

# BirdGuard

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## **Installation manual**

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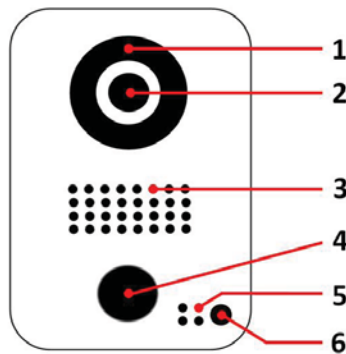
You can always find the most up-to-date version of the installation manual on [www.doorbird.com/support](http://www.doorbird.com/support)

## Components

### Contents

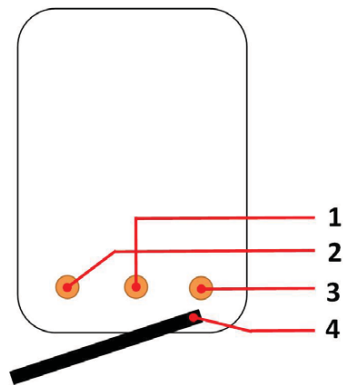
- 1x BirdGuard
- 1x 433 MHz RFID Antenna
- 1x 2.4 GHz WiFi Antenna
- 1x Power supply unit (mains adaptor) with four country-specific adaptors
- 8x Crimp connectors
- 2x Cable ties
- 2x Phillips countersunk head screws for the mounting stand, long
- 2x Phillips countersunk head screws for the mounting stand, short
- 2x Dowels
- 1x Mounting stand
- 1x Installation manual
- 1x Quick start guide

### BirdGuard - front



- 1) **Night vision**  
Extra bright infra-red LEDs, effective during the hours of darkness (infra-red light invisible to the human eye, 850nm)
- 2) **HDTV video**  
Ultra wide-angle hemispheric lens, 180°
- 3) **Loudspeaker**  
Large-sized and speech enhanced broadband speaker
- 4) **Motion sensor**  
180° Infrared motion sensor for alarms
- 5) **Microphone**  
With active noise cancellation
- 6) **Light sensor**

## BirdGuard - back



- 1) **Mounting stand thread**  
For screwing in the mounting stand
- 2) **433 MHz RFID Antenna thread**  
For screwing in the 433 MHz RFID Antenna
- 3) **2.4 GHz WiFi Antenna thread**  
For screwing in the 2.4 GHz WiFi Antenna
- 4) **BirdGuard cable**  
For connecting all external components

## Videos

Need help with the installation? Be sure to watch our installation videos which can be found on <http://www.doorbird.com/support>

Each individual step of the installation is clearly documented in the videos.

## Installation

All the steps below should be carried out carefully by a competent adult, taking into consideration any applicable safety regulations. Should you have any questions, please contact us or a competent specialist directly. Please ensure that all wires used for the installation are undamaged along their entire length and approved for this type of use.

### Network speed and network components

Please ensure that the upload speed of your Internet connection is at least 0.384 Mbps. You can also carry out a speed test at any time via the DoorBird app. The user experience is only as good as your network speed, network stability and quality of your network components, such as your Internet router and Wi-Fi access points or Wi-Fi repeaters. Please also make sure that your network components are no older than two years old, have been manufactured by a well-known manufacturer, and have the latest firmware installed.

Should these requirements not be fulfilled, it may happen, for example that the performance of audio and video is poor or push notifications are delayed or do not arrive on your smartphone or tablet at all.

High-speed Internet (via landline): DSL, cable or optical fibre

Network: 802.11b/g/n 2.4 GHz or Ethernet, with DHCP

### **Step 1: Switching off power**

Switch off the power to all wires leading to the installation place, i.e. power supply unit for the BirdGuard etc..

### **Step 3: Determining the assembly location**

The BirdGuard uses an ultra wide-angle hemispheric lens so that even when the person is a minimum distance of 50 cm away from the BirdGuard, a low installation height is sufficient. The lens is therefore not mechanically adjustable. For persons of up to 175 cm (5'9") in height, a minimum installation height (lower edge of the BirdGuard) of at least 115 cm (3'9.3"), for taller persons a minimum installation height of at least 125 cm (4'1.2") is recommended. You may check this prior to the final mounting. (Optional) Press the mounting stand against the wall at the desired installation site and mark the boreholes with a pencil. Remove the mounting stand again. Ensure that no cables are to be found in the wall behind the boreholes.

### **Step 4: Power supply**

The BirdGuard can be powered by two simple doorbell wires using the power-supply unit (mains adaptor) supplied with it or via PoE (Power over Ethernet) using a network cable..

The BirdGuard does not use battery power. The use of a mains power supply permits the transmission and display of on-demand live video at any time and not only if an alarm event is present.

#### **Power supply using the power-supply unit (mains adaptor)**

Two insulated wires are required to power the BirdGuard by plugging it into the mains. Only use the power supply unit provided along with the BirdGuard, since this has been specially stabilized electrically and is equipped with an integrated audio interference reduction device. Other power supply units may destroy the BirdGuard or cause poor transmission quality. The warranty automatically expires if you use a different power supply unit. The power supply unit is plugged into a wall socket inside your house, usually where the two wires for the power-supply of the BirdGuard come out of the wall in the interior of the house.

Do not plug the power supply unit into the wall socket yet. Connect the power supply unit inside the house with the crimp connector provided and the two wires that you would like to use to power the device.

### Power supply via PoE

To power the BirdGuard via a PoE switch (e.g. D-Link DGS-1008P) or PoE injector (e.g. TP-Link TL-PoE150S) in accordance with the PoE standard IEEE 802.3af Mode A, the four wires bearing the numbers 1, 2, 3 and 6 of a Cat.5 cable or better are to be used. A Cat.5 cable or better *must* be used as network signals can only be transmitted over completely insulated, shielded and twisted cables. If you use PoE as a source of power, the Wi-Fi interface of the BirdGuard is automatically inactive, and the four wires for PoE then simultaneously form the data link. The BirdGuard won't start if your PoE Switch or PoE injector does not support the PoE Standard IEEE 802.3af Mode A (see Diagnostic-LED and Diagnostic-Sounds).

1. Disconnect the PoE switch or PoE injector from the power grid.
2. Place the network cable in the installation site of the BirdGuard.

Do not combine the power supply from the power supply unit (mains adaptor) with the power supply via PoE.

### Step 5: Further connections

If desired, connect additional wires to the installation site of the BirdGuard. The wires or connection options mentioned in this section are optional.

#### Connecting the unit to a network

You can connect the BirdGuard to your existing network via Wi-Fi, or Network cable in alternatively use a network cable (Ethernet). For reasons of network accordance with the stability, we principally recommend using a network cable, as Wi-Fi is Cat.5 standard or better. sensitive to interference (range, house walls acting as shields, reliability of performance, third party Wi-Fi networks, wireless transmitters causing interference in the area, etc.).

The BirdGuard can be powered by PoE or using the power supply unit provided.

If you use PoE as a source of power, the Wi-Fi interface of the BirdGuard remains inactive.

The Birdguard cable offers an RJ45 Ethernet (female) jack to easily connect your existing network cable.

Connect the network cable in the house to your Internet router or to your PoE switch or PoE injector that is connected to your Internet router.

#### Alarm output

The BirdGuard has a zero-potential relay contact for connecting external devices such as relays (e.g. event triggering and alarm notifications) and LEDs (two wires). There is the possibility of switching on all external devices that work at a maximum power of 1A in the voltage range of up to 24V (AC/DC). The BirdGuard does not provide its own power supply for the external devices. This is provided through the separate power supply of the external devices. You can learn more about the installation of the power supply from the instruction manual or technical specifications of your external devices. Should you have any questions about this, please contact the manufacturer of your external devices.

You can find compatible external devices and a sample wiring diagram at [www.doorbird.com/support](http://www.doorbird.com/support)

### Alarm input

The BirdGuard has a zero-potential relay contact for connecting external devices that can toggle between an open and closed circuit, e.g. PIRs, door/window contacts, glass breakdetectors, etc. (two wires). There is the possibility of connecting all external devices that work at a maximum power of 1A in the voltage range of up to 24V (AC/DC). The BirdGuard does not provide its own power supply for the external devices. This is provided through the separate power supply of the external devices. You can learn more about the installation of the power supply from the instruction manual or technical specifications of your external devices. Should you have any questions about this, please contact the manufacturer of your external devices. You can find compatible external devices and a sample wiring diagram at [www.doorbird.com/support](http://www.doorbird.com/support)

### External speaker

The BirdGuard has a contact for connecting external speakers, e.g. horn speakers, sirens (two wires). We recommend using the combi horn speaker/siren for BirdGuard (incl. amplifier within the BirdGuard) available separately by Bird Home Automation.

The following third party external speakers are compatible:

- Power rating: 10 W MAX /8 Ω
- Frequency range: 350-10,000 Hz
- SPL: (1 W/1 m) 100 dB

Warning: Do not connect speakers with other specification or with 110V technology, this will destroy the BirdGuard.

## Step 6: (Optional) Dowels

If the exterior wall of the house is not made of wood, you should drill four holes 5 mm in diameter in the wall and then place the dowels provided into the boreholes. If the exterior wall of the house is made of wood, you will usually not require any dowels. There are special dowels for assembling the BirdGuard on an insulating wall, e.g. Fischer insulating dowels. Please check with your insulating material manufacturer regarding which dowels they recommend.

## Step 7: (Optional) Attach the mounting stand

Position the mounting stand against the exterior wall of the house and use the screws provided to position it in the dowels or on the wall.

## Step 8: Preparing the wires

Remove about 5 mm of insulation material at the end of the wires that you would like to connect to the BirdGuard.

### Step 9: Connecting the wires

It is possible to connect the BirdGuard conveniently and safely via the BirdGuard cable. The individual wires of the BirdGuard cable color coded. You can simply use pliers to connect these directly to your own wires via crimp connectors.

<b>Black</b>	Power supply, negative pole (-)
<b>Red</b>	Power supply, positive pole (+)
<b>Blue</b>	Alarm output (zero potential)
<b>White-blue</b>	Alarm output (zero potential)
<b>Brown</b>	Alarm input (zero potential)
<b>White-brown</b>	Alarm input (zero potential)
<b>Yellow</b>	External speaker, negative pole (-)
<b>Pink</b>	External speaker, positive pole (+)

Please take care when connecting the wires. Connecting the wires the wrong way may destroy the BirdGuard.

### Step 10: Final assembly

Screw in the 433 MHz RFID Antenna and 2.4 GHz WiFi Antenna into the desired threads on the back of the BirdGuard. Mount the BirdGuard on the mounting stand.

### Step 11: Activating the BirdGuard

Switch on the power to the wires leading to the Birdguard again. You can see whether you have connected the power supply properly from the Diagnostic LED (it lights up once the power has been connected correctly for up to five minutes). The BirdGuard is ready for operation (booting up process, any software updates, etc.) once it has emitted a short diagnosis sound from the integrated loudspeaker. This may last for up to 5 minutes. Should you not hear a beep, please check the power supply. Please also check whether you have used a wall-plug power-supply and not PoE and whether you have connected the positive pole and negative pole to the BirdGuard correctly.

### Step 12: Downloading and installing the app

Download the "DoorBird" app by Bird Home Automation onto your mobile device from the Apple app store or Google Play store. You can always find the most up-to-date version of the App manual manual on [www.doorbird.com/support](http://www.doorbird.com/support)

If you use Wi-Fi for connecting the BirdGuard to your Internet router, first go to "Settings > Wi-Fi Setup" and follow the instructions.

If you have finished the Wi-Fi set-up or have connected the BirdGuard to your Internet router by means of a network cable, go to "Settings > Add device" and click on the QR code icon in the "User" field. Scan the user QR code found on the "Digital Passport" that accompanies the BirdGuard.

Since Apple uses very high quality microphones, loudspeakers and digital audio components that are perfectly in tune with one another, the voice quality with an iPhone or iPad is usually noticeably better than with an Android smartphone or Android tablet.

## Diagnostic-LED

The Light sensor also acts as Diagnostic-LED. This LED light is only lit up for five minutes after the BirdGuard has been supplied with power. It lights up as soon as the BirdGuard is supplied with power.

Permanent illuminated: Device is powered

We may add more diagnostic information to the software- and hardware-controlled Diagnostic-LED (e.g. blinking for certain information) in the future.

## Diagnostic-sounds

After around two to five minutes, the BirdGuard emits brief diagnostic sounds after it has been connected to the power grid

1x diagnostic sound: The BirdGuard is connected to the Internet

2x diagnostic sounds: The BirdGuard is able to communicate with the router, but cannot access the Internet.

3x diagnostic sounds: The BirdGuard has no connection to the network

## Troubleshooting / common problems

Diagnostic-LED does not illuminate for 5 minutes after connecting the BirdGuard to the power supply and there is no Diagnostic-sound-> Please check if the power supply is appropriate and properly connected

BirdGuard is not connected to the Internet: Please check the WiFi signal strength or cable connection at the assembly location and [www.doorbird.com/checkonline](http://www.doorbird.com/checkonline) for detailed troubleshooting

You can contact us at any time via [www.doorbird.com/support](http://www.doorbird.com/support) for support.



# Legal notes

## General remarks

1. DoorBird is a registered trademark of Bird Home Automation GmbH.
2. Apple, the Apple logo, Mac, Mac OS, Macintosh, iPad, Multi-Touch, iOS, iPhone and iPod touch are trademarks of Apple Inc.
3. Google, Android and Google Play are trademarks of Google, Inc.
4. All other company and product names may be trademarks of the respective companies with which they are associated.
5. We reserve the right to make changes to our products in the interests of technical advancement. The products shown may also look different from the products supplied based on ongoing enhancement.
6. Reproducing or using texts, illustrations and photos from this instruction manual in any media – even if only in the form of excerpts – shall only be permitted with our express written consent.
7. The design of this manual is subject to copyright protection. We do not accept any liability for any errors or any erroneous content or printing errors (even in the case of technical specifications or within graphics and technical sketches).

## Product Liability Act

1. All products covered by this instruction manual may only be used for the purpose specified. When in doubt, consult a qualified specialist or our support team.
2. Products that are supplied with voltage (in particular 110-240V mains voltage) need to be disconnected from the power supply prior to opening them or connecting cables.
3. Any losses or consequential damage caused by intervention or changes made to our products or improper handling are excluded from liability. The same applies to improper storage or external effects.
4. When dealing with 110-240V mains voltage or with mains-operated or battery-operated products, the applicable guidelines are to be observed, e.g. guidelines on adhering to the electromagnetic compatibility; or the low-voltage directive. The respective work should only be carried out by a qualified specialist.
5. Our products are in compliance with all technical guidelines and telecommunications regulations applicable in Germany, the EU and the USA.

## Data privacy and data security

1. For maximum security, the device uses the same encryption technologies as are used in online banking. For your security, no port forwarding or DynDNS is used either.
2. The data centre for remote access over the Internet by means of an app is located in the EU and is operated in line with the most stringent security standards.
3. Video doorbell: In many countries video and voice signal may only be transmitted once a visitor has rung the bell (this feature is available due to data privacy considerations, and is configurable in the app).
4. Please carry out the mounting in such a way that the detection range of the camera limits the device exclusively to the immediate entrance area.
5. The device comes with an integrated visitor history. You can activate/deactivate this function as required (this feature being available due to data privacy considerations). If this function is enabled, up to 20 visitors are archived right inside the electronics of the device, complete with a picture, date and time. Use this function in accordance with the relevant country-specific statutory regulations applicable at the installation site (notification obligation/archival).
6. If necessary, inform visitors that the device has been installed, in a suitable place and in a suitable form.
7. If necessary, inform visitors that a motion sensor has been installed in a suitable place and in a suitable form. The motion sensor can, if necessary, be switched off via the app.
8. Please observe any relevant country-specific statutory regulations concerning the use of surveillance components and surveillance cameras applicable at the installation site.

## Publisher

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## FCC Warning Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the

FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This

Equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may

Cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and

on, the user is encouraged to try to correct the interference by one or more of the following measures:

- - Reorient or relocate the receiving antenna.
- - Increase the separation between the equipment and receiver.
- - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- - Consult the dealer or an experienced radio/TV technician for help.

## FCC Radiation Exposure Statement

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co - located for operating in conjunction with any other antenna or transmitter.

## INDUSTRY CANADA NOTICES (IC):

This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device

## Avis d'Industrie Canada (IC):

Cet appareil est conforme aux CNR exemptes de licence d'Industrie Canada . Son fonctionnement est soumis aux deux conditions suivantes :

( 1 ) Ce dispositif ne peut causer d'interférences ; et

( 2 ) Ce dispositif doit accepter toute interférence , y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

The distance between user and products should be no less than 20cm

La distance entre l'utilisateur et de produits ne devrait pas être inférieure à 20cm

[www.doorbird.com](http://www.doorbird.com)