Dakota Digital MLX-8414

Dakota Digital MLX-8414 Digital Gauge System User Manual

For 2014 and Newer Harley Davidson Touring Models

1. Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your Dakota Digital MLX-8414 Digital Gauge System. This system is designed as a direct plug-in replacement for the factory gauges on compatible Harley Davidson Touring models.

2. What's in the Box

Upon unpacking, verify that the following components are included:

- Dakota Digital MLX-8414 Digital Gauge System
- Oil Temperature Sender
- Instruction Manual

3. Key Features

The MLX-8414 system offers advanced functionality and customization:

- **Display Customization:** Independently select from 31 illumination colors for main gauge readings, message center information, bar-graph readouts, and gauge labels. Twelve preset themes are also available.
- **Automatic Brightness Adjustment:** The display automatically dims for night riding and brightens for optimal visibility in direct sunlight.
- **Speedometer Calibration:** Calibrate the speedometer for custom gearing and select between MPH or km/H.
- **Programmable Gauges:** The two smaller gauges can be configured to display various information, including oil temperature, fuel level, and voltage. Optional MBM upgrade modules allow for boost, air suspension pressure, and compass heading.
- **Bluetooth Connectivity:** Connect to the available mobile app (Android and Apple iOS) for setup and customization via smartphone or tablet.

- **Comprehensive Readouts:** Includes a 250 MPH (400 km/h) speedometer, tachometer with bar graph, oil temperature, volts, fuel level bar graph, gear position, clock, odometer, A & B trip meters, service meter, tire pressure monitoring (on factory-equipped models), and performance meters (1/4 mile speed/time, 0-60 time, high speed/RPM recall).
- **Integrated Indicators:** Displays for turn signals, high beam, cruise control (on/engaged), check engine, security, ABS, and reverse/parking brake (for Tri-Glide applications).
- **OEM Compatibility:** Utilizes the stock chrome trim rings from the original equipment manufacturer (OEM) gauges.

4. Compatibility

This digital gauge system is compatible with all 2014 and newer Harley Davidson Street Glide, Road Glide, Ultra Classic, Tri-Glide, and CVO touring models.

5. Setup and Installation

The MLX-8414 system is designed for direct plug-in installation. Refer to the included instruction book for detailed, step-by-step installation procedures.

5.1. General Installation Notes

- Ensure the motorcycle's power is disconnected before beginning installation.
- The oil temperature sender requires installation, often replacing the oil drain plug. Ensure proper routing of the sensor wire.
- The system utilizes existing OEM chrome trim rings.

5.2. Initial Configuration

After physical installation, download the Dakota Digital Orange App from your device's app store. Enable Bluetooth on your device to connect to the MLX-8414 system for initial setup and customization. Odometer readings may need to be transferred using the Trip Function button programming method if not automatically recognized by the app.



Image 1: The Dakota Digital MLX-8414 gauge system display. The left gauge shows 'OIL 235 F'. The central main display shows '0 MPH', '6 GEAR', '12:01' (time), and '3885 ODO MI'. Above the MPH display is a fuel level bar graph. The right central display shows '2000 RPM', '3500 HIGH RPM', and '3860.3 TRIP A'. Above the RPM display is a gear indicator bar graph. The rightmost gauge shows 'VOLT 13.8 V'.

6. Operating Instructions

6.1. Display Customization

Use the mobile app or the gauge system's interface to select color themes and configure the information displayed on each gauge. You can save up to three custom themes.

6.2. Clock Synchronization

The gauge system's clock synchronizes with the motorcycle's Boom Box settings. Ensure the Daylight Saving Time (DST) option is disabled in the Boom Box settings for accurate time display on the gauges. Manual adjustments in the Boom Box will reflect on the MLX-8414.

6.3. Fuel Level Learning

To ensure accurate Distance To Empty (DTE) calculations, follow the instructions in the manual to allow the system to 'learn' your fuel tank's characteristics. It is recommended to perform this learning process multiple times for optimal accuracy.

6.4. Indicator Lights

Note that the cruise control standby indicator is red, changing to green when engaged. The high beam indicator is blue. The check engine light is red.

7. Maintenance

Keep the gauge display clean using a soft, damp cloth. Avoid abrasive cleaners or solvents that could damage the screen. Regularly check all connections for security.

8. Troubleshooting

8.1. Error Codes

If error codes appear after installation (e.g., P0522 for oil pressure sensor or U0156 for lost communication), it is common for these to trigger when changing gauges. Clear the codes and ride the motorcycle to see if they return. If codes persist, consult the Dakota Digital support resources.

8.2. Display Visibility with Polarized Sunglasses

Some users may experience reduced visibility of the outer gauges when wearing polarized sunglasses. The main speedometer and tachometer displays are generally unaffected. If this is an issue, consider using non-polarized lenses or adjusting display colors for better contrast.

8.3. Daytime Visibility

In bright daylight, especially in sunny climates, some color schemes may be difficult to see. Experiment with different color options, such as a black background with white numbers, to optimize visibility. The automatic brightness adjustment helps, but personal preference and environmental conditions may require manual adjustments to color themes.

9. Specifications

Attribute	Detail
Brand	Dakota Digital
Model	MLX-8414
Material	Plastic
Item Dimensions (L x W x H)	20 x 6.5 x 4 inches
Item Weight	3 Pounds

UPC	647095946259
Manufacturer	Dakota Digital

10. Warranty and Support

For warranty information, technical support, or further assistance, please refer to the official Dakota Digital website or contact their customer service department directly. Contact details are typically provided in the product packaging or on the manufacturer's website.

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Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question