non-amplified, as this product is not compatible with such systems.

7. SPECIFICATIONS

- **Model:** Nulth 70-5521
- **Material:** Acrylonitrile Butadiene Styrene (ABS)
- **Connector Type:** Pioneer Connector (16-Pin), Vehicle-Specific Adapter (70-5521)
- **Cable Type:** Standard Wiring Harness
- **Compatibility:**
 - Vehicle: Selected Ford, Lincoln, Mercury (2003-2012), Hyundai Sonata (2006-2008)
 - Stereo: Various Pioneer AVIC, AVH, DEH series (refer to Section 3.2 for full list)
- **Features:** Pre-stripped wires, color-coded, includes RCA subwoofer input.
- **Note:** Not compatible with non-amplified factory systems.

8. WARRANTY AND SUPPORT

Nulth products are manufactured to high-quality standards. For warranty information or technical support, please refer to the contact information provided with your purchase or visit the official Nulth website. Keep your purchase receipt as proof of purchase for any warranty claims.

