



AXXESS Ford SWC (Steering Wheel Control) and Data Interface 2020-Up Installation Guide

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AXXESS Ford SWC (Steering Wheel Control) and Data Interface 2020-Up



INTERFACE FEATURES

- Provides accessory power (10-amp)
- Provides wires for multimedia radios (park brake, reverse, speed sense)
- Retains audio controls on the steering wheel
- Designed for non-amplified models only
- Designed to be compatible with all major radio brands
- Auto detects vehicle type, radio connection, and preset controls
- Ability to dual assign steering wheel control buttons
- Retains memory settings even after battery disconnection or interface removal (non-volatile memory)
- Provides illumination output
- Micro-B USB updatable

Note: The AXTC-FD3 does not retain SYNC.

APPLICATIONS

Ford

E Series	2021-Up	Escape	2020-Up	Transit	2020-Up
Eco Sport	2020-Up	F250/F350/F450/F550	2020-Up	Transit Connect	2020-Up

INTERFACE COMPONENTS

- AXTC-FD3 interface
- AXTC-FD3 harness
- 3.5mm adapter

TOOLS & INSTALLATION ACCESSORIES REQUIRED

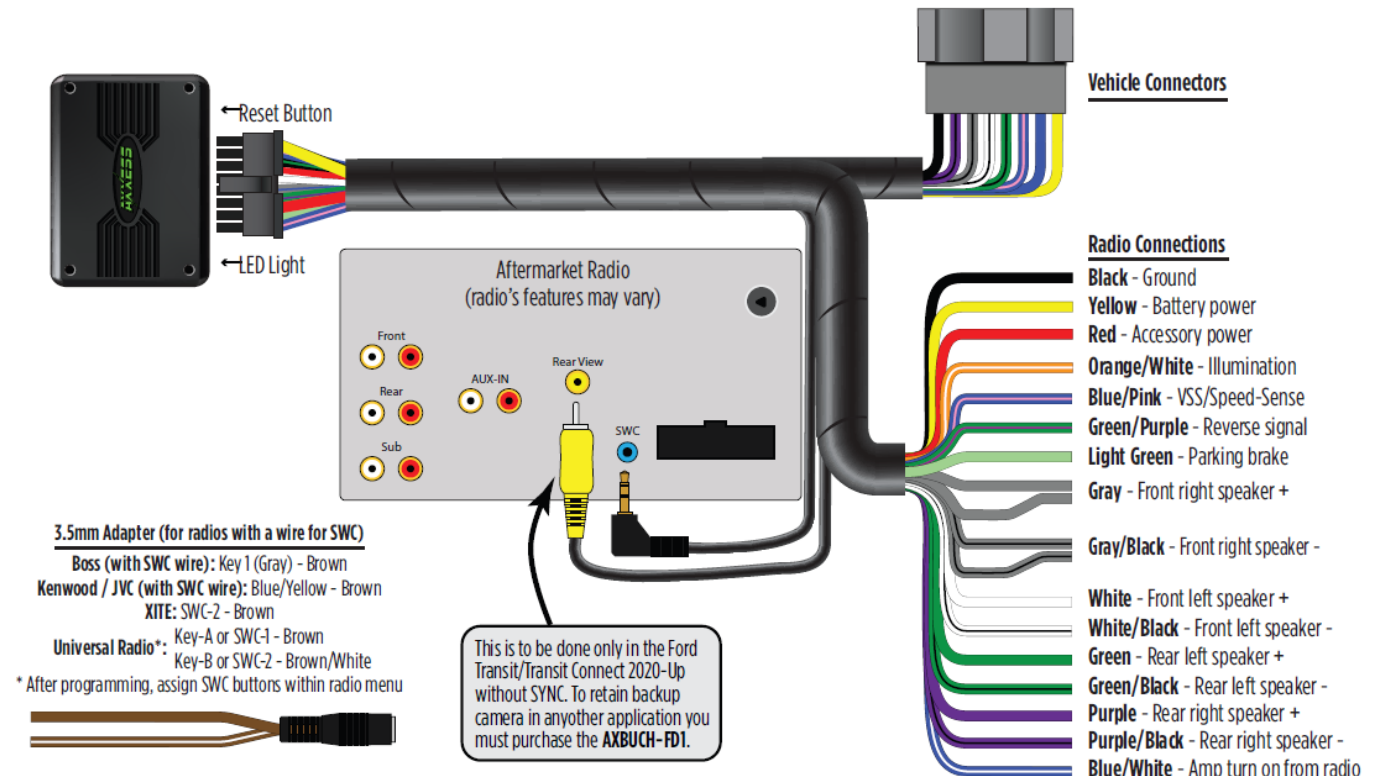
- Crimping tool and connectors, or solder gun, solder, and heat shrink
- Tape
- Wire cutter

- Zip-ties

ATTENTION: With the key out of the ignition, disconnect the negative battery terminal before installing this product. Ensure that all installation connections are secure before cycling the ignition to test this product.

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

CONNECTIONS



PROGRAMMING



Open the driver's door, and keep open during the programming process.



Cycle the ignition on and wait (5) seconds.



Connect the AXTC-FD3 harness to the AXTC-FD3 interface, and then to the wiring harness in the vehicle.



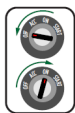
Locate the Volume Up button on the steering wheel. Program the interface by tapping the Volume Up button at a heartbeat pace until the LED light stops flashing.



The LED light will flash Green & Red while the interface programs the radio to the steering wheel controls. Once programmed, the LED light will go out, then produce a pattern that will identify the radio type installed.



The LED light will go out, then once again quickly flash Green & Red while the interface programs itself to the vehicle. Once programmed, the LED light will go out again, then turn solid Green.



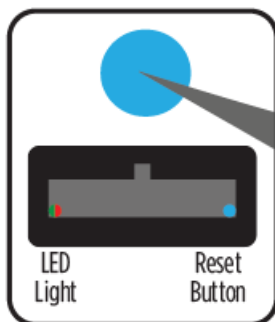
Cycle the ignition off, then back on.



Test all functions of the installation for proper operation.

TROUBLESHOOTING

1. If the interface fails to function, press and release the reset button, then repeat the programming process from step 4 to try again.



QR Code Scan Here

Further troubleshooting steps and information can be located at:

axxessinterfaces.com/product/AXTC-FD3

2. Final LED Feedback

At the end of programming, the LED light will turn Solid Green which indicates the programming was successful. If the LED light didn't turn Solid Green, reference the list below to understand which programming section the problem may stem from.

Radio	Vehicle	
LED Light	Programming	Programming
Section	Section	
Solid Green	Pass	Pass
Slow Red Flash	Fail	Pass
Slow Green Flash	Pass	Fail
Solid Red	Fail	Fail

Note: If the LED light shows Solid Green for Pass (indicating everything programmed correctly), yet the steering wheel controls don't work, check to ensure that the 3.5mm jack is plugged in, and also plugged into the correct jack on the radio.

Once corrected, press the reset button, then program again.

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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Log onto www.installerinstitute.edu or call 386-672-5771 for more information and take steps toward a better tomorrow.

SWC (Steering Wheel Control) and Data Interface

Ford Select Models

2012-Up

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

INTERFACE COMPONENTS

- AXTC-FD3 interface
- AXTC-FD3 harness
- 3.5mm adapter

INTERFACE FEATURES

- Provides accessory power (10-amp)
- Provides wires for multimedia radios (park brake, reverse, speed sense)
- Retains audio controls on the steering wheel
- Designed for non-amplified models only
- Designed to be compatible with all major radio brands
- Auto detects vehicle type, radio connection, and preset controls
- Ability to dual assign steering wheel control buttons
- Retains memory settings even after battery disconnection or interface removal (non-volatile memory)
- Provides illumination output
- Micro-B USB updatable

Note: The AXTC-FD3 does not retain SYNC.

APPLICATIONS

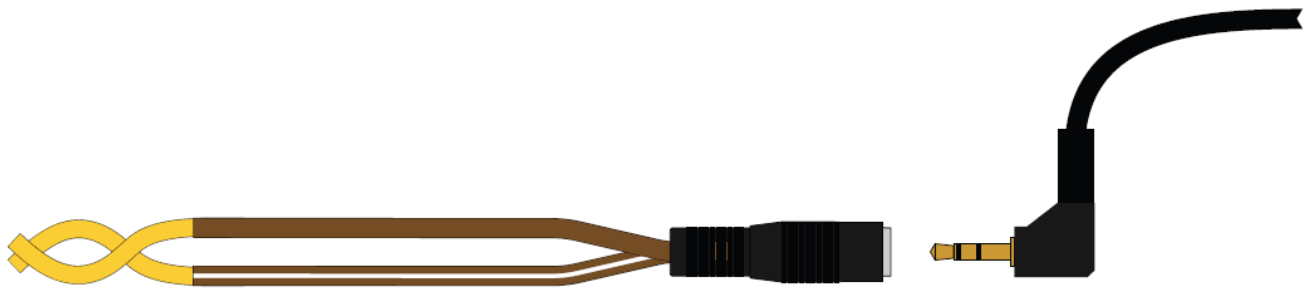
Ford

- **E Series** 2021-Up
- **Eco Sport** 2020-Up

- **Escape** 2020-Up
- **F250/F350/F450/F550** 2020-Up
- **Transit** 2020-Up
- **Transit Connect** 2020-Up

The AXTC interface can be used in vehicles without steering wheel controls to provide retained accessory power, and also to provide wires for multimedia radios (park brake/reverse / speed-sense). Follow the steps below to program the AXTC-CH5 for just these features.

1. From the 3.5mm adapter, tie the Brown and Brown/White wires together and tape up or use a connector.
2. Connect the 3.5mm adapter to the 3.5mm jack from the AXTC-CH5 harness.
3. Program the AXTC-CH5 per the AXTC-CH5 instructions, page 3. Disregard steps 4 and 5.



Final LED Feedback

Final LED Feedback

- At the end of programming the LED light will turn solid Green which indicates programming was successful.
- If the LED light turned solid Red instead, this means programming has failed. Reset the interface and try again.
- If still no success after resetting and reprogramming the interface, refer to the Vehicle Troubleshooting document for the interface. Ignore the steps referencing steering wheel controls.

LED Light	Vehicle Programming Section
Solid Green	Pass
Solid Red	Fail

The AXTC interface has the capability to assign (2) functions to a single button except for Volume Up and Volume Down.

This feature can be performed three different ways; through a Windows-based computer using the Axxess Updater, through the Axxess Updater app available from the Android/Apple mobile devices app store, or by following the steps below.

Note: Apple mobile devices will require the use of the AX-HUB for this feature.

Attention! If more than 20 seconds elapses between steps, the procedure will abort, and the interface's LED light

will go out. The interface may not function properly and may need to be reset and reprogrammed.

1. Program the interface to the vehicle following the vehicle specific document.
2. Turn the radio off.
3. Cycle the key off, then back on.
4. Wait until the interface's light flashes Green one time then goes out.
5. Press and hold the Volume Down button on the steering wheel until the interface's light turns solid Red, then release. The light will then go out indicating that the interface is in Changing Radio Type mode.
6. Reference the Radio Legend for the radio number preferred.
7. Press and hold the Volume Up button on the steering wheel until the interface's light turns solid Red, then release. Radio number 1 has now been programmed. Repeat this step for the desired radio.
8. Once the desired radio has been selected, press and hold the Volume Down button on the steering wheel until the interface's light turns solid Red. The light will remain solid Red for 3 seconds while it stores the new radio information. After the light goes out, turn the radio on and test the steering control wheel controls.

Radio Legend

Radio Brand	Radio Number	Radio Brand	Radio Number
Pioneer / Jensen	1	Visteon / Boss (type 4)	12
Boss (type 1) / Dual / Sony	2	JBL	13
Kenwood	3	Eclipse (type 1)	14
JVC	4	Eclipse (type 2)	15
Alpine	5	Philips	16
Boss (type 2)	6	XITE	17
Clarion (type 1)	7	Parrot	18
Clarion (type 2)	8	Valor	19
Boss (type 3)	9	LG	20
Insane Audio	10	Kicker	21
Magnadyne	11	Axxera	22

The AXTC interface can assign (2) functions to a single button except for Volume Up and Volume Down. This feature can be performed three different ways; through a Windows based computer using the Axxess Updater, through the Axxess Updater app available from the Android/Apple mobile devices app store, or by following the steps below.

Notes:

- a) Seek Up and Seek Down come pre-programmed as Preset Up and Preset Down for a long button press.
- b) Apple mobile devices will require the use of the AX-HUB for this feature.

Attention! If more than 10 seconds elapses between steps, the procedure will abort, and the interface's light will go out. The interface may not function properly and will need to be reset and reprogrammed.

1. Program the interface to the vehicle following the vehicle-specific document.
2. Turn the radio off.
3. Cycle the key off, then back on.
4. Wait until the interface's light flashes Green 1 time then goes out.
5. Press and hold the desired SWC button for dual assignment for 10 seconds (or until the interface's light flashes rapidly Green), then release. The light will turn solid Green indicating the interface is in Dual Assignment mode.
6. Reference the Dual Assignment Legend. Press and release the Volume Up button on the steering wheel the number of times related to the desired feature for a long button press.
7. Press and release the SWC button from step 5. The interface's light will go out indicating the information has been stored to memory.
8. Repeat from step 5 to select another SWC button for dual assignment.
9. To reset an SWC button back to its default state, repeat steps 3 and 4, then press and release the Volume Down button on the steering wheel. The AXTC-1's light will go out, and the dual assignment feature for that button will be erased.

Feature Desired	Volume Up Presses		Feature Desired	Volume Up Presses
Volume Up *	1		Band	10
Volume Down *	2		Play / Enter	11
Seek Up / Next	3		PTT	12
Seek Down / Previous	4		On Hook	13
Mode / Source	5		Off Hook	14
ATT / Mute	6		Fan Up *	15
Preset Up	7		Fan Down *	16
Preset Down	8		Temp Up *	17
Power	9		Temp Down *	18

Not applicable in this application

Overall LED Feedback

LED Light	Radio Programming Section	Vehicle Programming Section
Solid Green	Pass	Pass
Slow Red Flash	Fail	Pass
Slow Green Flash	Pass	Fail
Solid Red	Fail	Fail

Radio	LED Pattern	Keynotes (reference below)
Pioneer / Jensen		
Boss (type 1) / Dual / Sony		3 (Boss)
Kenwood		1
JVC		
Alpine		2
Boss (type 2)		3
Clarion (type 1)		3
Clarion (type 2)		3
Boss (type 3)		3
Insane Audio		
Magnadyne		
Visteon / Boss (type 4)		3 (Boss)
JBL		
Eclipse (type 1)		3
Eclipse (type 2)		3
Philips		
XITE		
Parrot		4
Valor		
LG		
Kicker		
Axxera		

1. If the LED pattern shows JVC, 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.
4. AX-SWC-PARROT required (sold separately). The software in the radio must be rev. 2.1.4 or higher.

If the AXTC interface's LED light didn't go out at the end of the radio programming sequence or showed the wrong radio installed*, follow the steps below to trace down where the problem may lie. The final LED feedback light will also flash Red slowly or turn solid Red, instead of turning solid Green. If any of the following steps are performed, reset and reprogram the interface per the vehicle-specific document. Take note where SWC is worded means Steering Wheel Control.

Reference the Radio LED Feedback table at the end of this document.

Is the
3.5mm jack
connected?

The 3.5mm jack from the interface should be plugged into the SWC Input from the radio. Make sure it isn't plugged into the Bluetooth Mic or AUX Input. If unsure which input to use, refer to the manual provided with the radio, or contact the radio Manufacturer.

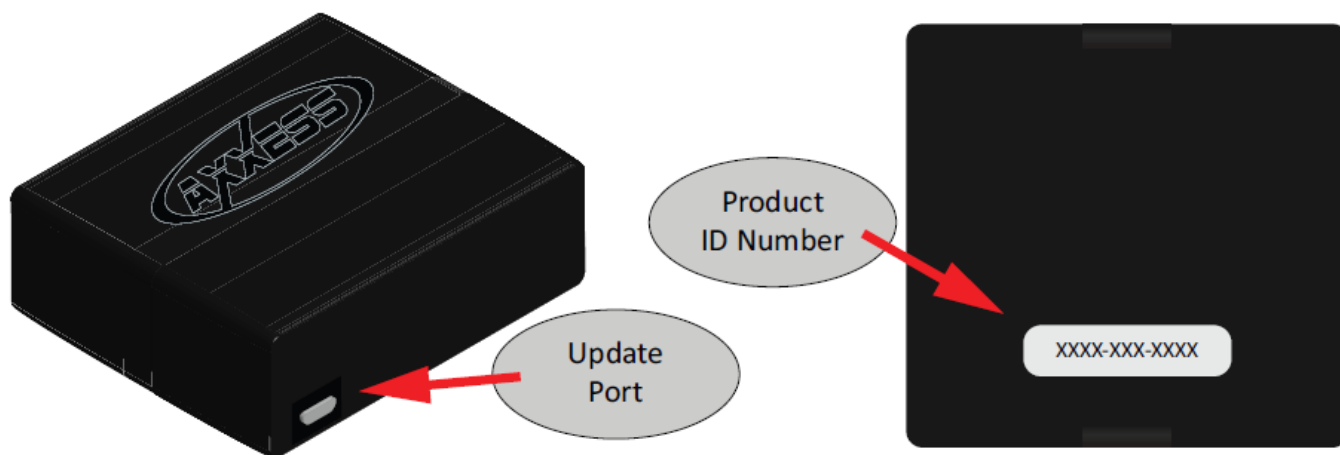
Note: Some radios use a wire a for SWC instead

Was the
correct
radio type
detected?

Reference the Radio LED Feedback table. Boss, Clarion, and Eclipse have different radio types and the wrong radio type may have been auto-detected. Reference the Changing Radio Type document to change the radio type. Also, refer to the radio-specific troubleshooting steps on the following page.

Update
the
interface

If all troubleshooting steps have been performed and the interface still doesn't go solid Green at the end of the final programming sequence, update the interface to the latest firmware, then try programming once more. If the interface still doesn't go solid Green, contact Tech Support at 1-800-253-TECH. Take note to be prepared to perform some tests in the vehicle when you contact Tech Support, and have the Product ID Number on the bottom of the interface noted.



Back of interface

Radio
Specific
Troubleshooting

Alpine

1. Unplug the 3.5mm jack from the radio, reset and reprogram the interface, then plug the 3.5mm jack back into the SWC input labeled REM.
2. Some Alpine radios have a feature that changes SWC* from the back to the front, and vice-versa. If the radio has this feature, make sure SWC is on the rear setting. If the setting is on the rear, turn it to the front, then back to the rear.

Labeled remote in the Alpine manual

Kenwood

1. Make sure the interface's LED feedback shows Kenwood. If it shows JVC instead, reference the Changing Radio Type document to change the radio type to Kenwood.
- 2.
3. If the interface's LED feedback shows Alpine, this could mean the wrong wire used from the radio, or a bad 3.5mm jack. Kenwood radios use a Blue/Yellow wire for SWC. If the radio is connected properly, remove the 3.5mm Adapter and wire the radio directly to the interfaces's "skinny" Red wire within the 3.5mm jack.
4. Some Kenwood radios have a feature called Remote Sensor which disables SWC. If the radio has this feature, make sure it's turned on. If it's turned on, turn it off, then back on.

Parrot

1. AX-SWC-PARROT (sold separately) is required. The software in the radio must be rev. 2.1.4 or higher.

Pioneer / Sony

1. If the SWC buttons are out of order, this could be caused by the 3.5mm jack not be seating properly, or residue on the contacts. Clean the contacts, then plug the 3.5mm jack firmly back into the radio. Add a stress loop on the cable to prevent the 3.5mm jack from slipping out.
2. If anything is prohibiting the 3.5mm jack from seating all the way in such as a heatsink, lightly trim away some of the plastic from the 3.5mm jack as needed.
3. SWC input for Pioneer is labeled W/R. SWC input for Sony is a blue 3.5mm input labeled REMOTE.

General Radio (with wire for SWC)

1. Make sure the correct wire is used from the 3.5mm Adapter.
 - a) Brown is for Key-A or SWC-1.
 - b) Brown/White is for Key-B or SWC-2*

Disregard if not applicable



3.5mm Adapter

2. Make sure SWC is programmed within the radio menu. Refer to the manual provided with the radio, or contact the radio Manufacturer for any questions regarding this process

Radio LED Feedback

Radio	LED Pattern	Keynotes (reference below)
Pioneer / Jensen		
Boss (type 1) / Dual / Sony		3 (Boss)
Kenwood		1
JVC		
Alpine		2
Boss (type 2)		3
Clarion (type 1)		3
Clarion (type 2)		3
Boss (type 3)		3
Insane Audio		
Magnadyne		
Visteon / Boss (type 4)		3 (Boss)
JBL		
Eclipse (type 1)		3
Eclipse (type 2)		3
Philips		
XITE		
Parrot		4
Valor		
LG		
Kicker		
Axxera		

1. If the LED pattern shows JVC, 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.
4. AX-SWC-PARROT required (sold separately). The software in the radio must be rev. 2.1.4 or higher.

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Documents / Resources



[AXXESS Ford SWC \(Steering Wheel Control\) and Data Interface 2020-Up \[pdf\]](#) Installation Guide
Steering Wheel Control, Data Interface, 2020-Up, Ford SWC

References

-  [Auto Sound Company Inc - Aftermarket Vehicle Accessory Specialists](#)
-  [Axxess Integrate - Comprehensive Interface Products for Vehicle Upgrades](#)
-  [AXTC-FD3 | Axxess Integrate](#)

Manuals+.