FitSpark HW-3

FitSpark HW-3 Dash Cam Hardwire Kit User Manual

Model: HW-3

1. Introduction

The FitSpark HW-3 Dash Cam Hardwire Kit provides a reliable power connection for your FitSpark dash camera, enabling advanced features such as 24-hour parking monitoring. This kit ensures your dash camera receives continuous power directly from your vehicle's battery, even when the ignition is off, while protecting against battery drain with its integrated low voltage protection.

2. Package Contents

- 1 x FitSpark HW-3 Hardwire Kit
- 1 x User Manual

3. Key Features

- **24-Hour Parking Monitoring:** Provides continuous power to your dash camera for surveillance when the vehicle is parked.
- **Voltage Selector:** Allows selection of low voltage cut-off thresholds (11.8V/12.0V/12.2V/12.4V for 12V systems; 23.6V/24.0V/24.4V/24.8V for 24V systems) to prevent vehicle battery drain.
- **Low Voltage Protection:** Automatically cuts power to the dash camera if the vehicle's battery voltage drops below the selected threshold.
- **Wide Compatibility:** Designed for use with all FitSpark dash cameras.
- **USB-C Output:** Standard USB-C connector for dash camera power input.

4. Safety Information

- Installation should ideally be performed by a qualified professional to avoid damage to your vehicle's electrical system.
- Ensure the vehicle's ignition is off and the battery is disconnected before beginning installation.
- Always use appropriate fuse taps and connect to the correct fuse types (ACC for switched power, BATT for

constant power).

- Do not modify the hardwire kit. Unauthorized modifications may void the warranty and pose safety risks.
- Keep the hardwire kit away from water and extreme temperatures.

5. Setup and Installation

Follow these steps carefully to install your FitSpark HW-3 Hardwire Kit:

5.1 Kit Components Overview

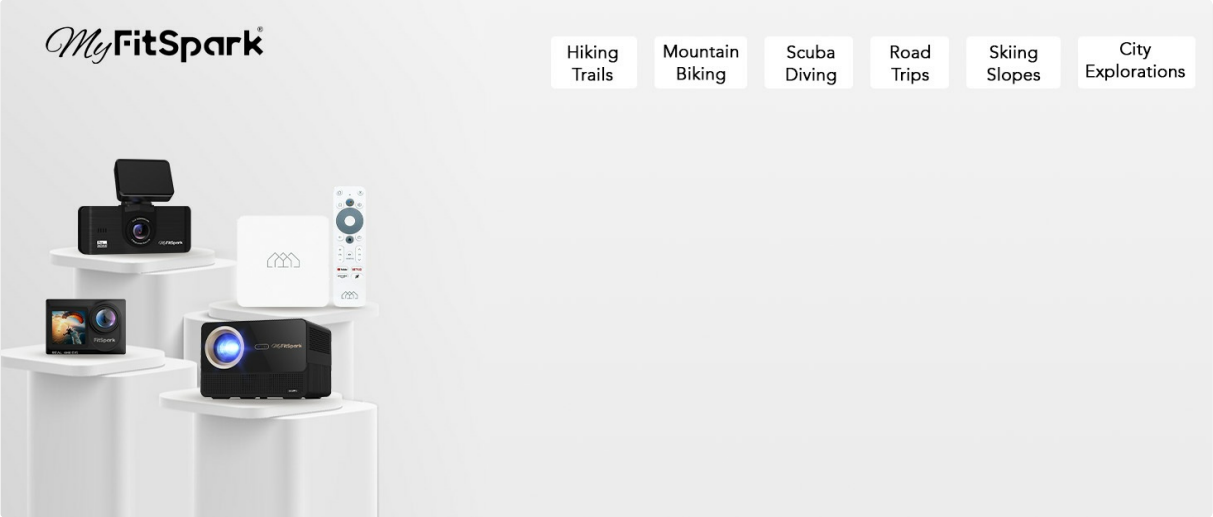

Figure 1: Diagram showing the components of the HW-3 Hardwire Kit, including Battery (+), ACC, Ground wires, adapters, hardwire box, ferrite ring core, and USB-C plug, with overall dimensions.

The diagram above illustrates the main components of the hardwire kit and their approximate lengths. The kit includes three main wires for connection: Red (Battery +), Yellow (ACC), and Black (Ground), leading to the hardwire box and then to the USB-C plug for your dash camera.

5.2 Identifying Wires

- **Red Wire (Battery +):** Connects to a constant power source in your vehicle's fuse box (always on, even when the ignition is off). This powers the parking monitoring feature.
- **Yellow Wire (ACC):** Connects to an accessory power source in your vehicle's fuse box (only on when the ignition is on). This tells the dash cam when the vehicle is running.
- **Black Wire (Ground):** Connects to a metal part of the vehicle's chassis for grounding.

5.3 Voltage Selector Setting

Figure 2: The hardwire box with the voltage selector switch. This switch allows you to choose the low voltage cut-off threshold for your vehicle's battery.

Before installation, set the desired low voltage cut-off threshold using the switch on the hardwire box. This prevents your vehicle's battery from draining completely. Refer to the table below for voltage options:

Input Voltage	Low Voltage Cut-off (12V System)	Low Voltage Cut-off (24V System)
12V/24V	11.8V, 12.0V, 12.2V, 12.4V	23.6V, 24.0V, 24.4V, 24.8V

Choose a setting that balances parking monitoring duration with your vehicle's battery health. A higher voltage cut-off provides more battery protection but may reduce parking monitoring time.

5.4 Installation Steps

1. **Locate Fuse Box:** Identify your vehicle's fuse box. Consult your vehicle's owner's manual for its location (typically under the dashboard, in the engine bay, or in the trunk).
2. **Identify Fuse Types:** Using a circuit tester, identify a constant power fuse (always on) for the **Red (Battery +)** wire and an accessory power fuse (on with ignition) for the **Yellow (ACC)** wire.
3. **Connect Wires:**
    - Connect the **Red (Battery +)** wire to the constant power fuse using an appropriate fuse tap (not

included).
    - Connect the **Yellow (ACC)** wire to the accessory power fuse using an appropriate fuse tap.
    - Connect the **Black (Ground)** wire to a bare metal bolt or screw on the vehicle's chassis.
4. **Route Cables:** Carefully route the hardwire kit cable from the fuse box to your dash camera's mounting location, tucking it neatly along the vehicle's trim to avoid obstruction.
5. **Connect to Dash Cam:** Plug the USB-C connector of the hardwire kit into your FitSpark dash camera.
6. **Test System:** Start your vehicle to ensure the dash camera powers on. Turn off the ignition and remove the key; the dash camera should switch to parking monitoring mode (if supported and configured).

Figure 3: The complete FitSpark HW-3 Hardwire Kit, showing the main unit, power wires, and USB-C output cable.

6. Operation

Once correctly installed, the FitSpark HW-3 Hardwire Kit operates automatically:

- When your vehicle's ignition is on, the dash camera will receive full power and operate in normal recording mode.
- When your vehicle's ignition is turned off, the hardwire kit will detect this and switch the dash camera into parking monitoring mode (if your dash camera supports this feature). The dash camera will continue to

record based on its parking mode settings (e.g., motion detection, time-lapse).

- If the vehicle's battery voltage drops below the threshold set on the voltage selector switch, the hardwire kit will automatically cut power to the dash camera to prevent excessive battery drain, ensuring your vehicle can still start.

7. Troubleshooting

Problem	Possible Cause	Solution
Dash cam does not power on.	Incorrect wiring; Blown fuse; Loose connection.	Check all wire connections (Red, Yellow, Black). Verify fuses in the fuse box are intact. Ensure the USB-C connection to the dash cam is secure.
Parking monitoring not working.	Red (Battery +) wire not connected to constant power; Dash cam parking mode not enabled/configured.	Ensure the Red wire is connected to a fuse that is always on. Check your dash camera's settings to confirm parking mode is activated and configured correctly.
Dash cam turns off too quickly in parking mode.	Low voltage cut-off set too high; Vehicle battery is weak.	Adjust the voltage selector switch to a lower cut-off threshold. Have your vehicle's battery tested and replaced if necessary.
Dash cam does not switch from parking mode to normal recording.	Yellow (ACC) wire not connected to switched power.	Verify the Yellow wire is connected to a fuse that only receives power when the ignition is on.

8. Specifications

Feature	Detail
Model Name	HW-3 Hardwire kit
Input Voltage	DC 12V / 24V
Output Voltage	DC 5V
Max Output Current	2A
Low Voltage Protection (12V)	11.8V / 12.0V / 12.2V / 12.4V (selectable)
Low Voltage Protection (24V)	23.6V / 24.0V / 24.4V / 24.8V (selectable)
Connector Type	USB-C
Cable Length	Approx. 4000mm (4 meters) total
Product Dimensions	5D x 8W x 12.5H Centimeters
Item Weight	300 Grams
Compatible Devices	FitSpark Dash Cameras

9. Warranty and Support

Warranty Description: This product comes with a 1-year warranty from the date of purchase.
For technical support, warranty claims, or any inquiries, please contact FitSpark India Pvt Ltd. customer care:

Email: support@myfitspark.com