



APPLICATIONS (See Page 2)

INTERFACE COMPONENTS

- AXDIS-TY1 interface
- AXDIS-TY1 harnesses (LD-TYNOAMP, LD-BX-TY2 AND LD-2NAVAMP)
- Female 3.5mm connector with stripped leads

TOOLS REQUIRED

- · Wire cutter
- Crimp tool
- Solder gun
- Tape

- Small flat-blade screwdriver
- Connectors (example: buttconnectors, bell caps, etc.)

Radio Replacement Data Interface with SWC

Fits Select Toyota/Lexus Models 2001–2015

Visit <u>AxxessInterfaces.com</u> for more detailed information about the product and up-to-date vehicle specific applications.

INTERFACE FEATURES

- Designed for amplified and non-amplified systems
- Provides accessory power (12-volt 10-amp)
- Retains R.A.P. (Retained Accessory Power)
- Provides NAV outputs (parking brake, reverse, speed sense)
- Retains audio controls on the steering wheel
- Retains balance (amplified), balance & fade (non-amplified)
- Retains factory 3.5mm AUX-IN jack
- Micro "B" USB updatable

For **Dash Disassembly Instructions,** refer to **metraonline.com.** Enter the
year, make, and model of the
vehicle in the **Vehicle Fit Guide**

for Radio Install kits.

www.MetraOnline.com



Product Info



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ATTENTION: With the key out of the ignition, disconnect the negative battery terminal before installing this product. Ensure that all installation connections, especially the air bag indicator lights, are plugged in before reconnecting the battery or cycling the ignition to test this product.

NOTE: Refer also to the instructions included with the aftermarket radio.

APPLICATIONS

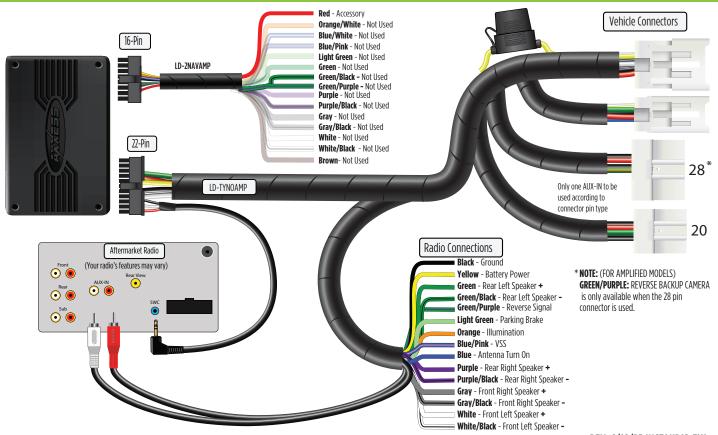
APPLICATIONS

LEXUS	
ES Series	2007-2012
ES Series (w/Multi-Disc)	2002-2006
GS Series	2001-2005
IS Series	2002-2005
LS Series	2001-2008
LX Series	2001-2007
RX Series	2001-2009

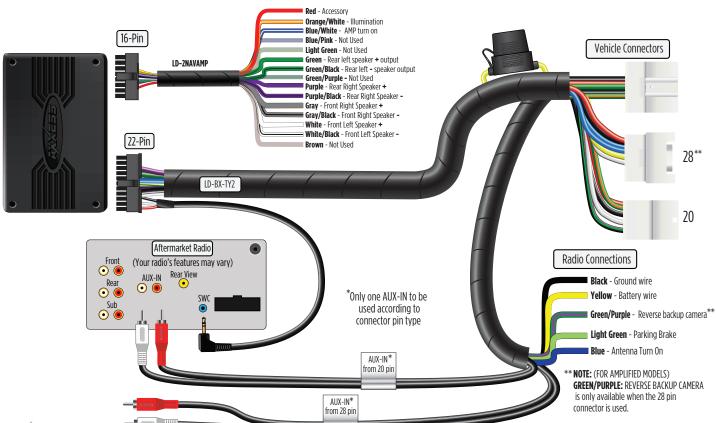
TOYOTA	
4Runner	2003-2013
Avalon (Non-NAV)	2013-2014
Camry	2007-2014
Corolla	2009-2015
FJ Cruiser	2011-2014
Highlander	2008-2013
Prius	2010-2014
RAV4	2004-2014

TOYOTA (CONT)	
Sequoia	2005-2013
Sienna	2004-2014
Solara	2004-2008
Tacoma	2005-2013
Tundra	2006-2013
Tundra (4 -Door)	2004-2005
Venza	2009-2013

CONNECTIONS: LD-TYNOAMP FOR NON-AMPLIFIED MODELS



CONNECTIONS: LD-BX-TY2 FOR AMPLIFIED MODELS



CONNECTIONS (CONT)

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 included female 3.5mm connector with stripped leads, to the male 3.5mm SWC jack from the AXDIS-TY1. Any remaining wires tape off and disregard.
 - Eclipse: Connect the steering wheel control wire, normally Brown, to the Brown/White
 wire of the connector. Then connect the remaining steering wheel control wire, normally
 Brown/White, to the Brown wire of 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 your 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), and 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 of the connector. Then connect the remaining steering wheel
control wire, referred to as Key-B or SWC-2, to the Brown/White wire of 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-TY1 harness into the jack on 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 goes to.

INSTALLING THE AXDIS-TY1

With The Key In The Off Position:

 Connect the 16-pin harness with stripped leads, and the AXDIS-TY1 harness, into the interface.

Attention! Do not connect the **AXDIS-TY1** 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 THE AXDIS-TY1

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

- Start the vehicle.
- Connect the **AXDIS-TY1** harness to the wiring harness in the vehicle.
- The LED will initially turn on solid **Green**, then turn off for a few seconds while it auto detects the radio installed.
- The LED will then flash Red & Green in different patterns (see chart) indicating which radio
 is connected to the interface, and then turn off for a couple of seconds. Pay close attention
 to the RED & Green LED pattern. This will help in troubleshooting, if need be. Refer to the
 LED Feedback section for more information.
- After a couple seconds the LED will turn on solid **Red** while the interface auto detects the vehicle. The radio will shut off at this point. This process should take 5 to 30 seconds.
- Once the vehicle has been auto detected by the interface, the LED will turn on solid Green, and the radio will come back on, indicating programming was successful.
- Test all functions of the installation for proper operation, before reassembling the dash. If
 the interface fails to function, refer to Resetting the AXDIS-TY1.

Note: The LED will turn on solid **Green** for a moment, and 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 3/4 of the way.
- 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.

RADIO LED FEEDBACK

RADIO		LED PATTERN		
Pioneer/Jensen	G	<u> </u>		
JVC	R	<u> </u>		
KENWOOD	GG	XX		
SONY/DUAL	GR	<u> </u>		
Reserved for future use	RG	<u> </u>		
ALPINE	RR	X		
ALPINE (type 2)	GGG			
AXXERA	GGR	* * *		
AXXERA (type 2)	GRG	XX		
MAGNADYNE	GRR	<u> </u>		

- **1)** If the LED pattern shows **JVC**, but a **JVC** radio isn't installed, change the radio type to Kenwood. Refer to the **Changing Radio Type** document.
- **2)** If the LED pattern shows **Alpine**, but an **Alpine** radio isn't installed, make sure the 3.5mm jack is plugged into the radio.
- **3)** If no SWC, change the radio type to the opposite radio type. Refer to the **Changing Radio Type** document.

RADIO		LED PATTERN		
BOSS	RGG	* * *		
Reserved for future use	RGR	* * *		
CLARION (type 1)	RRG	* * *		
CLARION (type 2)	RRR			
Reserved for future use	GGGG			
Reserved for future use	GGGR			
Reserved for future use	GGRG			
Reserved for future use	GGRR			
Reserved for future use	GRGG			
Reserved for future use	GRGR			
Resistive Radio #1	GRRG			
Resistive Radio #2	GRRR			
Resistive Radio #3	RGGG			
Resistive Radio #4	RGGR			
Resistive Radio #5	RGRG			
Resistive Radio #6	RGRR	* * * *		

SWC SETTINGS: CHANGING RADIO TYPE & REMAPPING

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

Changing Radio Type

If the LED flashes do not match the radio you have connected, you must manually program the **AXDIS-TY1** to tell it what radio it is connected to.

- After (3) seconds of turning the key on, press and hold the Volume-Down button on the steering wheel until the LED in the AXDIS-TY1 goes solid.
- Release the Volume-Down button; the LED will go out indicating we are now in Changing Radio Type mode.
- **3.** Refer to the **Radio Legend** to know which radio number you would like to program.
- Press and hold the Volume-Up button until the LED goes solid, and then release. Repeat this step for the desired radio number you have selected.
- Once the desired radio number has been selected, press and hold the **Volume-Down** button
 on the steering wheel until the LED goes solid. The LED will remain on for about (3) seconds
 while it stores the new radio information.
- **6.** Once the LED goes off, 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.

Note: Refer to **LED Feedback Legend** for number of flashes, and for more information regarding specific radios.

Flash Count Radio Legend		
1 PIONEER/JENSEN	10 MAGNADYNE	19 Reserved
2 JVC	11 BOSS	20 Reserved
3 KENWOOD	12 Reserved	21 Resistive Radio #1
4 SONY/DUAL	13 CLARION (type 1)	22 Resistive Radio #2
5 Reserved	14 CLARION (type 2)	23 Resistive Radio #3
6 ALPINE	15 Reserved	24 Resistive Radio #4
7 ALPINE (type 2)	16 Reserved	25 Resistive Radio #5
8 AXXERA	17 Reserved	26 Resistive Radio #6
9 AXXERA (type 2)	18 Reserved	

Remapping the Steering Wheel Control Buttons

Let's say you have **AXDIS-TY1** initialized and you want to change the button assignment for the steering wheel control buttons. For example, you would like **Seek-Up** to become **Mute**. Follow the steps below to remap the steering wheel control buttons:

- Ensure the AXDIS-TY1 is visible so you can see the LED flashes to confirm button recognition.
 Tip: Turning the radio off is recommended.
- Within the first twenty seconds of turning the ignition on, press and hold the Volume-Up button on the steering wheel until the LED goes solid.
- Release the Volume-Up button, the LED will then go out; the Volume-Up button has now been programmed.

Continued on the next page



REMAPPING (CONT)

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 LED comes on, and then release the **Volume-Up** button. This will tell the **AXDIS-TYI** that this function is not available and it will move on to the next function.

To complete the remapping process, press and hold the Volume-Up button on the steering wheel until the LED in the AXDIS-TY1 goes out.

SWC SETTINGS: BUTTON ASSIGNMENT

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: Not all radios will have all of these commands. Please refer to the manual provided with the radio, or contact the radio manufacturer for specific commands recognized by that particular radio.

Continued on the next page

DUAL ASSIGNMENT INSTRUCTIONS

Dual Assignment Instructions (Long Button Press)

The **AXDIS-TY1** 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 your liking.

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

- **1.** Turn on the ignition but do not start the vehicle.
- Press and hold down the steering wheel control button that you want to assign a long press function to for about (10) seconds, or until the LED flashes rapidly. At this point release the button; the LED 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 LED will flash rapidly while the Volume-Up button is being pressed, and then go back to a solid LED once released. Go 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 LED will go out.

4. To store the long press button in memory, press the button that you assigned a long press button to (the button held down in Step 2). The LED will now go off indicating the new information has been stored.

Note: These steps must be repeated for each button you would like to assign a dual purpose feature to. To reset a button back to its default state, repeat Step 1, and then press the **Volume-Down** button. The LED will go out, and the long press mapping for that button will be erased.

Dual Assignment Legend

- Not allowed
- Not allowed
- 3. Seek-Up/Next
- Seek-Down/Prev
- Mode/Source
- 6. ATT/Mute
- 7. Preset-Up
- 8. Preset-Down
- 9. Power
- * Not applicable in this application

- 10. Band
- 11. Play/Enter
- 12. PTT
- 13. On-Hook
- 14. Off-Hook
- 15. Fan-Up *
- 16. Fan-Down *
- 17. Temp-Up *
- 18. Temp-Down *

TROUBLESHOOTING

Resetting the AXDIS-TY1 Interface

- 1. 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.
- **2.** Press and hold the reset button for two seconds, and then let go to reset the interface.
- **3.** Refer to "**Programming the AXDIS-TY**1" from this point.



AXDIS-TY1INSTALLATION 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 - 5:00 PM Sunday: 10:00 AM - 4:00 PM



Metra recommends MECP certified technicians