►SHUTR®◄
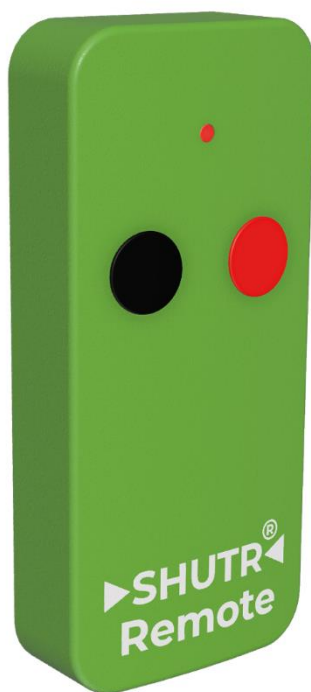
Remote

User Guide

Disclaimer statement

BlastGate.com BV has taken utmost care to provide complete, accurate and up-to-date information in this guide. However, Blastgate.com BV cannot guarantee that the information provided in this guide is complete, accurate and up to date. BlastGate.com has the right to update the information in this guide without prior notice. BlastGate.com BV cannot be held liable for any damage, direct or indirect, as a result of incomplete or inaccurate information in this guide.

BlastGate.com provides guidelines in this guide for the usage of their products. It is explicitly the responsibility of the user to install and use the products in accordance with the guidelines given. BlastGate.com BV cannot be held liable for any damage, direct or indirect, resulting from deviating from the guidelines in this guide.

Product warranty

BlastGate.com BV provides 1 year warranty on its products. The terms and conditions regarding warranty claims can be found in the Warranty Clause document on www.blastgate.com

Trademarks

▶**SHUTR**® registered trademark of BlastGate.com BV

SHUTR Connect™ is a trademark of BlastGate.com BV
Apple is a registered trademark of Apple Inc.
Google is a registered trademark of Google LLC.
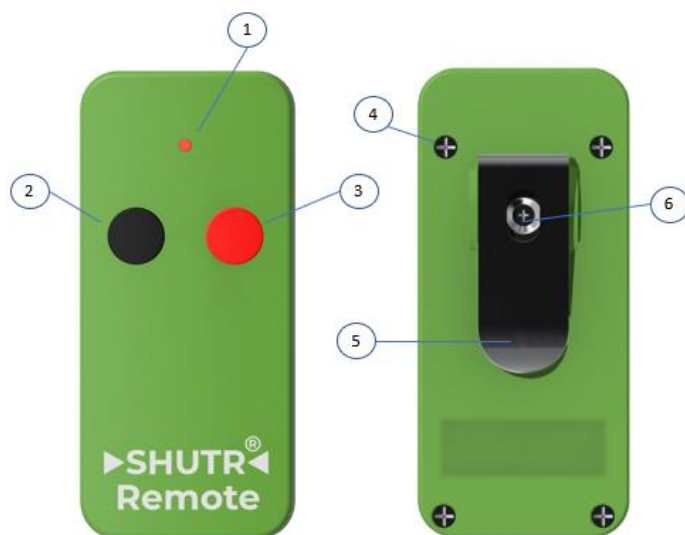
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1. Safety and handling instructions

Please follow the safety and handling instructions. Not following the instructions may cause damage to the remote control unit. Warranty will be voided when the instructions are not followed.

- The remote-control unit is powered by two AA batteries. Ensure that the batteries are replaced when depleted. Chemicals of old batteries may damage the unit if not replaced timely.
- The remote is delivered with non-rechargeable batteries. When depleted, replace them with similar type AA batteries. Depleted batteries are chemical waste and have to be disposed of appropriately.
- Mind the polarity of the batteries during replacement. Polarity is indicated in the battery holder. A wrong polarity may damage the electronics.
- Operating temperature is -20°C to +40°C. Do not operate the remote control outside of this temperature range.
- The housing of the remote is dustproof to IP54 level. Do not place the remote in an environment that can cause water to ingress in the unit. Water ingress will damage the electronics.
- The remote is equipped with an antenna for sending and receiving radio signals. Blocking the signal by a thick wall or metal casing will impact the ability to communicate.
- The housing is made of strong ABS plastic. However, dropping the unit to the floor may damage the housing permanently. It is advisable, when not in use, to place the remote in the supplied holder and fix the holder to the wall with screws

2. Remote overview

Item	Description
1	Indicator LED
2	ON button
3	Off button
4	M3 screws to open housing
5	Belt clip
6	Screw to hold belt clip in place
7	Placeholder

3. Remote features

The SHUTR Remote control is part of the SHUTR family of products and uses the SHUTR Connect™ protocol. The wireless remote links to the SHUTR Controller and can be used to activate the dust collector connected to the SHUTR controller or a combination of one or more SHUTR Gates and the Dust Collector.

Linking the remote to a specific SHUTR controller or a combination of a Controller and one or more Gates can be done with the pairing functionality. Pairing can either be done manually using the buttons on the remote or it can be performed with the SHUTR Connect app.

The rugged remote comes with a belt clip to carry the remote with you.

Combined with the SHUTR Controller the Remote can be used in different ways:

Basic setup: remotely switching a dust collector or machine

In the most basic set up the SHUTR Remote can be used in combination with the SHUTR Controller to operate a dust collector. Multiple remotes can be used for the same controller, in effect each remote can operate the dust collector (or any mains powered machine).

Comprehensive setup: multiple sensors, gates and remote(s)

Fully functional setup with a SHUTR controller that provides a SHUTR Connect network with multiple gates, sensors and remotes all paired in logical "series" which connects them to specific processing machines. Each activated gate, sensor or remote may activate the controller, which then will switch on the dust collector.
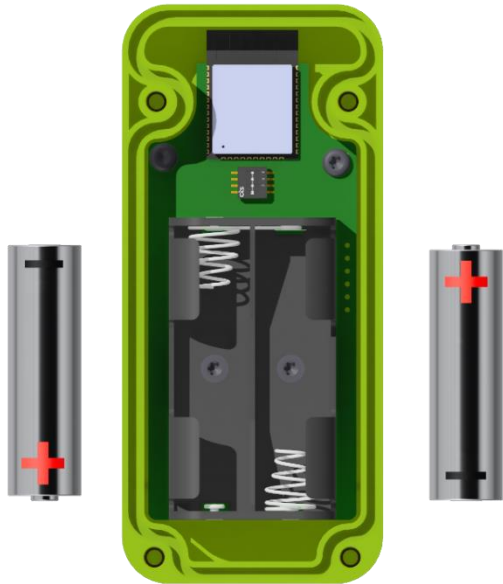
Comprehensive setup with remote-only activation: multiple sensors, gates and remote(s)

Similar to the comprehensive setup, but only a remote is able to operate the dust controller. At the same time all functionality for combining SHUTR gates with sensors and remotes remains in place. This functionality can be configured using the SHUTR Connect app (react to opening gates setting).

4. Installing batteries

When the batteries are low the LED indicator will flash magenta before entering standby mode.

Unscrew the four M3 screws on the back of the remote with a Philips PH1 screwdriver and open the housing. Remove the depleted batteries and install fresh AA batteries as indicated.

5. Pairing the remote

For manually pairing the remote with a SHUTR Gate or SHUTR Controller please refer to the SHUTR Controller Installation Guide.
A more comprehensive method of pairing is the use of the SHUTR app, available for Apple iOS and Google Android.

For pairing it is important to "wake up" the remote. Otherwise, the controller will not be able to detect the remote. To wake up the remote:

- Press the RED button and keep it pressed,
- Now press the BLACK button
- Now let go of both buttons

The remote will now "stay awake" for 60 seconds, sufficient time to complete the pairing process.

6. Resetting the remote

6.1 Reset to default settings (erase pairing data)

To reset a **remote**:

- o first press the red button and add the black button so both are pressed at the same time to "wake up" the remote and then release both buttons
- o Press the RED button > 10 seconds
- o After 10 seconds, the LED goes from RED to blinking YELLOW slowly
- o Release the button, LED blinks YELLOW quickly
- o Press the RED button AGAIN shortly within 5 seconds
- o Remote has been reset and unpaired
- o Not pressing the RED button again automatically cancels the reset procedure

6.2 Reset to factory default

In addition to resetting to default settings it is also possible to restore the originally factory installed firmware by performing the following steps:

- Open the remote and keep it open
- Take one AA battery out of the holder
- Keep the RED button pressed for >15 seconds after re-installing the battery
- Release the button when the LED turns on again (WHITE or GREEN)
- The remote now runs the original factory firmware with default settings

Use this procedure only if a fatal crash causes the remote to not work anymore. If you have updated the firmware before (with the app), you will have to do so again in order to run the latest version of the SHUTR firmware.

7. Remote LED indicator color codes

Color	Blinking/steady	Status
WHITE	steady	Ready, remote sends OFF signal, communications oke
GREEN	steady	Ready, remote sends ON signal, communications oke
MAGENTA	flashing 2x	Battery low – replace batteries
BLUE	blinking slowly	In pairing mode, not paired to a series yet
BLUE	steady	In pairing mode, already paired to a series
BLUE	Blinking shortly	Remote has requested pairing for its current series. Confirm pairing request by pressing controller pairing button for 3 sec to start pairing for this series.
CYAN	blinking slowly	Receiving new firmware from controller
CYAN	blinking fast	Installing new firmware on remote
RED	flashing 2x	Component(s) missing in a series (communication error)
RED	flashing 4x	Firmware upgrade failed

8. Specifications

Model, part number	SHUTR Remote, 1012000000-030
Power supply	Two AA batteries
Radio signal	2.412-2.462 GHz. FCC certified. Output power 19dBm. Range 50-100 meters in open space. Built-in antenna. FCC ID: 2AC7Z-ESP32S2WROOM
Operation	Two push buttons for ON/OFF,RESET,PAIRING LED indicator for transmit, pairing and low battery warning
Housing material	PC/ABS, IP54 Stainless steel removable belt clip
CE Conformity	EN 300328, EN 301489-1, EN 301489-17, EN 61326-1, EN 55011, EN 62368-1, EN 62311
RoHs	Conforming to EN 63000
Warranty	1 year warranty **
Package includes	Remote unit, belt clip with screw, placeholder, AA batteries, PH1 screw driver bit

(*) Specifications may change without prior notice.
(**) Please refer to the Warranty clause on www.blastgate.com

EC declaration of conformity

Manufacturer:

BlastGate.com B.V.
Botsholsedwarsweg 2A
3646AK Waverveen
The Netherlands

Declares that the following line of products:

Product family: **SHUTR**
Model(s): **Remote**

Fulfill all relevant provisions of the Radio Equipment Directive (RED directive), 2014/53/EU. According to the harmonized standards:

EN 300 328 (V2.2.2)   **Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz band; Harmonised Standard for access to radio spectrum**

Fulfill all relevant provisions of the Electromagnetic Compatibility Directive 2014/30/EU. According to the harmonized standards:

EN 301 489-1 (V2.2.3)   **Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements**

EN 301 489-17 (V2.2.1)   **Electromagnetic compatibility and Radio spectrum Matters (ERM);**
ElectroMagnetic Compatibility (EMC) standard for radio equipment;
Part 17: Specific conditions for Broadband Data Transmission Systems

EN 61326-1 (2013)   **Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements**

EN 55011 (2016)
+ A1 (2017)
+ A11 (2020)   **Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement**

Fulfills all relevant provisions of the Low voltage directive 2014/35/EU. According to the harmonized standards:

EN 62368-1 (2014)   **Audio/video, information and communication technology equipment - Part 1: Safety requirements**

EN 62311 (2008)   **Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)**

Fulfills all relevant provisions of the EC RoHS directive 2011/65/EU.
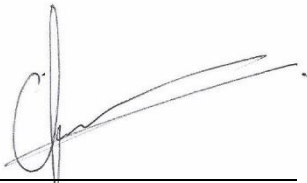According to the harmonized standards:

EN IEC 63000 (2018)   **Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances**

The signatory on behalf of the manufacturer:

Waverveen, The Netherlands	20 November 2023	
Place of issue	Date of issue	Chris de Jongh, General Manager

BlastGate.com

SMART DUST CONTROL