



Toyota Data Interface with SWC 2018-Up

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INTERFACE FEATURES

- Provides accessory power (12-volt 10-amp)
- Provides NAV outputs (parking brake, reverse, speed sense)
- Retains the factory AUX-IN jack
- Retains the factory backup camera
- Includes an AXCS6-6V 12-to-6V step-down for the factory camera
- Retains audio controls on the steering wheel
- Can be used in amplified and non-amplified models
- Retains balance and fade[†]
- Micro-B USB updatable

[†] Non-amplified models only

INTERFACE COMPONENTS

- AXDIS-TY3 interface
- AXDIS-TY3 harness
- 16-pin harness with stripped leads
- Female 3.5mm connector with stripped leads
- AXCS6-6V
- Backup camera harness

APPLICATIONS

TOYOTA

Avalon	2019-Up	RAV4	2019-Up
C-HR	2019-Up	Sienna	2018-Up
Camry	2018-Up		

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TOOLS REQUIRED

- Crimping tool and connectors, or solder gun, solder, and heat shrink
- Small flat-blade screwdriver
- Tape
- Wire cutter
- Zip ties

Product Info



CONNECTIONS

Attention! This interface will work with models that are either non-amplified, or amplified. Please follow the instructions carefully for your model vehicle. Failure to do so will result in either no sound, or low sound. If you are unsure if your vehicle is factory amplified or not, please contact your local dealership.

For models *without* an amplifier:

From the 16-Pin harness with stripped leads to the aftermarket radio:

- Connect the **Red** wire to the accessory wire.
- Connect the **White** wire to front left positive output.
- Connect the **White/Black** wire to front left negative speaker output.
- Connect the **Gray** wire to the front right positive speaker output.
- Connect the **Gray/Black** wire to the front right negative speaker output.
- Tape off and disregard the following (10) wires, they will not be used in this application:
Blue/Pink, Blue/White, Brown, Green, Green/Black, Green/Purple, Light Green, Orange/White, Purple, Purple/Black

From the AXDIS-TY3 harness to the aftermarket radio:

- Connect the **Black** wire to the ground wire.
- Connect the **Yellow** wire to the battery wire.
- Connect the **Green** wire to the left rear positive speaker output.
- Connect the **Green/Black** wire to the left rear negative speaker output.

- Connect the **Purple** wire to the right rear positive speaker output.
- Connect the **Purple/Black** to the right rear negative speaker output.

The following (2) wires are only for multimedia/navigation radios that require these wires.

- Connect the **Green/Purple** wire to the radio's reverse wire, and also to the **Blue/White** wire from the AXCS-6V.
- Connect the **Blue/Pink** wire to the radio's VSS/speed sense wire.
- If the factory AUX-IN jack is desired to be retained, connect the **Red** and **White** RCA jacks to the audio AUX-IN jacks from the aftermarket radio.

Backup camera harness:

- Connect the **Black** wire to chassis ground, and also to the **Black** wire from the AXCS-6V.
- Connect the **Red** wire labeled "Camera Power 6V", to the **Blue/Red** wire from the AXCS-6V.
- Connect the **Blue/White** wire from the AXCS-6V to the radios reverse wire input, along with the **Green/Purple** wire from the AXDIS-TY3 harness.
- Connect the **Yellow** RCA jack to the radios backup camera input.

The following (1) wire is only for a multimedia/navigation radio that requires this wire.

- Connect the **Light Green** wire to the radios parking brake wire.

Continue to 3.5mm jack steering wheel control retention

Attention! This interface will work with models that are either non-amplified, or amplified. Please follow the instructions carefully for your model vehicle. Failure to do so will result in either no sound, or low sound. If you are unsure if your vehicle is factory amplified or not, please contact your local dealership.

For models *with* an amplifier:

From the 16-Pin harness with stripped leads to the aftermarket radio:

- Connect the **Red** wire to the accessory wire.
- Connect the **Blue/White** wire to the amplifier turn on wire. This wire must be connected to hear sound from the factory amplifier.
- Connect the **Gray** wire to the right front positive speaker output.
- Connect the **Gray/Black** wire to the right front negative speaker output.
- Connect the **White** wire to the left front positive speaker output.
- Connect the **White/Black** wire to the left front negative speaker output.
- Connect the **Green** wire to the left rear positive speaker output.
- Connect the **Green/Black** wire to the left rear negative speaker output.
- Connect the **Purple** wire to the right rear positive speaker output.
- Connect the **Purple/Black** wire to the right rear negative output.
- Tape off and disregard the following (5) wires, they will not be used in this application: **Blue/Pink, Brown, Green/Purple, Light Green, Orange/White**

From the AXDIS-TY3 harness to the aftermarket radio:

- Connect the **Black** wire to the ground wire.
- Connect the **Yellow** wire to the battery wire.
- Tape off and disregard the following (4) wires, they will not be used in this application: **Green, Green/Black, Purple, Purple/Black**

The following (2) wires are only for multimedia/navigation radios that require these wires.

- Connect the **Green/Purple** wire to the reverse wire, and also to the **Blue/White** wire from the AXCS-6V.
- Connect the **Blue/Pink** wire to the VSS/speed sense wire.
- Connect the **Red** and **White** RCA jacks to the audio AUX-IN jacks from the aftermarket radio.

Backup camera harness:

- Connect the **Black** wire to chassis ground, and also to the **Black** wire from the AXCS-6V.
- Connect the **Red** wire labeled “Camera Power 6V”, to the **Blue/Red** wire from the AXCS-6V.
- Connect the **Blue/White** wire from the AXCS-6V to the radios reverse wire input, along with the **Green/Purple** wire from the AXDIS-TY3 harness.
- Connect the **Yellow** RCA jack to the radios backup camera input.

The following (1) wire is only for a multimedia/navigation radio that requires this wire.

- Connect the **Light Green** wire to the radios parking brake wire.

Continue to 3.5mm jack steering wheel control retention

CONNECTIONS

3.5mm jack steering wheel control retention:

The 3.5mm jack is to be used to retain audio controls on the steering wheel.

- **For the radios listed below:** Connect the **female 3.5mm connector with stripped leads**, to the male 3.5mm SWC jack from the **AXDIS-TY3 harness**. Any remaining wires tape off and disregard.
 - **Eclipse:** Connect the steering wheel control wire, normally **Brown**, to the **Brown/White** wire from the connector. Then connect the remaining steering wheel control wire, normally **Brown/White**, to the **Brown** wire from the connector.
 - **Metra OE:** Connect the steering wheel control Key 1 wire (**Gray**) to the **Brown** wire.
 - **Kenwood or select JVC with a steering wheel control wire:** Connect the **Blue/Yellow** wire to the **Brown** wire.
Note: If the Kenwood radio auto detects as a JVC, manually set the radio type to Kenwood. See the instructions under changing radio type.
 - **XITE:** Connect the steering wheel control SWC-2 wire from the radio to the **Brown** wire.
 - **Parrot Asteroid Smart or Tablet:** Connect the 3.5mm jack into the AXSWCH-PAR (sold separately), then connect the 4-pin connector from the AXSWCH-PAR into the radio.
Note: The radio must be updated to rev. 2.1.4 or higher software.
 - **Universal “2 or 3 wire” radio:** Connect the steering wheel control wire, referred to as Key-A or SWC-1, to the **Brown** wire from the connector. Then connect the remaining steering wheel control wire, referred to as Key-B or SWC-2, to the **Brown/White** wire from the connector. If the radio comes with a third wire for ground, disregard this wire.
Note: After the interface has been programmed to the vehicle, refer to the manual provided with the radio for assigning the SWC buttons. Contact the radio manufacturer for more information.
- **For all other radios:** Connect the 3.5mm jack from the **AXDIS-TY3 harness** into the jack from the aftermarket radio designated for an external steering wheel control interface. Please refer to the aftermarket radios manual if in doubt as to where the 3.5mm jack connects to.

INSTALLATION

With the key in the off position:

1. Connect the **16-pin harness with stripped leads**, and the **AXDIS-TY3 harness** into the interface.
2. Connect the *backup camera harness* to the wiring harness in the vehicle.

Attention! Do not connect the **AXDIS-TY3 harness** to the wiring harness in the vehicle just yet.

Attention! If retaining steering wheel controls, ensure that the jack/wire is connected to the radio before proceeding. If this step is skipped, the interface will need to be reset for the steering wheel controls to function.

PROGRAMMING

For the steps below, the L.E.D. located inside the interface can only be seen while active. The interface does not need to be opened to see the L.E.D.

1. Start the vehicle.
2. Connect the **AXDIS-TY3 harness** to the wiring harness in the vehicle.
3. The L.E.D. will initially turn on solid **Green**, then turn off for a few second while detecting the radio.
4. The L.E.D. will then flash **Red** up to (18) times indicating which radio is connected to the interface, then turn off for a couple seconds. Pay close attention to how many **Red** flashes there are. This will help in troubleshooting, if need be. Refer to the L.E.D. Feedback section for more information.
5. After a couple seconds the L.E.D. will turn on solid **Red** while the interface auto detects the vehicle. The radio will shut off at this point. The process should take 5 to 30 seconds.
6. Once the vehicle has been auto detected by the interface, the L.E.D. will turn on solid **Green**, then the radio will come back on, indicating that programming was successful.
7. Test all functions of the installation for proper operation, before reassembling the dash. If the interface fails to function, refer to the **Troubleshooting** section.

Note: The L.E.D. will turn on solid **Green** for a moment, then turn off under normal operation after the key has been cycled.

AUDIO LEVEL ADJUSTMENT

(amplified models only)

1. With the vehicle and radio turned on, turn the volume up $\frac{3}{4}$ of the way.
2. With a small flat-blade screwdriver, adjust the potentiometer clockwise to raise the audio level; counter clockwise to lower the audio level.
3. Once at a desired level, audio adjustment is complete.

STEERING WHEEL CONTROL SETTINGS

L.E.D. feedback

The (18) **Red** L.E.D. flashes represent what brand radio the AXDIS-TY3 believes it is connected to. Each flash represents a different radio Manufacturer. For example, if you are installing a JVC radio, the AXDIS-TY3 will flash **Red** (5) times, and then stop. Following is a legend that dictates which radio manufacturer corresponds to which flash.

Flash Count	Radio	Flash Count	Radio
1	Eclipse (type 1) †	10	Clarion (type 2) †
2	Kenwood ‡	11	Metra OE
3	Clarion (type 1) †	12	Eclipse (type 2) †
4	Sony / Dual	13	LG
5	JVC	14	Parrot **
6	Pioneer / Jensen	15	XITE
7	Alpine *	16	Philips
8	Visteon	17	TBA
9	Valor	18	JBL

* **Note:** If the AXDIS-TY3 flashes **Red** (7) times, and you do not have an Alpine radio connected to it, that means the AXDIS-TY3 does not detect a radio connected to it. Verify that the 3.5mm jack is connected to the correct steering wheel jack/wire in the radio.

** **Note:** The AXSWCH-PAR is required (sold separately). Also, the Parrot radio must be updated to rev. 2.1.4 or higher through www.parrot.com.

† **Note:** If you have a Clarion radio and the steering wheel controls do not work, change the radio type to the other Clarion radio type; same for Eclipse. The following section explains how to do this.

‡ **Note:** If you have a Kenwood radio and the L.E.D. feedback comes back as showing as a JVC radio, change the radio type to a Kenwood. The following section explains how to do this.

Attention! The Axxess Updater App can also be used to program the following (3) sub-sections as well, pending that the interface has been programmed.

Continued on the next page

STEERING WHEEL CONTROL SETTINGS *(CONT)*

Changing radio type

If the LED flashes do not match the radio you have connected, you must manually program the AXDIS-TY3 to tell it what radio it is connected to.

1. After (3) seconds of turning the key on, press and hold the Volume-Down button on the steering wheel until the L.E.D. in the AXDIS-TY3 goes solid.
2. Release the Volume-Down button; the L.E.D. will go out indicating the interface is in Changing Radio Type mode.
3. Refer to the Radio Legend to know which radio number you would like to have programmed.
4. Press and hold the Volume-Up button until the L.E.D. goes solid, and then release. Repeat this step for the desired radio number you have selected.
5. Once the desired radio number has been selected, press and hold the Volume-Down button on the steering wheel until the L.E.D. goes solid. The L.E.D. will remain on for about (3) seconds while it stores the new radio information.
6. Once the L.E.D. goes out, the Changing Radio Type mode will then end. You can now test the steering control wheel controls.

Note: If at any time the user fails to press any button for a period longer than (10) seconds, this process will abort.

Radio legend

Radio #	Radio	Radio #	Radio
1	Eclipse (type 1)	10	Clarion (type 2)
2	Kenwood	11	Metra OE
3	Clarion (type 1)	12	Eclipse (type 2)
4	Sony / Dual	13	LG
5	JVC	14	Parrot
6	Pioneer / Jensen	15	XITE
7	Alpine	16	Philips
8	Visteon	17	TBA
9	Valor	18	JBL

Continued on the next page

STEERING WHEEL CONTROL SETTINGS (CONT)

Remapping

Once the AXDIS-TY3 has been programmed, the button assignment for the steering wheel controls may be reassigned if so desired. For example, if the Seek-Up button is preferred to be the Mute button instead. Follow the steps below to remap the steering wheel control buttons.

1. Ensure the AXDIS-TY3 is visible so you can see the L.E.D. flashes to confirm button recognition.
Tip: Turning the radio off is recommended.
2. Within the first twenty seconds of turning the ignition on, press and hold the Volume-Up button on the steering wheel until the L.E.D. goes solid.
3. Release the Volume-Up button, the L.E.D. will then go out; The Volume-Up button has now been programmed.
4. Follow the list in the Button Assignment Legend to reference the order in which the steering wheel control buttons need to be programmed.
Note: If the next function on the list is not on the steering wheel, press the Volume-Up button for (1) second until the L.E.D. comes on to skip that function, and then release the Volume-Up button. This will tell the AXDIS-TY3 that this function is not available, and it will move on to the next function.
5. To complete the remapping process, press and hold the Volume-Up button until the L.E.D. in the AXDIS-TY3 goes out.

Button assignment legend

Function #	Function	Function #	Function
1	Volume-Up	10	Band
2	Volume-Down	11	Play/Enter
3	Seek-Up/Next	12	PTT (Push to Talk)
4	Seek-Down/Prev	13	On-Hook
5	Source/Mode	14	Off-Hook
6	Mute	15	Fan-Up *
7	Preset-Up	16	Fan-Down *
8	Preset-Down	17	Temp-Up *
9	Power	18	Temp-Down *

* Not applicable in this application

Note: Some radios may not have these commands. Please refer to the manual provided with the radio, or contact the radio Manufacturer for specific commands recognized by that particular radio.

STEERING WHEEL CONTROL SETTINGS (CONT)

Dual assignment (long button press)

The AXDIS-TY3 has the capability to assign (2) functions to a single button, except Volume-Up and Volume-Down. Follow the steps below to program the button(s) to the desired setting.

Note: Seek-Up and Seek-Down come pre-programmed as Preset-Up and Preset-Down for a long button press.

1. Turn the key to ignition but do not start the vehicle.
2. Press and hold the desired steering wheel control button for (10) seconds, or until the L.E.D. flashes rapidly. At this point release the button; the L.E.D. will then go solid.
3. Press and release the Volume-Up button the number of times corresponding to the new button number selected. Refer to the Dual Assignment Legend. The L.E.D. will flash rapidly while the Volume-Up button is being pressed, and then go back to a solid L.E.D. once released. Proceed to the next step once the Volume-Up button has been pressed the desired number of times.

Caution: If more than (10) seconds elapses between pressing the Volume-Up button, this procedure will abort, and the L.E.D. will go out.

4. Press the desired button to store it to memory. The L.E.D. will now go out indicating the new information has been stored to memory.

Note: These steps must be repeated for each button desired to assign a dual assignment feature to. To reset a button back to its default state, repeat Step 1, then press the Volume-Down button. The L.E.D. will go out, and the dual assignment feature for that button will be erased.

Dual assignment legend

Function #	Function	Function #	Function
1	Not allowed	10	Band
2	Not allowed	11	Play/Enter
3	Seek-Up/Next	12	PTT
4	Seek-Down/Prev	13	On-Hook
5	Mode/Source	14	Off-Hook
6	ATT/Mute	15	Fan-Up *
7	Preset-Up	16	Fan-Down *
8	Preset-Down	17	Temp-Up *
9	Power	18	Temp-Down *

* Not applicable in this application

Resetting the interface

The **Blue** reset button is located inside the interface, between the two connectors. The button is accessible outside the interface, no need to open the interface.

1. Press and hold the reset button for (2) seconds, and then let go to reset the interface.
2. Refer to the **Programming** section from this point.



AXDIS-TY3

INSTALLATION INSTRUCTIONS



Having difficulties? We're here to help.



Contact our Tech Support line at:

386-257-1187



Or via email at:

techsupport@metra-autosound.com

Tech Support Hours (Eastern Standard Time)

Monday - Friday: 9:00 AM - 7:00 PM

Saturday: 10:00 AM - 7:00 PM

Sunday: 10:00 AM - 4:00 PM



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