INSTRUCTION MANUAL

AEM
PERFORMANCE ELECTRONICS

30-2220
CD-X PnP Harness for Yamaha YXZ

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.


CSM-6 Connector

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.

Parts and Accessories (*Sold Separately*)	
AEM Vehicle Dynamics Module	30-2206
AEM GPS Module	30-2207
AEMnet Extension Cable 2 FT	30-3606
AEMnet Extension Cable 5 FT	30-3607
AEMnet Extension Cable 10 FT	30-3608
AEM Inline UEGO Controller	30-0310
AEM 22-Ch CAN Sensor Module	30-2212
AEM 6-Ch CAN Sensor Module	30-2226
AEM 8-Ch CAN EGT Module	30-2224
AEM 4 Port CAN Hub	30-2225

Harness Installation Instructions

Step 1.

Remove the following Qty 3 fasteners holding the OEM Dash cowl:
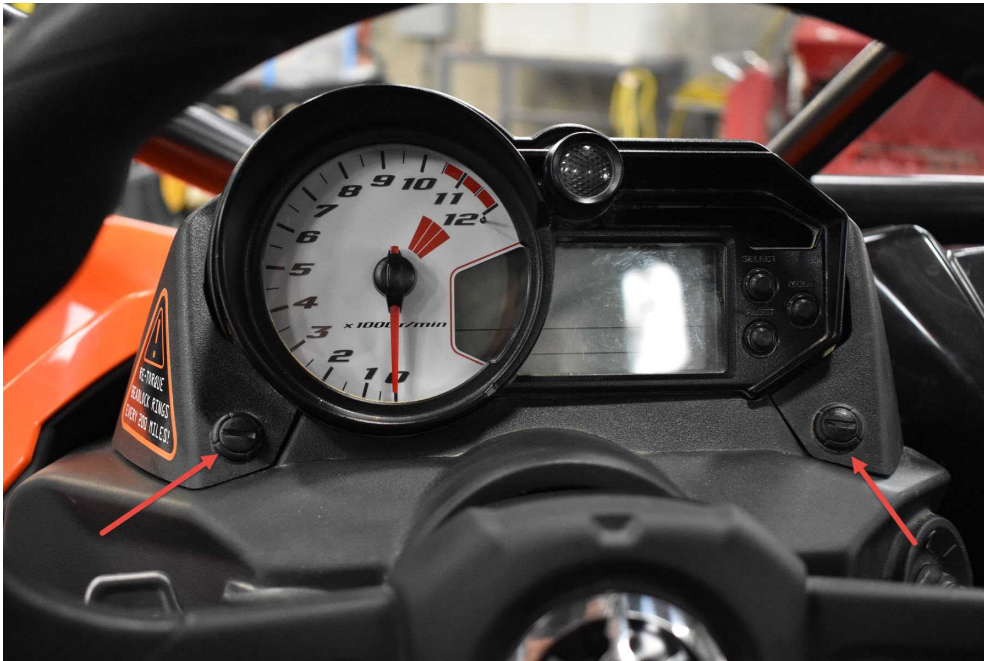
Step 2:

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.
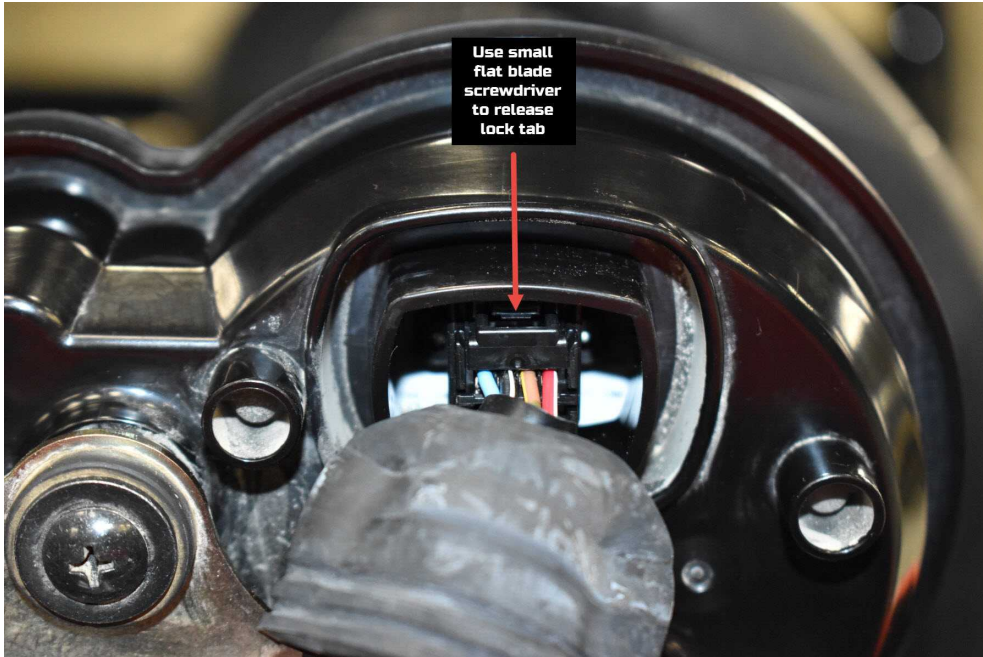

Step 3:

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:

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6 6

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Step 6:

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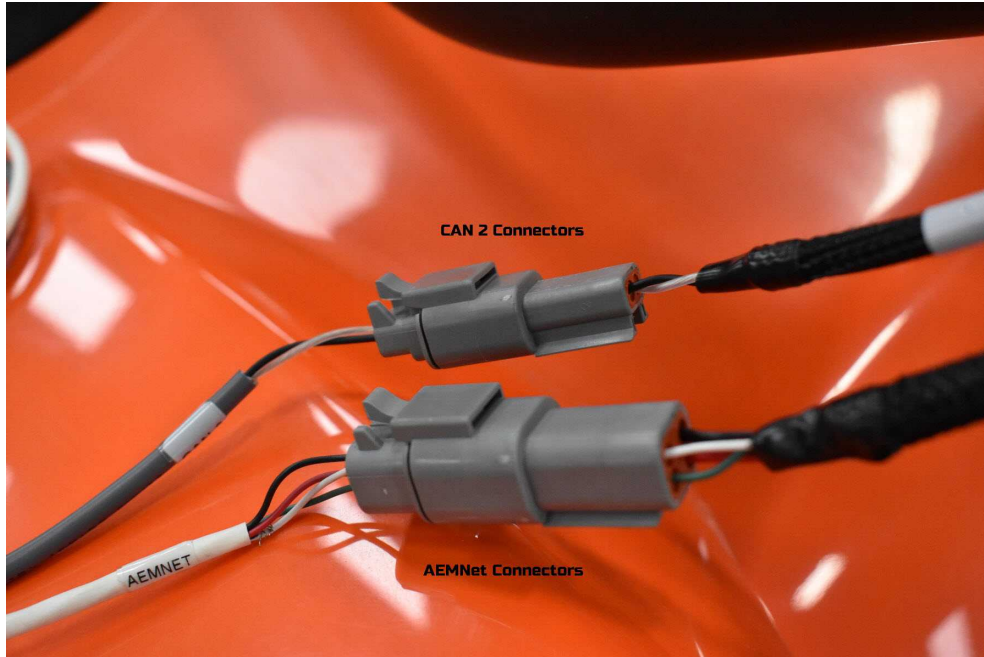
Step 9:
Route dash harness to AEM Carbon Dash and plug in the 12-way DTM connector.

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.

Layout Configuration

Page 1

- 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%.

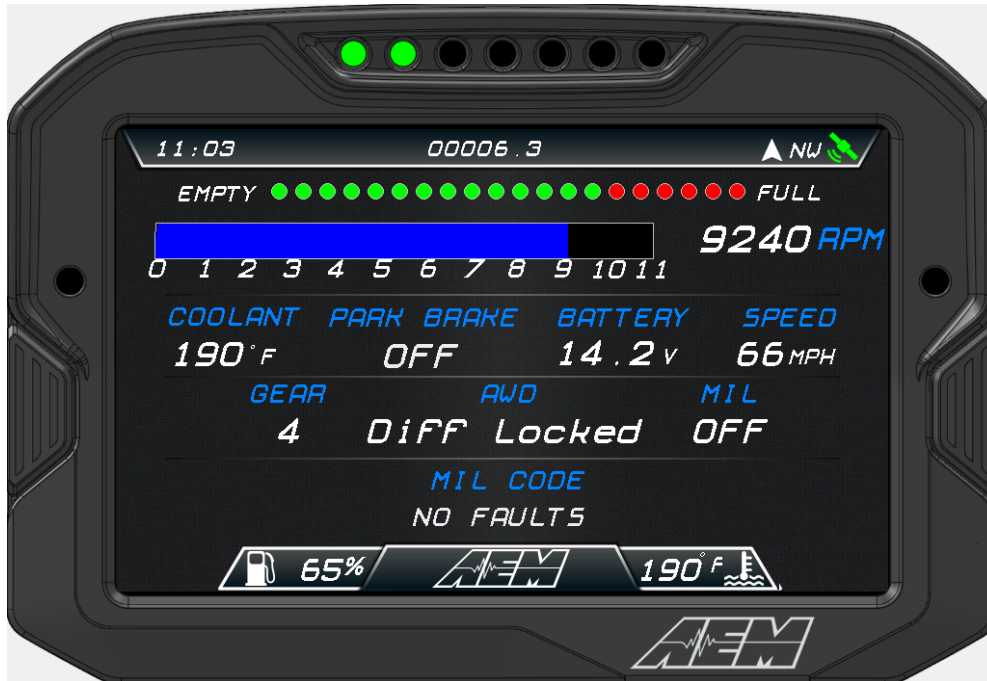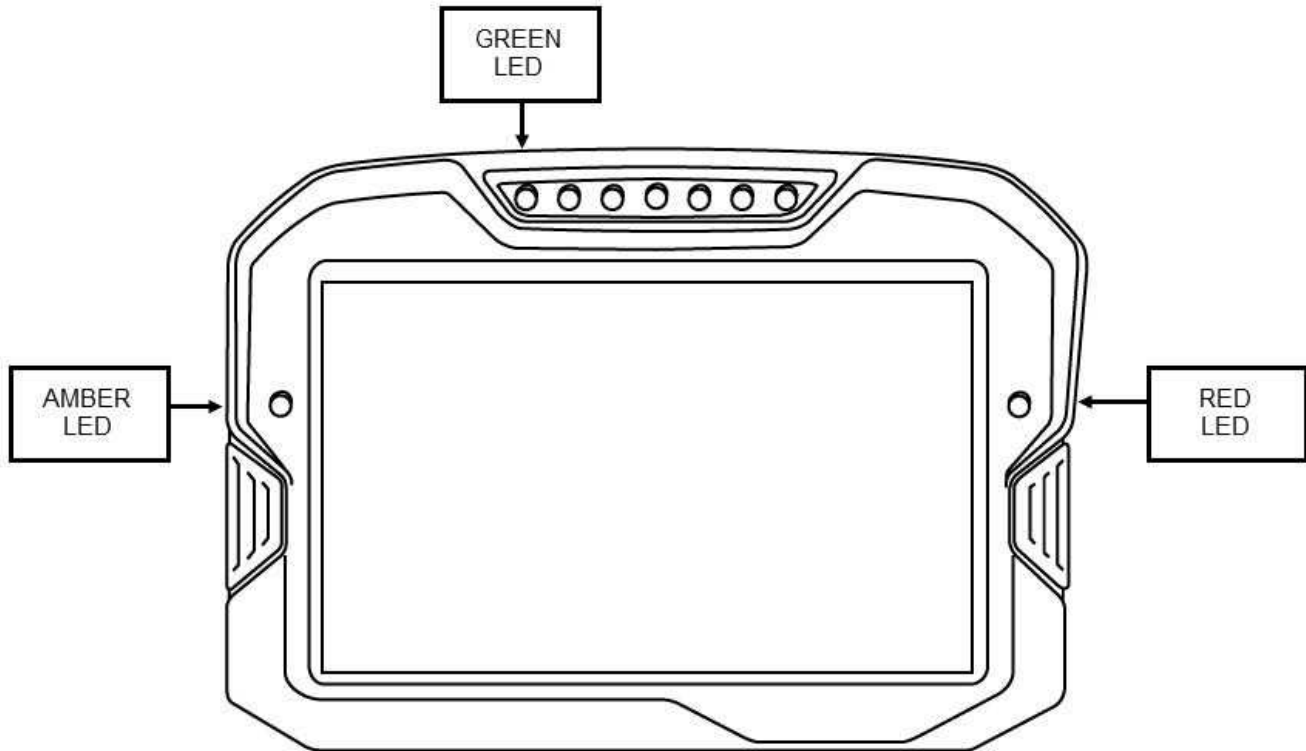- AWD Status – Status of AWD engagement.

Page 2 - Race Page

Page 3 - Adventurer Page

Page 4 - Diagnostics Page

LEDs

LED DESCRIPTIONS

- 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.

12 Month Limited Warranty

AEM Performance Electronics warrants to the consumer that all AEM ELECTRONICS products will be free from defects in material and workmanship for a period of twelve months from date of the original purchase. Products that fail within this 12-month warranty period will be repaired or replaced when determined by AEM that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement, at AEM's discretion, of the AEM Electronics part. In no event shall this warranty exceed the original purchase price of the AEM ELECTRONICS part nor shall AEM ELECTRONICS be responsible for special, incidental or consequential damages or cost incurred due to the failure of this product.

Warranty claims to AEM ELECTRONICS must be transportation prepaid and accompanied by dated proof of purchase. This warranty applies only to the original purchaser of product and is non-transferable. All implied warranties shall be limited in duration to the said 12-month warranty period. Improper use or installation, accident, abuse, unauthorized repairs or alterations voids this warranty.

AEM ELECTRONICS disclaims any liability for consequential damages due to breach of any written or implied warranty on all products manufactured by AEM ELECTRONICS.

Warranty returns will only be accepted by AEM ELECTRONICS when accompanied by a valid Return Merchandise Authorization (RMA) number. Product must be received by AEM ELECTRONICS within 30 days of the date the RMA is issued. UEGO oxygen sensors are considered wear items and are not covered under warranty.

Please note that before AEM ELECTRONICS can issue an RMA for any electronic product, it is first necessary for the installer or end user to contact the tech line at 1-800-423-0046 to discuss the problem. Most issues can be resolved over the phone. Under no circumstances should a system be returned, or an RMA requested before the above process transpires. AEM ELECTRONICS will not be responsible for products that are installed incorrectly, installed in a non-approved application, misused, or tampered with.

Fuel Pumps installed with incorrect polarity (+&- wires crossed) will not be warranted. Proper fuel filtration before and after the fuel pump are essential to fuel pump life. Any pump returned with contamination will not be warranted.

Any AEM ELECTRONICS product, excluding discontinued products, can be returned for repair if it is out of the warranty period. There is a minimum charge for inspection and diagnosis of AEM ELECTRONICS parts which are out of warranty. Parts used in the repair of AEM ELECTRONICS electronic components will be extra. AEM ELECTRONICS will provide an estimate of repairs and must receive written or electronic authorization before repairs are made to the product.

Need additional help? Contact the AEM Performance Electronics tech department at 1-800-423-0046 or email us at tech@aemelectronics.com.