

## TKNSHYDW BM008

# TKNSHYDW 11-inch LCD Digital Instrument Cluster BM008 User Manual

For BMW 3 Series E90/E91/E92/E93 (2005-2012)

## 1. INTRODUCTION

This user manual provides detailed instructions for the installation, operation, and maintenance of your TKNSHYDW 11-inch LCD Digital Instrument Cluster, model BM008. This product is designed to upgrade the dashboard experience for compatible BMW 3 Series vehicles. Please read this manual thoroughly before installation and use to ensure proper function and safety.

## 2. PRODUCT OVERVIEW AND FEATURES

The TKNSHYDW BM008 is an advanced 11-inch LCD digital instrument cluster designed to replace the original dashboard in compatible BMW 3 Series models. It integrates modern display technology with essential vehicle information, enhancing the driving experience.

### Key Features:

- High-Definition Display:** Features a 1920x720 resolution blue light anti-glare screen for clear visibility in various lighting conditions.
- Seamless Integration:** Designed for plug-and-play installation without requiring complex coding or programming.
- Comprehensive Data Display:** Retains and displays original vehicle information including mileage, fuel level, speed, and fuel consumption.
- Dual Chip System:** Ensures stable performance and reliable data processing across various operating conditions (-50 to 70 degrees Celsius).
- Steering Wheel Control Support:** Compatible with existing steering wheel controls for convenient operation.
- Multiple UI Styles:** Offers four distinct user interface themes (Simple, Track, Technology, Comfort) to personalize the display.
- Enhanced Safety Features:** Includes visual reminders for seat belts, open doors, and warning lights.



Figure 2.1: The TKNSHYDW 11-inch LCD Digital Instrument Cluster in operation, displaying key vehicle data such as speed, RPM, and a visual representation of the car's status, including an open door warning.

### 3. COMPATIBILITY

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This digital instrument cluster is compatible with the following BMW 3 Series models:

- BMW 3 Series E90 (2005-2012)
- BMW 3 Series E91 (2005-2012)
- BMW 3 Series E92 (2005-2012)
- BMW 3 Series E93 (2005-2012)

It supports vehicles equipped with CCC, CIC systems, and original cars without a screen.

### 4. INSTALLATION (SETUP)

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The TKNSHYDW BM008 is designed for a plug-and-play installation. No coding or programming is required for basic functionality. However, professional installation is highly recommended to ensure correct wiring and secure mounting, preventing potential damage to the vehicle's electrical system or the unit itself.

#### Installation Notes:

- Ensure the vehicle's ignition is off and the battery is disconnected before beginning installation.
- Carefully remove the original instrument cluster according to your vehicle's service manual.
- Connect the provided wiring harness to the new digital instrument cluster and the vehicle's existing connectors.
- Mount the new digital instrument cluster securely in the dashboard opening.
- Reconnect the battery and test all functions before fully reassembling the dashboard trim.

## ■ Installation effect

New appearance and feature upgrades



## 3 Series E90/E91/E92 (2005-2012)

Figure 4.1: This visual comparison demonstrates the 'Before' and 'After' installation effect, showcasing the upgrade from the original analog BMW 3 Series E90/E91/E92 (2005-2012) instrument cluster to the modern 11-inch LCD Digital Instrument Cluster.

## 5. OPERATION

The digital instrument cluster displays various vehicle status information and allows for customization through its settings menu.

### 5.1 Displayed Information

The cluster provides real-time data, including:

- Speed (km/h or mph)
- Engine RPM
- Fuel Level and Consumption (LPK, Efficient Dynamics)
- Odometer and Trip Mileage
- Door Opening/Closing Reminders
- Tire Pressure (kPa) and Tire Angle

- Warning Lights and Vehicle Status

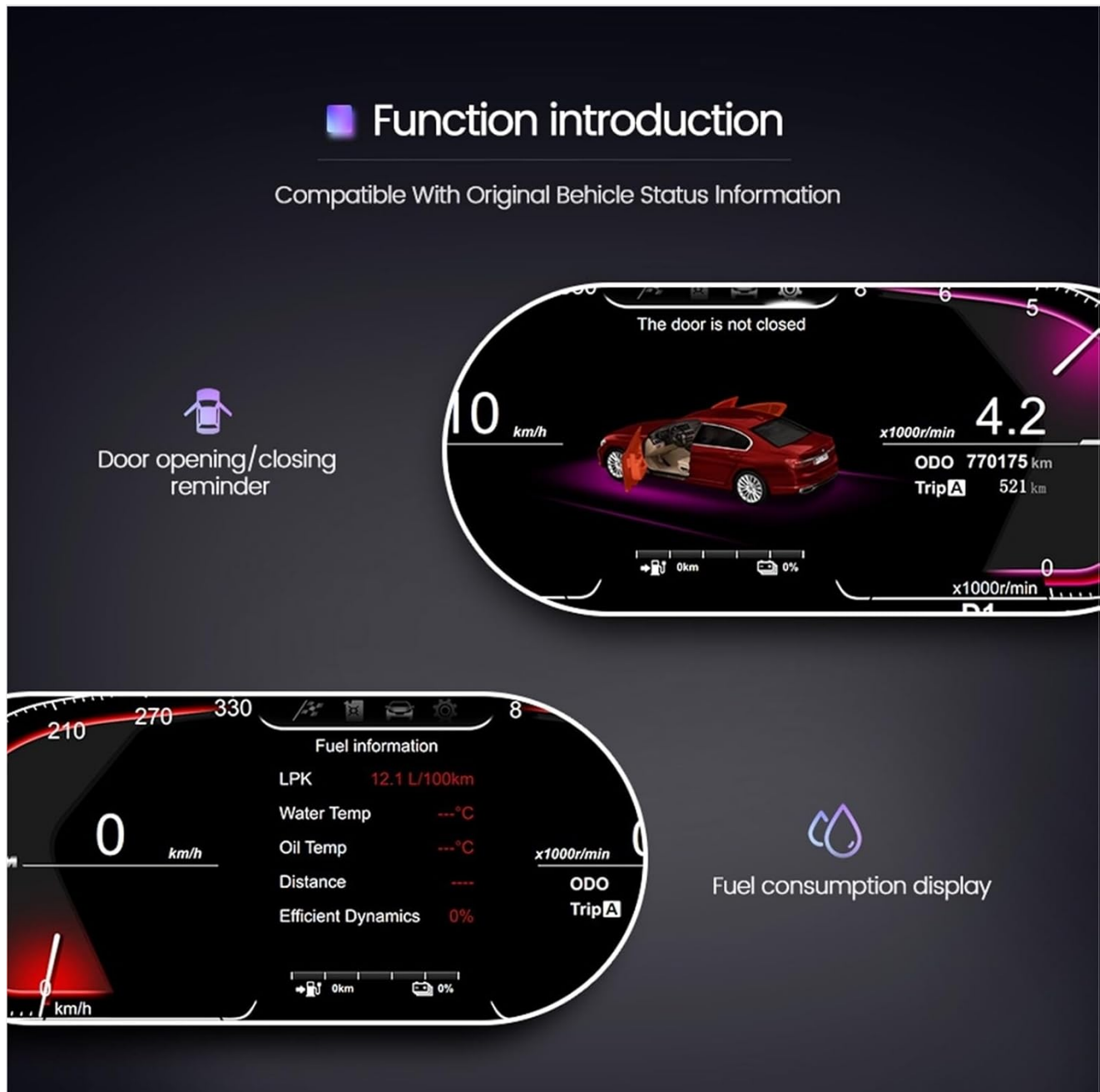

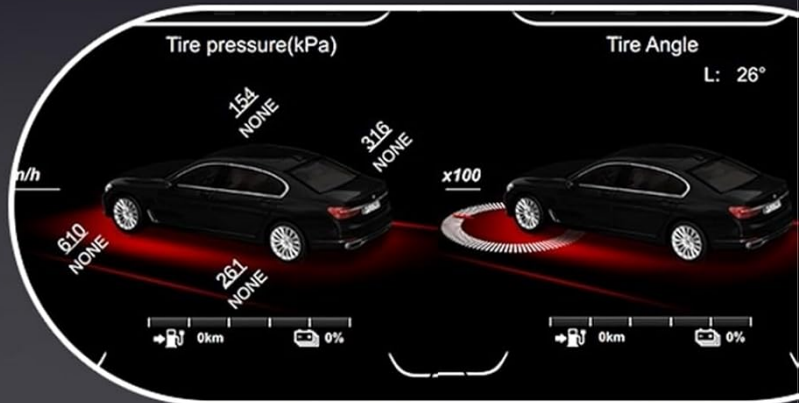


Figure 5.1: An illustration of the instrument cluster's function to display a door opening/closing reminder and comprehensive fuel information, including fuel consumption (LPK) and efficient dynamics.

## Function introduction

Compatible With Original Vehicle Status Information

  
Tire pressure and  
angle display



  
System settings  


Figure 5.2: This image highlights the instrument cluster's ability to display tire pressure (kPa) and tire angle, alongside an interface for accessing system settings.

## 5.2 System Settings

Access the system settings to customize various display parameters:

- **Brightness:** Adjust Day Brightness and Night Brightness levels.
- **Color:** Select preferred display color schemes.
- **Driving Mode:** Choose between different driving modes (e.g., ECO PRO, SPORT+).
- **Language:** Select the display language.
- **Date/Time:** Set the current date and time.



Figure 5.3: The image illustrates the system settings menu on the digital instrument cluster, allowing users to adjust day and night brightness, display color, and select driving modes like ECO PRO.

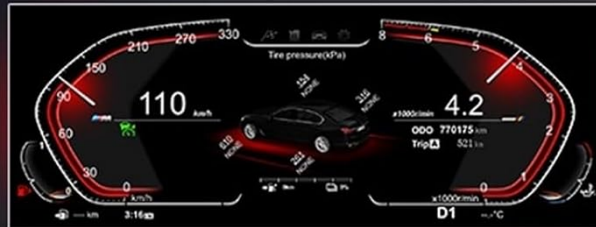
### 5.3 UI Style Switching

The instrument cluster offers four distinct user interface styles to match your preference:

- **Simple Mode:** A clean and minimalist display.
- **Track Mode:** Optimized for performance-oriented driving, often highlighting RPM and speed.
- **Technology Mode:** Features a modern, data-rich layout.
- **Comfort Mode:** Designed for a relaxed and intuitive information presentation.

## ■ Four UI Style Switching

You can choose the theme mode you like, each theme has a variety of colors to choose from



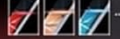
■ Simple mode



■ Track mode



■ Technology mode



■ Comfort mode

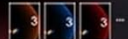


Figure 5.4: This graphic presents the four distinct user interface styles that can be switched on the digital instrument cluster: Simple mode, Track mode, Technology mode, and Comfort mode, each offering a unique visual layout for vehicle information.

## 6. MAINTENANCE

To ensure the longevity and optimal performance of your digital instrument cluster, follow these maintenance guidelines:

- **Cleaning:** Use a soft, lint-free cloth slightly dampened with water or a screen-safe cleaner to wipe the display. Avoid abrasive materials or harsh chemicals.
- **Temperature:** Avoid exposing the unit to extreme temperatures outside its operating range (-50 to 70 degrees Celsius).
- **Protection:** Do not apply excessive force to the screen or expose it to sharp objects.
- **Software Updates:** Check the manufacturer's website periodically for any available software updates to ensure the best performance and compatibility.

## 7. TROUBLESHOOTING

If you encounter issues with your digital instrument cluster, consider the following basic troubleshooting steps:

- **No Power/Display:** Check all connections to ensure they are secure. Verify the vehicle's battery is fully charged.
- **Incorrect Readings:** Ensure the unit is correctly configured for your vehicle model. If issues persist, a factory reset (if available in settings) might resolve minor software glitches.
- **Intermittent Functionality:** This could indicate a loose connection or a power supply issue. Recheck wiring.
- **Display Glitches:** Try restarting the vehicle. If the problem persists, consult a professional installer or contact customer support.

For complex issues, it is recommended to seek assistance from a qualified automotive technician.

## 8. SPECIFICATIONS

### Product Name

LCD Digital Dashboard

### Operating System

Linux System

### Screen Size

11.0 inch

### Resolution

1920\*720

### Screen Type

Blue light anti-glare screen

### Language

Chinese, English, Japanese, Russian, Korean, Arabic, Ukrainian, Turkish, etc.

### Driving Safety

Seat Belt Reminder / Reminder To Open The Door / Warning Light / Trip Mileage / Vehicle Information / Fuel Consumption information

Figure 8.1: This graphic provides a summary of the product's key specifications, including product name (LCD Digital Dashboard), operating system (Linux), screen size (11.0 inch), resolution (1920\*720), screen type (Blue light anti-glare), supported languages, and driving safety features.

Feature	Detail
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Product Name	LCD Digital Dashboard
Model	BM008
Operating System	Linux System
Screen Size	11.0 inch
Resolution	1920*720
Screen Type	Blue light anti-glare screen
Supported Languages	Chinese, English, Japanese, Russian, Korean, Arabic, Ukrainian, Turkish, etc.
Material Type	Metal and Plastic
Item Weight	50 Grams
Driving Safety Features	Seat Belt Reminder, Door Open Reminder, Warning Light, Trip Mileage, Vehicle Information, Fuel Consumption Information