

# HOW TO USE THIS INSTALL GUIDE



Open the Bookmarks menu and find your vehicle OR scroll down until you find the install guide for your vehicle.



Print only the pages for your vehicle using the advanced options in the Print menu.



Install your Maestro RR according to the guide for your vehicle.

# WARNING

Pressing the printer icon or "quick printing" this document will print all of the guides in this compilation.



# **INSTALL GUIDE**

### 2017 FORD F-SERIES SUPER DUTY NOT RETAINING SYNC WITH MYFORD 4.3" SCREEN

### **RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro FTR1 Dash Kit

**PROGRAMMED FIRMWARE** ADS-RR(SR)-F02B-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

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NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

## **WELCOME**

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Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

### **TABLE OF CONTENTS**

Installation Instructions	3
Wiring Diagram	7
Radio Wire Reference Chart	8
Troubleshooting Table	9

# **NEED HELP?**





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### DASH DISASSEMBLY

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- **1.** If the vehicle is equipped with a center channel speaker: Pop the speaker grille up (A), unscrew (2) 7mm bolts from the tray (B), and remove it (C). (Fig. 1.0) If there is no center channel speaker: lift the rubber mat at the top of the dash (A), then remove (2) 7mm bolts from the tray (B), and remove it (C). (Fig. 1.1)
- 2. Remove the (2) 7mm bolts from the top of the radio panel. Unclip the radio bezel, unplug its connectors, and remove the panel. (Fig. 2.0)
- 3. Remove the 7mm screws securing the factory screen and disconnect it. (Fig. 3.0)
- 4. Remove the (4) 7mm screws securing the radio module, then unplug and remove it. (Fig. 4.0)
- 5. Remove (2) 7mm screws securing the Sync module. Unplug and remove it. Note: Because sync is not being retained, the sync module does not need to be re-installed. (Fig. 5.0)
- 6. If the camera module is present, remove the (3) 10mm nuts securing it and remove the module. (Fig.6.0)

Looking down, from the top of the dash, locate the (2) 8mm bolts securing the camera module's bracket and remove them. Remove the (2) 7mm bolts under the plastic of the top of the dash (bolts aren't visible). Work the metal bracket free from the sub-dash and remove it. (Fig. 6.1) Note: the bracket may be cut but this will prevent reinstalling OEM equipment.

7. Unclip the factory harness that is secured to the plastic trim at the front of the radio cavity and push it out of the way, to the back of the dash. Cut and remove the plastic sub-dash at the front of the radio cavity. (Fig. 7.0)



Fig. 7.0





Fig. 1.0







Fig. 2.0

Fig. 3.0





Fig. 4.0

Fig. 5.0





Fig. 6.1



#### **RADIO BEZEL DISASSEMBLY**

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Note: Save all of the screws from the disassembly and separate them by length, short and long, many of these screws will be used to assemble the FTR-1 kit.

- 1. Remove the hazard and traction control buttons by depressing the release tabs. (Fig. 1.0)
- Remove the T10 screws from the back of the factory dash panel. (Fig. 2.0)
  Remove the back cover of the bezel. (Fig. 2.0)
- Remove the (4) ribbon cables from the circuit boards on the factory panel (gently push on the white release tabs and gently pull on the cables to detach them. (Fig. 3.0)
- Remove the T10 screws from the climate circuit board. Remove the circuit board; set the board and screws aside. (Fig. 4.0)
- **5.** Remove the fan speed and temperature control knobs, the HVAC buttons and rubber button pad. (Fig. 5.0)
- 6. Remove T10 screws from the controller board, the middle circuit board on the bezel. Remove the middle circuit board and set aside. The rubber buttons will not be used for this installation; set them aside to be saved with the OEM parts. [Fig. 6.0]





Fig. 1.0

Fig. 2.0





Fig. 3.0

Fig. 4.0





Fig. 5.0

Fig. 6.0



#### DASH KIT ASSEMBLY

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When assembling the dash kit, be careful to use the correct length screws (use of too long of screw will puncture the front of the dash kit).

- Set the plastic climate buttons into the FTR1 kit. Ensure the temperature control knob is in the center position, then install the temperature and fan knobs into the kit. (Fig. 1.0)
- Install the climate circuit board (bottom board from the OEM dash panel) over the top of the climate knobs. Ensure that the black plastic gear that aligns with the temperature control is centered, just like the temperature knob (point the line on the big black gear toward the little gear (Fig. 2.0 A)). Use (4) short T10 screws to secure the climate circuit board to the dash kit (leave the 3 holes in the center of the board empty). (Fig. 2.0)
- Install the new ribbon cables as shown (shiny side of the ribbon cable and the copper contacts at the end facing you). Insert them into the connector then push the latch to lock them into place. Failure to correctly install the ribbon cables will cause the climate controls to not function at all. (Fig. 3.0)
- Feed the ribbon cable through the holes on the back of the housing cover for the climate unit. Use (3) long T10 screws and secure the FTR1 back cover of the climate board. (Fig. 4.0)
- Install the ribbon cables shiny side down, to the bottom ports of the control board then seat the second control board to the back of the climate portion of the dash kit. . (Fig. 5.0 and 5.1)

Secure this board to the dash kit with (6) short T10 screws. Note: Make sure the ribbon cables are not obstructing the screw holes on the sides. (Fig. 5.1)

- Put the second FTR1 plastic cover on the control board and secure it at the sides and bottom with (3) long T10 screws. (Fig. 6.0)
- **7.** Insert the hazard and traction control buttons in the holes in the top of the dash kit. (Fig. 7.0)
- **8.** Insert and fix the storage pocket at the bottom of the dash panel, using provided screws. (Fig. 7.0 (A))





Fig. 1.0

Fig. 2.0





Fig. 3.0

Fig. 4.0





Fig. 5.0



Fig. 5.1

Fig. 6.0

Fig. 7.0

# **INSTALLATION INSTRUCTIONS** \*NOT RETAINING SYNC

### DASH KIT ASSEMBLY

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- Unbox the aftermarket radio and mount it to the brackets included with the FTR1 kit (use the holes marked "1" for proper placement of the new radio). (Fig. 8.0)
- 10. If the camera module is present, mount it to the supplied mounting bracket using (3) M6 bolts and washers included with the FTR1 kit. Connect it. Insert in dash (area where OEM radio was) and secure it with (4) 7mm screws. (Fig. 9.0)





Fig. 8.0

MAKE CONNECTIONS (refer to wiring diagram)

- Locate the aftermarket radio's main harness. Connect the wires from the aftermarket radio's main harness to the FTR1 t-harness and match the wire functions (refer to diagram).
- Connect the FTR1 T-harness to the factory radio harness. Plug the backup camera cable into the factory harness (if applicable).
- **3.** Plug the FTR1 cable into the OEM Sync module harness. Connect the BLACK 2-pin connector of this cable to the BLACK 2-pin on the FTR1 T-harness. Connect the BLACK wire to ground. The backup camera RCA plug of this cable is not connected.
- **4.** Connect all harnesses to the Maestro RR module.
- 5. Plug the aftermarket radio harnesses into the aftermarket radio. Plug the data cable to the data port of the aftermarket radio (port labeled iDatalink). Insert the Audio cable into the iDatalink 3.5 mm audio jack of the aftermarket radio (if there is no iDatalink audio input, connect to AUX). Plug the backup camera RCA into the aftermarket radio (if applicable).

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

- **6.** Insert the radio into the dash and secure the metal brackets with (4) 7mm bolts. (Fig. 1.0)
- **7.** Connect all the harnesses to the FTR1 kit, and secure it in the dash. Test your installation before completely reassembling the bezel to the truck. (Fig. 2.0)





Fig. 1.0

Fig. 2.0

### WIRING DIAGRAM \*NOT RETAINING SYNC

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### **RADIO WIRE REFERENCE CHART**

Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable
Illumination	(+)	Orange	N/A	Orange/White	Orange/White
Reverse Light	(+)	Purple/White	Orange/White	Purple/White	Purple/White
E-Brake	[-]	Lt Green	Yellow/Blue	Lt Green	Lt Green
Foot Brake	[+]	Yellow/Black	Yellow/Black	N/A	N/A
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink
Power Antenna	[+]	Blue	Blue	Blue	N/A



# TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBDII connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/ BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. Reset the RR.
There is no sound from OEM sources like Sync.	Ensure the all black, 3-pin to 3.5mm audio cable is connected between the RR and the radio. Make sure it is in the correct radio input.
The climate controls do not work.	Re-check the climate control assembly. Ensure the ribbon cables are not installed backward.
There is no image from the backup camera.	Ensure that the yellow RCA is plugged into the correct port on the radio. Ensure the 12-pin connector from the 4.3" factory screen is plugged into the 12 pin plug of the FTR1 T-harness. *Some vehicles get the backup camera video from the Sync connector (54-pin) instead. Plug this connector to the supplied 54-pin connector of the FTR1 T-harness.
The light on the Maestro is flashing <b>RED ONCE</b> .	There is no firmware on the module; flash the RR module.
The light on the Maestro is blinking <b>RED TWICE</b> .	Ensure the 4-pin data cable is connected between the radio and the RR, and that it is plugged into the black port on the Maestro RR. The red and blue ports on the RR should be empty. Make sure the correct radio model and serial number were entered during the flash. Verify the radio's serial number entered during the flash matches what is listed on the radio screen. This can be found in the settings of the radio, listed as Device Id, Device Number, or Serial Number.

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



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### **TABLE OF CONTENTS**

Installation Instructions	3
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#### DASH DISASSEMBLY

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- If the vehicle is equipped with a center channel speaker: Pop the speaker grille up (A), unscrew (2) 7mm bolts from the tray (B), and remove it (C). (Fig. 1.0) If there is no center channel speaker: lift the rubber mat at the top of the dash (A), then remove (2) 7mm bolts from the tray (B), and remove it (C). (Fig. 1.1)
- 2. Remove the (2) 7mm bolts from the top of the radio panel. Unclip the radio bezel, unplug its connectors, and remove the panel. (Fig. 2.0)
- **3.** Remove the 7mm screws securing the factory screen and disconnect it. (Fig. 3.0)
- **4.** Remove the (4) 7mm screws securing the radio module, then unplug and remove it. (Fig. 3.0)
- **5.** If the camera module is present, remove the (3) 10mm nuts securing it and remove the module. (Fig.4.0)

Looking down, from the top of the dash, locate the [2] 8mm bolts securing the camera module's bracket and remove them. Remove the [2] 7mm bolts under the plastic of the top of the dash (bolts aren't visible). Work the metal bracket free from the sub-dash and remove it. (Fig. 4.1) Note: the bracket may be cut but this will prevent reinstalling OEM equipment.

**6.** Unclip the factory harness that is secured to the plastic trim at the front of the radio cavity and push it out of the way, to the back of the dash. Cut and remove the plastic sub-dash at the front of the radio cavity. (Fig. 5.0)





Fig. 1.0

Fig. 1.1





Fig. 2.0

Fig. 3.0





Fig. 4.0

Fig. 4.1







#### **RADIO BEZEL DISASSEMBLY**

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Note: Save all of the screws from the disassembly and separate them by length, short and long, many of these screws will be used to assemble the FTR-1 kit.

- Remove the hazard and traction control buttons by depressing the release tabs. (Fig. 1.0)
- Remove the T10 screws from the back of the factory dash panel. (Fig. 2.0)
  Remove the back cover of the bezel. (Fig. 2.0)
- **3.** Remove the (4) ribbon cables from the circuit boards on the factory panel (gently push on the white release tabs and gently pull on the cables to detach them. (Fig. 3.0)
- Remove the T10 screws from the climate circuit board. Remove the circuit board; set the board and screws aside. (Fig. 4.0)
- **5.** Remove the fan speed and temperature control knobs, the HVAC buttons and rubber button pad. (Fig. 5.0)
- Remove T10 screws from the controller board, the middle circuit board on the bezel. Remove the middle circuit board and set aside. The rubber buttons will not be used for this installation; set them aside to be saved with the OEM parts. [Fig. 6.0]





Fig. 1.0

Fig. 2.0





Fig. 3.0

Fig. 4.0





Fig. 5.0

Fig. 6.0



#### DASH KIT ASSEMBLY

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When assembling the dash kit, be careful to use the correct length screws (use of too long of screw will puncture the front of the dash kit).

- Set the plastic climate buttons into the FTR1 kit. Ensure the temperature control knob is in the center position, then install the temperature and fan knobs into the kit. (Fig. 1.0)
- Install the climate circuit board (bottom board from the OEM dash panel) over the top of the climate knobs. Ensure that the black plastic gear that aligns with the temperature control is centered, just like the temperature knob (point the line on the big black gear toward the little gear (Fig. 2.0 A)). Use (4) short T10 screws to secure the climate circuit board to the dash kit (leave the 3 holes in the center of the board empty). (Fig. 2.0)
- Install the new ribbon cables as shown (shiny side of the ribbon cable and the copper contacts at the end facing you). Insert them into the connector then push the latch to lock them into place. Failure to correctly install the ribbon cables will cause the climate controls to not function at all. (Fig. 3.0)
- Feed the ribbon cable through the holes on the back of the housing cover for the climate unit. Use (3) long T10 screws and secure the FTR1 back cover of the climate board. (Fig. 4.0)
- Install the ribbon cables shiny side down, to the bottom ports of the control board then seat the second control board to the back of the climate portion of the dash kit. . (Fig. 5.0 and 5.1)

Secure this board to the dash kit with (6) short T10 screws. Note: Make sure the ribbon cables are not obstructing the screw holes on the sides. (Fig. 5.1)

- Put the second FTR1 plastic cover on the control board and secure it at the sides and bottom with (3) long T10 screws. (Fig. 6.0)
- **7.** Insert the hazard and traction control buttons in the holes in the top of the dash kit. (Fig. 7.0)
- **8.** Insert and fix the storage pocket at the bottom of the dash panel, using provided screws. (Fig. 7.0 (A))





Fig. 1.0

Fig. 2.0





Fig. 3.0

Fig. 4.0





Fig. 5.0



Fig. 5.1



Fig. 6.0

Fig. 7.0

# **INSTALLATION INSTRUCTIONS** \*NOT RETAINING SYNC

### DASH KIT ASSEMBLY

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- Unbox the aftermarket radio and mount it to the brackets included with the FTR1 kit (use the holes marked "1" for proper placement of the new radio). (Fig. 8.0)
- 10. If the camera module is present, mount it to the supplied mounting bracket using (3) M6 bolts and washers included with the FTR1 kit. Connect it. Insert in dash (area where OEM radio was) and secure it with (4) 7mm screws. (Fig. 9.0)





Fig. 8.0

Fig. 9.0

#### MAKE CONNECTIONS (refer to wiring diagram)

- Locate the aftermarket radio's main harness. Connect the wires from the aftermarket radio's main harness to the FTR1 t-harness and match the wire functions (refer to diagram).
- Connect the FTR1 T-harness to the factory radio harness. Plug the backup camera cable into the factory harness (if applicable).
- **3.** Plug the FTR1 cable into the OEM Sync module harness. Connect the BLACK 2-pin connector of this cable to the BLACK 2-pin on the FTR1 T-harness. Connect the BLACK wire to ground.
- 4. Connect all harnesses to the Maestro RR module.
- 5. Plug the aftermarket radio harnesses into the aftermarket radio. Plug the data cable to the data port of the aftermarket radio (port labeled iDatalink). Insert the Audio cable into the iDatalink 3.5 mm audio jack of the aftermarket radio (if there is no iDatalink audio input, connect to AUX). Plug the backup camera RCA into the aftermarket radio from FTR1 cable (if applicable).

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

- **6.** Insert the radio into the dash and secure the metal brackets with (4) 7mm bolts. (Fig. 1.0)
- Connect all the harnesses to the FTR1 kit, and secure it in the dash. Test your installation before completely reassembling the bezel to the truck. (Fig. 2.0)





Fig. 1.0

Fig. 2.0

### WIRING DIAGRAM \*NOT RETAINING SYNC

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### **RADIO WIRE REFERENCE CHART**

Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable
Illumination	(+)	Orange	N/A	Orange/White	Orange/White
Reverse Light	(+)	Purple/White	Orange/White	Purple/White	Purple/White
E-Brake	[-]	Lt Green	Yellow/Blue	Lt Green	Lt Green
Foot Brake	[+]	Yellow/Black	Yellow/Black	N/A	N/A
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink
Power Antenna	[+]	Blue	Blue	Blue	N/A

# TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBDII connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/ BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. Reset the RR.
There is no sound from OEM sources like Sync.	Ensure the all black, 3-pin to 3.5mm audio cable is connected between the RR and the radio. Make sure it is in the correct radio input.
The climate controls do not work.	Re-check the climate control assembly. Ensure the ribbon cables are not installed backward.
There is no image from the backup camera.	Ensure that the yellow RCA is plugged into the correct port on the radio. Ensure Ensure the 54-pin connector is plugged into the 54-pin plug of the FTR1 T-harness. *Some vehicles get the backup camera video from the 12-pin connector that was plugged into the 4.3" screen instead. Plug this 12-pin connector to the 12-pin of the FTR1 T-harness. Also connect the vehicle's 54-pin connector to the FTR1 T-harness.
The light on the Maestro is flashing <b>RED ONCE</b> .	There is no firmware on the module; flash the RR module.
The light on the Maestro is blinking <b>RED TWICE</b> .	Ensure the 4-pin data cable is connected between the radio and the RR, and that it is plugged into the black port on the Maestro RR. The red and blue ports on the RR should be empty. Make sure the correct radio model and serial number were entered during the flash. Verify the radio's serial number entered during the flash matches what is listed on the radio screen. This can be found in the settings of the radio, listed as Device Id, Device Number, or Serial Number.

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

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### DASH DISASSEMBLY

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- If the vehicle is equipped with a center channel speaker: Pop the speaker grille up (A), unscrew (2) 7mm bolts from the tray (B), and remove it (C). (Fig. 1.0) If there is no center channel speaker: lift the rubber mat at the top of the dash (A), then remove (2) 7mm bolts from the tray (B), and remove it (C). (Fig. 1.1)
- 2. Remove the (2) 7mm bolts from the top of the radio panel. Unclip the radio bezel, unplug its connectors, and remove the panel. (Fig. 2.0)
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- 5. Remove (2) 7mm screws securing the Sync module. Unplug and remove it. (Fig. 5.0)
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Looking down, from the top of the dash, locate the [2] 8mm bolts securing the camera module's bracket and remove them. Remove the [2] 7mm bolts under the plastic of the top of the dash (bolts aren't visible). Work the metal bracket free from the sub-dash and remove it. (Fig. 6.1) Note: the bracket may be cut but this will prevent reinstalling OEM equipment.

 Unclip the factory harness that is secured to the plastic trim at the front of the radio cavity and push it out of the way, to the back of the dash. Cut and remove the plastic sub-dash at the front of the radio cavity. (Fig. 7.0)



Fig. 7.0





Fig. 1.0







Fig. 2.0

Fig. 3.0





Fig. 4.0

Fig. 5.0





Fig. 6.1



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#### **RADIO BEZEL DISASSEMBLY**

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Note: Save all of the screws from the disassembly and separate them by length, short and long, many of these screws will be used to assemble the FTR-1 kit.

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- **3.** Remove the (4) ribbon cables from the circuit boards on the factory panel (gently push on the white release tabs and gently pull on the cables to detach them. (Fig. 3.0)
- Remove the T10 screws from the climate circuit board. Remove the circuit board; set the board and screws aside. (Fig. 4.0)
- **5.** Remove the fan speed and temperature control knobs, the HVAC buttons and rubber button pad. (Fig. 5.0)
- 6. Remove T10 screws from the controller board, the middle circuit board on the bezel. Remove the middle circuit board and set aside. The rubber buttons will not be used for this installation; set them aside to be saved with the OEM parts. [Fig. 6.0]





Fig. 1.0

Fig. 2.0





Fig. 3.0

Fig. 4.0





Fig. 5.0

Fig. 6.0



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When assembling the dash kit, be careful to use the correct length screws (use of too long of screw will puncture the front of the dash kit).

- Set the plastic climate buttons into the FTR1 kit. Ensure the temperature control knob is in the center position, then install the temperature and fan knobs into the kit. (Fig. 1.0)
- Install the climate circuit board (bottom board from the OEM dash panel) over the top of the climate knobs. Ensure that the black plastic gear that aligns with the temperature control is centered, just like the temperature knob (point the line on the big black gear toward the little gear (Fig. 2.0 A)). Use (4) short T10 screws to secure the climate circuit board to the dash kit (leave the 3 holes in the center of the board empty). (Fig. 2.0)
- Install the new ribbon cables as shown (shiny side of the ribbon cable and the copper contacts at the end facing you). Insert them into the connector then push the latch to lock them into place. Failure to correctly install the ribbon cables will cause the climate controls to not function at all. (Fig. 3.0)
- Feed the ribbon cable through the holes on the back of the housing cover for the climate unit. Use (3) long T10 screws and secure the FTR1 back cover of the climate board. (Fig. 4.0)
- Install the ribbon cables shiny side down, to the bottom ports of the control board then seat the second control board to the back of the climate portion of the dash kit. . (Fig. 5.0 and 5.1)

Secure this board to the dash kit with (6) short T10 screws. Note: Make sure the ribbon cables are not obstructing the screw holes on the sides. (Fig. 5.1)

- Put the second FTR1 plastic cover on the control board and secure it at the sides and bottom with (3) long T10 screws. (Fig. 6.0)
- **7.** Insert the hazard and traction control buttons in the holes in the top of the dash kit. (Fig. 7.0)
- Insert and fix the storage pocket at the bottom of the dash panel, using provided screws. (Fig. 7.0 (A))





Fig. 1.0

Fig. 2.0





Fig. 3.0

Fig. 4.0





Fig. 5.0



Fig. 5.1



Fig. 6.0

Fig. 7.0



### DASH KIT ASSEMBLY

maestro **A** 

Unscrew the sync module from the factory brackets. (Fig. 8.0)

Mount the sync module using the supplied M5 bolts and washers to the brackets included with the FTR1 kit. (Fig. 8.1)

- **10.** Unbox the aftermarket radio and mount it to the brackets (use the holes marked "1" for proper placement of the new radio) . (Fig. 8.2)
- 11. If the camera module is present, mount it to the supplied mounting bracket using (3) M6 bolts and washers included with the FTR1 kit. Connect it. Insert in dash (area where OEM radio was) and secure it with (4) 7mm screws. (Fig. 9.0)





Fig. 8.0





Fig. 8.2

### Fig. 9.0

### MAKE CONNECTIONS (refer to wiring diagram)

- 1. Locate the aftermarket radio's main harness. Connect the wires from the aftermarket radio's main harness to the FTR1 t-harness and match the wire functions (refer to diagram).
- 2. Connect the FTR1 T-harness to the factory radio harness.

Plug the backup camera cable into the factory harness (if applicable).

- **3.** Plug the OBD2 connector into the OBD2 port of the vehicle, located under the driver side dash, and run the wires up to the radio cavity.
- 4. Connect all harnesses to the Maestro RR module.
- 5. Plug the aftermarket radio harnesses into the aftermarket radio. Plug the data cable to the data port of the aftermarket radio (port labeled iDatalink).Insert the Audio cable into the iDatalink 3.5 mm audio jack of the aftermarket radio (if there is no iDatalink audio input, connect to AUX). Plug the backup camera RCA into the aftermarket radio (if applicable).

### Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

- **6.** Insert the radio and sync module into the dash and secure the metal brackets with (4) 7mm bolts. (Fig. 1.0)
- Connect all the harnesses to the FTR1 kit, and secure it in the dash. Test your installation before completely reassembling the bezel to the truck. (Fig. 2.0)





Fig. 1.0

Fig. 2.0



### WIRING DIAGRAM \*RETAINING SYNC

<sup>®</sup>maestro**A** 



### **RADIO WIRE REFERENCE CHART**

Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable
Illumination	(+)	Orange	N/A	Orange/White	Orange/White
Reverse Light	(+)	Purple/White	Orange/White	Purple/White	Purple/White
E-Brake	[-]	Lt Green	Yellow/Blue	Lt Green	Lt Green
Foot Brake	(+)	Yellow/Black	Yellow/Black	N/A	N/A
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink
Power Antenna	[+]	Blue	Blue	Blue	N/A

# TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBDII connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/ BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. Reset the RR.
There is no sound from OEM sources like Sync.	Ensure the all black, 3-pin to 3.5mm audio cable is connected between the RR and the radio. Make sure it is in the correct radio input.
The climate controls do not work.	Re-check the climate control assembly. Ensure the ribbon cables are not installed backward.
The light on the Maestro is flashing <b>RED ONCE</b> .	There is no firmware on the module; flash the RR module.
The light on the Maestro is blinking <b>RED TWICE</b> .	Ensure the 4-pin data cable is connected between the radio and the RR, and that it is plugged into the black port on the Maestro RR. The red and blue ports on the RR should be empty. Make sure the correct radio model and serial number were entered during the flash. Verify the radio's serial number entered during the flash matches what is listed on the radio screen. This can be found in the settings of the radio, listed as Device Id, Device Number, or Serial Number.

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2015-2017 FORD F150 NOT RETAINING SYNC WITH MYFORD 4.3" SCREEN

### **RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro FTR1 Dash Kit

**PROGRAMMED FIRMWARE** ADS-RR(SR)-F02B-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HRN-ANT-SAT1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

## **WELCOME**

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

### **TABLE OF CONTENTS**

Installation Instructions	3
Wiring Diagram	7
Radio Wire Reference Chart	8
Troubleshooting Table	9

# **NEED HELP?**

1 866 427-2999



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### DASH DISASSEMBLY

maestro **Ar** 

- **1.** If the vehicle is equipped with a center channel speaker: Pop the speaker grille up (A), unscrew (2) 7mm bolts from the tray (B), and remove it (C). (Fig. 1.0) If there is no center channel speaker: lift the rubber mat at the top of the dash (A), then remove (2) 7mm bolts from the tray (B), and remove it (C). (Fig. 1.1)
- 2. Remove the (2) 7mm bolts from the top of the radio panel. Unclip the radio bezel, unplug its connectors, and remove the panel. (Fig. 2.0)
- 3. Remove the 7mm screws securing the factory screen and disconnect it. (Fig. 3.0)
- 4. Remove the (4) 7mm screws securing the radio module, then unplug and remove it. (Fig. 4.0)
- 5. Remove (2) 7mm screws securing the Sync module. Unplug and remove it. Note: Because sync is not being retained, the sync module does not need to be re-installed. (Fig. 5.0)
- 6. If the camera module is present, remove the (3) 10mm nuts securing it and remove the module. (Fig.6.0)

Looking down, from the top of the dash, locate the (2) 8mm bolts securing the camera module's bracket and remove them. Remove the (2) 7mm bolts under the plastic of the top of the dash (bolts aren't visible). Work the metal bracket free from the sub-dash and remove it. (Fig. 6.1) Note: the bracket may be cut but this will prevent reinstalling OEM equipment.

7. Unclip the factory harness that is secured to the plastic trim at the front of the radio cavity and push it out of the way, to the back of the dash. Cut and remove the plastic sub-dash at the front of the radio cavity. (Fig. 7.0)



Fig. 7.0

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Fig. 2.0

Fig. 3.0





Fig. 4.0

Fig. 5.0





Fig. 6.1



#### **RADIO BEZEL DISASSEMBLY**

maestro **Ar** 

Note: Save all of the screws from the disassembly and separate them by length, short and long, many of these screws will be used to assemble the FTR-1 kit.

- 1. Remove the hazard and traction control buttons by depressing the release tabs. (Fig. 1.0)
- Remove the T10 screws from the back of the factory dash panel. (Fig. 2.0)
  Remove the back cover of the bezel. (Fig. 2.0)
- **3.** Remove the (4) ribbon cables from the circuit boards on the factory panel (gently push on the white release tabs and gently pull on the cables to detach them. (Fig. 3.0)
- Remove the T10 screws from the climate circuit board. Remove the circuit board; set the board and screws aside. (Fig. 4.0)
- **5.** Remove the fan speed and temperature control knobs, the HVAC buttons and rubber button pad. (Fig. 5.0)
- 6. Remove T10 screws from the controller board, the middle circuit board on the bezel. Remove the middle circuit board and set aside. The rubber buttons will not be used for this installation; set them aside to be saved with the OEM parts. [Fig. 6.0]





Fig. 1.0

Fig. 2.0





Fig. 3.0

Fig. 4.0





Fig. 5.0

Fig. 6.0



# **INSTALLATION INSTRUCTIONS** \*NOT RETAINING SYNC

### DASH KIT ASSEMBLY

When assembling the dash kit, be careful to use the correct length screws (use of too long of screw will puncture the front of the dash kit).

- Set the plastic climate buttons into the FTR1 kit. Ensure the temperature control knob is in the center position, then install the temperature and fan knobs into the kit. (Fig. 1.0)
- Install the climate circuit board (bottom board from the OEM dash panel) over the top of the climate knobs. Ensure that the black plastic gear that aligns with the temperature control is centered, just like the temperature knob (point the line on the big black gear toward the little gear (Fig. 2.0 A)). Use (4) short T10 screws to secure the climate circuit board to the dash kit (leave the 3 holes in the center of the board empty). (Fig. 2.0)
- Install the new ribbon cables as shown (shiny side of the ribbon cable and the copper contacts at the end facing you). Insert them into the connector then push the latch to lock them into place. Failure to correctly install the ribbon cables will cause the climate controls to not function at all. (Fig. 3.0)
- Feed the ribbon cable through the holes on the back of the housing cover for the climate unit. Use (3) long T10 screws and secure the FTR1 back cover of the climate board. (Fig. 4.0)
- Install the ribbon cables shiny side down, to the bottom ports of the control board then seat the second control board to the back of the climate portion of the dash kit. . (Fig. 5.0 and 5.1)

Secure this board to the dash kit with (6) short T10 screws. Note: Make sure the ribbon cables are not obstructing the screw holes on the sides. (Fig. 5.1)

- Put the second FTR1 plastic cover on the control board and secure it at the sides and bottom with (3) long T10 screws. (Fig. 6.0)
- **7.** Insert the hazard and traction control buttons in the holes in the top of the dash kit. (Fig. 7.0)
- **8.** Insert and fix the storage pocket at the bottom of the dash panel, using provided screws. (Fig. 7.0 (A))





Fig. 1.0

Fig. 2.0





Fig. 3.0

Fig. 4.0





Fig. 5.0



Fig. 5.1



Fig. 6.0

Fig. 7.0



# **INSTALLATION INSTRUCTIONS** \*NOT RETAINING SYNC

### DASH KIT ASSEMBLY

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- Unbox the aftermarket radio and mount it to the brackets included with the FTR1 kit (use the holes marked "1" for proper placement of the new radio). (Fig. 8.0)
- 10. If the camera module is present, mount it to the supplied mounting bracket using (3) M6 bolts and washers included with the FTR1 kit. Connect it. Insert in dash (area where OEM radio was) and secure it with (4) 7mm screws. (Fig. 9.0)





Fig. 8.0

MAKE CONNECTIONS (refer to wiring diagram)

- Locate the aftermarket radio's main harness. Connect the wires from the aftermarket radio's main harness to the FTR1 t-harness and match the wire functions (refer to diagram).
- Connect the FTR1 T-harness to the factory radio harness. Plug the backup camera cable into the factory harness (if applicable).
- **3.** Plug the FTR1 cable into the OEM Sync module harness. Connect the BLACK 2-pin connector of this cable to the BLACK 2-pin on the FTR1 T-harness. Connect the BLACK wire to ground. The backup camera RCA plug of this cable is not connected.
- 4. Connect all harnesses to the Maestro RR module.
- 5. Plug the aftermarket radio harnesses into the aftermarket radio. Plug the data cable to the data port of the aftermarket radio (port labeled iDatalink). Insert the Audio cable into the iDatalink 3.5 mm audio jack of the aftermarket radio (if there is no iDatalink audio input, connect to AUX). Plug the backup camera RCA into the aftermarket radio (if applicable).

Note: On Pioneer radio, ensure that there is nothing plugged into the  $\ensuremath{\mathsf{W/R}}$  port.

- **6.** Insert the radio into the dash and secure the metal brackets with (4) 7mm bolts. (Fig. 1.0)
- Connect all the harnesses to the FTR1 kit, and secure it in the dash. Test your installation before completely reassembling the bezel to the truck. (Fig. 2.0)





Fig. 1.0

Fig. 2.0

### WIRING DIAGRAM \*NOT RETAINING SYNC

<sup>®</sup>maestro**A** 



### **RADIO WIRE REFERENCE CHART**

Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable
Illumination	(+)	Orange	N/A	Orange/White	Orange/White
Reverse Light	(+)	Purple/White	Orange/White	Purple/White	Purple/White
E-Brake	[-]	Lt Green	Yellow/Blue	Lt Green	Lt Green
Foot Brake	(+)	Yellow/Black	Yellow/Black	N/A	N/A
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink
Power Antenna	[+]	Blue	Blue	Blue	N/A
# TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBDII connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/ BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/</b> <b>BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. Reset the RR.
There is no sound from OEM sources like Sync.	Ensure the all black, 3-pin to 3.5mm audio cable is connected between the RR and the radio. Make sure it is in the correct radio input.
The climate controls do not work.	Re-check the climate control assembly. Ensure the ribbon cables are not installed backward.
There is no image from the backup camera.	Ensure that the yellow RCA is plugged into the correct port on the radio. Ensure the 12-pin connector from the 4.3" factory screen is plugged into the 12 pin plug of the FTR1 T-harness. *Some vehicles get the backup camera video from the Sync connector (54-pin) instead. Plug this connector to the supplied 54-pin connector of the FTR1 T-harness.
The light on the Maestro is flashing <b>RED ONCE</b> .	There is no firmware on the module; flash the RR module.
The light on the Maestro is blinking <b>RED TWICE</b> .	Ensure the 4-pin data cable is connected between the radio and the RR, and that it is plugged into the black port on the Maestro RR. The red and blue ports on the RR should be empty. Make sure the correct radio model and serial number were entered during the flash. Verify the radio's serial number entered during the flash matches what is listed on the radio screen. This can be found in the settings of the radio, listed as Device Id, Device Number, or Serial Number.

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

## 2018-2020 FORD F150 NOT RETAINING SYNC WITH MYFORD 4.3" SCREEN

### **RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro FTR1 Dash Kit

PROGRAMMED FIRMWARE ADS-RR(SR)-F02B-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

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NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

# **WELCOME**

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

### **TABLE OF CONTENTS**

Installation Instructions	3
Wiring Diagram	7
Radio Wire Reference Chart	8
Troubleshooting Table	9

# **NEED HELP?**



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#### DASH DISASSEMBLY

maestro **Ar** 

- If the vehicle is equipped with a center channel speaker: Pop the speaker grille up (A), unscrew (2) 7mm bolts from the tray (B), and remove it (C). (Fig. 1.0) If there is no center channel speaker: lift the rubber mat at the top of the dash (A), then remove (2) 7mm bolts from the tray (B), and remove it (C). (Fig. 1.1)
- 2. Remove the (2) 7mm bolts from the top of the radio panel. Unclip the radio bezel, unplug its connectors, and remove the panel. (Fig. 2.0)
- **3.** Remove the 7mm screws securing the factory screen and disconnect it. (Fig. 3.0)
- **4.** Remove the (4) 7mm screws securing the radio module, then unplug and remove it. (Fig. 3.0)
- **5.** If the camera module is present, remove the (3) 10mm nuts securing it and remove the module. (Fig.4.0)

Looking down, from the top of the dash, locate the [2] 8mm bolts securing the camera module's bracket and remove them. Remove the [2] 7mm bolts under the plastic of the top of the dash (bolts aren't visible). Work the metal bracket free from the sub-dash and remove it. (Fig. 4.1) Note: the bracket may be cut but this will prevent reinstalling OEM equipment.

**6.** Unclip the factory harness that is secured to the plastic trim at the front of the radio cavity and push it out of the way, to the back of the dash. Cut and remove the plastic sub-dash at the front of the radio cavity. (Fig. 5.0)





Fig. 1.0

Fig. 1.1





Fig. 2.0

Fig. 3.0





Fig. 4.0

Fig. 4.1



Fig. 5.0



### **RADIO BEZEL DISASSEMBLY**

maestro **Ar** 

Note: Save all of the screws from the disassembly and separate them by length, short and long, many of these screws will be used to assemble the FTR-1 kit.

- 1. Remove the hazard and traction control buttons by depressing the release tabs. (Fig. 1.0)
- Remove the T10 screws from the back of the factory dash panel. (Fig. 2.0)
  Remove the back cover of the bezel. (Fig. 2.0)
- Remove the (4) ribbon cables from the circuit boards on the factory panel (gently push on the white release tabs and gently pull on the cables to detach them. (Fig. 3.0)
- Remove the T10 screws from the climate circuit board. Remove the circuit board; set the board and screws aside. (Fig. 4.0)
- **5.** Remove the fan speed and temperature control knobs, the HVAC buttons and rubber button pad. (Fig. 5.0)
- Remove T10 screws from the controller board, the middle circuit board on the bezel. Remove the middle circuit board and set aside. The rubber buttons will not be used for this installation; set them aside to be saved with the OEM parts. [Fig. 6.0]





Fig. 1.0

Fig. 2.0





Fig. 3.0

Fig. 4.0





Fig. 5.0

Fig. 6.0



maestro **Ar** 

When assembling the dash kit, be careful to use the correct length screws (use of too long of screw will puncture the front of the dash kit).

- Set the plastic climate buttons into the FTR1 kit. Ensure the temperature control knob is in the center position, then install the temperature and fan knobs into the kit. (Fig. 1.0)
- Install the climate circuit board (bottom board from the OEM dash panel) over the top of the climate knobs. Ensure that the black plastic gear that aligns with the temperature control is centered, just like the temperature knob (point the line on the big black gear toward the little gear (Fig. 2.0 A)). Use (4) short T10 screws to secure the climate circuit board to the dash kit (leave the 3 holes in the center of the board empty). (Fig. 2.0)
- Install the new ribbon cables as shown (shiny side of the ribbon cable and the copper contacts at the end facing you). Insert them into the connector then push the latch to lock them into place. Failure to correctly install the ribbon cables will cause the climate controls to not function at all. (Fig. 3.0)
- Feed the ribbon cable through the holes on the back of the housing cover for the climate unit. Use (3) long T10 screws and secure the FTR1 back cover of the climate board. (Fig. 4.0)
- 5. Install the ribbon cables shiny side down, to the bottom ports of the control board then seat the second control board to the back of the climate portion of the dash kit. . (Fig. 5.0 and 5.1)

Secure this board to the dash kit with (6) short T10 screws. Note: Make sure the ribbon cables are not obstructing the screw holes on the sides. (Fig. 5.1)

- Put the second FTR1 plastic cover on the control board and secure it at the sides and bottom with (3) long T10 screws. (Fig. 6.0)
- **7.** Insert the hazard and traction control buttons in the holes in the top of the dash kit. (Fig. 7.0)
- **8.** Insert and fix the storage pocket at the bottom of the dash panel, using provided screws. (Fig. 7.0 (A))





Fig. 1.0

Fig. 2.0





Fig. 3.0

Fig. 4.0





Fig. 5.0



Fig. 5.1



Fig. 6.0

Fig. 7.0



maestro 🎮

- Unbox the aftermarket radio and mount it to the brackets included with the FTR1 kit (use the holes marked "1" for proper placement of the new radio). (Fig. 8.0)
- 10. If the camera module is present, mount it to the supplied mounting bracket using (3) M6 bolts and washers included with the FTR1 kit. Connect it. Insert in dash (area where OEM radio was) and secure it with (4) 7mm screws. (Fig. 9.0)





Fig. 8.0

MAKE CONNECTIONS (refer to wiring diagram)

- Locate the aftermarket radio's main harness. Connect the wires from the aftermarket radio's main harness to the FTR1 t-harness and match the wire functions (refer to diagram).
- Connect the FTR1 T-harness to the factory radio harness. Plug the backup camera cable into the factory harness (if applicable).
- **3.** Plug the FTR1 cable into the OEM Sync module harness. Connect the BLACK 2-pin connector of this cable to the BLACK 2-pin on the FTR1 T-harness. Connect the BLACK wire to ground.
- 4. Connect all harnesses to the Maestro RR module.
- 5. Plug the aftermarket radio harnesses into the aftermarket radio. Plug the data cable to the data port of the aftermarket radio (port labeled iDatalink). Insert the Audio cable into the iDatalink 3.5 mm audio jack of the aftermarket radio (if there is no iDatalink audio input, connect to AUX). Plug the backup camera RCA into the aftermarket radio from FTR1 cable (if applicable).

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

- **6.** Insert the radio into the dash and secure the metal brackets with (4) 7mm bolts. (Fig. 1.0)
- Connect all the harnesses to the FTR1 kit, and secure it in the dash. Test your installation before completely reassembling the bezel to the truck. (Fig. 2.0)





Fig. 1.0

Fig. 2.0

# WIRING DIAGRAM \*NOT RETAINING SYNC

<sup>®</sup>maestro**A** 



# **RADIO WIRE REFERENCE CHART**

Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable
Illumination	(+)	Orange	N/A	Orange/White	Orange/White
Reverse Light	(+)	Purple/White	Orange/White	Purple/White	Purple/White
E-Brake	[-]	Lt Green	Yellow/Blue	Lt Green	Lt Green
Foot Brake	(+)	Yellow/Black	Yellow/Black	N/A	N/A
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink
Power Antenna	[+]	Blue	Blue	Blue	N/A

# TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBDII connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/ BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. Reset the RR.
There is no sound from OEM sources like Sync.	Ensure the all black, 3-pin to 3.5mm audio cable is connected between the RR and the radio. Make sure it is in the correct radio input.
The climate controls do not work.	Re-check the climate control assembly. Ensure the ribbon cables are not installed backward.
There is no image from the backup camera.	Ensure that the yellow RCA is plugged into the correct port on the radio. Ensure Ensure the 54-pin connector is plugged into the 54-pin plug of the FTR1 T-harness. *Some vehicles get the backup camera video from the 12-pin connector that was plugged into the 4.3" screen instead. Plug this 12-pin connector to the 12-pin of the FTR1 T-harness. Also connect the vehicle's 54-pin connector to the FTR1 T-harness.
The light on the Maestro is flashing <b>RED ONCE</b> .	There is no firmware on the module; flash the RR module.
The light on the Maestro is blinking <b>RED TWICE</b> .	Ensure the 4-pin data cable is connected between the radio and the RR, and that it is plugged into the black port on the Maestro RR. The red and blue ports on the RR should be empty. Make sure the correct radio model and serial number were entered during the flash. Verify the radio's serial number entered during the flash matches what is listed on the radio screen. This can be found in the settings of the radio, listed as Device Id, Device Number, or Serial Number.

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

## 2015-2017 FORD F150 RETAINING SYNC WITH MYFORD 4.3" SCREEN

#### **RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro FTR1 Dash Kit

**PROGRAMMED FIRMWARE** ADS-RR(SR)-F02B-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HRN-ANT-SAT1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

# **WELCOME**

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

### **TABLE OF CONTENTS**

Installation Instructions	3
Wiring Diagram	7
Radio Wire Reference Chart	8
Troubleshooting Table	9

# **NEED HELP?**

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#### DASH DISASSEMBLY

maestro **Ar** 

- If the vehicle is equipped with a center channel speaker: Pop the speaker grille up (A), unscrew (2) 7mm bolts from the tray (B), and remove it (C). (Fig. 1.0) If there is no center channel speaker: lift the rubber mat at the top of the dash (A), then remove (2) 7mm bolts from the tray (B), and remove it (C). (Fig. 1.1)
- 2. Remove the (2) 7mm bolts from the top of the radio panel. Unclip the radio bezel, unplug its connectors, and remove the panel. (Fig. 2.0)
- **3.** Remove the 7mm screws securing the factory screen and disconnect it. (Fig. 3.0)
- **4.** Remove the (4) 7mm screws securing the radio module, then unplug and remove it. (Fig. 4.0)
- 5. Remove (2) 7mm screws securing the Sync module. Unplug and remove it. (Fig. 5.0)
- **6.** If the camera module is present, remove the (3) 10mm nuts securing it and remove the module. (Fig.6.0)

Looking down, from the top of the dash, locate the (2) 8mm bolts securing the camera module's bracket and remove them. Remove the (2) 7mm bolts under the plastic of the top of the dash (bolts aren't visible). Work the metal bracket free from the sub-dash and remove it. (Fig. 6.1) Note: the bracket may be cut but this will prevent reinstalling OEM equipment.

7. Unclip the factory harness that is secured to the plastic trim at the front of the radio cavity and push it out of the way, to the back of the dash. Cut and remove the plastic sub-dash at the front of the radio cavity. (Fig. 7.0)



Fig. 7.0

Automotive Data Solutions Inc. © 2020





Fig. 1.0







Fig. 2.0

Fig. 3.0





Fig. 4.0

Fig. 5.0





Fig. 6.1

# **INSTALLATION INSTRUCTIONS** \*RETAINING SYNC

### **RADIO BEZEL DISASSEMBLY**

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Note: Save all of the screws from the disassembly and separate them by length, short and long, many of these screws will be used to assemble the FTR-1 kit.

- 1. Remove the hazard and traction control buttons by depressing the release tabs. (Fig. 1.0)
- Remove the T10 screws from the back of the factory dash panel. (Fig. 2.0)
  Remove the back cover of the bezel. (Fig. 2.0)
- **3.** Remove the (4) ribbon cables from the circuit boards on the factory panel (gently push on the white release tabs and gently pull on the cables to detach them. (Fig. 3.0)
- Remove the T10 screws from the climate circuit board. Remove the circuit board; set the board and screws aside. (Fig. 4.0)
- **5.** Remove the fan speed and temperature control knobs, the HVAC buttons and rubber button pad. (Fig. 5.0)
- 6. Remove T10 screws from the controller board, the middle circuit board on the bezel. Remove the middle circuit board and set aside. The rubber buttons will not be used for this installation; set them aside to be saved with the OEM parts. [Fig. 6.0]





Fig. 1.0

Fig. 2.0





Fig. 3.0

Fig. 4.0





Fig. 5.0

Fig. 6.0



maestro **Ar** 

When assembling the dash kit, be careful to use the correct length screws (use of too long of screw will puncture the front of the dash kit).

- Set the plastic climate buttons into the FTR1 kit. Ensure the temperature control knob is in the center position, then install the temperature and fan knobs into the kit. (Fig. 1.0)
- Install the climate circuit board (bottom board from the OEM dash panel) over the top of the climate knobs. Ensure that the black plastic gear that aligns with the temperature control is centered, just like the temperature knob (point the line on the big black gear toward the little gear (Fig. 2.0 A)). Use (4) short T10 screws to secure the climate circuit board to the dash kit (leave the 3 holes in the center of the board empty). (Fig. 2.0)
- Install the new ribbon cables as shown (shiny side of the ribbon cable and the copper contacts at the end facing you). Insert them into the connector then push the latch to lock them into place. Failure to correctly install the ribbon cables will cause the climate controls to not function at all. (Fig. 3.0)
- Feed the ribbon cable through the holes on the back of the housing cover for the climate unit. Use (3) long T10 screws and secure the FTR1 back cover of the climate board. (Fig. 4.0)
- Install the ribbon cables shiny side down, to the bottom ports of the control board then seat the second control board to the back of the climate portion of the dash kit. . (Fig. 5.0 and 5.1)

Secure this board to the dash kit with (6) short T10 screws. Note: Make sure the ribbon cables are not obstructing the screw holes on the sides. (Fig. 5.1)

- Put the second FTR1 plastic cover on the control board and secure it at the sides and bottom with (3) long T10 screws. (Fig. 6.0)
- **7.** Insert the hazard and traction control buttons in the holes in the top of the dash kit. (Fig. 7.0)
- 8. Insert and fix the storage pocket at the bottom of the dash panel, using provided screws. (Fig. 7.0 (A))





Fig. 1.0

Fig. 2.0





Fig. 3.0

Fig. 4.0





Fig. 5.0



Fig. 5.1



Fig. 6.0

Fig. 7.0



maestro **A**r

Unscrew the sync module from the factory brackets. (Fig. 8.0)

Mount the sync module using the supplied M5 bolts and washers to the brackets included with the FTR1 kit. (Fig. 8.1)

- **10.** Unbox the aftermarket radio and mount it to the brackets (use the holes marked "1" for proper placement of the new radio) . (Fig. 8.2)
- 11. If the camera module is present, mount it to the supplied mounting bracket using (3) M6 bolts and washers included with the FTR1 kit. Connect it. Insert in dash (area where OEM radio was) and secure it with (4) 7mm screws. (Fig. 9.0)





Fig. 8.0





Fig. 8.2

Fig. 9.0

### MAKE CONNECTIONS (refer to wiring diagram)

- 1. Locate the aftermarket radio's main harness. Connect the wires from the aftermarket radio's main harness to the FTR1 t-harness and match the wire functions (refer to diagram).
- 2. Connect the FTR1 T-harness to the factory radio harness.

Plug the backup camera cable into the factory harness (if applicable).

- **3.** Plug the OBD2 connector into the OBD2 port of the vehicle, located under the driver side dash, and run the wires up to the radio cavity.
- 4. Connect all harnesses to the Maestro RR module.
- 5. Plug the aftermarket radio harnesses into the aftermarket radio. Plug the data cable to the data port of the aftermarket radio (port labeled iDatalink).Insert the Audio cable into the iDatalink 3.5 mm audio jack of the aftermarket radio (if there is no iDatalink audio input, connect to AUX). Plug the backup camera RCA into the aftermarket radio (if applicable).

### Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

- **6.** Insert the radio and sync module into the dash and secure the metal brackets with (4) 7mm bolts. (Fig. 1.0)
- **7.** Connect all the harnesses to the FTR1 kit, and secure it in the dash. Test your installation before completely reassembling the bezel to the truck. (Fig. 2.0)





Fig. 1.0

Fig. 2.0



### WIRING DIAGRAM \*RETAINING SYNC



# **RADIO WIRE REFERENCE CHART**

Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable
Illumination	[+]	Orange	N/A	Orange/White	Orange/White
Reverse Light	(+)	Purple/White	Orange/White	Purple/White	Purple/White
E-Brake	[-]	Lt Green	Yellow/Blue	Lt Green	Lt Green
Foot Brake	(+)	Yellow/Black	Yellow/Black	N/A	N/A
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink
Power Antenna	[+]	Blue	Blue	Blue	N/A

# TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBDII connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/ BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/</b> <b>BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. Reset the RR.
There is no sound from OEM sources like Sync.	Ensure the all black, 3-pin to 3.5mm audio cable is connected between the RR and the radio. Make sure it is in the correct radio input.
The climate controls do not work.	Re-check the climate control assembly. Ensure the ribbon cables are not installed backward.
The light on the Maestro is flashing <b>RED ONCE</b> .	There is no firmware on the module; flash the RR module.
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Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

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