

## Ford Data Interface with SWC 2006-2022

Visit [AxxessInterfaces.com](http://AxxessInterfaces.com) for up-to-date vehicle specific applications.

### INTERFACE FEATURES

- Designed for non-amplified & amplified models (including Sony/THX)
- 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 RSE (Rear Seat Entertainment)
- Retains SAT (Satellite Radio)
- Retains SYNC<sup>®</sup>
- Retains the factory AUX-IN jack
- Retains balance and fade (excluding Sony/THX)
- Micro-B USB updatable

MetraOnline.com may be used to assist with dash assembly instructions. Simply enter your Year, Make, Model vehicle into the vehicle fit guide and look for the Dash Kit Installation Instructions.

[www.MetraOnline.com](http://www.MetraOnline.com)



Product Info



### INTERFACE COMPONENTS

- AXDIS-FD1 interface
- AXDIS-FD1 harness
- 16-pin harness with stripped leads
- Female 3.5mm connector with stripped leads

### TOOLS REQUIRED

- Wire cutter • Crimp tool • Solder gun • Tape
- Connectors (ex. butt-connectors, bell caps, etc.)
- Small flat-blade screwdriver

### APPLICATIONS

See inside front cover

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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

## FORD

E Series (with AM/FM/CD/SYNC).....	2014-2020
Edge (NAV).....	2009-2010
Edge (Non-NAV).....	2007-2010
Edge.....	2007-2008
Escape.....	2008-2012
Expedition.....	2007-2013
F-150 (Base).....	2013
F-150.....	2009-2014
F-250/350/450/550 (Base).....	2011-2012

## FORD (CONT)

F-250/350/450/550.....	2011-2016
F-650/750 (w/CD).....	2016-2022
Focus.....	2008-2011
Fusion.....	2010-2012
Mustang.....	2008-2014

## LINCOLN

MKS.....	2009-2011
MKT.....	2010-2012
MKX.....	2007-2012

## LINCOLN (CONT)

MKZ.....	2007-2012
Navigator.....	2007-2010
Zephyr.....	2006

## MAZDA

Tribute.....	2008-2011
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## MERCURY

Mariner.....	2008-2011
Milan.....	2010-2011

## CONNECTIONS

**Attention!** This interface will work with models that are either Sony/THX amplified, or non-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* a Sony/THX amplifier:

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

- Connect the **Red** wire to the accessory wire.  
**Note:** If installing an AX-LCD (sold separately), there will be an accessory wire there to connect as well.
- If the vehicle is equipped with a factory subwoofer, connect the **Blue/White** wire to the amp turn on wire.
- If the aftermarket radio has an illumination wire, connect the **Orange/White** wire to it.
- If the aftermarket radio has a mute wire and the vehicle is equipped with SYNC®, connect the **Brown** wire to it. If the mute wire is not connected, the radio will turn off when SYNC® is activated.
- 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.

*The following (3) wires are only for multimedia/navigation radios that require these wires.*

- Connect the **Blue/Pink** wire to the VSS/speed sense wire.
- Connect the **Green/Purple** wire to the reverse wire.
- Connect the **Light Green** wire to the parking brake wire
- Tape off and disregard the following (4) wires, they will not be used in this application: **Green, Green/Black, Purple, Purple/Black.**

#### From the AXDIS-FD1 harness to the aftermarket radio:

- Connect the **Black** wire to the ground wire.
- Connect the **Yellow** wire to the battery wire.
- Connect the **Blue** wire to the power antenna wire.
- Tape off and disregard the **Blue/White** wire, it will not be used in this application.
- 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.
- If the vehicle is equipped with SYNC®, connect the **Red** and **White** RCA jacks labeled “RSE/SYNC/SAT” to the audio AUX-IN jacks.
- If the vehicle is equipped without SYNC®, connect the **Red** and **White** RCA jacks labeled “FROM 3.5” to the audio AUX-IN jacks.
- The DIN jack is to be used with the optional AX-LCD (sold separately) to retain SYNC® information.
- Connect the **Red** wire to accessory power.
- If the vehicle is equipped with a factory subwoofer, connect the **White** RCA jack labeled “SUBWOOFER” to the subwoofer out jack.
- Disregard the **Red** RCA jack labeled “CENTER CHANNEL”, it will not be used in this application.

*Continue to 3.5mm jack steering wheel control retention*

**Attention!** This interface will work with models that are either Sony/THX amplified, or non-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 a Sony/THX amplifier:

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

- Connect the **Red** wire to the accessory wire.

**Note:** If installing an AX-LCD (sold separately), there will be an accessory wire there to connect as well.

- Connect the **Blue/White** wire to the amp turn on wire. This wire must be connected to hear sound from the factory amplifier.
- If the aftermarket radio has an illumination wire, connect the **Orange/White** wire to it.
- If the aftermarket radio has a mute wire and the vehicle is equipped with SYNC<sup>®</sup>, connect the **Brown** wire to it. If the mute wire is not connected, the radio will turn off when SYNC<sup>®</sup> is activated.
- 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.

The following (3) wires are only for multimedia/navigation radios that require these wires.

- Connect the **Blue/Pink** wire to the VSS/speed sense wire.
- Connect the **Green/Purple** wire to the reverse wire.
- Connect the **Light Green** wire to the parking brake wire

#### From the AXDIS-FD1 harness to the aftermarket radio:

- Connect the **Black** wire to the ground wire.
- Connect the **Yellow** wire to the battery wire.
- Connect the **Blue** wire to the power antenna wire.
- **For NAV models only:** Connect the **Blue/White** wire from the 24-pin connector to the amp turn on wire. This wire must be connected to hear sound from the factory amplifier.
- If the vehicle is equipped with SYNC<sup>®</sup>, connect the **Red** and **White** RCA jacks labeled “RSE/ SYNC/SAT” to the audio AUX-IN jacks.
- If the vehicle is equipped without SYNC<sup>®</sup>, connect the **Red** and **White** RCA jacks labeled “FROM 3.5” to the audio AUX-IN jacks.
- The DIN jack is to be used with the optional AX-LCD (sold separately) to retain SYNC<sup>®</sup> information.
- Connect the **Red** wire to accessory power.
- Connect the **White** RCA jack to the subwoofer out jack.
- Connect the **Red** RCA jack to the center channel out jack on the radio/processor.  
**Note:** If this jack is not present on the aftermarket radio, just leave be. Only the center channel speaker will be lost.
- Tape off and disregard the following (4) wires, they will not be used in this application: **Green, Green/Black, Purple, Purple/Black.**

Continue to 3.5mm jack steering wheel control retention

### 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* onto the male 3.5mm SWC jack from the **AXDIS-FD1**. 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-FD1** into the jack on the aftermarket radio designated for an external steering wheel control interface. Please refer to the aftermarket radio’s manual if in doubt as to where the 3.5mm jack goes.

### With the key in the off position:

- Connect the 16-pin harness with stripped leads, and the **AXDIS-FD1** harness, into the interface.

**Attention!** *Do not connect the **AXDIS-FD1** 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-FD1

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.

1. Connect the **AXDIS-FD1** harness to the wiring harness in the vehicle.
2. The LED will initially turn on solid **Green**, then turn off for a few seconds while it auto detects the radio installed.
3. The LED will then flash **Red** up to (24) times indicating which radio is connected to the interface, and then turn off for a couple of seconds. Pay close attention to how many **Red** flashes there are. This will help in troubleshooting, if need be. Refer to the LED feedback section for more information.
4. 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.
5. 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.
6. Test all functions of the installation for proper operation, before reassembling the dash. If the interface fails to function, refer to Resetting the **AXDIS-FD1**.

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

## ADJUSTMENTS (SONY/THX ONLY)

### Audio level adjustment:

- 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; counterclockwise to lower the audio level.
- Once at a desired level, audio level adjustment is complete.

## EXTRA FEATURES

### RSE, SAT and SYNC®:

- If the vehicle is equipped with rear seat entertainment, satellite radio or SYNC®, the **AXDIS-FD1** can retain these features.  
**Note:** *Most Ford radios have SAT built in, if so, this feature is lost.*
- Change the source of the radio to AUX-IN; SYNC® audio will start playing if SYNC® has been activated.
- The display in the factory screen, or the optional AX-LCD (sold separately) will display the SYNC® information.
- Listed below are the functions of the AX-LCD while using satellite radio or SYNC®:
  - Arrow up—Channel up (only in SAT or USB mode)
  - Arrow down—Channel down (only in SAT or USB mode)
  - Enter—Selects current item on the screen
  - Return/ESC—Exits to the previous screen
- To access RSE or SAT, press and hold the MEDIA button on the steering wheel for 2 seconds. This will switch to the next source available. Each time the MEDIA button is pressed for 2 seconds the source will change. The sequence of sources are; SYNC/RSE/SAT. To temporarily disable SYNC/ RSE/SAT, press and hold the MEDIA button for 3 seconds. To turn it back on, press the MEDIA button for 2 seconds. The factory screen, or the AX-LCD will provide a visual confirmation of which source is active.

## STEERING WHEEL CONTROL SETTINGS

**LED Feedback:** The (24) **Red LED** flashes represent a different radio manufacturer for the **AXDIS-FD1 SWC interface** to detect. For example, if you are installing a **JVC** radio, the **SWC interface** will flash **Red** (5) times, then stop. Following is the **LED Feedback Legend**, which indicates the flash count of the radio manufacturer.

### LED Feedback Legend

Flash Count	Radio
1	Eclipse (type 1) †
2	Kenwood ‡
3	Clarion (type 1) †
4	Sony / Dual
5	JVC
6	Pioneer / Jensen
7	Alpine *
8	Visteon
9	Valor
10	Clarion (type 2) †
11	Metra OE
12	Eclipse (type 2) †

Flash Count	Radio
13	LG
14	Parrot **
15	XITE
16	Philips
17	TBA
18	JBL
19	Insane
20	Magnadyne
21	Boss
22	Axxera
23	Axxera (type 2)
24	Alpine (type 2)

### KEYNOTES

\* If the **SWC interface** flashes **RED** (7) times, and an **Alpine** radio is not installed, that means there is an open connection not accounted for. Verify that the 3.5mm jack is connected to the correct steering wheel jack/wire in the radio.

\*\* The **AXSWCH-PAR** is required (sold separately). Also, the software in the radio must be rev. 2.1.4 or higher.

† If a **Clarion** or **Eclipse** radio is installed and the steering wheel controls do not function, change the radio to **Clarion (type 2)** or **Eclipse (type 2)** respectively. If the steering wheel controls still do not function, refer to the **Changing Radio Type** document on the next page, also available at [axxessinterfaces.com](http://axxessinterfaces.com).

‡ If a **Kenwood** radio is installed and the LED feedback flashes (5) times instead of (2), manually change the radio type to **Kenwood**. To do this, refer to the **Changing Radio Type** instructions on the next page, also available at [axxessinterfaces.com](http://axxessinterfaces.com).

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## STEERING WHEEL CONTROL SETTINGS *(CONT)*

**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-FD1** 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 LED in the **AXDIS-FD1** goes solid.
2. 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 have programmed.
4. 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.
5. 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 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

Flash Count Radio Legend	
1. Eclipse (type 1)	13. LG
2. Kenwood	14. Parrot
3. Clarion (type 1)	15. XITE
4. Sony / Dual	16. Phillips
5. JVC	17. TBA
6. Pioneer / Jensen	18. JBL
7. Alpine	19. Insane
8. Visteon	20. Magnadyne
9. Valor	21. Boss
10. Clarion (type 2)	22. Axxera
11. Metra OE	23. Axxerra (type 2)
12. Eclipse (type 2)	24. Alpine (type 2)

### Remapping the steering wheel control buttons

Let's say you have **AXDIS-FD1** 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:

1. Ensure the **AXDIS-FD1** is visible so you can see the LED 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 LED goes solid.

*Continued on the next page*

## STEERING WHEEL CONTROL SETTINGS (CONT)

3. Release the **Volume-Up** button, the LED 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 LED comes on, and then release the **Volume-Up** button. This will tell the **AXDIS-FD1** 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 on the steering wheel until the LED in the **AXDIS-FD1** goes out.

### Button assignment legend

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

\* Not applicable if the vehicle is equipped with SYNC®

\*\* 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*

## STEERING WHEEL CONTROL SETTINGS *(CONT)*

### Dual Assignment Instructions (long button press)

The **AXDIS-FDI** 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.
2. 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

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

\* Not applicable in this application

### TROUBLESHOOTING

#### Resetting the AXDIS-FD1

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 the **Programming** section (see page 6) from this point.

Having difficulties? We're here to help.



Contact our Tech Support line at:

**386-257-1187**



Or via email at:

[techsupport@metra-autosound.com](mailto: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



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