

Part Number 35-9027
VHM XR1200 LCD Display

Congratulations, you have purchased the finest system available for your motorcycle. Your Vance & Hines Motorsports LCD Display is designed and crafted for maximum performance. Please follow the instructions below, check for missing or damaged parts and if you need any assistance please contact our technical support line (317) 852-9057.



PARTS INCLUDED IN KIT

	Part	Qty
<input type="checkbox"/>	Display	1
<input type="checkbox"/>	Backing Plate	1
<input type="checkbox"/>	M4 x 10mm Bolts	4
<input type="checkbox"/>	Button Assembly	1
<input type="checkbox"/>	Wiring Harness	1
<input type="checkbox"/>	Speed Sensor	1
<input type="checkbox"/>	Speed Sensor Bracket	1
<input type="checkbox"/>	Speed Sensor Nut & Bolt	1

REMOVE FOR INSTALLATION

- » Remove the tank cover. First remove the gas cap then loosen the four screws on the gas cap trim as shown in (Figure 1).
- » Pry off the tank cover by getting your fingers under the cover towards the front of the tank. Work your way back to the back to release the two tabs retaining the cover to the tank as shown in (Figure 2). Now remove the front bolt and nut going through the front of the tank and the bolt holding the rear of the tank as shown in (Figure 3 & 4).
- » Remove the two hoses near the gas cap as shown in (Figure 5). Release the fuel hose from the quick release fitting by pushing up on the chrome collar as shown in (Figure 6). Disconnect the clip holding up the throttle cables as shown in (Figure 7).
- » Disconnect the fuel pump/gauge connector and clip retaining the wire as shown in (Figure 8).
- » Remove the two torx screws holding the airbox to the tank as shown in (Figure 9).
- » Now you can lift the fuel tank off the bike and set aside.
- » Remove the stock gauges by disconnecting connector as shown in (Figure 7).
- » Remove the two bolts holding the gauges to the bar clamp as shown in (Figure 10).

Packaged By: _____



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6

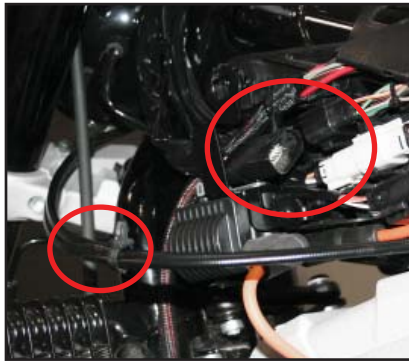


Figure 7



Figure 8



Figure 9



Figure 10

LCD DISPLAY INSTALLATION

- » Bolt the Dash Plate to the handlebar clamp using the stock bolts removed earlier and discard the washers, torque to factory specifications.
- » Bolt the VHM LCD Dash to the plate using the four M4 x 10mm bolts supplied.
- » Route the wires along where the stock dash wiring was and plug into the stock connector. Leave the 6 Pin and 2 Pin connector by the stock connector for now.

BUTTON INSTALLATION

- » Remove the torx bolt on the left handlebar cluster and insert through the button bracket and re-install as shown in (Figure 11). Route the wire down along the stock cluster wires and to the 2 pin connector left hanging earlier.



Figure 11

SPEED SENSOR/ RPM/ TEMP PICKUP HARNESS INSTALLATION

- » Connect the harness to the 6 pin connector left hanging earlier. Route temp sensor lead down along wiring running parallel with the oil cooler and attach to the lifter cover bolt nearest to the oil filter as shown in (Figure 12). NOTE: A ball end allen key with a wrench or set of pliers will greatly aid in tightening and loosening the bolt.
- » Remove battery cover by gently pulling on the top of the cover to free from rubber grommets.
- » Route the speed sensor connector along the factory main harness and to the battery compartment area as shown in (Figure 13).
- » Attach the speed sensor to the bracket supplies on the kit and attach to swing arm as shown in (Figure 14). Use a set of feeler gauges to achieve a air gap of .050" – .100" and be sure surface of sensor is parallel with the rotor surface and lined up with the rotor openings.
- » Route the speed sensor wire along the rear brake line and then in between the swing arm and swing arm pivot bolt. Then route into the battery box area and connect to dash harness connector. Re-install the battery cover.
- » Connect the yellow wire from harness to white/yellow wire on the front fuel injector with solder.
- » Zip all wires nice and neat placing them out of the way of obstruction
- » Install the tank in reverse order of removal. Install the tank cover, to achieve the correct alignment around the gas cap tighten the four gas cap trim screws first. Then snap the rear tubs into place. Do not force the rear tabs into place. Adjustment of the gas cap alignment may be needed if the tank cover is hesitant to snap into place.



Figure 12



Figure 13



Figure 14

SETTING THE LCD DISPLAY PARAMETERS

ATTENTION! We recommend that the following set-up procedures are done with the use of a Dynamometer for the best results.

- » To enter the set-up mode press and hold the black lap timer button, switch on the ignition, the lap-timer section of the LCD Display will countdown ie: 05, 04, 03, 02, 01, 00, when zero is reached release the button and start the engine. Do not switch off the ignition/engine during these set-up procedures unless instructed to do so. Each section to be programmed will flash on the display in turn.

SAVING MODE SELECTION: To save the parameters in each section and then move onto the next following programming section press and hold the black button, the lap-timer section of the LCD Display will countdown ie: 05, 04, 03, 02, 01, 00, when zero is reached release the button.

- » To change between KMH and MPH press the black button to select the desired indication. Now press and hold the black button... see SAVING MODE SELECTION

NOTE: The words **FUEL LOW** will now be displayed on the LCD Display and the word OFF will be displayed in the distance section.

- » To enable the low fuel level indication momentarily press the black button, the number 50 will now be displayed in the distance section, (this number indicates that the low fuel level warning will come on at 50 miles). To increase the distance the low fuel level warning indication comes on momentarily press the black button, the number 50 will change to 60 to indicate that the low fuel level warning will come on at 60 miles. You can repeat this procedure and raise the low fuel level indication up to 200 miles, after this OFF will be displayed indicating that the low fuel indication will be disabled, further momentary presses of the black button will start the sequence again. Now press and hold the black button... see SAVING MODE SELECTION

NOTE: When you first enter the next tach/RPM section check to see if the LCD Display is showing the correct tach/RPM before pressing the black button. Each time the black button is pressed this will half the number of RPM pulses being read by the LCD Display and the tach/RPM reading will change accordingly.

- » To adjust the tach/RPM reading to the correct engine idle RPM press the black button once at a time until the correct tach/RPM is being shown on the LCD Display. Note: zero button presses may be necessary. Now press and hold the black button... see SAVING MODE SELECTION

NOTE: In the next section the LCD Display will show double the actual engine RPM's in 'real time', this is done so the shiftlight indication point can be set without over revving the engine.

- » To set the approximate shiftlight indication point increase the engine RPM's until you see the desired shiftlight indication RPM number shown on the display, hold the engine RPM's steady and press the black button twice to set the indication point . * Note: after a second or two you will see the RPM on the display reduce again to double the 'real time' engine RPM. You can set this approximate shiftlight indication point as many times as necessary. Now press and hold the black button... see SAVING MODE SELECTION
- » To adjust the tach/RPM reading to the correct engine idle RPM press the black button once at a time until the correct

tacho/RPM is being shown on the LCD Display. Note: zero button presses may be necessary.

- » To fine tune the shiftlight indication point press the black button once at a time until the actual shiftlight indication point is reached. Note: You may need to re-enter set-up mode again if you made a mistake in the previous section 5, as this adjustment is plus or minus 500 RPM.
Now press and hold the black button... see SAVING MODE SELECTION

WARNING! The rear wheel/wheels will be rotating in each gear at speed during the following.

- » To set the speed indication you must operate the motorcycle at a known steady 30 mph/48 kmh. Once you have reached this speed press the black button. If you have made a mistake you can set the speed indication again during this section of the set-up procedure by repeating this process.
Now press and hold the black button... see SAVING MODE SELECTION
- » To set the gear indication each gear to be programmed will flash on the display. Select 1st gear, release the clutch, increase the engine RPM's to approximately half of the RPM range of the engine and hold the RPM's steady, then press the black button once to program 1st gear selection, number 2 will now flash, select 2nd gear, hold the engine RPM's steady again at half of the RPM range, then press the black button and continue until you have reached and programmed the gearboxes top gear. Now allow the engine to idle and select neutral.
Now press and hold the black button... see SAVING MODE SELECTION
- » To change between Fahrenheit and Centigrade readings press the black button to select the desired indication.
Now press and hold the black button... see SAVING MODE SELECTION
- » To set the oil pressure loss indication parameters press the black button.
Now press and hold the black button... see SAVING MODE SELECTION
- » To set the backlight color parameters press the black button to toggle between **RED** and **BLUE** backlighting.

To save the backlight color parameters and authenticate the entire LCD Display parameters press and hold the black button. Once the lap-timer section of the LCD Display has counted down again ie: 05, 04, 03, 02, 01, 00 the LCD Display will be programmed and will be in normal run mode.

* Press the black button only once to set the indication point (on units purchased before 2009).

FINE TUNING THE LCD DISPLAY PARAMETERS

If you wish to make minor adjustments to any of the LCD Display parameters this can be done by entering the set-up mode again. You can re-adjust any of the settings within each section of the LCD Display mentioned in **SETTING THE LCD DISPLAY PARAMETERS**.

- » To skip a section and move straight onto the next section without altering the parameters in the indicated flashing section press and hold the black button, the lap-timer section of the LCD Display will countdown ie: 05, 04, 03, 02, 01, 00, when zero is reached release the button and you will move to the next section without making any alterations. This sequence can be repeated until you reach a section of the LCD Display parameters you wish to adjust.
- » Once in the section you wish to adjust carry out the new setting as described in SETTING THE LCD DISPLAY PARAMETERS and save the new setting by pressing and holding the black button, then the lap-timer section of the Micro Dash will countdown ie: 05, 04, 03, 02, 01, 00, when zero is reached release the button. You can now continue to make an adjustment in the next section or simply switch off the ignition/engine to save and authenticate the new settings.

USING THE TRIP METER

- » To enter the trip meter press and hold the black button, switch on the ignition, wait until LCD Display countdown to 03, ie; 05, 04, 03, then release black button at this point. To reset the trip meter press and hold the black button, the lap-timer section of the LCD Display will countdown ie: 05, 04, 03, 02, 01, 00, when zero is reached release the button. If you wish the LCD Display to run in trip meter mode instead of total distance mode press the black button until the lap-timer section of the LCD Display counts down to number 03 then release the black button at this point. **DISTANCE A** will now be displayed to indicate trip distance display mode. You can toggle between trip distance and total distance

modes pressing black button until dash countdown to 03, ie; 05, 04, 03, then release black button. To exit the trip meter memory simply switch off the engine.

RESETTING THE LOW FUEL INDICATION

ATTENTION! For best results the low fuel indication must be reset after refueling (full tank).

- » To reset the low fuel indication (with the ignition on and not in set-up mode) press and hold the black button, the lap-timer section of the LCD Display will countdown ie: 05, 04, 03, 02, 01, 00, after 5 seconds **FUEL RESET** will be displayed in the left hand side of the dash, at this point release the black button to reset the low fuel indication.

DIMMING THE SHIFTLIGHTS

- » At any time during normal vehicle operation (with the ignition on and not in step-up mode) the shiftlight array can be dimmed for poor light conditions and night time use. Press and hold the black button until the lap timer section of the LCD Display counts down to 03, ie; 05, 04, 03, then release the black button at this point. The new shiftlight illumination intensity will now be displayed. You can toggle between SHIFTLIGHTS HIGH and SHIFTLIGHTS LOW by repeating this procedure.

OPERATING THE LAP TIMER

- » When you reach a point on the circuit like the start/finish line simply press the black button to register each lap time. Each Lap time will be displayed momentarily for 3 seconds for on-the-fly viewing. Once you have finished your race or session switch off the ignition.
- » To view the stored lap times switch the ignition on, then press and hold the black button, the display will countdown ie: 05, 04, 03, 02, 01, 00, when zero is reached release the button, the lap number will be shown above each lap time. To view the next lap time press the black button once and so on for each lap time.
- » To erase stored laps in the memory press and hold the black button once more until the display counts down ie: 05, 04, 03, 02, 01, 00, when zero is reached release the button, the lap timer display will now flash 5 times and the memory will have been erased. Note: if you do not wish to erase the memory after you have finished viewing the stored lap times simply switch off the ignition. The LCD Display will now be ready to commence with new sessions.
- » Further consecutive lap times/sessions will be added to the end of the previous stored sessions. A maximum of 99 laps can be stored in the memory. Note: If FULL is displayed in the lap timer section then the memory will need to be erased to store any further lap times.

NOTE: You can switch between the lap-timer and fuel mileage indication feature of the LCD Display by following the next procedure.

- » To enable/disable the lap-timer function, switch the ignition on, then press and hold the black button, the display will countdown ie: 05, 04, 03, 02, 01, 00, when zero is reached release the button, any stored lap times may be displayed. To move to the enable/disable feature press and hold the black button once more until the display counts down to 03, ie: 05, 04, 03, release the black button, the current state of the lap-timer/fuel mileage indication will be displayed, enter ON or OFF. Each momentary press of the black button will toggle between on and off. Once you have chosen the desired setting simply switch off the ignition.

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