INSTRUCTION MANUAL

30-2220
CD-X PnP Harness for Yamaha YXZ

AEM Performance Electronics
AEM Performance Electronics, 2205 126th Street Unit A, Hawthorne, CA 90250
Phone: (310) 484-2322 Fax: (310) 484-0152
http://www.aemelectronics.com
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Kit Contents

- CD PnP Yamaha YXZ Harness
- User Instructions

Important Application Notes

 Plug and Play for 2016+ Yamaha YXZ 1000R. AEM CSM-6 Module (30-2226) required for Fuel Level to display and is sold separately.

WARNING – If the CSM-6 (PN: 30-2226) is not being used the 12-Way DTM connector must be taped or sealed off to protect it from being exposed to the elements. Failure to do so may result in a shorted circuit, which may cause damage to the AEM Dash or OEM ECU.
Introduction

This CD-7 Plug and Play Kit for Yamaha YXZ vehicles consists of a plug and play harness and layouts designed specifically for the YXZ. The harness plugs into the vehicle’s OEM dash connector and requires no additional wiring in order to display all the channels transmitted over the vehicle’s factory CAN data stream. The CD Carbon Dashes can be paired with an AEM Vehicle Dynamics Module (VDM) or AEM GPS Module as well as other AEMnet enabled products or third party CAN devices to receive and display additional data.

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Harness Installation Instructions

Step 1.

Remove the following Qty 3 fasteners holding the OEM Dash cowl:
Step 2:
Once these have been removed, lift the cover off the dash assembly as shown. Note: Make sure to carefully release the tab circled in the image below. There is one on either side of the cover.

Step 3:
With the cover removed, we now have access to the factory dash harness. There is a rubber boot covering the connector to the back of the factory dash. Peel back the boot to expose the connector beneath.
Step 4:
With the boot peeled back, take a small flat blade screw driver and apply pressure to the lock tab on the connector to remove it.

Step 5:
After disconnecting the connector from the factory dash, connect the YXZ PnP connector on the AEM 30-2220 harness to the factory connector:
Step 6:
Route the harness to the area in which you will be installing your AEM Carbon Digital Dash.

Step 7:
Locate an appropriate mounting location for the CSM-6 module (if equipped) and connect to the 12-way DTM connector on the AEM 30-2220 harness. We recommend somewhere on the center console or under the factory dash hood using the supplied hardware or Velcro.
Step 8:
Connect the AEMNet and CAN 2 connectors on the AEM 30-2220 harness to the mating connectors on the harness supplied with your AEM Carbon Dash. Note: Switched +12v and Ground are supplied through the factory YXZ dash connector so there is no need for additional wiring.

Step 9:
Route dash harness to AEM Carbon Dash and plug in the 12-way DTM connector.

Step 10:
Reinstall factory dash cover. Installation is the reverse of removal. Depending on your AEM Dash mounting solution, you may remove the factory cluster or chose to leave it in place. Note: The factory cluster will no longer remain functional after AEM Dash installation.
Layout Installation Instructions

Launch Dash Design software and open appropriate Yamaha YXZ specific layout file. Go File>Open... and navigate to My Documents\AEM\DashDesign\Setups\App Specific\Yamaha YXZ. If folder can not be found please download the newest release of AEM dash design software. GPSi layout uses the dashes equipped with internal GPS for navigational use and includes a live compass, heading graphic, as well as latitude, longitude, and elevation data. The VDM layout offers the same features as the GPSi layout but uses the GPS data from the VDM (Vehicle Dynamics Module). Note: If you do not have a VDM or dash with internal GPS functionality, the aforementioned channels will not display.

With desired layout file open, connect the USB cable between the dash and PC. Connection status will change to green “AEM CD-7 connected”. To load layout onto dash go File>Upload to Display... or use F7 keyboard shortcut. Wait until layout is fully loaded – do not unplug USB cable until connection status displays green “Upload complete, OK to disconnect”. Layout is now loaded onto dash.

Displayable Channels

The following channels are captured from the vehicles CAN data stream and available for display:

- Engine Speed
- Vehicle Speed
- Coolant Temp (displayed numerically)
- Gear Position
- Neutral Indicator Lamp
- AWD/Diff Lock Status
- Check Engine Light
- Parking Brake Indicator Lamp
- MIL Code (displayed as text so no need to reference manual to determine MIL code)
- Fuel Level*

*Fuel Level data from CSM-6 module, fuel level will not display if CSM-6 module is not used.
• Clock – Uses dash’s internal clock. Configurable for 12 or 24 hour.

• Odometer – Non-resettable odometer. Increments in tenths of a mile. Based on speed from Vehicle Speed Sensor.

• Coolant Temp – Coolant temp from engine’s coolant temp sensor.

• Tach – Dynamic Needle Gauge. Floating needle over bitmap background image.

• Vehicle Speed – Vehicle speed in miles per hour from Vehicle Speed Sensor.

• Gear Position – Gear shifter position. R N 1 2 3 4 5.

• Fuel Level – Fuel level increments in percent. Gas icon turns red when fuel level <10%.

• AWD Status – Status of AWD engagement.
LEDs

- **Amber LED** – Controlled by output LED Left Amber which is configured as an Alarm. Alarm will trigger if either Warning FuelLevel, Warning ECUBatteryVoltage or Warning CoolantTemp 210 are on (=1). Each warning input channel can be individually adjusted to suit different triggering conditions.

- **Red LED** – Controlled by output LED Right Red which is configured as an Alarm. Alarm will trigger if IndicatorMILState is on (=1) or if Parking Brake is left on for more than 5 seconds with Vehicle Speed greater than 10mph.

**Additional Information**
- **Splash Screen** – Initial start-up time can be reduced by adjusting the Splash Screen on time. For quickest start up, set to zero.

- **Logging** – Logging channels have already been pre-selected and setup to start logging based on output named EngineRunning which is true (=1) when engine speed is >1. Logging-enable CD5 or CD7 required.
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Need additional help? Contact the AEM Performance Electronics tech department at 1-800-423-0046 or email us at tech@aemelectronics.com.