SELECT VEHICLE
PRINT PAGES NEEDED

iDatalink maestro RR

HOW TO USE THIS INSTALL GUIDE

1. Open the Bookmarks menu and find your vehicle OR scroll down until you find the install guide for your vehicle.
2. Print only the pages for your vehicle using the advanced options in the Print menu.
3. 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

2020-2023
TOYOTA 4 RUNNER

RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA, AND MORE!

+

HEAD UNIT
ADAPTER READY

PRODUCTS REQUIRED

iDatalink Maestro RR Radio Replacement Interface
iDatalink Maestro HRR-TO3 Installation Harness

PROGRAMMED FIRMWARE: TO3-RR-DS

WELCOME

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.

NEED HELP?

1 866 427-2999

maestro.support@idatalink.com

ADDITIONAL INFORMATION AND ACCESSORIES

HEAD UNIT ADAPTER:
ACC-HU-PIO1, SON1, KEN1, KEN2, ALP1

MIC1 (Factory microphone interface module)	MIC1 INSTALL GUIDE
Radar Detectors K40 ELECTRONICS ESCORT	Radar Installation Guides
Installation, product information, vehicle specific videos.	VIDEO HELP
Last flash information, steering control configuration, vehicle information.	VERIFY FLASH
Software to program module.	WEBLINK

INSTALLATION INSTRUCTIONS P1/1

STEP 1

- Remove the factory radio.

  If using head unit adapter (sold separately), connect HRR-TO3 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-TO3 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-TO3 T-harness and match the wire functions.

Note: Purple/white is a low current positive output used to trigger the radio only. Do NOT connect to anything other than the radio's reverse input. Refer to radio wire chart for radio's reverse light wire color.

If no camera is installed/desired, do not connect the radio's reverse wire. If installing an aftermarket camera, do NOT connect power for the camera to the Maestro's purple/white wire or module damage will occur.

STEP 2

- Determine if the vehicle has a factory amplifier.

If the vehicle DOES NOT have a factory amplifier:

- Plug in the HRR-TO3 4-pin white connectors.

If the vehicle DOES have a factory amplifier:

- Unlug the HRR-TO3 4-pin white connectors.
- Connect the 4-pin white to 4-pin white connector with RCAs. Connect the RCAs to the radio outputs: white/left front, gray/right front.

STEP 3

- Connect the factory harness to the HRR-TO3 T-harness.

STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup camera RCA cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

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

STEP 5

- Connect all the harnesses to the Maestro RR module then test your installation.

CAMERA CONTROLS

REAR CAMERA ONLY with controls on factory radio screen:

Camera controls (with vehicle in reverse)

MODE - Normal/wide view toggle

SEEK UP - Change guidelines

SEEK DOWN - Mute/unmute rear cross traffic alert

PANORAMIC/360 CAMERA:

Note: If equipped with Bird's Eye camera, be sure to set the factory radio "AUTO ON" for the radio to change from rear/front camera automatically and allow the vehicle camera button to switch 360 degree views.

Camera controls (with vehicle in reverse)

MODE - Change view

SEEK UP - Zoom in/out

SEEK DOWN - Change guidelines

PANORAMIC/360, WITH OFFROAD CAMERA ACTIVATED
(select vehicles/optional feature — activate 4LO and press the camera button to access):

Camera controls (with camera active)

MODE - Change view

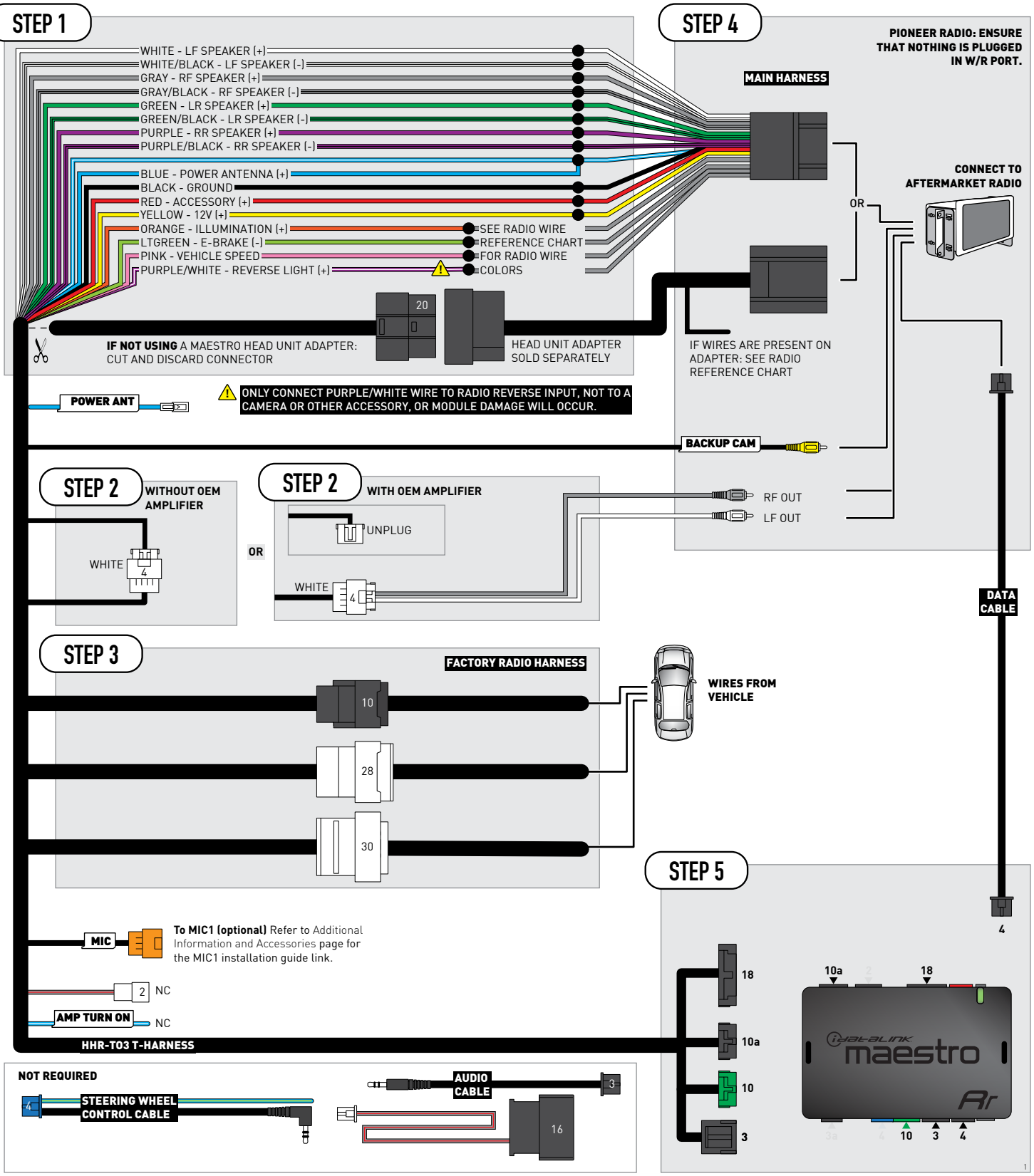
SEEK UP - Auto button on Offroad view

KENWOOD/JVC/SONY RADIOS - touch left or right side of screen

Note: For Sony radios with OSD Controllable camera: When the vehicle is equipped with the bird's eye view camera system, plug the camera into Camera 1 on the radio. This is the only camera input that allows camera control through the touchscreen

1

WIRING DIAGRAM



RADIO WIRE REFERENCE CHART

HRR-T03 T-harness Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable	Wire Color on Sony cable
Illumination	(+)	Orange	N/A	Orange/White	Orange/White	Orange
Reverse Light*	(+)	Purple/White	Orange/White	Purple/White	Purple/White	Purple/White
E-Brake	(-)	Lt Green	Yellow/Blue	Lt Green	Lt Green	Lt Green
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink	N/A

* Reverse light wire: Only connect to radio or module damage will occur.

Head unit adapter wiring (optional accessory, sold separately)

ACC-HU-ALP1 Wire Description	Polarity	Wire Color on Adapter	Alpine Radio
VSS (vehicle speed sensor)	(DATA)	Green/White	Green/White

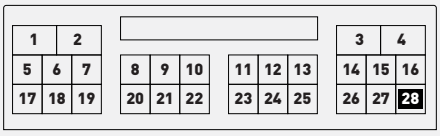
ACC-HU-KEN1 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
CAM	(+)	Green/Red	Refer to camera/radio manual
CAM	(-)	Green/White	Refer to camera/radio manual
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

ACC-HU-KEN2 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
E-Brake	(-)	LtGreen	LtGreen
Reverse Light*	(+)	Purple/White	Purple/White
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

MODULE DIAGNOSTICS

LED 1 Module/Firmware status	LED STATUS	DIAGNOSTIC
● or ●	RED or GREEN flashing	LED flashes 1 or more times, either red or green, **when a steering wheel button is pressed** : normal operation.
●	1 RED flash	Module has no firmware. Flash module using Weblink Desktop and log in. Do NOT use DEMO MODE.
●	2 RED flashes	Problem detected. Consult troubleshooting table.
●	1 GREEN flash	After radio boots up : Normal operation.
●	OFF	Normal operation (inactive).

TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBD2 connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the **RED/BROWN** wire is on **PIN 6** and the **YELLOW/BROWN** wire is connected to **PIN 14** of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options. Reset the RR.
The light on the Maestro is blinking **RED TWICE** and the radio **IS** turning on.	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.
The light on the Maestro is blinking **RED TWICE** but radio is **NOT** turning on.	If installing a floating screen type radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully. Not installing these fully will prevent radio from powering up and show a 2x red error as well. Test red and yellow wires for DC voltage at radio using a multimeter. Contact support if no voltage on red or yellow.
There is no image from the backup camera, just a black screen.	Ensure the yellow backup camera RCA cable is connected to the proper input on the radio (i.e. Brown "BC IN" on Pioneer or yellow backup/reverse video input on other brands).
Radio does not switch to reverse cam input when shifting to reverse.  28 PIN CONNECTOR - WIRE SIDE VIEW	Verify the purple/white wire from the Maestro is connected to the radio's reverse input trigger (purple/white on most, Alpine may be orange/white - read radio manual to confirm). **If the purple/white is connected**: Use a multimeter to verify you have 12v DC when in reverse, 0v in any other position. If so, check radio settings for "Reverse Interrupt" or similar, and ensure it is enabled/ON. If it's the opposite, 12v in park/neutral/drive, but 0v in reverse, the module output has been damaged and will need replaced. Make sure ONLY the radio's reverse trigger is connected to the Maestro purple/white wire. If 0v in any gear, test pin 28 of the vehicle's 28 pin connector for reverse. Color varies but identify the wire that reads 12v in reverse only and splice into it and connect it, instead of the Maestro purple/white wire, to the radio's reverse trigger input. (Maestro purple/white wire is not used).

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

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

2019-2022
TOYOTA AVALON

RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA, AND MORE!

+

HEAD UNIT
ADAPTER READY

PRODUCTS REQUIRED

iDatalink Maestro RR Radio Replacement Interface
iDatalink Maestro HRR-TO3 Installation Harness

PROGRAMMED FIRMWARE: TO3-RR-DS

WELCOME

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.

NEED HELP?

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maestro.support@idatalink.com

ADDITIONAL INFORMATION AND ACCESSORIES

HEAD UNIT ADAPTER:
ACC-HU-PIO1, SON1, KEN1, KEN2, ALP1

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Last flash information, steering control configuration, vehicle information.	VERIFY FLASH
Software to program module.	WEBLINK

INSTALLATION INSTRUCTIONS P1/1

STEP 1

- Remove the factory radio.

  If using head unit adapter (sold separately), connect HRR-TO3 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-TO3 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-TO3 T-harness and match the wire functions.

Note: Purple/white is a low current positive output used to trigger the radio only. Do NOT connect to anything other than the radio's reverse input. Refer to radio wire chart for radio's reverse light wire color.

If no camera is installed/desired, do not connect the radio's reverse wire. If installing an aftermarket camera, do NOT connect power for the camera to the Maestro's purple/white wire or module damage will occur.

STEP 2

- Determine if the vehicle has a factory amplifier.

If the vehicle DOES NOT have a factory amplifier:

- Plug in the HRR-TO3 4-pin white connectors.

If the vehicle DOES have a factory amplifier:

- Unlug the HRR-TO3 4-pin white connectors.
- Connect the 4-pin white to 4-pin white connector with RCAs. Connect the RCAs to the radio outputs: white/left front, gray/right front.

STEP 3

- Connect the factory harness to the HRR-TO3 T-harness.

STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup camera RCA cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

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

STEP 5

- Connect all the harnesses to the Maestro RR module then test your installation.

CAMERA CONTROLS

REAR CAMERA ONLY with controls on factory radio screen:

Camera controls (with vehicle in reverse)

MODE - Normal/wide view toggle

SEEK UP - Change guidelines

SEEK DOWN - Mute/unmute rear cross traffic alert

PANORAMIC/360 CAMERA:

Note: If equipped with Bird's Eye camera, be sure to set the factory radio "AUTO ON" for the radio to change from rear/front camera automatically and allow the vehicle camera button to switch 360 degree views.

Camera controls (with vehicle in reverse)

MODE - Change view

SEEK UP - Zoom in/out

SEEK DOWN - Change guidelines

PANORAMIC/360, WITH OFFROAD CAMERA ACTIVATED
(select vehicles/optional feature — activate 4LO and press the camera button to access):

Camera controls (with camera active)

MODE - Change view

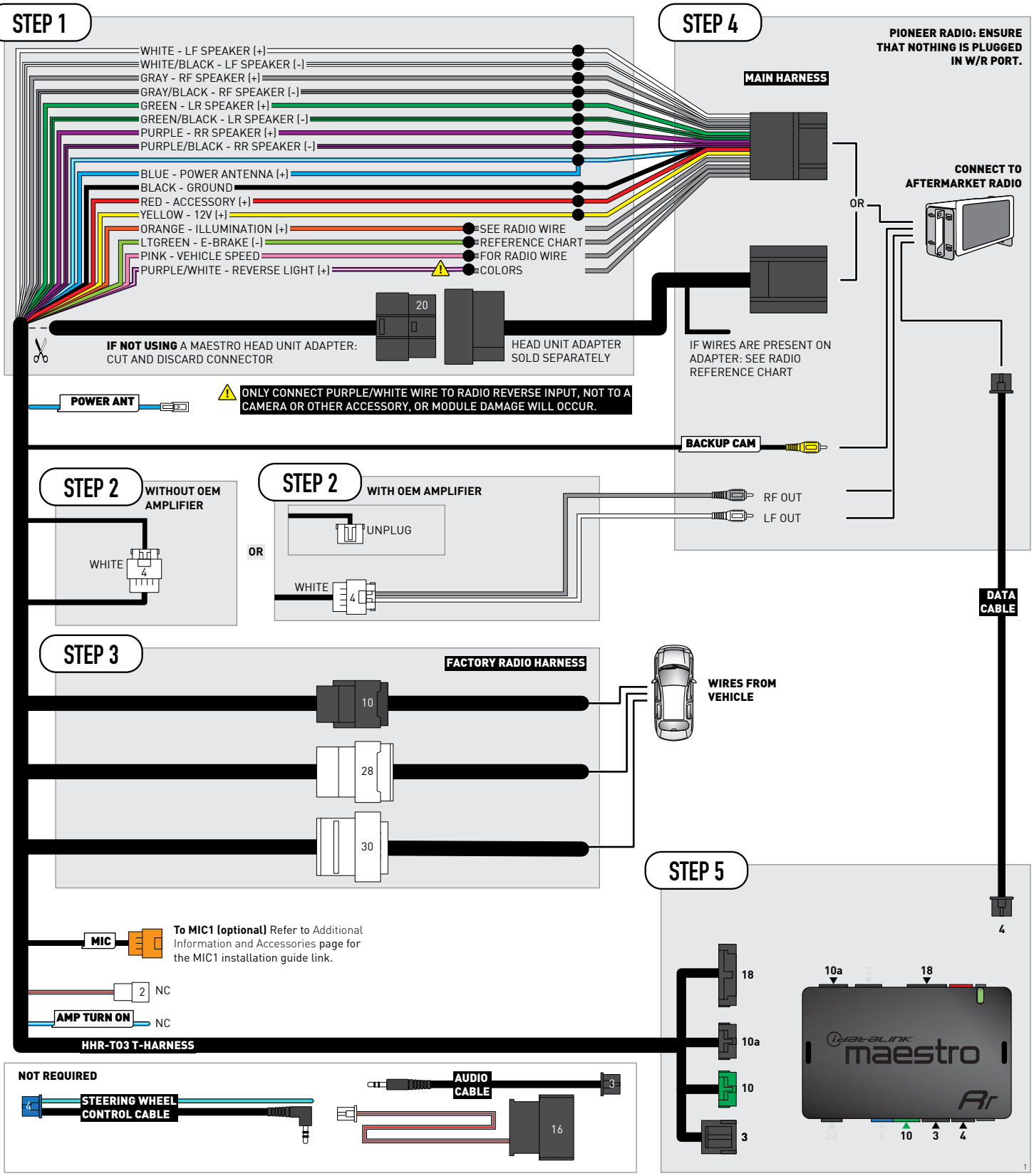
SEEK UP - Auto button on Offroad view

KENWOOD/JVC/SONY RADIOS - touch left or right side of screen

Note: For Sony radios with OSD Controllable camera: When the vehicle is equipped with the bird's eye view camera system, plug the camera into Camera 1 on the radio. This is the only camera input that allows camera control through the touchscreen

1

WIRING DIAGRAM



RADIO WIRE REFERENCE CHART

HRR-T03 T-harness Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable	Wire Color on Sony cable
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Reverse Light*	(+)	Purple/White	Orange/White	Purple/White	Purple/White	Purple/White
E-Brake	(-)	Lt Green	Yellow/Blue	Lt Green	Lt Green	Lt Green
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink	N/A

* Reverse light wire: Only connect to radio or module damage will occur.

Head unit adapter wiring (optional accessory, sold separately)

ACC-HU-ALP1 Wire Description	Polarity	Wire Color on Adapter	Alpine Radio
VSS (vehicle speed sensor)	(DATA)	Green/White	Green/White

ACC-HU-KEN1 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
CAM	(+)	Green/Red	Refer to camera/radio manual
CAM	(-)	Green/White	Refer to camera/radio manual
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

ACC-HU-KEN2 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
E-Brake	(-)	LtGreen	LtGreen
Reverse Light*	(+)	Purple/White	Purple/White
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

MODULE DIAGNOSTICS

LED 1 Module/Firmware status	LED STATUS	DIAGNOSTIC
● or ●	RED or GREEN flashing	LED flashes 1 or more times, either red or green, **when a steering wheel button is pressed** : normal operation.
●	1 RED flash	Module has no firmware. Flash module using Weblink Desktop and log in. Do NOT use DEMO MODE.
●	2 RED flashes	Problem detected. Consult troubleshooting table.
●	1 GREEN flash	After radio boots up : Normal operation.
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TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBD2 connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the **RED/BROWN** wire is on **PIN 6** and the **YELLOW/BROWN** wire is connected to **PIN 14** of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options. Reset the RR.
The light on the Maestro is blinking **RED TWICE** and the radio **IS** turning on.	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.
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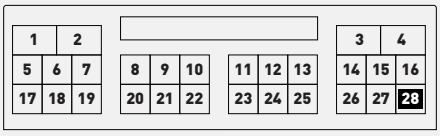
There is no image from the backup camera, just a black screen.	Ensure the yellow backup camera RCA cable is connected to the proper input on the radio (i.e. Brown "BC IN" on Pioneer or yellow backup/reverse video input on other brands).
Radio does not switch to reverse cam input when shifting to reverse.  **28 PIN CONNECTOR - WIRE SIDE VIEW**	Verify the purple/white wire from the Maestro is connected to the radio's reverse input trigger (purple/white on most, Alpine may be orange/white - read radio manual to confirm). **If the purple/white is connected**: Use a multimeter to verify you have 12v DC when in reverse, 0v in any other position. If so, check radio settings for "Reverse Interrupt" or similar, and ensure it is enabled/ON. If it's the opposite, 12v in park/neutral/drive, but 0v in reverse, the module output has been damaged and will need replaced. Make sure ONLY the radio's reverse trigger is connected to the Maestro purple/white wire. If 0v in any gear, test pin 28 of the vehicle's 28 pin connector for reverse. Color varies but identify the wire that reads 12v in reverse only and splice into it and connect it, instead of the Maestro purple/white wire, to the radio's reverse trigger input. (Maestro purple/white wire is not used).

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

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

2019-2022
TOYOTA C-HR

RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA, AND MORE!

+

HEAD UNIT
ADAPTER READY

PRODUCTS REQUIRED

iDatalink Maestro RR Radio Replacement Interface
iDatalink Maestro HRR-TO3 Installation Harness

PROGRAMMED FIRMWARE: TO3-RR-DS

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

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.

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NEED HELP?

1 866 427-2999

maestro.support@idatalink.com

ADDITIONAL INFORMATION AND ACCESSORIES

HEAD UNIT ADAPTER:
ACC-HU-PIO1, SON1, KEN1, KEN2, ALP1

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INSTALLATION INSTRUCTIONS P1/1

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- Remove the factory radio.

  If using head unit adapter (sold separately), connect HRR-TO3 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-TO3 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-TO3 T-harness and match the wire functions.

Note: Purple/white is a low current positive output used to trigger the radio only. Do NOT connect to anything other than the radio's reverse input. Refer to radio wire chart for radio's reverse light wire color.

If no camera is installed/desired, do not connect the radio's reverse wire. If installing an aftermarket camera, do NOT connect power for the camera to the Maestro's purple/white wire or module damage will occur.

STEP 2

- Determine if the vehicle has a factory amplifier.

If the vehicle DOES NOT have a factory amplifier:

- Plug in the HRR-TO3 4-pin white connectors.

If the vehicle DOES have a factory amplifier:

- Unlug the HRR-TO3 4-pin white connectors.
- Connect the 4-pin white to 4-pin white connector with RCAs. Connect the RCAs to the radio outputs: white/left front, gray/right front.

STEP 3

- Connect the factory harness to the HRR-TO3 T-harness.

STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup camera RCA cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

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

STEP 5

- Connect all the harnesses to the Maestro RR module then test your installation.

CAMERA CONTROLS

REAR CAMERA ONLY with controls on factory radio screen:

Camera controls (with vehicle in reverse)

MODE - Normal/wide view toggle

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PANORAMIC/360 CAMERA:

Note: If equipped with Bird's Eye camera, be sure to set the factory radio "AUTO ON" for the radio to change from rear/front camera automatically and allow the vehicle camera button to switch 360 degree views.

Camera controls (with vehicle in reverse)

MODE - Change view

SEEK UP - Zoom in/out

SEEK DOWN - Change guidelines

PANORAMIC/360, WITH OFFROAD CAMERA ACTIVATED
(select vehicles/optional feature — activate 4LO and press the camera button to access):

Camera controls (with camera active)

MODE - Change view

SEEK UP - Auto button on Offroad view

KENWOOD/JVC/SONY RADIOS - touch left or right side of screen

Note: For Sony radios with OSD Controllable camera: When the vehicle is equipped with the bird's eye view camera system, plug the camera into Camera 1 on the radio. This is the only camera input that allows camera control through the touchscreen

1

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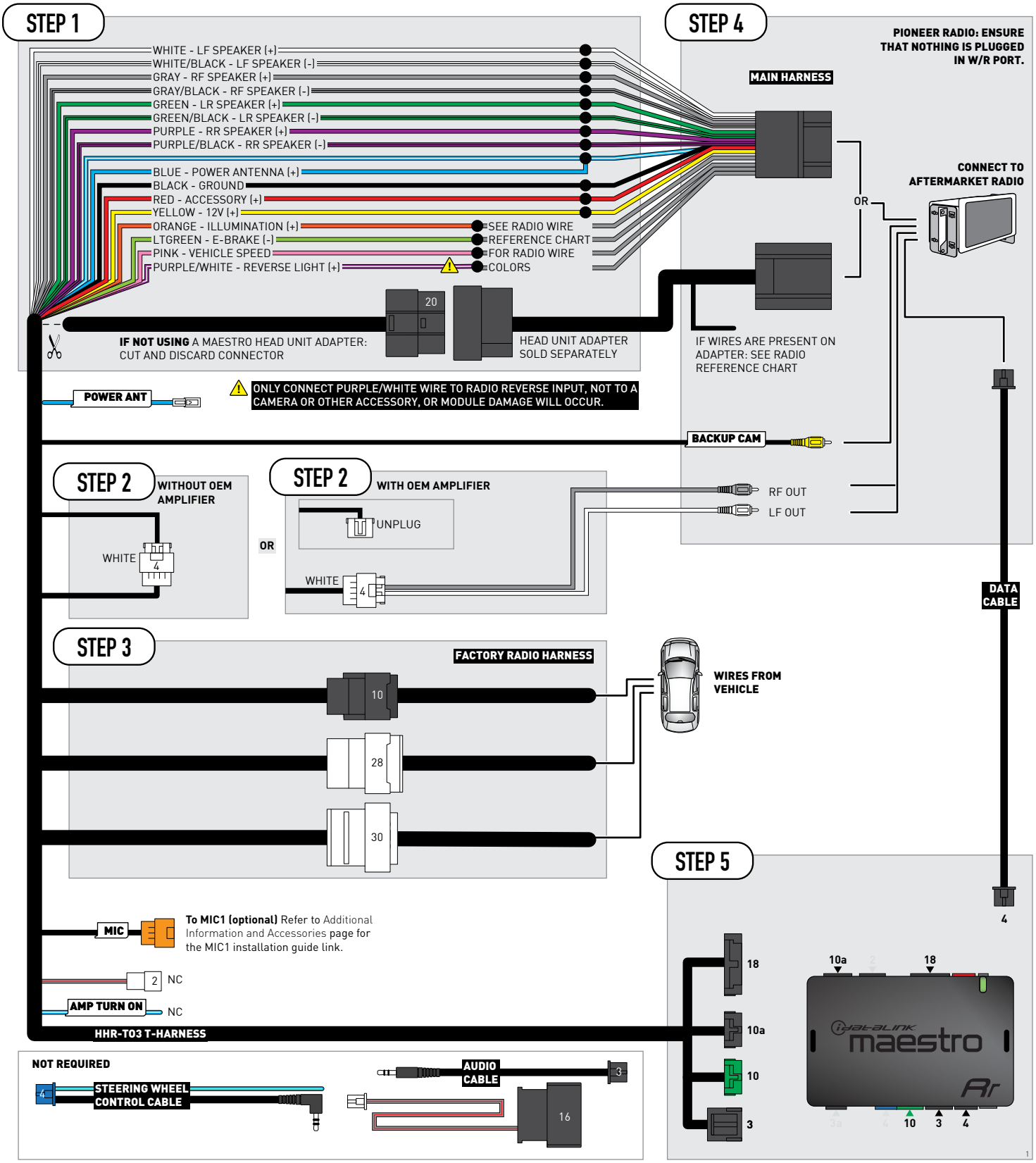

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HRR-T03 T-harness Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable	Wire Color on Sony cable
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Reverse Light*	(+)	Purple/White	Orange/White	Purple/White	Purple/White	Purple/White
E-Brake	(-)	Lt Green	Yellow/Blue	Lt Green	Lt Green	Lt Green
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink	N/A

* Reverse light wire: Only connect to radio or module damage will occur.

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ACC-HU-ALP1 Wire Description	Polarity	Wire Color on Adapter	Alpine Radio
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Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

ACC-HU-KEN2 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
E-Brake	(-)	LtGreen	LtGreen
Reverse Light*	(+)	Purple/White	Purple/White
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

MODULE DIAGNOSTICS

LED 1 Module/Firmware status	LED STATUS	DIAGNOSTIC
● or ●	RED or GREEN flashing	LED flashes 1 or more times, either red or green, **when a steering wheel button is pressed** : normal operation.
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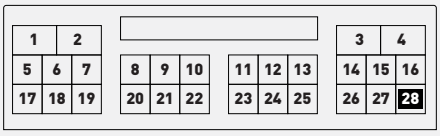
TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBD2 connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the **RED/BROWN** wire is on **PIN 6** and the **YELLOW/BROWN** wire is connected to **PIN 14** of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options. Reset the RR.
The light on the Maestro is blinking **RED TWICE** and the radio **IS** turning on.	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.
The light on the Maestro is blinking **RED TWICE** but radio is **NOT** turning on.	If installing a floating screen type radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully. Not installing these fully will prevent radio from powering up and show a 2x red error as well. Test red and yellow wires for DC voltage at radio using a multimeter. Contact support if no voltage on red or yellow.
There is no image from the backup camera, just a black screen.	Ensure the yellow backup camera RCA cable is connected to the proper input on the radio (i.e. Brown "BC IN" on Pioneer or yellow backup/reverse video input on other brands).
Radio does not switch to reverse cam input when shifting to reverse.  28 PIN CONNECTOR - WIRE SIDE VIEW	Verify the purple/white wire from the Maestro is connected to the radio's reverse input trigger (purple/white on most, Alpine may be orange/white - read radio manual to confirm). **If the purple/white is connected**: Use a multimeter to verify you have 12v DC when in reverse, 0v in any other position. If so, check radio settings for "Reverse Interrupt" or similar, and ensure it is enabled/ON. If it's the opposite, 12v in park/neutral/drive, but 0v in reverse, the module output has been damaged and will need replaced. Make sure ONLY the radio's reverse trigger is connected to the Maestro purple/white wire. If 0v in any gear, test pin 28 of the vehicle's 28 pin connector for reverse. Color varies but identify the wire that reads 12v in reverse only and splice into it and connect it, instead of the Maestro purple/white wire, to the radio's reverse trigger input. (Maestro purple/white wire is not used).

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

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
TOYOTA C-HR
WITH CARPLAY

RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA, AND MORE!

+

HEAD UNIT
ADAPTER READY

PRODUCTS REQUIRED

iDatalink Maestro RR Radio Replacement Interface
iDatalink Maestro HRR-TO3 Installation Harness

PROGRAMMED FIRMWARE: TO3-RR-DS

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

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.

NEED HELP?

1 866 427-2999

maestro.support@idatalink.com

ADDITIONAL INFORMATION AND ACCESSORIES

HEAD UNIT ADAPTER:
ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

MIC1 (Factory microphone interface module)	MIC1 INSTALL GUIDE
Radar Detectors K40 ELECTRONICS ESCORT	Radar Installation Guides
Installation, product information, vehicle specific videos.	VIDEO HELP
Last flash information, steering control configuration, vehicle information.	VERIFY FLASH
Software to program module.	WEBLINK

INSTALLATION INSTRUCTIONS P1/1

STEP 1

- Remove the factory radio.

  If using head unit adapter (sold separately), connect HRR-TO3 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-TO3 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-TO3 T-harness and match the wire functions.

Note: Purple/white is a low current positive output used to trigger the radio only. Do NOT connect to anything other than the radio's reverse input. Refer to radio wire chart for radio's reverse light wire color.

If no camera is installed/desired, do not connect the radio's reverse wire. If installing an aftermarket camera, do NOT connect power for the camera to the Maestro's purple/white wire or module damage will occur.

STEP 2

- Determine if the vehicle has a factory amplifier.

If the vehicle DOES NOT have a factory amplifier:

- Plug in the HRR-TO3 4-pin white connectors.

If the vehicle DOES have a factory amplifier:

- Unlug the HRR-TO3 4-pin white connectors.
- Connect the 4-pin white to 4-pin white connector with RCAs. Connect the RCAs to the radio outputs: white/left front, gray/right front.

STEP 3

- Connect the factory harness to the HRR-TO3 T-harness.

STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup camera RCA cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

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

STEP 5

- Connect all the harnesses to the Maestro RR module then test your installation.

CAMERA CONTROLS

REAR CAMERA ONLY with controls on factory radio screen:

Camera controls (with vehicle in reverse)

MODE - Normal/wide view toggle

SEEK UP - Change guidelines

SEEK DOWN - Mute/unmute rear cross traffic alert

PANORAMIC/360 CAMERA:

Note: If equipped with Bird's Eye camera, be sure to set the factory radio "AUTO ON" for the radio to change from rear/front camera automatically and allow the vehicle camera button to switch 360 degree views.

Camera controls (with vehicle in reverse)

MODE - Change view

SEEK UP - Zoom in/out

SEEK DOWN - Change guidelines

PANORAMIC/360, WITH OFFROAD CAMERA ACTIVATED
(select vehicles/optional feature — activate 4LO and press the camera button to access):

Camera controls (with camera active)

MODE - Change view

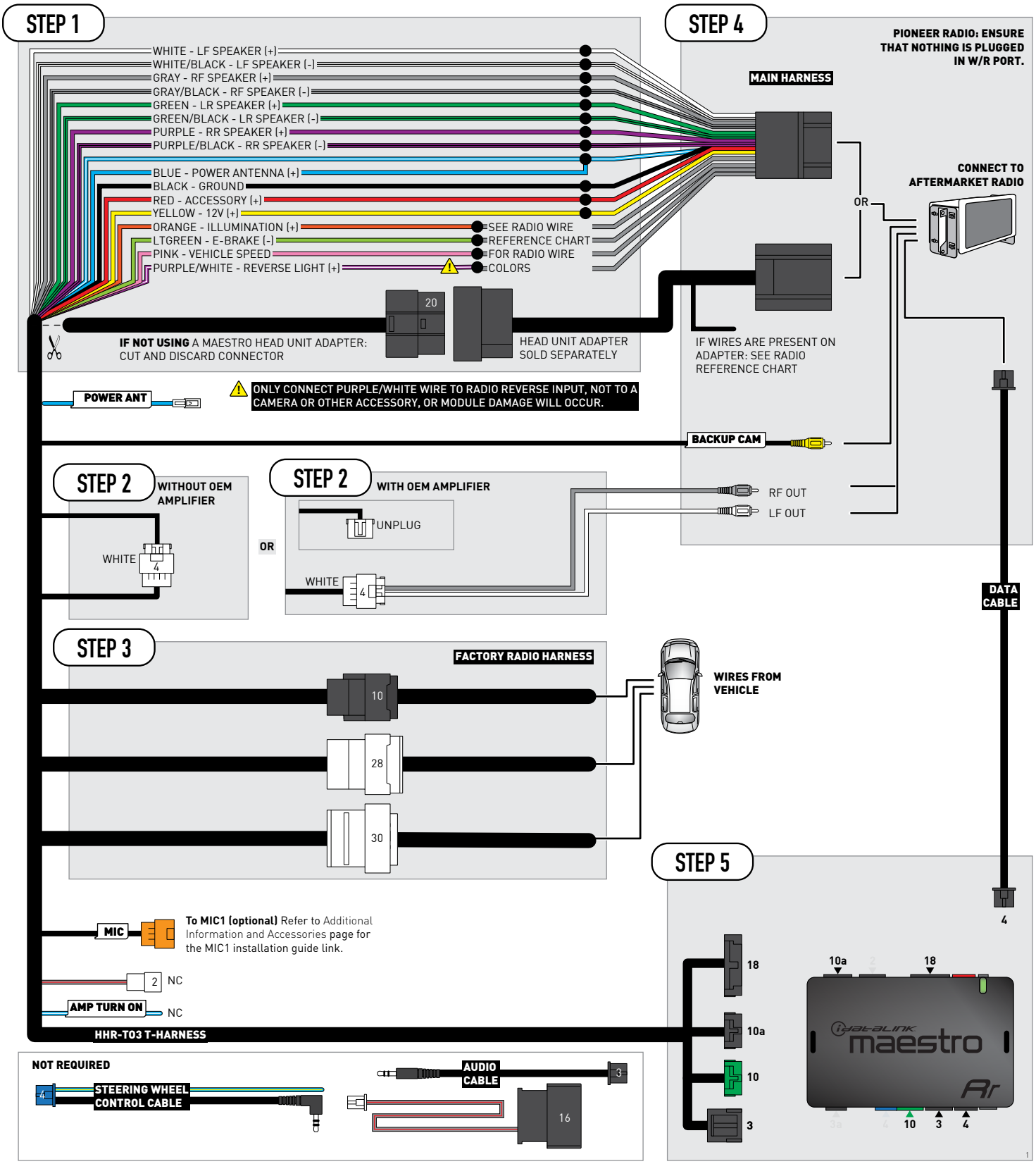
SEEK UP - Auto button on Offroad view

KENWOOD/JVC/SONY RADIOS - touch left or right side of screen

Note: For Sony radios with OSD Controllable camera: When the vehicle is equipped with the bird's eye view camera system, plug the camera into Camera 1 on the radio. This is the only camera input that allows camera control through the touchscreen

1

WIRING DIAGRAM



RADIO WIRE REFERENCE CHART

HRR-T03 T-harness Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable	Wire Color on Sony cable
Illumination	(+)	Orange	N/A	Orange/White	Orange/White	Orange
Reverse Light*	(+)	Purple/White	Orange/White	Purple/White	Purple/White	Purple/White
E-Brake	(-)	Lt Green	Yellow/Blue	Lt Green	Lt Green	Lt Green
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink	N/A

* Reverse light wire: Only connect to radio or module damage will occur.

Head unit adapter wiring (optional accessory, sold separately)

ACC-HU-ALP1 Wire Description	Polarity	Wire Color on Adapter	Alpine Radio
VSS (vehicle speed sensor)	(DATA)	Green/White	Green/White

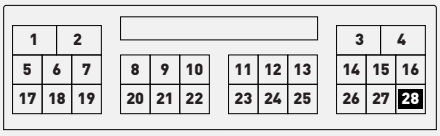
ACC-HU-KEN1 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
CAM	(+)	Green/Red	Refer to camera/radio manual
CAM	(-)	Green/White	Refer to camera/radio manual
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

ACC-HU-KEN2 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
E-Brake	(-)	LtGreen	LtGreen
Reverse Light*	(+)	Purple/White	Purple/White
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

MODULE DIAGNOSTICS

LED 1 Module/Firmware status	LED STATUS	DIAGNOSTIC
● or ●	RED or GREEN flashing	LED flashes 1 or more times, either red or green, **when a steering wheel button is pressed** : normal operation.
●	1 RED flash	Module has no firmware. Flash module using Weblink Desktop and log in. Do NOT use DEMO MODE.
●	2 RED flashes	Problem detected. Consult troubleshooting table.
●	1 GREEN flash	After radio boots up : Normal operation.
●	OFF	Normal operation (inactive).

TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBD2 connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the **RED/BROWN** wire is on **PIN 6** and the **YELLOW/BROWN** wire is connected to **PIN 14** of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options. Reset the RR.
The light on the Maestro is blinking **RED TWICE** and the radio **IS** turning on.	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.
The light on the Maestro is blinking **RED TWICE** but radio is **NOT** turning on.	If installing a floating screen type radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully. Not installing these fully will prevent radio from powering up and show a 2x red error as well. Test red and yellow wires for DC voltage at radio using a multimeter. Contact support if no voltage on red or yellow.
There is no image from the backup camera, just a black screen.	Ensure the yellow backup camera RCA cable is connected to the proper input on the radio (i.e. Brown "BC IN" on Pioneer or yellow backup/reverse video input on other brands).
Radio does not switch to reverse cam input when shifting to reverse.  **28 PIN CONNECTOR - WIRE SIDE VIEW**	Verify the purple/white wire from the Maestro is connected to the radio's reverse input trigger (purple/white on most, Alpine may be orange/white - read radio manual to confirm). **If the purple/white is connected**: Use a multimeter to verify you have 12v DC when in reverse, 0v in any other position. If so, check radio settings for "Reverse Interrupt" or similar, and ensure it is enabled/ON. If it's the opposite, 12v in park/neutral/drive, but 0v in reverse, the module output has been damaged and will need replaced. Make sure ONLY the radio's reverse trigger is connected to the Maestro purple/white wire. If 0v in any gear, test pin 28 of the vehicle's 28 pin connector for reverse. Color varies but identify the wire that reads 12v in reverse only and splice into it and connect it, instead of the Maestro purple/white wire, to the radio's reverse trigger input. (Maestro purple/white wire is not used).

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

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

2018-2023
TOYOTA CAMRY

RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA, AND MORE!

+

HEAD UNIT
ADAPTER READY

PRODUCTS REQUIRED

iDatalink Maestro RR Radio Replacement Interface
iDatalink Maestro HRR-TO3 Installation Harness

PROGRAMMED FIRMWARE: TO3-RR-DS

WELCOME

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.

NEED HELP?

1 866 427-2999

maestro.support@idatalink.com

ADDITIONAL INFORMATION AND ACCESSORIES

HEAD UNIT ADAPTER:
ACC-HU-PIO1, SON1, KEN1, KEN2, ALP1

MIC1 (Factory microphone interface module)	MIC1 INSTALL GUIDE
Radar Detectors K40 ELECTRONICS ESCORT	Radar Installation Guides
Installation, product information, vehicle specific videos.	VIDEO HELP
Last flash information, steering control configuration, vehicle information.	VERIFY FLASH
Software to program module.	WEBLINK

INSTALLATION INSTRUCTIONS P1/1

STEP 1

- Remove the factory radio.

  If using head unit adapter (sold separately), connect HRR-TO3 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-TO3 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-TO3 T-harness and match the wire functions.

Note: Purple/white is a low current positive output used to trigger the radio only. Do NOT connect to anything other than the radio's reverse input. Refer to radio wire chart for radio's reverse light wire color.

If no camera is installed/desired, do not connect the radio's reverse wire. If installing an aftermarket camera, do NOT connect power for the camera to the Maestro's purple/white wire or module damage will occur.

STEP 2

- Determine if the vehicle has a factory amplifier.

If the vehicle DOES NOT have a factory amplifier:

- Plug in the HRR-TO3 4-pin white connectors.

If the vehicle DOES have a factory amplifier:

- Unlug the HRR-TO3 4-pin white connectors.
- Connect the 4-pin white to 4-pin white connector with RCAs. Connect the RCAs to the radio outputs: white/left front, gray/right front.

STEP 3

- Connect the factory harness to the HRR-TO3 T-harness.

STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup camera RCA cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

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

STEP 5

- Connect all the harnesses to the Maestro RR module then test your installation.

CAMERA CONTROLS

REAR CAMERA ONLY with controls on factory radio screen:

Camera controls (with vehicle in reverse)

MODE - Normal/wide view toggle

SEEK UP - Change guidelines

SEEK DOWN - Mute/unmute rear cross traffic alert

PANORAMIC/360 CAMERA:

Note: If equipped with Bird's Eye camera, be sure to set the factory radio "AUTO ON" for the radio to change from rear/front camera automatically and allow the vehicle camera button to switch 360 degree views.

Camera controls (with vehicle in reverse)

MODE - Change view

SEEK UP - Zoom in/out

SEEK DOWN - Change guidelines

PANORAMIC/360, WITH OFFROAD CAMERA ACTIVATED
(select vehicles/optional feature — activate 4LO and press the camera button to access):

Camera controls (with camera active)

MODE - Change view

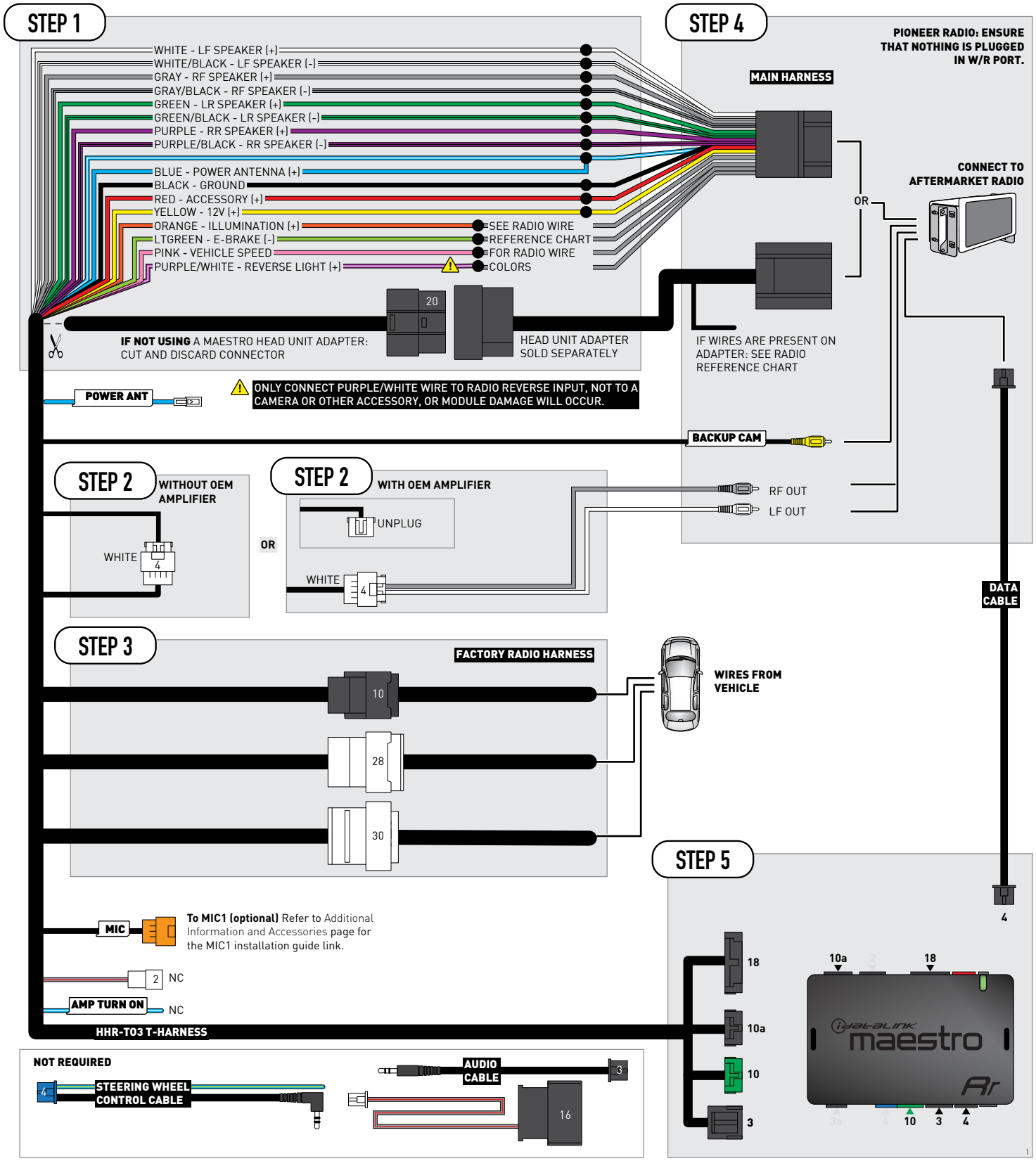
SEEK UP - Auto button on Offroad view

KENWOOD/JVC/SONY RADIOS - touch left or right side of screen

Note: For Sony radios with OSD Controllable camera: When the vehicle is equipped with the bird's eye view camera system, plug the camera into Camera 1 on the radio. This is the only camera input that allows camera control through the touchscreen

1

WIRING DIAGRAM



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Reverse Light*	(+)	Purple/White	Orange/White	Purple/White	Purple/White	Purple/White
E-Brake	(-)	Lt Green	Yellow/Blue	Lt Green	Lt Green	Lt Green
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink	N/A

* Reverse light wire: Only connect to radio or module damage will occur.

Head unit adapter wiring (optional accessory, sold separately)

ACC-HU-ALP1 Wire Description	Polarity	Wire Color on Adapter	Alpine Radio
VSS (vehicle speed sensor)	(DATA)	Green/White	Green/White

ACC-HU-KEN1 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
CAM	(+)	Green/Red	Refer to camera/radio manual
CAM	(-)	Green/White	Refer to camera/radio manual
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

ACC-HU-KEN2 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
E-Brake	(-)	LtGreen	LtGreen
Reverse Light*	(+)	Purple/White	Purple/White
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

MODULE DIAGNOSTICS

LED 1 Module/Firmware status	LED STATUS	DIAGNOSTIC
● or ●	RED or GREEN flashing	LED flashes 1 or more times, either red or green, **when a steering wheel button is pressed** : normal operation.
●	1 RED flash	Module has no firmware. Flash module using Weblink Desktop and log in. Do NOT use DEMO MODE.
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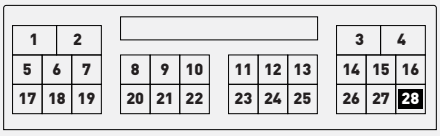
Radio does not switch to reverse cam input when shifting to reverse.  28 PIN CONNECTOR - WIRE SIDE VIEW	Verify the purple/white wire from the Maestro is connected to the radio's reverse input trigger (purple/white on most, Alpine may be orange/white - read radio manual to confirm). **If the purple/white is connected**: Use a multimeter to verify you have 12v DC when in reverse, 0v in any other position. If so, check radio settings for "Reverse Interrupt" or similar, and ensure it is enabled/ON. If it's the opposite, 12v in park/neutral/drive, but 0v in reverse, the module output has been damaged and will need replaced. Make sure ONLY the radio's reverse trigger is connected to the Maestro purple/white wire. If 0v in any gear, test pin 28 of the vehicle's 28 pin connector for reverse. Color varies but identify the wire that reads 12v in reverse only and splice into it and connect it, instead of the Maestro purple/white wire, to the radio's reverse trigger input. (Maestro purple/white wire is not used).

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Email: maestro.support@idatalink.com

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INSTALL GUIDE

2020-2022
TOYOTA COROLLA

RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA, AND MORE!

+

HEAD UNIT
ADAPTER READY

PRODUCTS REQUIRED

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PROGRAMMED FIRMWARE: TO3-RR-DS

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NEED HELP?

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STEP 3

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STEP 4

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Camera controls (with camera active)

MODE - Change view

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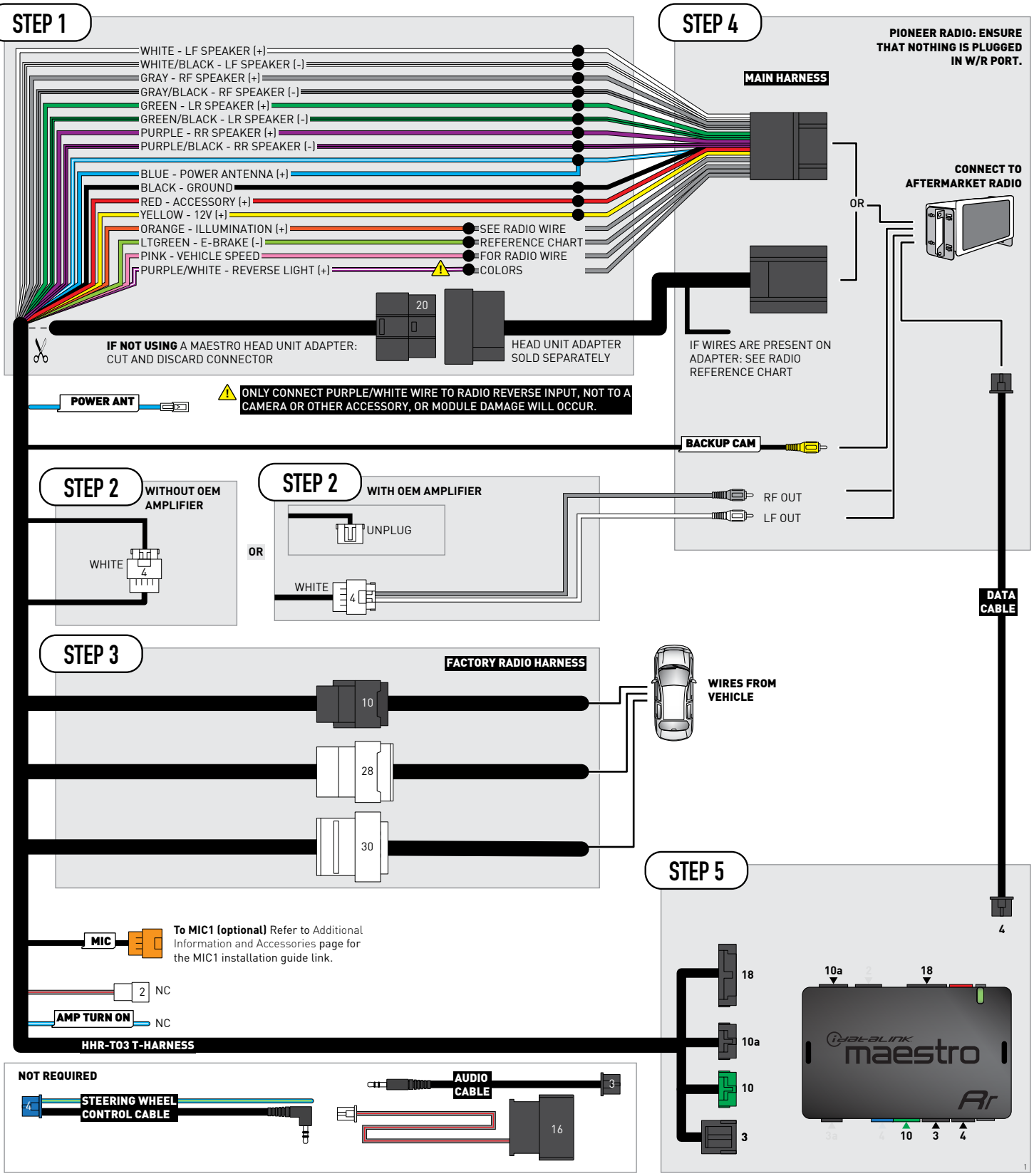

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VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink	N/A

* Reverse light wire: Only connect to radio or module damage will occur.

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ACC-HU-ALP1 Wire Description	Polarity	Wire Color on Adapter	Alpine Radio
VSS (vehicle speed sensor)	(DATA)	Green/White	Green/White

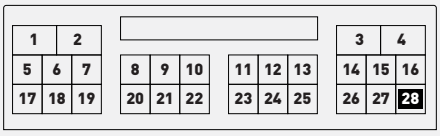
ACC-HU-KEN1 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
CAM	(+)	Green/Red	Refer to camera/radio manual
CAM	(-)	Green/White	Refer to camera/radio manual
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

ACC-HU-KEN2 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
E-Brake	(-)	LtGreen	LtGreen
Reverse Light*	(+)	Purple/White	Purple/White
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

MODULE DIAGNOSTICS

LED 1 Module/Firmware status	LED STATUS	DIAGNOSTIC
● or ●	RED or GREEN flashing	LED flashes 1 or more times, either red or green, **when a steering wheel button is pressed** : normal operation.
●	1 RED flash	Module has no firmware. Flash module using Weblink Desktop and log in. Do NOT use DEMO MODE.
●	2 RED flashes	Problem detected. Consult troubleshooting table.
●	1 GREEN flash	After radio boots up : Normal operation.
●	OFF	Normal operation (inactive).

TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBD2 connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the **RED/BROWN** wire is on **PIN 6** and the **YELLOW/BROWN** wire is connected to **PIN 14** of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options. Reset the RR.
The light on the Maestro is blinking **RED TWICE** and the radio **IS** turning on.	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.
The light on the Maestro is blinking **RED TWICE** but radio is **NOT** turning on.	If installing a floating screen type radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully. Not installing these fully will prevent radio from powering up and show a 2x red error as well. Test red and yellow wires for DC voltage at radio using a multimeter. Contact support if no voltage on red or yellow.
There is no image from the backup camera, just a black screen.	Ensure the yellow backup camera RCA cable is connected to the proper input on the radio (i.e. Brown "BC IN" on Pioneer or yellow backup/reverse video input on other brands).
Radio does not switch to reverse cam input when shifting to reverse.  **28 PIN CONNECTOR - WIRE SIDE VIEW**	Verify the purple/white wire from the Maestro is connected to the radio's reverse input trigger (purple/white on most, Alpine may be orange/white - read radio manual to confirm). **If the purple/white is connected**: Use a multimeter to verify you have 12v DC when in reverse, 0v in any other position. If so, check radio settings for "Reverse Interrupt" or similar, and ensure it is enabled/ON. If it's the opposite, 12v in park/neutral/drive, but 0v in reverse, the module output has been damaged and will need replaced. Make sure ONLY the radio's reverse trigger is connected to the Maestro purple/white wire. If 0v in any gear, test pin 28 of the vehicle's 28 pin connector for reverse. Color varies but identify the wire that reads 12v in reverse only and splice into it and connect it, instead of the Maestro purple/white wire, to the radio's reverse trigger input. (Maestro purple/white wire is not used).

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

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

2022
TOYOTA COROLLA CROSS

RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA, AND MORE!

+

HEAD UNIT
ADAPTER READY

PRODUCTS REQUIRED

iDatalink Maestro RR Radio Replacement Interface
iDatalink Maestro HRR-TO3 Installation Harness

PROGRAMMED FIRMWARE: TO3-RR-DS

WELCOME

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.

NEED HELP?

1 866 427-2999

maestro.support@idatalink.com

ADDITIONAL INFORMATION AND ACCESSORIES

HEAD UNIT ADAPTER:
ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

MIC1 (Factory microphone interface module)	MIC1 INSTALL GUIDE
Radar Detectors K40 ELECTRONICS ESCORT	Radar Installation Guides
Installation, product information, vehicle specific videos.	VIDEO HELP
Last flash information, steering control configuration, vehicle information.	VERIFY FLASH
Software to program module.	WEBLINK

INSTALLATION INSTRUCTIONS P1/1

STEP 1

- Remove the factory radio.

  If using head unit adapter (sold separately), connect HRR-TO3 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-TO3 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-TO3 T-harness and match the wire functions.

Note: Purple/white is a low current positive output used to trigger the radio only. Do NOT connect to anything other than the radio's reverse input. Refer to radio wire chart for radio's reverse light wire color.

If no camera is installed/desired, do not connect the radio's reverse wire. If installing an aftermarket camera, do NOT connect power for the camera to the Maestro's purple/white wire or module damage will occur.

STEP 2

- Determine if the vehicle has a factory amplifier.

If the vehicle DOES NOT have a factory amplifier:

- Plug in the HRR-TO3 4-pin white connectors.

If the vehicle DOES have a factory amplifier:

- Unlug the HRR-TO3 4-pin white connectors.
- Connect the 4-pin white to 4-pin white connector with RCAs. Connect the RCAs to the radio outputs: white/left front, gray/right front.

STEP 3

- Connect the factory harness to the HRR-TO3 T-harness.

STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup camera RCA cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

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

STEP 5

- Connect all the harnesses to the Maestro RR module then test your installation.

CAMERA CONTROLS

REAR CAMERA ONLY with controls on factory radio screen:

Camera controls (with vehicle in reverse)

MODE - Normal/wide view toggle

SEEK UP - Change guidelines

SEEK DOWN - Mute/unmute rear cross traffic alert

PANORAMIC/360 CAMERA:

Note: If equipped with Bird's Eye camera, be sure to set the factory radio "AUTO ON" for the radio to change from rear/front camera automatically and allow the vehicle camera button to switch 360 degree views.

Camera controls (with vehicle in reverse)

MODE - Change view

SEEK UP - Zoom in/out

SEEK DOWN - Change guidelines

PANORAMIC/360, WITH OFFROAD CAMERA ACTIVATED
(select vehicles/optional feature — activate 4LO and press the camera button to access):

Camera controls (with camera active)

MODE - Change view

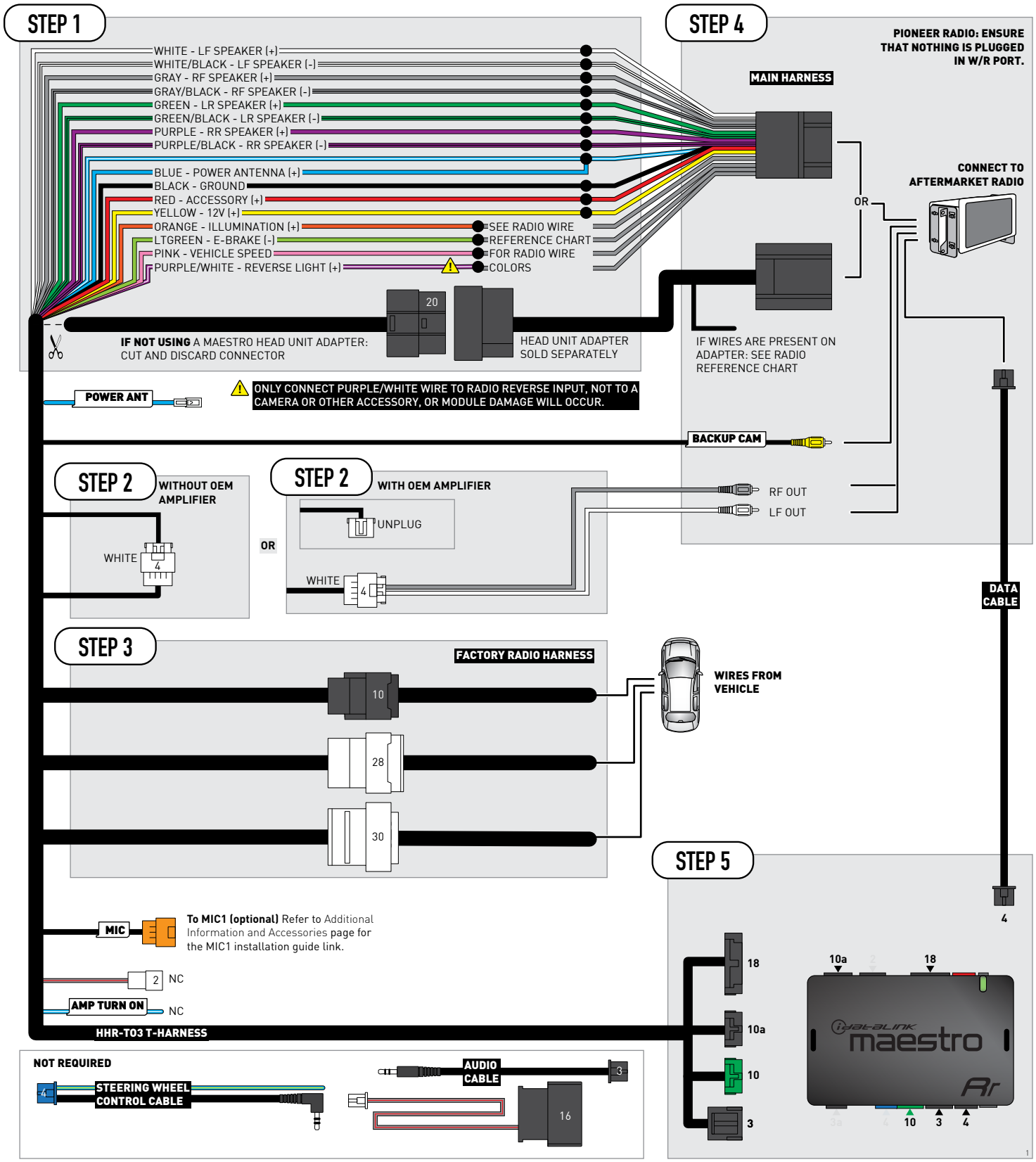
SEEK UP - Auto button on Offroad view

KENWOOD/JVC/SONY RADIOS - touch left or right side of screen

Note: For Sony radios with OSD Controllable camera: When the vehicle is equipped with the bird's eye view camera system, plug the camera into Camera 1 on the radio. This is the only camera input that allows camera control through the touchscreen

1

WIRING DIAGRAM



RADIO WIRE REFERENCE CHART

HRR-T03 T-harness Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable	Wire Color on Sony cable
Illumination	(+)	Orange	N/A	Orange/White	Orange/White	Orange
Reverse Light*	(+)	Purple/White	Orange/White	Purple/White	Purple/White	Purple/White
E-Brake	(-)	Lt Green	Yellow/Blue	Lt Green	Lt Green	Lt Green
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink	N/A

* Reverse light wire: Only connect to radio or module damage will occur.

Head unit adapter wiring (optional accessory, sold separately)

ACC-HU-ALP1 Wire Description	Polarity	Wire Color on Adapter	Alpine Radio
VSS (vehicle speed sensor)	(DATA)	Green/White	Green/White

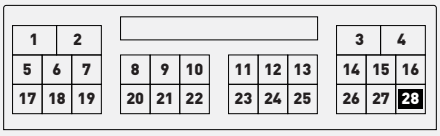
ACC-HU-KEN1 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
CAM	(+)	Green/Red	Refer to camera/radio manual
CAM	(-)	Green/White	Refer to camera/radio manual
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

ACC-HU-KEN2 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
E-Brake	(-)	LtGreen	LtGreen
Reverse Light*	(+)	Purple/White	Purple/White
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

MODULE DIAGNOSTICS

LED 1 Module/Firmware status	LED STATUS	DIAGNOSTIC
● or ●	RED or GREEN flashing	LED flashes 1 or more times, either red or green, **when a steering wheel button is pressed** : normal operation.
●	1 RED flash	Module has no firmware. Flash module using Weblink Desktop and log in. Do NOT use DEMO MODE.
●	2 RED flashes	Problem detected. Consult troubleshooting table.
●	1 GREEN flash	After radio boots up : Normal operation.
●	OFF	Normal operation (inactive).

TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBD2 connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the **RED/BROWN** wire is on **PIN 6** and the **YELLOW/BROWN** wire is connected to **PIN 14** of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options. Reset the RR.
The light on the Maestro is blinking **RED TWICE** and the radio **IS** turning on.	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.
The light on the Maestro is blinking **RED TWICE** but radio is **NOT** turning on.	If installing a floating screen type radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully. Not installing these fully will prevent radio from powering up and show a 2x red error as well. Test red and yellow wires for DC voltage at radio using a multimeter. Contact support if no voltage on red or yellow.
There is no image from the backup camera, just a black screen.	Ensure the yellow backup camera RCA cable is connected to the proper input on the radio (i.e. Brown "BC IN" on Pioneer or yellow backup/reverse video input on other brands).
Radio does not switch to reverse cam input when shifting to reverse.  **28 PIN CONNECTOR - WIRE SIDE VIEW**	Verify the purple/white wire from the Maestro is connected to the radio's reverse input trigger (purple/white on most, Alpine may be orange/white - read radio manual to confirm). **If the purple/white is connected**: Use a multimeter to verify you have 12v DC when in reverse, 0v in any other position. If so, check radio settings for "Reverse Interrupt" or similar, and ensure it is enabled/ON. If it's the opposite, 12v in park/neutral/drive, but 0v in reverse, the module output has been damaged and will need replaced. Make sure ONLY the radio's reverse trigger is connected to the Maestro purple/white wire. If 0v in any gear, test pin 28 of the vehicle's 28 pin connector for reverse. Color varies but identify the wire that reads 12v in reverse only and splice into it and connect it, instead of the Maestro purple/white wire, to the radio's reverse trigger input. (Maestro purple/white wire is not used).

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

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

2019-2022
TOYOTA COROLLA HATCHBACK

RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA, AND MORE!

+

HEAD UNIT
ADAPTER READY

PRODUCTS REQUIRED

iDatalink Maestro RR Radio Replacement Interface
iDatalink Maestro HRR-TO3 Installation Harness

PROGRAMMED FIRMWARE: TO3-RR-DS

WELCOME

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.

NEED HELP?

1 866 427-2999

maestro.support@idatalink.com

ADDITIONAL INFORMATION AND ACCESSORIES

HEAD UNIT ADAPTER:
ACC-HU-PIO1, SON1, KEN1, KEN2, ALP1

MIC1 (Factory microphone interface module)	MIC1 INSTALL GUIDE
Radar Detectors K40 ELECTRONICS ESCORT	Radar Installation Guides
Installation, product information, vehicle specific videos.	VIDEO HELP
Last flash information, steering control configuration, vehicle information.	VERIFY FLASH
Software to program module.	WEBLINK

INSTALLATION INSTRUCTIONS P1/1

STEP 1

- Remove the factory radio.

  If using head unit adapter (sold separately), connect HRR-TO3 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-TO3 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-TO3 T-harness and match the wire functions.

Note: Purple/white is a low current positive output used to trigger the radio only. Do NOT connect to anything other than the radio's reverse input. Refer to radio wire chart for radio's reverse light wire color.

If no camera is installed/desired, do not connect the radio's reverse wire. If installing an aftermarket camera, do NOT connect power for the camera to the Maestro's purple/white wire or module damage will occur.

STEP 2

- Determine if the vehicle has a factory amplifier.

If the vehicle DOES NOT have a factory amplifier:

- Plug in the HRR-TO3 4-pin white connectors.

If the vehicle DOES have a factory amplifier:

- Unlug the HRR-TO3 4-pin white connectors.
- Connect the 4-pin white to 4-pin white connector with RCAs. Connect the RCAs to the radio outputs: white/left front, gray/right front.

STEP 3

- Connect the factory harness to the HRR-TO3 T-harness.

STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup camera RCA cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

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

STEP 5

- Connect all the harnesses to the Maestro RR module then test your installation.

CAMERA CONTROLS

REAR CAMERA ONLY with controls on factory radio screen:

Camera controls (with vehicle in reverse)

MODE - Normal/wide view toggle

SEEK UP - Change guidelines

SEEK DOWN - Mute/unmute rear cross traffic alert

PANORAMIC/360 CAMERA:

Note: If equipped with Bird's Eye camera, be sure to set the factory radio "AUTO ON" for the radio to change from rear/front camera automatically and allow the vehicle camera button to switch 360 degree views.

Camera controls (with vehicle in reverse)

MODE - Change view

SEEK UP - Zoom in/out

SEEK DOWN - Change guidelines

PANORAMIC/360, WITH OFFROAD CAMERA ACTIVATED
(select vehicles/optional feature — activate 4LO and press the camera button to access):

Camera controls (with camera active)

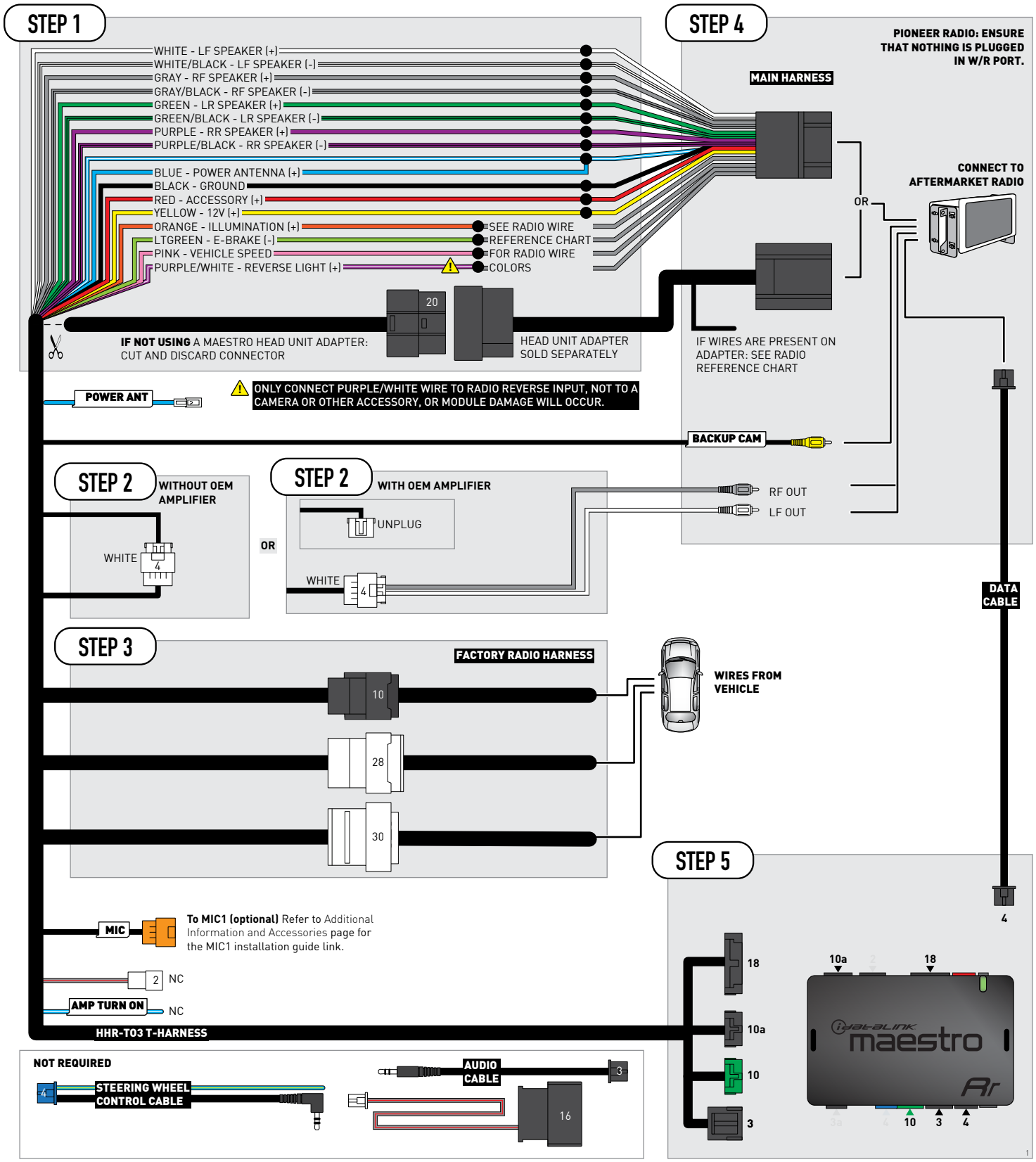
MODE - Change view

SEEK UP - Auto button on Offroad view

KENWOOD/JVC/SONY RADIOS - touch left or right side of screen

Note: For Sony radios with OSD Controllable camera: When the vehicle is equipped with the bird's eye view camera system, plug the camera into Camera 1 on the radio. This is the only camera input that allows camera control through the touchscreen

WIRING DIAGRAM



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Reverse Light*	(+)	Purple/White	Orange/White	Purple/White	Purple/White	Purple/White
E-Brake	(-)	Lt Green	Yellow/Blue	Lt Green	Lt Green	Lt Green
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink	N/A

* Reverse light wire: Only connect to radio or module damage will occur.

Head unit adapter wiring (optional accessory, sold separately)

ACC-HU-ALP1 Wire Description	Polarity	Wire Color on Adapter	Alpine Radio
VSS (vehicle speed sensor)	(DATA)	Green/White	Green/White

ACC-HU-KEN1 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
CAM	(+)	Green/Red	Refer to camera/radio manual
CAM	(-)	Green/White	Refer to camera/radio manual
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

ACC-HU-KEN2 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
E-Brake	(-)	LtGreen	LtGreen
Reverse Light*	(+)	Purple/White	Purple/White
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

MODULE DIAGNOSTICS

LED 1 Module/Firmware status	LED STATUS	DIAGNOSTIC
● or ●	RED or GREEN flashing	LED flashes 1 or more times, either red or green, **when a steering wheel button is pressed** : normal operation.
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●	2 RED flashes	Problem detected. Consult troubleshooting table.
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●	OFF	Normal operation (inactive).

TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBD2 connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the **RED/BROWN** wire is on **PIN 6** and the **YELLOW/BROWN** wire is connected to **PIN 14** of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options. Reset the RR.
The light on the Maestro is blinking **RED TWICE** and the radio **IS** turning on.	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.
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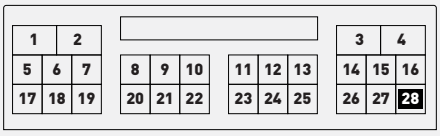
Radio does not switch to reverse cam input when shifting to reverse.  **28 PIN CONNECTOR - WIRE SIDE VIEW**	Verify the purple/white wire from the Maestro is connected to the radio's reverse input trigger (purple/white on most, Alpine may be orange/white - read radio manual to confirm). **If the purple/white is connected**: Use a multimeter to verify you have 12v DC when in reverse, 0v in any other position. If so, check radio settings for "Reverse Interrupt" or similar, and ensure it is enabled/ON. If it's the opposite, 12v in park/neutral/drive, but 0v in reverse, the module output has been damaged and will need replaced. Make sure ONLY the radio's reverse trigger is connected to the Maestro purple/white wire. If 0v in any gear, test pin 28 of the vehicle's 28 pin connector for reverse. Color varies but identify the wire that reads 12v in reverse only and splice into it and connect it, instead of the Maestro purple/white wire, to the radio's reverse trigger input. (Maestro purple/white wire is not used).

MAESTRO RR RESET PROCEDURE:

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TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

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

2020-2023
TOYOTA HIGHLANDER

RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA, AND MORE!

+

HEAD UNIT
ADAPTER READY

PRODUCTS REQUIRED

iDatalink Maestro RR Radio Replacement Interface
iDatalink Maestro HRR-TO3 Installation Harness

PROGRAMMED FIRMWARE: TO3-RR-DS

WELCOME

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NEED HELP?

1 866 427-2999

maestro.support@idatalink.com

ADDITIONAL INFORMATION AND ACCESSORIES

HEAD UNIT ADAPTER:
ACC-HU-PIO1, SON1, KEN1, KEN2, ALP1

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Installation, product information, vehicle specific videos.	VIDEO HELP
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INSTALLATION INSTRUCTIONS P1/1

STEP 1

- Remove the factory radio.

  If using head unit adapter (sold separately), connect HRR-TO3 harness to adapter and skip to step 2.

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- Cut and remove the black 20 pin connector from the HRR-TO3 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-TO3 T-harness and match the wire functions.

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If no camera is installed/desired, do not connect the radio's reverse wire. If installing an aftermarket camera, do NOT connect power for the camera to the Maestro's purple/white wire or module damage will occur.

STEP 2

- Determine if the vehicle has a factory amplifier.

If the vehicle DOES NOT have a factory amplifier:

- Plug in the HRR-TO3 4-pin white connectors.

If the vehicle DOES have a factory amplifier:

- Unlug the HRR-TO3 4-pin white connectors.
- Connect the 4-pin white to 4-pin white connector with RCAs. Connect the RCAs to the radio outputs: white/left front, gray/right front.

STEP 3

- Connect the factory harness to the HRR-TO3 T-harness.

STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup camera RCA cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

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

STEP 5

- Connect all the harnesses to the Maestro RR module then test your installation.

CAMERA CONTROLS

REAR CAMERA ONLY with controls on factory radio screen:

Camera controls (with vehicle in reverse)

MODE - Normal/wide view toggle

SEEK UP - Change guidelines

SEEK DOWN - Mute/unmute rear cross traffic alert

PANORAMIC/360 CAMERA:

Note: If equipped with Bird's Eye camera, be sure to set the factory radio "AUTO ON" for the radio to change from rear/front camera automatically and allow the vehicle camera button to switch 360 degree views.

Camera controls (with vehicle in reverse)

MODE - Change view

SEEK UP - Zoom in/out

SEEK DOWN - Change guidelines

PANORAMIC/360, WITH OFFROAD CAMERA ACTIVATED
(select vehicles/optional feature — activate 4LO and press the camera button to access):

Camera controls (with camera active)

MODE - Change view

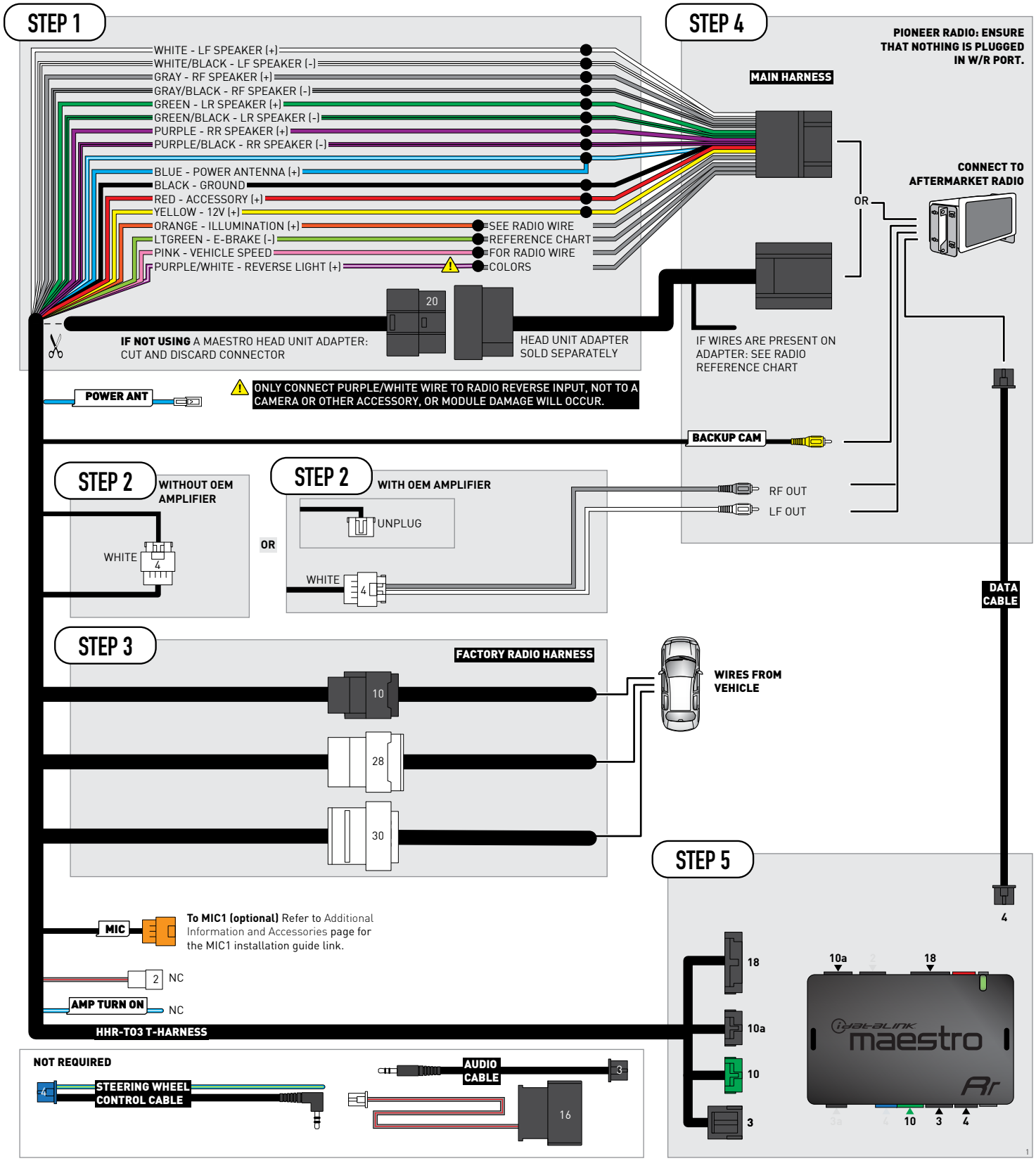
SEEK UP - Auto button on Offroad view

KENWOOD/JVC/SONY RADIOS - touch left or right side of screen

Note: For Sony radios with OSD Controllable camera: When the vehicle is equipped with the bird's eye view camera system, plug the camera into Camera 1 on the radio. This is the only camera input that allows camera control through the touchscreen

1

WIRING DIAGRAM



RADIO WIRE REFERENCE CHART

HRR-T03 T-harness Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable	Wire Color on Sony cable
Illumination	(+)	Orange	N/A	Orange/White	Orange/White	Orange
Reverse Light*	(+)	Purple/White	Orange/White	Purple/White	Purple/White	Purple/White
E-Brake	(-)	Lt Green	Yellow/Blue	Lt Green	Lt Green	Lt Green
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink	N/A

* Reverse light wire: Only connect to radio or module damage will occur.

Head unit adapter wiring (optional accessory, sold separately)

ACC-HU-ALP1 Wire Description	Polarity	Wire Color on Adapter	Alpine Radio
VSS (vehicle speed sensor)	(DATA)	Green/White	Green/White

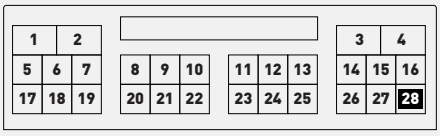
ACC-HU-KEN1 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
CAM	(+)	Green/Red	Refer to camera/radio manual
CAM	(-)	Green/White	Refer to camera/radio manual
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

ACC-HU-KEN2 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
E-Brake	(-)	LtGreen	LtGreen
Reverse Light*	(+)	Purple/White	Purple/White
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

MODULE DIAGNOSTICS

LED 1 Module/Firmware status	LED STATUS	DIAGNOSTIC
● or ●	RED or GREEN flashing	LED flashes 1 or more times, either red or green, **when a steering wheel button is pressed** : normal operation.
●	1 RED flash	Module has no firmware. Flash module using Weblink Desktop and log in. Do NOT use DEMO MODE.
●	2 RED flashes	Problem detected. Consult troubleshooting table.
●	1 GREEN flash	After radio boots up : Normal operation.
●	OFF	Normal operation (inactive).

TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBD2 connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the **RED/BROWN** wire is on **PIN 6** and the **YELLOW/BROWN** wire is connected to **PIN 14** of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options. Reset the RR.
The light on the Maestro is blinking **RED TWICE** and the radio **IS** turning on.	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.
The light on the Maestro is blinking **RED TWICE** but radio is **NOT** turning on.	If installing a floating screen type radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully. Not installing these fully will prevent radio from powering up and show a 2x red error as well. Test red and yellow wires for DC voltage at radio using a multimeter. Contact support if no voltage on red or yellow.
There is no image from the backup camera, just a black screen.	Ensure the yellow backup camera RCA cable is connected to the proper input on the radio (i.e. Brown "BC IN" on Pioneer or yellow backup/reverse video input on other brands).
Radio does not switch to reverse cam input when shifting to reverse.  28 PIN CONNECTOR - WIRE SIDE VIEW	Verify the purple/white wire from the Maestro is connected to the radio's reverse input trigger (purple/white on most, Alpine may be orange/white - read radio manual to confirm). **If the purple/white is connected**: Use a multimeter to verify you have 12v DC when in reverse, 0v in any other position. If so, check radio settings for "Reverse Interrupt" or similar, and ensure it is enabled/ON. If it's the opposite, 12v in park/neutral/drive, but 0v in reverse, the module output has been damaged and will need replaced. Make sure ONLY the radio's reverse trigger is connected to the Maestro purple/white wire. If 0v in any gear, test pin 28 of the vehicle's 28 pin connector for reverse. Color varies but identify the wire that reads 12v in reverse only and splice into it and connect it, instead of the Maestro purple/white wire, to the radio's reverse trigger input. (Maestro purple/white wire is not used).

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

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

2019-2022
TOYOTA RAV4

RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA, AND MORE!

+

HEAD UNIT
ADAPTER READY

PRODUCTS REQUIRED

iDatalink Maestro RR Radio Replacement Interface
iDatalink Maestro HRR-TO3 Installation Harness

PROGRAMMED FIRMWARE: TO3-RR-DS

WELCOME

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.

NEED HELP?

1 866 427-2999

maestro.support@idatalink.com

ADDITIONAL INFORMATION AND ACCESSORIES

HEAD UNIT ADAPTER:
ACC-HU-PIO1, SON1, KEN1, KEN2, ALP1

MIC1 (Factory microphone interface module)	MIC1 INSTALL GUIDE
Radar Detectors K40 ELECTRONICS ESCORT	Radar Installation Guides
Installation, product information, vehicle specific videos.	VIDEO HELP
Last flash information, steering control configuration, vehicle information.	VERIFY FLASH
Software to program module.	WEBLINK

INSTALLATION INSTRUCTIONS P1/1

STEP 1

- Remove the factory radio.

  If using head unit adapter (sold separately), connect HRR-TO3 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-TO3 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-TO3 T-harness and match the wire functions.

Note: Purple/white is a low current positive output used to trigger the radio only. Do NOT connect to anything other than the radio's reverse input. Refer to radio wire chart for radio's reverse light wire color.

If no camera is installed/desired, do not connect the radio's reverse wire. If installing an aftermarket camera, do NOT connect power for the camera to the Maestro's purple/white wire or module damage will occur.

STEP 2

- Determine if the vehicle has a factory amplifier.

If the vehicle DOES NOT have a factory amplifier:

- Plug in the HRR-TO3 4-pin white connectors.

If the vehicle DOES have a factory amplifier:

- Unlug the HRR-TO3 4-pin white connectors.
- Connect the 4-pin white to 4-pin white connector with RCAs. Connect the RCAs to the radio outputs: white/left front, gray/right front.

STEP 3

- Connect the factory harness to the HRR-TO3 T-harness.

STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup camera RCA cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

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

STEP 5

- Connect all the harnesses to the Maestro RR module then test your installation.

CAMERA CONTROLS

REAR CAMERA ONLY with controls on factory radio screen:

Camera controls (with vehicle in reverse)

MODE - Normal/wide view toggle

SEEK UP - Change guidelines

SEEK DOWN - Mute/unmute rear cross traffic alert

PANORAMIC/360 CAMERA:

Note: If equipped with Bird's Eye camera, be sure to set the factory radio "AUTO ON" for the radio to change from rear/front camera automatically and allow the vehicle camera button to switch 360 degree views.

Camera controls (with vehicle in reverse)

MODE - Change view

SEEK UP - Zoom in/out

SEEK DOWN - Change guidelines

PANORAMIC/360, WITH OFFROAD CAMERA ACTIVATED
(select vehicles/optional feature — activate 4LO and press the camera button to access):

Camera controls (with camera active)

MODE - Change view

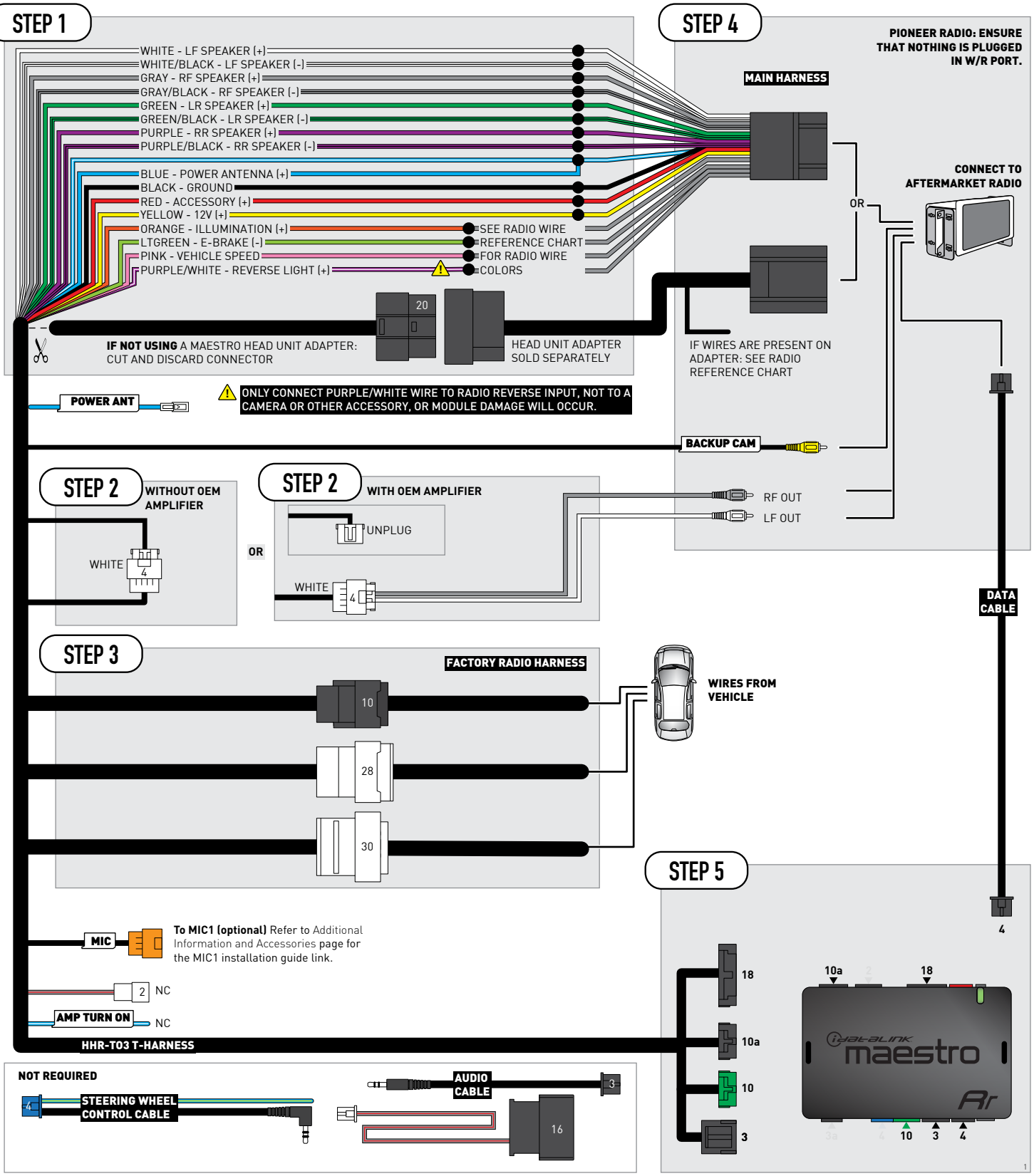
SEEK UP - Auto button on Offroad view

KENWOOD/JVC/SONY RADIOS - touch left or right side of screen

Note: For Sony radios with OSD Controllable camera: When the vehicle is equipped with the bird's eye view camera system, plug the camera into Camera 1 on the radio. This is the only camera input that allows camera control through the touchscreen

1

WIRING DIAGRAM



RADIO WIRE REFERENCE CHART

HRR-T03 T-harness Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable	Wire Color on Sony cable
Illumination	(+)	Orange	N/A	Orange/White	Orange/White	Orange
Reverse Light*	(+)	Purple/White	Orange/White	Purple/White	Purple/White	Purple/White
E-Brake	(-)	Lt Green	Yellow/Blue	Lt Green	Lt Green	Lt Green
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink	N/A

* Reverse light wire: Only connect to radio or module damage will occur.

Head unit adapter wiring (optional accessory, sold separately)

ACC-HU-ALP1 Wire Description	Polarity	Wire Color on Adapter	Alpine Radio
VSS (vehicle speed sensor)	(DATA)	Green/White	Green/White

ACC-HU-KEN1 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
CAM	(+)	Green/Red	Refer to camera/radio manual
CAM	(-)	Green/White	Refer to camera/radio manual
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

ACC-HU-KEN2 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
E-Brake	(-)	LtGreen	LtGreen
Reverse Light*	(+)	Purple/White	Purple/White
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

MODULE DIAGNOSTICS

LED 1 Module/Firmware status	LED STATUS	DIAGNOSTIC
● or ●	RED or GREEN flashing	LED flashes 1 or more times, either red or green, **when a steering wheel button is pressed** : normal operation.
●	1 RED flash	Module has no firmware. Flash module using Weblink Desktop and log in. Do NOT use DEMO MODE.
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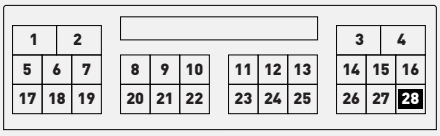
TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBD2 connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the **RED/BROWN** wire is on **PIN 6** and the **YELLOW/BROWN** wire is connected to **PIN 14** of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options. Reset the RR.
The light on the Maestro is blinking **RED TWICE** and the radio **IS** turning on.	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.
The light on the Maestro is blinking **RED TWICE** but radio is **NOT** turning on.	If installing a floating screen type radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully. Not installing these fully will prevent radio from powering up and show a 2x red error as well. Test red and yellow wires for DC voltage at radio using a multimeter. Contact support if no voltage on red or yellow.
There is no image from the backup camera, just a black screen.	Ensure the yellow backup camera RCA cable is connected to the proper input on the radio (i.e. Brown "BC IN" on Pioneer or yellow backup/reverse video input on other brands).
Radio does not switch to reverse cam input when shifting to reverse.  **28 PIN CONNECTOR - WIRE SIDE VIEW**	Verify the purple/white wire from the Maestro is connected to the radio's reverse input trigger (purple/white on most, Alpine may be orange/white - read radio manual to confirm). **If the purple/white is connected**: Use a multimeter to verify you have 12v DC when in reverse, 0v in any other position. If so, check radio settings for "Reverse Interrupt" or similar, and ensure it is enabled/ON. If it's the opposite, 12v in park/neutral/drive, but 0v in reverse, the module output has been damaged and will need replaced. Make sure ONLY the radio's reverse trigger is connected to the Maestro purple/white wire. If 0v in any gear, test pin 28 of the vehicle's 28 pin connector for reverse. Color varies but identify the wire that reads 12v in reverse only and splice into it and connect it, instead of the Maestro purple/white wire, to the radio's reverse trigger input. (Maestro purple/white wire is not used).

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

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

2020-2022
TOYOTA SEQUOIA

RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA, AND MORE!

+

HEAD UNIT
ADAPTER READY

PRODUCTS REQUIRED

iDatalink Maestro RR Radio Replacement Interface
iDatalink Maestro HRR-TO3 Installation Harness

PROGRAMMED FIRMWARE: TO3-RR-DS

WELCOME

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.

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

NEED HELP?

1 866 427-2999

maestro.support@idatalink.com

ADDITIONAL INFORMATION AND ACCESSORIES

HEAD UNIT ADAPTER:
ACC-HU-PIO1, SON1, KEN1, KEN2, ALP1

MIC1 (Factory microphone interface module)	MIC1 INSTALL GUIDE
Radar Detectors K40 ELECTRONICS ESCORT	Radar Installation Guides
Installation, product information, vehicle specific videos.	VIDEO HELP
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INSTALLATION INSTRUCTIONS P1/1

STEP 1

- Remove the factory radio.

  If using head unit adapter (sold separately), connect HRR-TO3 harness to adapter and skip to step 2.

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- Cut and remove the black 20 pin connector from the HRR-TO3 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-TO3 T-harness and match the wire functions.

Note: Purple/white is a low current positive output used to trigger the radio only. Do NOT connect to anything other than the radio's reverse input. Refer to radio wire chart for radio's reverse light wire color.

If no camera is installed/desired, do not connect the radio's reverse wire. If installing an aftermarket camera, do NOT connect power for the camera to the Maestro's purple/white wire or module damage will occur.

STEP 2

- Determine if the vehicle has a factory amplifier.

If the vehicle DOES NOT have a factory amplifier:

- Plug in the HRR-TO3 4-pin white connectors.

If the vehicle DOES have a factory amplifier:

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STEP 3

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STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup camera RCA cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

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

STEP 5

- Connect all the harnesses to the Maestro RR module then test your installation.

CAMERA CONTROLS

REAR CAMERA ONLY with controls on factory radio screen:

Camera controls (with vehicle in reverse)

MODE - Normal/wide view toggle

SEEK UP - Change guidelines

SEEK DOWN - Mute/unmute rear cross traffic alert

PANORAMIC/360 CAMERA:

Note: If equipped with Bird's Eye camera, be sure to set the factory radio "AUTO ON" for the radio to change from rear/front camera automatically and allow the vehicle camera button to switch 360 degree views.

Camera controls (with vehicle in reverse)

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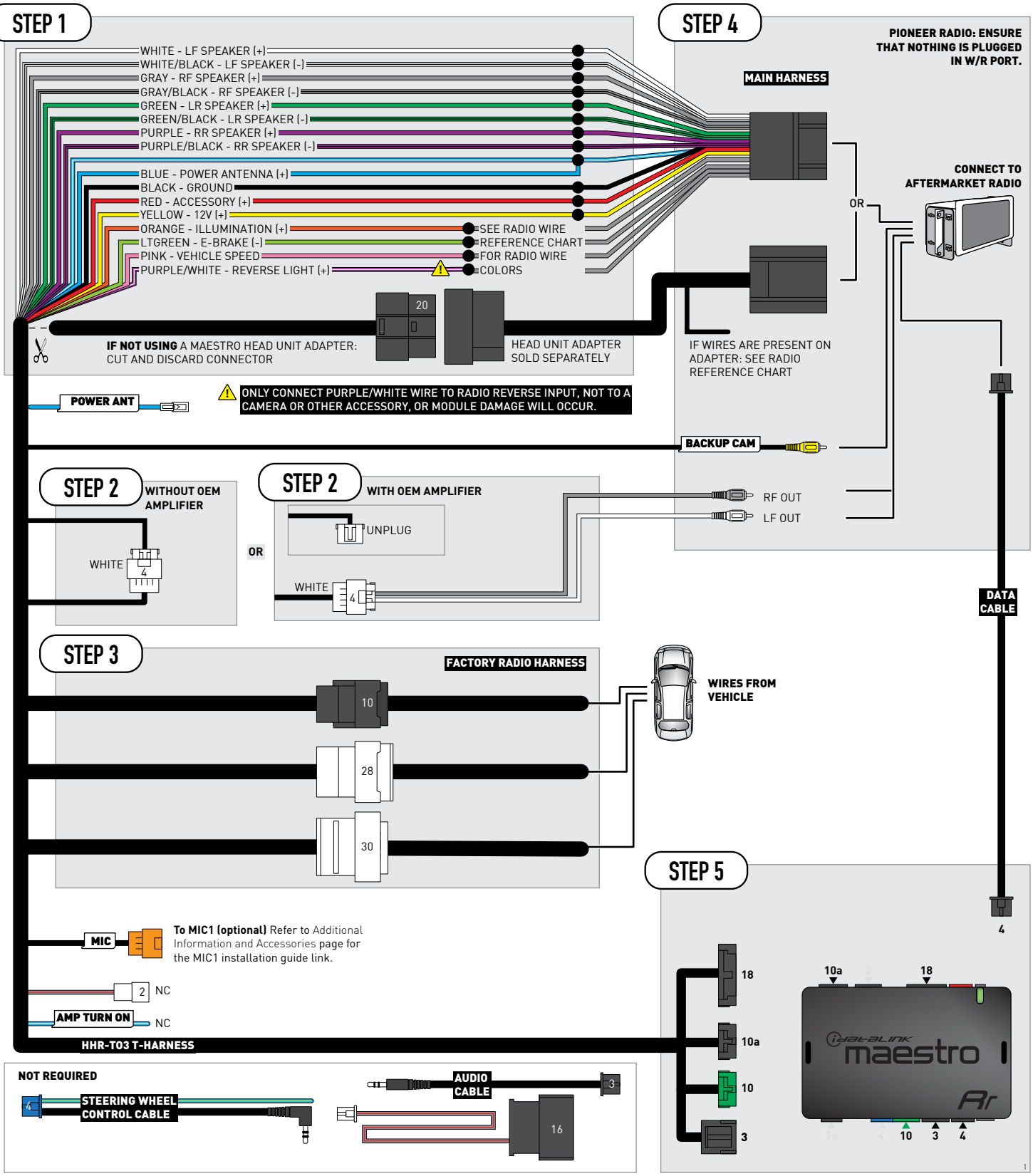

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* Reverse light wire: Only connect to radio or module damage will occur.

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E-Brake	(-)	LtGreen	LtGreen
Reverse Light*	(+)	Purple/White	Purple/White
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

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TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBD2 connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the **RED/BROWN** wire is on **PIN 6** and the **YELLOW/BROWN** wire is connected to **PIN 14** of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options. Reset the RR.
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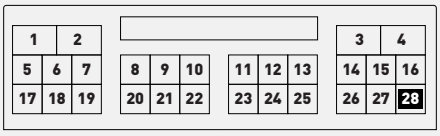
Radio does not switch to reverse cam input when shifting to reverse.  **28 PIN CONNECTOR - WIRE SIDE VIEW**	Verify the purple/white wire from the Maestro is connected to the radio's reverse input trigger (purple/white on most, Alpine may be orange/white - read radio manual to confirm). **If the purple/white is connected**: Use a multimeter to verify you have 12v DC when in reverse, 0v in any other position. If so, check radio settings for "Reverse Interrupt" or similar, and ensure it is enabled/ON. If it's the opposite, 12v in park/neutral/drive, but 0v in reverse, the module output has been damaged and will need replaced. Make sure ONLY the radio's reverse trigger is connected to the Maestro purple/white wire. If 0v in any gear, test pin 28 of the vehicle's 28 pin connector for reverse. Color varies but identify the wire that reads 12v in reverse only and splice into it and connect it, instead of the Maestro purple/white wire, to the radio's reverse trigger input. (Maestro purple/white wire is not used).

MAESTRO RR RESET PROCEDURE:

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

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

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INSTALL GUIDE

2018-2020
TOYOTA SIENNA

RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA, AND MORE!

+

HEAD UNIT
ADAPTER READY

PRODUCTS REQUIRED

iDatalink Maestro RR Radio Replacement Interface
iDatalink Maestro HRR-TO3 Installation Harness

PROGRAMMED FIRMWARE: TO3-RR-DS

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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- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-TO3 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-TO3 T-harness and match the wire functions.

Note: Purple/white is a low current positive output used to trigger the radio only. Do NOT connect to anything other than the radio's reverse input. Refer to radio wire chart for radio's reverse light wire color.

If no camera is installed/desired, do not connect the radio's reverse wire. If installing an aftermarket camera, do NOT connect power for the camera to the Maestro's purple/white wire or module damage will occur.

STEP 2

- Determine if the vehicle has a factory amplifier.

If the vehicle DOES NOT have a factory amplifier:

- Plug in the HRR-TO3 4-pin white connectors.

If the vehicle DOES have a factory amplifier:

- Unlug the HRR-TO3 4-pin white connectors.
- Connect the 4-pin white to 4-pin white connector with RCAs. Connect the RCAs to the radio outputs: white/left front, gray/right front.

STEP 3

- Connect the factory harness to the HRR-TO3 T-harness.

STEP 4

- Plug the HRR-TO3 harness 2-pin white connector to OBDII cable. Plug the cable to OBDII in vehicle..

STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup camera RCA cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

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

STEP 6

- Connect all the harnesses to the Maestro RR module then test your installation.

CAMERA CONTROLS

REAR CAMERA ONLY with controls on factory radio screen:

Camera controls (with vehicle in reverse)

MODE - Normal/wide view toggle

SEEK UP - Change guidelines

SEEK DOWN - Mute/unmute rear cross traffic alert

PANORAMIC/360 CAMERA:

Note: If equipped with Bird's Eye camera, be sure to set the factory radio "AUTO ON" for the radio to change from rear/front camera automatically and allow the vehicle camera button to switch 360 degree views.

Camera controls (with vehicle in reverse)

MODE - Change view

SEEK UP - Zoom in/out

SEEK DOWN - Change guidelines

PANORAMIC/360, WITH OFFROAD CAMERA ACTIVATED
(select vehicles/optional feature — activate 4LO and press the camera button to access):

Camera controls (with camera active)

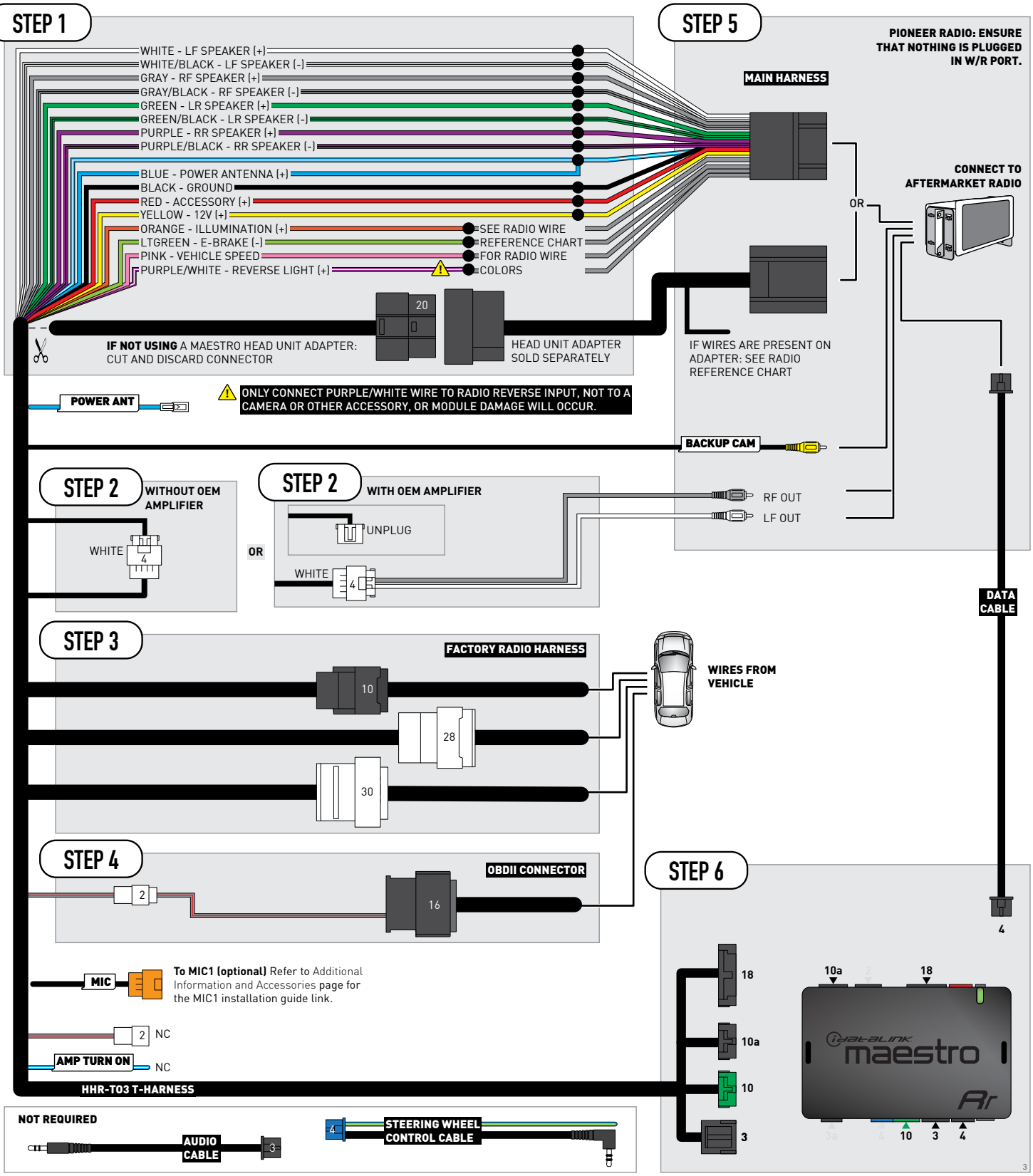
MODE - Change view

SEEK UP - Auto button on Offroad view

KENWOOD/JVC/SONY RADIOS - touch left or right side of screen

Note: For Sony radios with OSD Controllable camera: When the vehicle is equipped with the bird's eye view camera system, plug the camera into Camera 1 on the radio. This is the only camera input that allows camera control through the touchscreen

WIRING DIAGRAM



RADIO WIRE REFERENCE CHART

HRR-T03 T-harness Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable	Wire Color on Sony cable
Illumination	(+)	Orange	N/A	Orange/White	Orange/White	Orange
Reverse Light*	(+)	Purple/White	Orange/White	Purple/White	Purple/White	Purple/White
E-Brake	(-)	Lt Green	Yellow/Blue	Lt Green	Lt Green	Lt Green
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink	N/A

* Reverse light wire: Only connect to radio or module damage will occur.

Head unit adapter wiring (optional accessory, sold separately)

ACC-HU-ALP1 Wire Description	Polarity	Wire Color on Adapter	Alpine Radio
VSS (vehicle speed sensor)	(DATA)	Green/White	Green/White

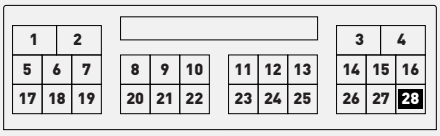
ACC-HU-KEN1 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
CAM	(+)	Green/Red	Refer to camera/radio manual
CAM	(-)	Green/White	Refer to camera/radio manual
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

ACC-HU-KEN2 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
E-Brake	(-)	LtGreen	LtGreen
Reverse Light*	(+)	Purple/White	Purple/White
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

MODULE DIAGNOSTICS

LED 1 Module/Firmware status	LED STATUS	DIAGNOSTIC
● or ●	RED or GREEN flashing	LED flashes 1 or more times, either red or green, **when a steering wheel button is pressed** : normal operation.
●	1 RED flash	Module has no firmware. Flash module using Weblink Desktop and log in. Do NOT use DEMO MODE.
●	2 RED flashes	Problem detected. Consult troubleshooting table.
●	1 GREEN flash	After radio boots up : Normal operation.
●	OFF	Normal operation (inactive).

TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBD2 connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the **RED/BROWN** wire is on **PIN 6** and the **YELLOW/BROWN** wire is connected to **PIN 14** of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options. Reset the RR.
The light on the Maestro is blinking **RED TWICE** and the radio **IS** turning on.	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.
The light on the Maestro is blinking **RED TWICE** but radio is **NOT** turning on.	If installing a floating screen type radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully. Not installing these fully will prevent radio from powering up and show a 2x red error as well. Test red and yellow wires for DC voltage at radio using a multimeter. Contact support if no voltage on red or yellow.
There is no image from the backup camera, just a black screen.	Ensure the yellow backup camera RCA cable is connected to the proper input on the radio (i.e. Brown "BC IN" on Pioneer or yellow backup/reverse video input on other brands).
Radio does not switch to reverse cam input when shifting to reverse.  28 PIN CONNECTOR - WIRE SIDE VIEW	Verify the purple/white wire from the Maestro is connected to the radio's reverse input trigger (purple/white on most, Alpine may be orange/white - read radio manual to confirm). **If the purple/white is connected**: Use a multimeter to verify you have 12v DC when in reverse, 0v in any other position. If so, check radio settings for "Reverse Interrupt" or similar, and ensure it is enabled/ON. If it's the opposite, 12v in park/neutral/drive, but 0v in reverse, the module output has been damaged and will need replaced. Make sure ONLY the radio's reverse trigger is connected to the Maestro purple/white wire. If 0v in any gear, test pin 28 of the vehicle's 28 pin connector for reverse. Color varies but identify the wire that reads 12v in reverse only and splice into it and connect it, instead of the Maestro purple/white wire, to the radio's reverse trigger input. (Maestro purple/white wire is not used).

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

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

2020-2023
TOYOTA TACOMA

RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA, AND MORE!

+

HEAD UNIT
ADAPTER READY

PRODUCTS REQUIRED

iDatalink Maestro RR Radio Replacement Interface
iDatalink Maestro HRR-TO3 Installation Harness

PROGRAMMED FIRMWARE: TO3-RR-DS

WELCOME

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.

NEED HELP?

1 866 427-2999

maestro.support@idatalink.com

ADDITIONAL INFORMATION AND ACCESSORIES

HEAD UNIT ADAPTER:
ACC-HU-PIO1, SON1, KEN1, KEN2, ALP1

MIC1 (Factory microphone interface module)	MIC1 INSTALL GUIDE
Radar Detectors K40 ELECTRONICS ESCORT	Radar Installation Guides
Installation, product information, vehicle specific videos.	VIDEO HELP
Last flash information, steering control configuration, vehicle information.	VERIFY FLASH
Software to program module.	WEBLINK

INSTALLATION INSTRUCTIONS P1/1

STEP 1

- Remove the factory radio.

  If using head unit adapter (sold separately), connect HRR-TO3 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-TO3 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-TO3 T-harness and match the wire functions.

Note: Purple/white is a low current positive output used to trigger the radio only. Do NOT connect to anything other than the radio's reverse input. Refer to radio wire chart for radio's reverse light wire color.

If no camera is installed/desired, do not connect the radio's reverse wire. If installing an aftermarket camera, do NOT connect power for the camera to the Maestro's purple/white wire or module damage will occur.

STEP 2

- Determine if the vehicle has a factory amplifier.

If the vehicle DOES NOT have a factory amplifier:

- Plug in the HRR-TO3 4-pin white connectors.

If the vehicle DOES have a factory amplifier:

- Unlug the HRR-TO3 4-pin white connectors.
- Connect the 4-pin white to 4-pin white connector with RCAs. Connect the RCAs to the radio outputs: white/left front, gray/right front.

STEP 3

- Connect the factory harness to the HRR-TO3 T-harness.

STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup camera RCA cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

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

STEP 5

- Connect all the harnesses to the Maestro RR module then test your installation.

CAMERA CONTROLS

REAR CAMERA ONLY with controls on factory radio screen:

Camera controls (with vehicle in reverse)

MODE - Normal/wide view toggle

SEEK UP - Change guidelines

SEEK DOWN - Mute/unmute rear cross traffic alert

PANORAMIC/360 CAMERA:

Note: If equipped with Bird's Eye camera, be sure to set the factory radio "AUTO ON" for the radio to change from rear/front camera automatically and allow the vehicle camera button to switch 360 degree views.

Camera controls (with vehicle in reverse)

MODE - Change view

SEEK UP - Zoom in/out

SEEK DOWN - Change guidelines

PANORAMIC/360, WITH OFFROAD CAMERA ACTIVATED
(select vehicles/optional feature — activate 4LO and press the camera button to access):

Camera controls (with camera active)

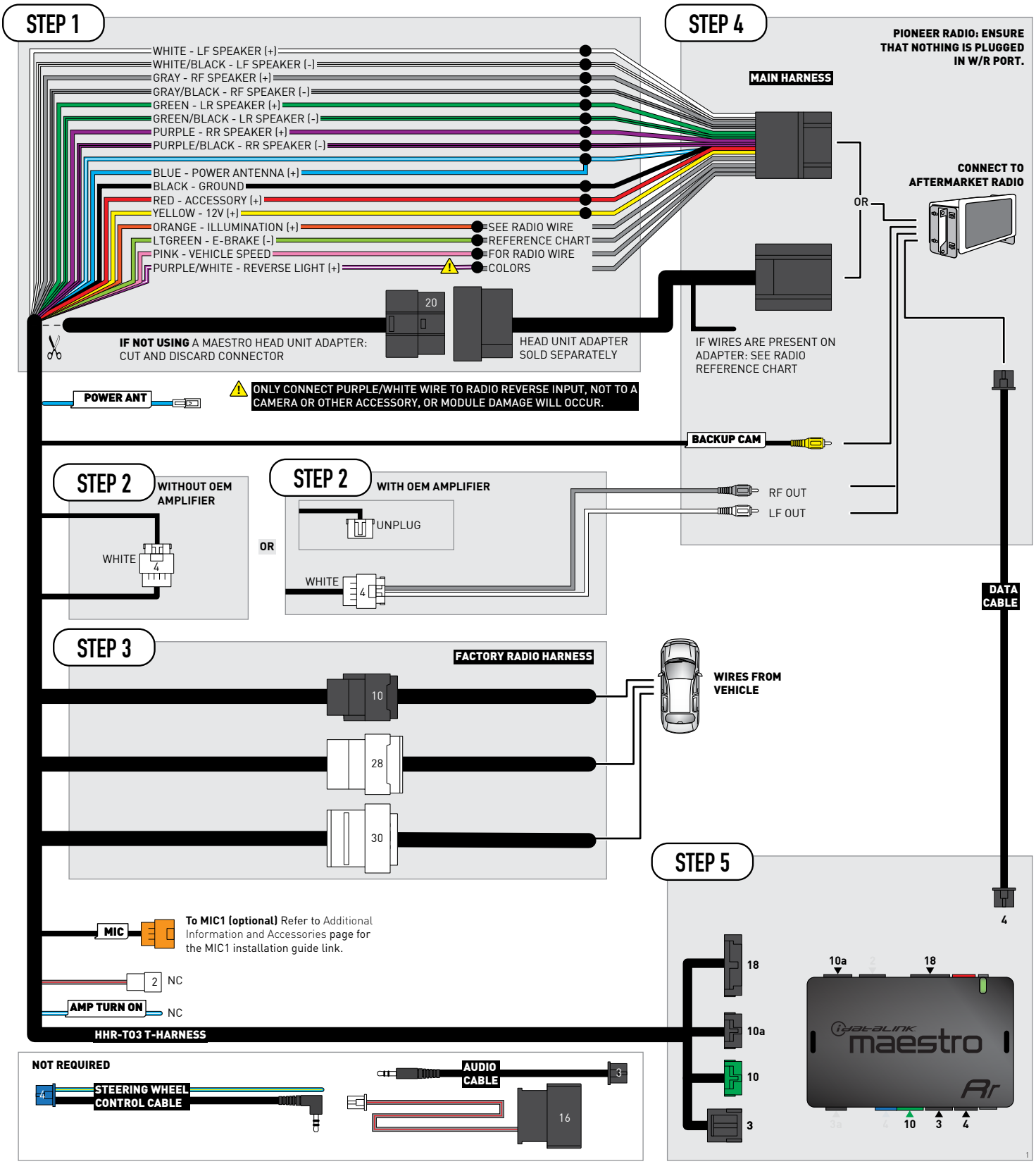
MODE - Change view

SEEK UP - Auto button on Offroad view

KENWOOD/JVC/SONY RADIOS - touch left or right side of screen

Note: For Sony radios with OSD Controllable camera: When the vehicle is equipped with the bird's eye view camera system, plug the camera into Camera 1 on the radio. This is the only camera input that allows camera control through the touchscreen

WIRING DIAGRAM



RADIO WIRE REFERENCE CHART

HRR-T03 T-harness Wire Description	Polarity	Wire Color on Maestro T-Harness	Wire Color on Alpine cable	Wire Color on Kenwood cable	Wire Color on Pioneer cable	Wire Color on Sony cable
Illumination	(+)	Orange	N/A	Orange/White	Orange/White	Orange
Reverse Light*	(+)	Purple/White	Orange/White	Purple/White	Purple/White	Purple/White
E-Brake	(-)	Lt Green	Yellow/Blue	Lt Green	Lt Green	Lt Green
VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink	N/A

* Reverse light wire: Only connect to radio or module damage will occur.

Head unit adapter wiring (optional accessory, sold separately)

ACC-HU-ALP1 Wire Description	Polarity	Wire Color on Adapter	Alpine Radio
VSS (vehicle speed sensor)	(DATA)	Green/White	Green/White

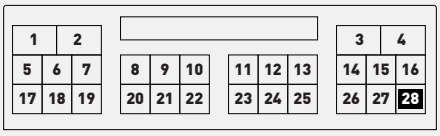
ACC-HU-KEN1 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
CAM	(+)	Green/Red	Refer to camera/radio manual
CAM	(-)	Green/White	Refer to camera/radio manual
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

ACC-HU-KEN2 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
E-Brake	(-)	LtGreen	LtGreen
Reverse Light*	(+)	Purple/White	Purple/White
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

MODULE DIAGNOSTICS

LED 1 Module/Firmware status	LED STATUS	DIAGNOSTIC
● or ●	RED or GREEN flashing	LED flashes 1 or more times, either red or green, **when a steering wheel button is pressed** : normal operation.
●	1 RED flash	Module has no firmware. Flash module using Weblink Desktop and log in. Do NOT use DEMO MODE.
●	2 RED flashes	Problem detected. Consult troubleshooting table.
●	1 GREEN flash	After radio boots up : Normal operation.
●	OFF	Normal operation (inactive).

TROUBLESHOOTING TABLE

PROBLEM	SOLUTION
Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBD2 connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the **RED/BROWN** wire is on **PIN 6** and the **YELLOW/BROWN** wire is connected to **PIN 14** of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options. Reset the RR.
The light on the Maestro is blinking **RED TWICE** and the radio **IS** turning on.	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.
The light on the Maestro is blinking **RED TWICE** but radio is **NOT** turning on.	If installing a floating screen type radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully. Not installing these fully will prevent radio from powering up and show a 2x red error as well. Test red and yellow wires for DC voltage at radio using a multimeter. Contact support if no voltage on red or yellow.
There is no image from the backup camera, just a black screen.	Ensure the yellow backup camera RCA cable is connected to the proper input on the radio (i.e. Brown "BC IN" on Pioneer or yellow backup/reverse video input on other brands).
Radio does not switch to reverse cam input when shifting to reverse.  **28 PIN CONNECTOR - WIRE SIDE VIEW**	Verify the purple/white wire from the Maestro is connected to the radio's reverse input trigger (purple/white on most, Alpine may be orange/white - read radio manual to confirm). **If the purple/white is connected**: Use a multimeter to verify you have 12v DC when in reverse, 0v in any other position. If so, check radio settings for "Reverse Interrupt" or similar, and ensure it is enabled/ON. If it's the opposite, 12v in park/neutral/drive, but 0v in reverse, the module output has been damaged and will need replaced. Make sure ONLY the radio's reverse trigger is connected to the Maestro purple/white wire. If 0v in any gear, test pin 28 of the vehicle's 28 pin connector for reverse. Color varies but identify the wire that reads 12v in reverse only and splice into it and connect it, instead of the Maestro purple/white wire, to the radio's reverse trigger input. (Maestro purple/white wire is not used).

MAESTRO RR RESET PROCEDURE:

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

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

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

2020-2021
TOYOTA TUNDRA

RETAINS STEERING WHEEL CONTROLS, BACKUP CAMERA, AND MORE!

+

HEAD UNIT
ADAPTER READY

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iDatalink Maestro HRR-TO3 Installation Harness

PROGRAMMED FIRMWARE: TO3-RR-DS

WELCOME

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.

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NEED HELP?

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INSTALLATION INSTRUCTIONS P1/1

STEP 1

- Remove the factory radio.

  If using head unit adapter (sold separately), connect HRR-TO3 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-TO3 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-TO3 T-harness and match the wire functions.

Note: Purple/white is a low current positive output used to trigger the radio only. Do NOT connect to anything other than the radio's reverse input. Refer to radio wire chart for radio's reverse light wire color.

If no camera is installed/desired, do not connect the radio's reverse wire. If installing an aftermarket camera, do NOT connect power for the camera to the Maestro's purple/white wire or module damage will occur.

STEP 2

- Determine if the vehicle has a factory amplifier.

If the vehicle DOES NOT have a JBL factory amplifier:

- Plug in the HRR-TO3 4-pin white connectors.

If the vehicle DOES have a JBL factory amplifier:

- Unlug the HRR-TO3 4-pin white connectors.
- Connect the 4-pin white to 4-pin white connector with RCAs. Connect the RCAs to the radio outputs: white/left front, gray/right front.

STEP 3

- Connect the factory harness to the HRR-TO3 T-harness.

STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup camera RCA cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

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

STEP 5

- Connect all the harnesses to the Maestro RR module then test your installation.

CAMERA CONTROLS

REAR CAMERA ONLY with controls on factory radio screen:

Camera controls (with vehicle in reverse)

MODE - Normal/wide view toggle

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PANORAMIC/360 CAMERA:

Note: If equipped with Bird's Eye camera, be sure to set the factory radio "AUTO ON" for the radio to change from rear/front camera automatically and allow the vehicle camera button to switch 360 degree views.

Camera controls (with vehicle in reverse)

MODE - Change view

SEEK UP - Zoom in/out

SEEK DOWN - Change guidelines

PANORAMIC/360, WITH OFFROAD CAMERA ACTIVATED
(select vehicles/optional feature — activate 4LO and press the camera button to access):

Camera controls (with camera active)

MODE - Change view

SEEK UP - Auto button on Offroad view

KENWOOD/JVC/SONY RADIOS - touch left or right side of screen

Note: For Sony radios with OSD Controllable camera: When the vehicle is equipped with the bird's eye view camera system, plug the camera into Camera 1 on the radio. This is the only camera input that allows camera control through the touchscreen

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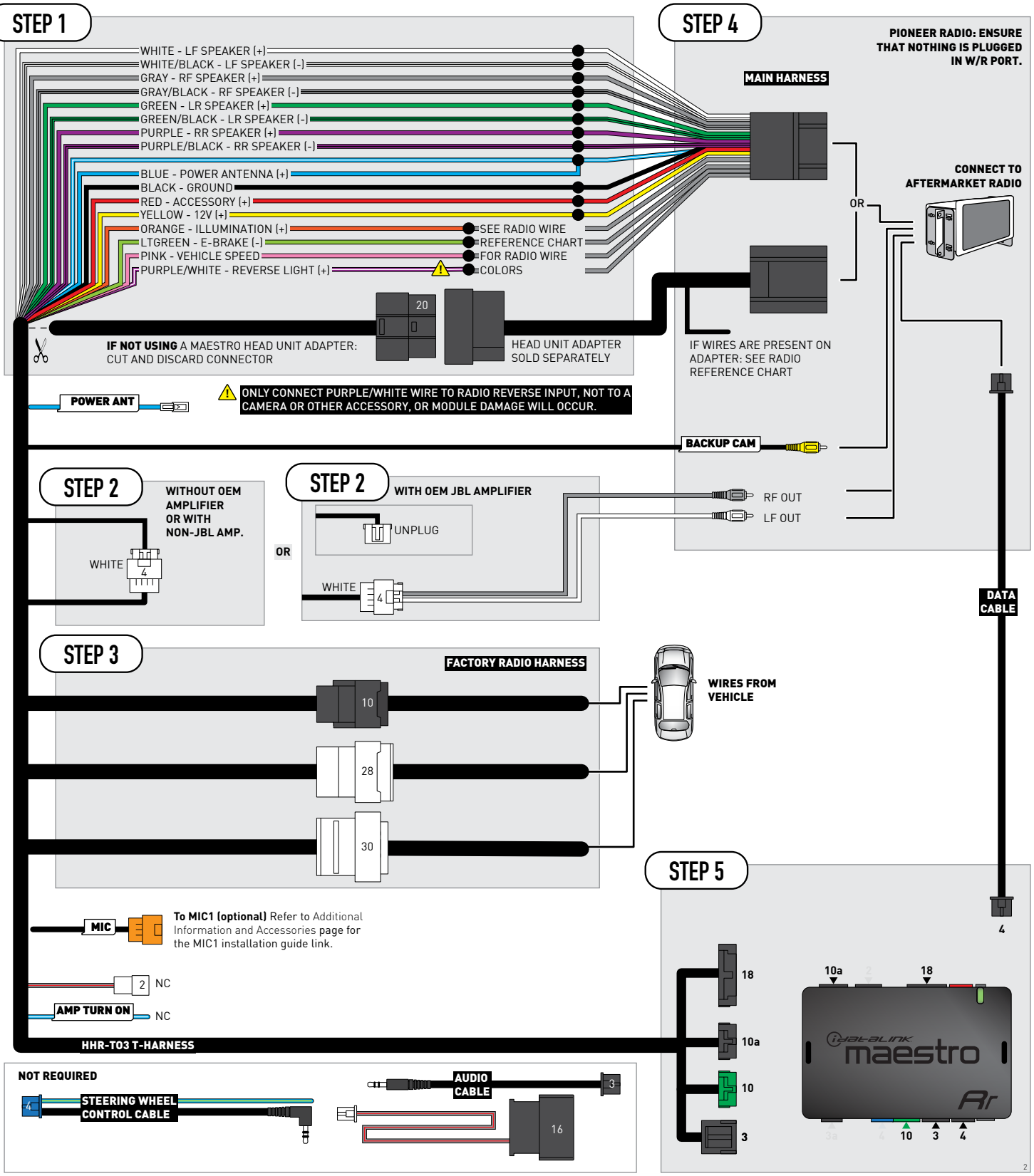

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VSS (vehicle speed sensor)	(DATA)	Pink	Green/White	Pink	Pink	N/A

* Reverse light wire: Only connect to radio or module damage will occur.

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ACC-HU-ALP1 Wire Description	Polarity	Wire Color on Adapter	Alpine Radio
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ACC-HU-KEN1 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
CAM	(+)	Green/Red	Refer to camera/radio manual
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ACC-HU-KEN2 Wire Description	Polarity	Wire Color on Adapter	Kenwood Radio
E-Brake	(-)	LtGreen	LtGreen
Reverse Light*	(+)	Purple/White	Purple/White
Steering Wheel Controls	(DATA)	Blue/Yellow	n/a

MODULE DIAGNOSTICS

LED 1 Module/Firmware status	LED STATUS	DIAGNOSTIC
● or ●	RED or GREEN flashing	LED flashes 1 or more times, either red or green, **when a steering wheel button is pressed** : normal operation.
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Gauges do not work, radio shows OBD2 Error 1 or Error 2.	Ensure OBDII connector is securely attached to the OBD2 connector of the vehicle. If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the **RED/BROWN** wire is on **PIN 6** and the **YELLOW/BROWN** wire is connected to **PIN 14** of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended. If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options. Reset the RR.
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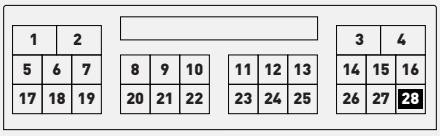
Radio does not switch to reverse cam input when shifting to reverse.  **28 PIN CONNECTOR - WIRE SIDE VIEW**	Verify the purple/white wire from the Maestro is connected to the radio's reverse input trigger (purple/white on most, Alpine may be orange/white - read radio manual to confirm). **If the purple/white is connected**: Use a multimeter to verify you have 12v DC when in reverse, 0v in any other position. If so, check radio settings for "Reverse Interrupt" or similar, and ensure it is enabled/ON. If it's the opposite, 12v in park/neutral/drive, but 0v in reverse, the module output has been damaged and will need replaced. Make sure ONLY the radio's reverse trigger is connected to the Maestro purple/white wire. If 0v in any gear, test pin 28 of the vehicle's 28 pin connector for reverse. Color varies but identify the wire that reads 12v in reverse only and splice into it and connect it, instead of the Maestro purple/white wire, to the radio's reverse trigger input. (Maestro purple/white wire is not used).

MAESTRO RR RESET PROCEDURE:

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

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.