mydlink™ Wi-Fi Motion Sensor

User Manual
Preface

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes.

Manual Revisions

<table>
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<tr>
<th>Revision</th>
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Product Overview
Package Contents

DCH-S150 mydlink™ Wi-Fi Motion Sensor

Quick Install Card

Quick Installation Guide

If any of the above items are missing from your package, please contact your reseller.
## System Requirements

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| **General Requirements** | • Wireless router with Internet Service  
                           • An available power outlet                                             |
| **Mobile Requirements**  | • Smartphone or tablet with iOS 6.0 or above, or Android 4.0 or above     |
| **mydlink Requirements** | • For mydlink and mydlink app requirements refer to: [http://www.mydlink.com](http://www.mydlink.com) |
Introduction

Features

Use Motion Detection to Automatically Turn on Your Appliances

The DCH-S150 mydlink™ Wi-Fi Motion Sensor is a portable plug-in PIR motion detection device that lets you automate appliances such as desk lamps attached to Smart Plugs in your home network. Tiny yet powerful, the DCH-S150 introduces you to the world of home automation in a device that fits in the palm of your hand.

Compact, Convenient Design

The DCH-S150’s compact design is ideal for use at home or a small office, as it saves space and is ready to use by simply plugging it in. The device’s small form means it can easily be plugged into a power outlet without blocking other outlets while its case design saves you the hassle of dealing with a power cord. Its sleek, unobtrusive appearance means it blends easily into the background.

mydlink™ Home

Manage your motion sensor and connected appliances by using the mydlink™ Home app available for iPhone®, iPad®, and iPod touch® and Android™ devices. Its intuitive user interface and simple instructions lets you easily manage your automated devices from wherever you are.

Simple Setup

Through its easy-to-use mydlink™ Home app, you can quickly and easily connect the DCH-S150 to an existing network. The setup wizard will even guide you through the setup process, so you can get your home automation devices up and running in no time.
Motion Sensor
This sensor will detect motion and trigger actions to other devices.
# Hardware Overview

## Side and Bottom

1. **LED**
   - **Solid Green**: The device is connected to the network
   - **Blinking Green (slow)**: WPS is working
   - **Blinking Green (fast)**: PIR is detecting motion
   - **Blinking Orange**: The device is not connected to the network
   - **Solid Red**: • The device is powering on
     • The firmware is being upgraded
     • The device is defective
   - **Light Off**: The device is powered off

2. **WPS Button**: Pressing the WPS button for 1 second allows you to connect with Wi-Fi clients using Wi-Fi Protected Setup

3. **Reset Button**: Pressing the reset button for 10 seconds will reset the DCH-S150 to the factory default settings
Section 2 - Installation

Wireless Installation Factors

The mydlink™ Wi-Fi Motion Sensor lets you automate appliances using your existing wireless network. Keep in mind, however, that the number, thickness, and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

1. Keep the number of walls and ceilings between the extender and other network devices to a minimum - each wall or ceiling can reduce your adapter’s range by up to 98 feet (30 meters). Position your devices so that the number of walls or ceilings is minimized.

2. Be aware of the direct line between network devices. At a 45-degree angle, a wall that is 0.5 meters thick (1.5 feet) appears to be almost 1 meter (3 feet) thick. At a 2-degree angle it can appear over 14 meters (45 feet) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.

3. Building materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete can degrade your wireless signal.

4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.

5. If you are using 2.4 GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4 GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone in not in use.
Setting Up Your DCH-S150

Plug in the DCH-S150 to a power outlet. Verify that the power LED is blinking orange before continuing.

Using your mobile device’s Wi-Fi connection utility, connect to the SSID of your network. Once connected, you are ready to begin the setup process.

You can now configure your DCH-S150 using the mydlink™ Home app on your smartphone or tablet device.
1. Download the free mydlink™ Home app from the App Store (iOS) or Google Play (Android).

2. First install the mydlink™ Home app on your mobile device. Then simply tap on the icon to launch the app.

3. Log into your mydlink account. If you don’t have one, sign up for a free mydlink account by clicking the Sign Up! link. Tap Add a new device. Then follow the on-screen instructions. The wizard will guide you through the configuration process for your motion sensor.

4. Once the configuration process is complete, use the mydlink™ Home app to automate your home and stay updated with instant push notifications to your mobile device while you’re away from home.
WPS Setup

The easiest way to set up your DCH-S150 is by using the Wi-Fi Protected Setup (WPS) method.

On the Device Setup page, tap **Next** to configure the device.

Press the WPS button on your device. When the LED blinks green, tap **Next**.
Check the LED on your device. When it turns solid green, tap **Next**.

You will also need to confirm that your mobile device is connected to your Wi-Fi network by exiting the app and going to your device's Wi-Fi settings.

After connecting to your Wi-Fi network, return to this app and tap **Next** to continue.

Your device should appear after a short search. Tap to select the DCH-S150.
You can change the device name by tapping on the textbox and typing in a nickname.

You can also customize the icon for your device with a photo or icon by tapping on it. Photo and icon options will appear in a menu. Type Finish when you are done.

Congratulations, you can now use the mydlink™ Home app!
Manual Setup

If you cannot set up your DCH-S150 using the Wi-Fi Protected Setup (WPS) method in the previous section, you will need to manually configure your device for use.

On the Device Setup page, tap **Manual Setup** to configure the device manually.

At the Connect to Device page, exit the app and connect to your DCH-S150 using the information on your Quick Install Card. Then return to the app and tap **Next**.
When asked to, input the Pin Code on your Quick Install Card and tap **Connect**.

Connect the device to your Wi-Fi network by tapping on the SSID of your network.

After connecting to your Wi-Fi network, return to this app and tap **Next** to continue.
Section 2 - Installation

You will also need to confirm that your mobile device is connected to your Wi-Fi network by exiting the app and going to your device’s Wi-Fi settings.

Your device should appear after a short search.

The mydlink™ Home app will remember your Pin Code from step 3.
Section 2 - Installation

You can change the device name by tapping on the textbox and typing in your device nickname.

You can also customize the icon for your device with a photo or another icon by tapping on the icon. Photo and icon options will appear in a menu. Type **Finish** when you are done.

Congratulations, you can now use the mydlink™ Home app!
mydlink™ Home
My Devices

Tapping the DCH-S150 under the My Devices page will take you to the device's settings.

**Motion**  Enable or disable motion detection.
**Detection:**

**Last Detection:** Displays the last time the sensor detected motion.

**Sensitivity:** Adjust the motion sensitivity of the sensor.

**Schedule:** Choose or set up a schedule for the device.

**Information:** This page will show detailed information about the product and your network. You can also perform a factory reset here by tapping **Reset**.
Schedule

You can customize schedules for when your DCH-S150 will be active in this section.

There are two types of schedules you can configure: **Repeat** and **Customize Rule**.

Tapping **Repeat** will take you to the next page where you can select the active days, **Start** and **End time**, and **Frequency** (or duration) that the device will be active. This type of schedule is suited for schedules using the same Start and End times and Frequency.

After the schedule is set, go back to the previous page and tick the radio button next to the rule to activate it.
Tapping **Customize Rule** will take you to the Details page where you can select different days and times that the device will be active in a table. Simply tap and drag the bars in the table to adjust the times. Tap ✗ to delete a specific time.

After the schedule is set, go back to the previous page and tick the radio button next to the rule to activate it.
Information

This page shows your product and related network details.

**Product Name:** Displays the product model.

**Firmware Version:** Displays the version of the firmware.

**MAC Address:** Displays the MAC address of the device.

**IP Address:** Displays the IP address of the device.

**mydlink Number:** Displays the mydlink number of the device.

**Factory Reset:** Tap **Reset** to perform a factory reset.
My Actions

This page lets you add and enable/disable rules which execute actions such as notifications when your DCH-S150 detects motion. Tap to switch between pages.

1. To add a new rule for your device, tap on New rule.

2. Tap on the device you want to trigger with the rule.

3. Select from the available conditions for this device and click Next.

4. Select from the available responders for this device.
5. Select from the available actions for this device. Tap **Next**.

6. In the text box, type in a name for this rule and tap **Done**.

7. You will be taken back to the My Actions page and you can now enable and disable your rule from this page.
My Places

This page lets you add devices into a group so you can easily see which devices are in a particular location.

1. To create a group, tap **New group**.

2. On the New Group page, tap the icon to choose an icon or photo for the group. Tap next to it to enter a name for the group. Then tap the + icon to add devices.

3. Tick the devices to be included in this group and tap **Done**.
4. Your group is created and will show up in My Places. Tapping each device in the group will take you to their settings.
Connecting to a Wireless Router

WPS Button

WPS (Wi-Fi Protected Setup) is a simple and secure way to connect your DCH-S150 to your network. Please refer to the user manual for the wireless router you want to connect to make sure you understand how to enable WPS. Once you know, follow the steps below:

**Step 1** - Press the WPS button on the DCH-S150 for about 1 second. The LED on the device will start to blink.

**Step 2** - Within 120 seconds, press the WPS button on your wireless device.

**Step 3** - Allow up to 1 minute to configure. Once the LED light stops blinking and turns solid green, you will be connected and your wireless connection will be secured with WPA2.
Troubleshooting

How do I reset the DCH-S150?

When you reset your DCH-S150, it will change your settings back to the factory default settings. To reset the device, locate the Reset button on the side of the device. With the device plugged in, press and hold the Reset button for about 10 seconds until the Power LED turns red.

Why can’t I connect to my wireless router?

If you are having trouble connecting to your wireless router, try plugging the DCH-S150 into a location that is closer to your router. After the Power LED turns solid green, you can unplug the mydlink™ Wi-Fi Motion Sensor and move it to the desired location.

Where can I find the mydlink™ Home app?

You may download the free mydlink™ Home app from the App Store (iPhone, iPad, or iPod touch) or Google Play (Android). Search for the mydlink™ Home app by typing in “mydlink Home”.

How does the mydlink™ Wi-Fi Motion Sensor work while I am away from home?

Remote access of the mydlink™ Wi-Fi Motion Sensor is enabled once you have registered and linked your DCH-S150 through mydlink. When your DCH-S150 is enabled for remote access, you will be able to control it from anywhere using your iOS or Android device.*

* Your motion sensor device must be connected to your home Wi-Fi network for remote access.
Technical Specifications

Standards
- IEEE 802.11n
- IEEE 802.11g
- IEEE 802.11b

Wireless Frequency Range \(^1\)
- 2.4 GHz to 2.4835 GHz

Antenna
- Two Internal Antennas

Security
- WPS™ (PBC)
- Wi-Fi Protected Access (WPA/WPA2)

Device Management
- mydlink™ Home app

Diagnostic LEDs
- Status/WPS/Motion detection

Operating Temperature
- 0 to 40 °C (32 to 104 °F)

Storage Temperature
- -20 to 65 °C (-4 to 149 °F)

Operating Humidity
- 10% to 90% non-condensing

Storage Humidity
- 5% to 95% non-condensing

Power Input
- AC 100-250 V AC

Power Consumption
- 3 W

Certifications
- FCC
- CE/LVD
- UL

Dimensions
- 58 x 54 x 43.5 mm (2.28 x 2.12 x 1.71 inches)

Weight
- 80 grams (2.82 ounces)

\(^1\) Frequency range varies depending on local regulations