



INSTALLATION INSTRUCTIONS FOR PART RFASWC

RFASWC

Wireless SWC universal add-on

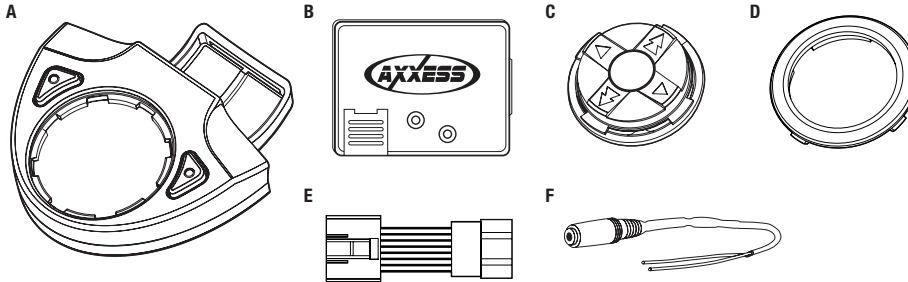
US. PAT. NOS. 8014920 and 8214105

FEATURES

- Designed to be compatible with most major radio brands
- Auto detects radio being connected, and presets controls
- Ability to dual assign steering wheel control buttons
- Retains settings even after the battery has been disconnected

INTERFACE COMPONENTS

- A) RFASWC Transmitter • B) RFASWC interface • C) Keypad • D) Trim ring • E) RFASWC harness
- F) Female 3.5mm connector with Brown and Brown/White wires • G) 12k-ohm Resistor (not shown)



TOOLS REQUIRED

- Cutting tool • Crimping tool • Tape • Connectors (example: butt-connectors, bell caps, etc.)

CAUTION: Metra recommends disconnecting the negative battery terminal before beginning any installation. All accessories, switches, and especially air bag indicator lights must be plugged in before reconnecting the battery or cycling the ignition.

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

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Caution: Metra recommends disconnecting the negative battery terminal before beginning any installation. All accessories, switches, and especially air bag indicator lights must be plugged in before reconnecting the battery or cycling the ignition.

Preface

What you need to know before you begin

- 1) Be sure that the radio you are installing is steering wheel control compatible. Additionally, refer to the [Radio Legend](#) and your radio's installation manual.
- 2) Update the RFASWC to the latest software.

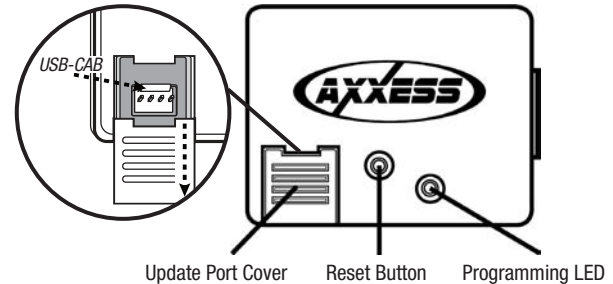
Note: To update the RFASWC, go to axsessinterfaces.com and download the WebXXpress Updater.

Overview

Introduction to the RFASWC Interface and Wiring Harness

On top of the RFASWC interface there are three points of interest:

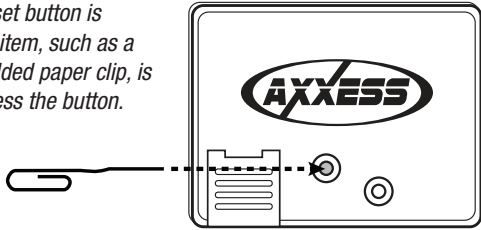
- 1) Programming LED • 2) Reset button • 3) Update port cover (slide to open)





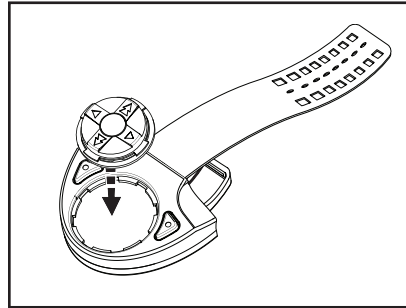
Overview

Note: The reset button is recessed. An item, such as a partially unfolded paper clip, is needed to press the button.

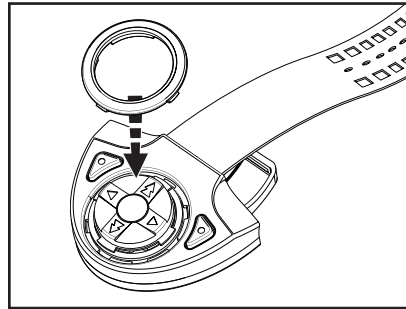


Mounting the RFA5WC Transmitter

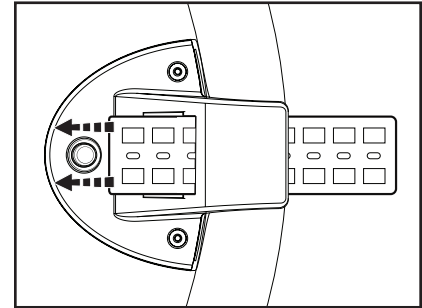
- 1) Place the button pad in the RFA5WC with the Volume Up arrow (▲) in the location where you want it to be. (Figure A)
- 2) Snap the trim ring onto the RFA5WC to secure the keypad in place. (Figure B)
- 3) Unscrew the strap cover from the RFA5WC.
- 4) Install the RFA5WC in the desired place on the steering wheel, wrapping the rubber strap around the steering wheel, and then through the slot. Hook it to the back side of the RFA5WC to secure it in place. (Figure C)
- 5) Cut off the unused portion of the rubber strap, and then screw the strap cover back onto the RFA5WC (do not over tighten the screw). (Figure D)



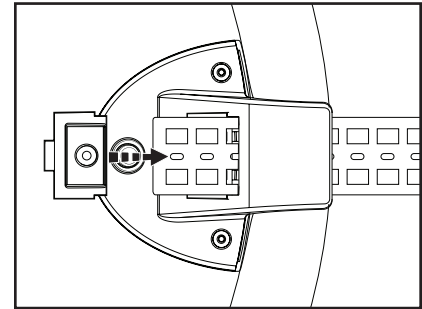
(Figure A)



(Figure B)



(Figure C)



(Figure D)



RFASWC Installation

Connections to be Made

Note: The **Black/Yellow** wire is the antenna for the RFASWC. Do not cut or lengthen this wire; leave it as-is.

Into vehicle

With the key in the off position:

- 1) Connect the **Black** wire of the RFASWC to the ground. You may use the same grounding point as the aftermarket radio; but it is highly recommended to ground the RFASWC to the chassis of the vehicle, by itself.
- 2) Connect the **Red** wire of the RFASWC to the 12-volt accessory wire.

Into radio

- 1) For the radios listed below, plug the included female 3.5mm adapter (with the **Brown** and **Brown/White** wires) into the male 3.5mm connector of the RFASWC harness.
 - a. **For Eclipse radios:** Connect the Eclipse steering wheel control wires (normally **Brown** and **Brown/Black**) to the **Brown** and **Brown/White** wires of the RFASWC. The **Brown** of the RFASWC goes to the **Brown/Black** of the Eclipse and **Brown/White** of the RFASWC goes to the **Brown** of the Eclipse.
 - b. **For Metra OE radios:** Connect the steering wheel control Key 1 wire (Gray) to the **Brown** wire of the RFASWC. Isolate and tape the **Brown/White** Wire, it will not be used.
 - c. **For Kenwood, or select JVC's with a Blue/Yellow steering wheel control wire:** Connect the Kenwood/JVC steering wheel control wire to the

Brown wire of the RFASWC. Isolate and tape off the **Brown/White** wire, it will not be used.

Note: Some of the newer Kenwood radios will auto detect as a JVC. If this is the case, either (a) use the included 12k ohm resistor in-line between the **Blue/Yellow** and **Brown** wire of the female 3.5mm jack only during programming (once programmed remove the resistor) or (b) you can manually set the radio type, refer to the [Changing Radio Type](#).

- d. **For XITE radios:** Connect the steering wheel control SWC-2 wire from the radio to the **Brown** wire of the RFASWC. Isolate and tape the **Brown/White** wire, it will not be used.
- 2) **For Parrot Asteroid Smart or Tablets:** Connect the 3.5mm jack of the RFASWC into the female 3.5mm jack of the AX-SWC-PARROT (sold separately). Then plug the 4-pin male harness into the corresponding steering wheel control female harness in the radio.

Note: AX-SWC-PARROT is required (sold separately) and the radio must be updated to rev. 2.1.4 or higher. Additionally, the RFASWC must be updated to the most recent software available.
- 3) **For all other radios:** Plug in the male 3.5mm connector of the RFASWC into the back of the aftermarket radio, designated for an external steering wheel control interface. Please refer to the aftermarket radios manual if in doubt where the 3.5mm connector of the RFASWC goes into.



RFASWC Installation

Setting up the RFASWC

- 1) Press the Red and Green buttons simultaneously for 5 seconds. Then press Volume Up for 2 seconds (this will orientate your button direction).
- 2) Turn the ignition on and press Volume Up on the RFASWC. This will “marry” the RFASWC to the interface.

Programming

- 1) Turn the ignition on; the LED on the RFASWC interface will start flashing rapidly, which means the RFASWC is looking for the radio.

Note: If the LED did not start flashing rapidly, press the reset button for 3 seconds, let go, and then proceed to Step 2.

- 2) After a few of seconds, the LED should stop flashing rapidly, and go out for approximately 2 seconds.
- 3) The LED will then flash up to 15 times, depending on what radio is connected to it.

Tip: Knowing this will help if you need to troubleshoot; refer to the [LED Feedback Legend](#).

- 4) This is the end of the auto detection stage. If the RFASWC programmed successfully, the LED will light up solid.

Remapping the SWC Buttons

Let's say you have the RFASWC programmed to your radio and you want to change the button assignment. For example, you would like Seek Up to be Mute. Follow the steps below to remap the buttons:

- 1) Make sure the RFASWC interface is visible, so you can see the LED flashes to confirm button recognition.

Tip: Turning off the radio is recommended.

- 2) Within the first 20 seconds of turning the ignition on, press and hold Volume Up on the RFASWC until the LED goes solid.
- 3) Release Volume Up and the LED will go out. Volume Up has now been programmed.
- 4) Refer to the [Button Assignment Legend](#) to reference the order in which the buttons need to be programmed.

Note: If the next function on the list is not on the RFASWC press Volume Up for 1 second, until the LED comes on, and then release Volume Up. This will tell the RFASWC that the function is not available and it will move onto the next function.

- 5) To complete the remapping process, press and hold Volume Up on the RFASWC until the LED goes out.



Remapping the SWC Buttons

Button Assignment Legend

1. Volume Up	10. Band
2. Volume Down	11. Play/Enter
3. Seek Up/Next	12. PTT (Push to Talk)*
4. Seek Down/Previous	13. On-Hook
5. Mode/Source	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

*** Only the following Pioneer models have the capability of retaining “Push to Talk” on the radio:** AVIC-Z110BT, AVIC-Z120BT, AVIC-Z130BT, AVIC-Z140BT, AVIC-X920BT, AVIC-X930BT, and AVIC-X940BT.

*** Update:** Some newer radios use this command to activate Android/Apple voice commands. Contact your radio vendor to see if your radios is applicable for this new feature.

Note: Not all radios will have all of these commands. Please refer to the radio owner’s manual or contact the radio vendor directly for specific commands recognized by that particular radio.

Changing Radio Type

- 1) Refer to the Radio Legend to know which radio number you would like to have programmed.
- 2) After 3 seconds of turning the key on, press and hold Volume Down on the RFASWC until the LED on the RFASWC interface goes solid.
- 3) Release Volume Down and the LED will go off, indicating that you are in the Changing Radio Type mode.
- 4) Press and hold Volume Up until the LED goes solid, then release. Repeat this step for the desired radio number you have selected.
- 5) Once the desired radio number has been selected, press and release Volume Down on the RFASWC; the LED will then go solid. The LED will remain on for approximately 3 seconds while it stores the new radio information.
- 6) Once the LED goes off the Changing Radio Type mode will end. You can now test the RFASWC.

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



Changing Radio Type

Radio Legend

- | | |
|-----------------------|----------------------|
| 1. Eclipse (Type 1) | 8. Visteon |
| 2. Kenwood | 9. Valor |
| 3. Clarion (Type 1) | 10. Clarion (Type 2) |
| 4. Sony and Dual | 11. Metra OE |
| 5. JVC | 12. Eclipse (Type 2) |
| 6. Pioneer and Jensen | 13. LG |
| 7. Alpine | 14. Parrot* |
| | 15. XITE |

* AX-SWC-PARROT is required (sold separately) and the radio must be updated to rev. 2.1.4 or higher. Additionally, the RFA SWC must be updated to the most recent software available.

Note: If you have a Clarion radio and the RFA SWC did not work try the other Clarion radio type, same for the Eclipse

Dual Assignment Instructions

Note: Seek Up and Seek Down are already set to 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 RFA SWC button, that you want to assign a long press function to, for about 10 seconds until the LED on the RFA SWC interface rapidly flashes. At this point release the button and the LED will go solid.
- 3) Press and release Volume Up the number of times corresponding to the new button number selected. The LED will blink rapidly when Volume Up is pressed and back to solid when released. Then go to the next step when Volume Up has been pressed the desired number of times.

Caution: If more than 10 seconds elapses between a Volume Up press, this procedure will abort, and the LED will go off.

- 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 1). The LED will now go off indicating it has been stored.

Tip: These steps must be repeated for each button you would like to assign dual purpose action to.

To reset a button back to its original use, repeat Step 1 and then press Volume Down. The LED will go off and the long press mapping for the button will be erased.



RFASWC

Dual Assignment Instructions

Dual Assignment Legend

Button Number	New Button Action
1	Not allowed
2	Not allowed
3	Seek Up/Next
4	Seek Down/Prev
5	Mode/Source
6	Mute
7	Preset Up
8	Preset Down
9	Power
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

- 1) Verify that you have 12-volt DC on the Red accessory wire of the RFASWC, using a multimeter.
- 2) Reconfirm that you have a good ground to the solid Black wire of the RFASWC.

Attention: Due to the nature of how microprocessors function, sometimes having the ground on the RFASWC shared with the radio, and/or using the factory ground in the vehicles wiring harness is not sufficient; and will cause problems. Attaching the **Black** wire of the RFASWC to a chassis ground, solely by itself, is highly recommended to avoid grounding issues. Ensure this wire is straight from the RFASWC without any extensions, and make sure a ring terminal (not supplied) is used, and crimped properly. This will alleviate any grounding issues that may keep the RFASWC from programming; most cases of the RFASWC not programming comes from the lack of this step being done.

- 3) Confirm that the 3.5mm jack on RFASWC is connected to your radio securely, and in the correct jack of the radio. Make sure it is not plugged into the Bluetooth mic. or AUX jack. If you are not sure what jack to connect to the radio, please contact the radio vendor.

Note: Some radios do not use a jack for the steering wheel controls, instead they use a wire. If so, reference Connections to be made, and ensure that you have the proper wire(s) connected.

- 4) If you are using a radio with a wire for connections instead of a jack, make sure you have also programmed the steering wheel controls to the radio following



Troubleshooting

the instructions included with the radio. Contact the radio vendor if you have any questions with this.

Note: *This does not apply to JVC and Kenwood radios.*

- 5) **For Kenwood radios**, make sure that the RFA5WC displays that a Kenwood radio is being used; reference to [Radio Legend](#). If the [Radio Legend](#) shows a JVC radio instead, then reference to the [Changing Radio Type](#) to force program the RFA5WC to display as a Kenwood.

Tip: *Some Kenwood radios have a feature called Remote Sensor. If your radio has this feature, ensure it is turned on. If it is on, turn it off, then back on.*

- 6) **For Alpine radios**, remove the 3.5mm jack from the radio, reprogram the RFA5WC with the jack removed, and then reconnect the 3.5mm jack back into the radio.

Tip: *Some Alpine radios have a feature that turns the remote to either the back, or the front. If you have one of these radios, ensure the sensor is on the rear setting. If the setting is on the rear, turn it to the front, then back to the rear.*

- 7) **For Pioneer and Sony radios**, if the RFA5WC works, but the buttons are out of order, or become out of order; this could be caused by the 3.5mm jack on the RFA5WC not seating properly, slipping out, or dirt on the contacts. Additionally, sometimes this can be intermittent. Remove any dirt on the contacts, reinsert the jack firmly into the radio, and then put a stress loop on the 3.5mm cable

to prevent this from happening in the future. Also, if anything is prohibiting the jack from seating all the way in, such as a heatsink, lightly trim some of the plastic from the 3.5mm jack as needed.

If you have performed any of the steps above, reset the RFA5WC by pressing the reset button on the RFA5WC for 3 seconds, release, then wait until the LED goes solid (approximately 20 seconds).

LED Feedback Legend

- | | |
|-----------------------|----------------------|
| 1. Eclipse (Type 1) | 8. Visteon |
| 2. Kenwood | 9. Valor |
| 3. Clarion (Type 1) | 10. Clarion (Type 2) |
| 4. Sony and Dual | 11. Metra OE |
| 5. JVC | 12. Eclipse (Type 2) |
| 6. Pioneer and Jensen | 13. LG |
| 7. Alpine | 14. Parrot |
| | 15. XITE |



INSTALLATION INSTRUCTIONS FOR PART RFASWC



IMPORTANT WARNING

This product includes instructions for installation which must be carefully followed. The instructions are worded in such a manner to assume that the installer is capable of completing these type of electronic installations. If you are unclear as to what you are instructed to do or believe that you do not understand the instructions so as to properly and safely complete the installation *you should consult a technician who does have this knowledge and understanding.*

Failure to follow these instructions carefully and to install the interface as described could cause harm to the vehicle or to safety systems on the vehicle. Interference with certain safety systems could cause harm to persons as well. If you have any questions in this regard please call the Help line or Metra at 1-800-221-0932 for assistance.

REV. 7/8/2014 INSTRFASWC



KNOWLEDGE IS POWER

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Metra recommends MECP certified technicians