Fits Mazda **Data Interface with SWC** 2007-2015

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

INTERFACE FEATURES

- Designed for both amplified and non-amplified models
- Provides NAV outputs (parking brake, reverse, speed sense)
- Retains audio controls on the steering wheel
- Retains balance and fade (excludes amplified models)
- Retains the ability to set the clock with a service harness
- Micro-B USB updatable

TOOLS REQUIRED

- Wire cutter • Crimp tool • Solder gun • Tape
- Connectors (example: butt-connectors, bell caps, etc.)

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   Product Info

INTERFACE COMPONENTS

- AXDIS-MZ1 interface
- AXDIS-MZ1 harness
- 16-pin harness with stripped leads
- Female 3.5mm connector with stripped leads

APPLICATIONS

MAZDA

CX-7	2007-2012
CX-9	2007-2010
CX-9	2013-2015

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 accessory before installing this device.

CONNECTIONS TO BE MADE

Attention! This interface will work with models that are either factory 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* an amplifier:

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

- 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 (8) wires, they will not be used in this application: **Blue/White**, **Brown**, **Green**, **Green/Black**, **Orange/White**, **Purple**, **Purple/Black**, **Red**.

From the AXDIS-MZ1 harness to the aftermarket radio:

- Connect the **Black** wire to the ground wire.
- Connect the **Yellow** wire to the battery wire.
- Connect the **Red** wire to the accessory wire.
- Connect the **Blue** wire to the power antenna wire.
- If the aftermarket radio has an illumination wire, connect the **Orange** wire to it.
- 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 speaker output.

Note: *The 2' long harness with a 24-pin connector is a service harness for setting the clock with the factory radio. Please run this harness to a location where it can be easily accessed, yet hidden.*

Continue to 3.5mm jack steering wheel control retention

Attention! This interface will work with models that are either factory 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* an amplifier:

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

- Connect the **Blue/White** wire to the amp 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.

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 (3) wires, they will not be used in this application: **Brown**, **Orange/White**, **Red**

From the AXDIS-MZ1 harness to the aftermarket radio:

- Connect the **Black** wire to the ground wire.
- Connect the **Yellow** wire to the battery wire.
- Connect the **Red** wire to the accessory wire.
- Connect the **Blue** wire to the power antenna wire.
- If the aftermarket radio has an illumination wire, connect the **Orange** wire to it.
- Tape off and disregard the following (4) wires, they will not be used in this application: **Green**, **Green/Black**, **Purple**, **Purple/Black**

Note: *The 2' long harness with a 24-pin connector is a service harness for setting the clock with the factory radio. Please run this harness to a location where it can be easily accessed, yet hidden.*

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-MZ1 harness. 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-MZ1 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.

With the key in the off position:

- Connect the AXDIS-MZ1 harness into the interface, and then to the wiring harness in the vehicle.

Attention! *Do not connect the AXDIS-MZ1 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.*

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.

1. Start the vehicle.

2. Connect the AXDIS-MZ1 harness to the wiring harness in the vehicle.

3. The LED will initially turn on solid **Green**, then turn off for a few seconds while it auto detects the radio installed.

4. 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.

5. After a couple seconds the LED will turn on solid **Red** while the interface auto detects the vehicle. This process should take 5 to 30 seconds.

6. Once the vehicle has been auto detected by the interface, the LED will turn on solid **Green** indicating programming was successful.

7. Test all functions of the installation for proper operation, before reassembling the dash.

8. If the interface fails to function, refer to Resetting the AXDIS-MZ1.

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

LED Feedback: The (24) **Red** LED flashes represent what brand radio the AXDIS-MZ1 believes it is connected to. Each flash represents a different radio manufacturer. For example, if you are installing a JVC radio, the AXDIS-MZ1 will flash (5) times. Following is a legend that dictates which manufacturer corresponds to which flash.

LED Feedback Legend

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

KEYNOTES

*Note: If the AXDIS-MZ1 flashes **Red** (7) times, and you do not have an Alpine radio connected to it, that means the AXDIS-MZ1 does not detect a radio connected 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 LED feedback comes back as showing as a JVC radio, change the radio type to a Kenwood. The following section on **Changing Radio Type** 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 initialized and programmed.

Changing radio type

If the LED flashes do not match the radio you have connected, you must manually program the AXDIS-MZ1 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-MZ1 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 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

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

Remapping the steering wheel control buttons

Let's say you have AXDIS-MZ1 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-MZ1 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.

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-MZ1 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-MZ1 goes out.

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/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.*

Dual assignment instructions (long button press)

The AXDIS-MZ1 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.*

STEERING WHEEL CONTROL SETTINGS *(CONT)*

Dual assignment legend

1. Not allowed
2. Not allowed
3. Seek-Up/Next
4. Seek-Down/Prev
5. Mode/Source
6. ATT/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 *

* Not applicable in this application

TROUBLESHOOTING

Resetting the AXDIS-MZ1

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 Interface" 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

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