Fireco

Compliance Made Easy

Dorgard Pro
Handbook

2019-02-20

Fireco

Compliance Made Easy

Contents

System
overview

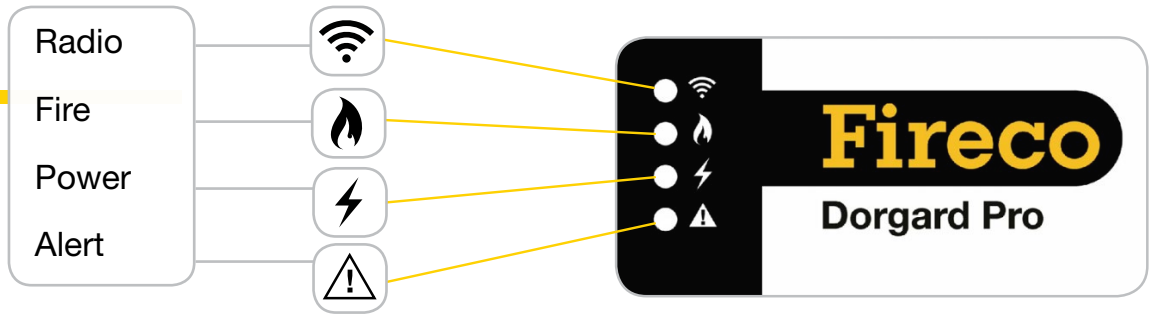
Dorgard Pro is a fire door retainer which holds open fire doors legally, allowing them to automatically close when a fire alarm is activated.

Dorgard Pro can be acoustically activated or connected to a Transmitter using secure wireless technology. The radio Transmitter can be directly wired to volt free contacts of a fire alarm relay or triggered acoustically, processing the sound of the fire alarm and sending a radio signal to Dorgard Pro allowing them to release the doors.

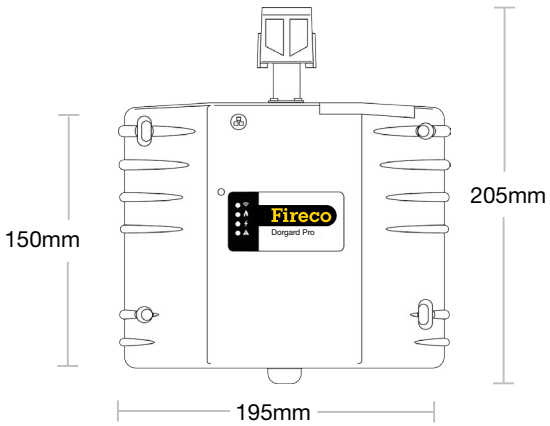
Part Number	Part Name
218-8662	Dorgard Pro Site Survey and Demo Case
360-1551	Dorgard Pro Black
956-8278	Dorgard Pro White
885-3205	Fireco Transmitter
966-2075	Fireco Repeater

Dorgard Pro

Dorgard Pro is a self contained fire door hold open device which is able to retain a fire door, at any angle of opening.



Power	Two x LR14 C Size batteries
Battery life	Five years when radio connected, three years in acoustic mode
Triggers	Fireco Transmitter 885-3205 or acoustically
Radio frequency	433.050 MHz to 434.790 MHz
Applicable door size	Up to EN7 160Kg, 1600mm
Fire rating	Suitable for timber/composite doorsets up to 120 minutes and steel doorsets of 240 minutes
Compliant to	EN1155, EN1634, EMC Directive, Radio Equipment Directive, Critical (Cat A) BS7273-4, when hard wired to a critical (cat A) system

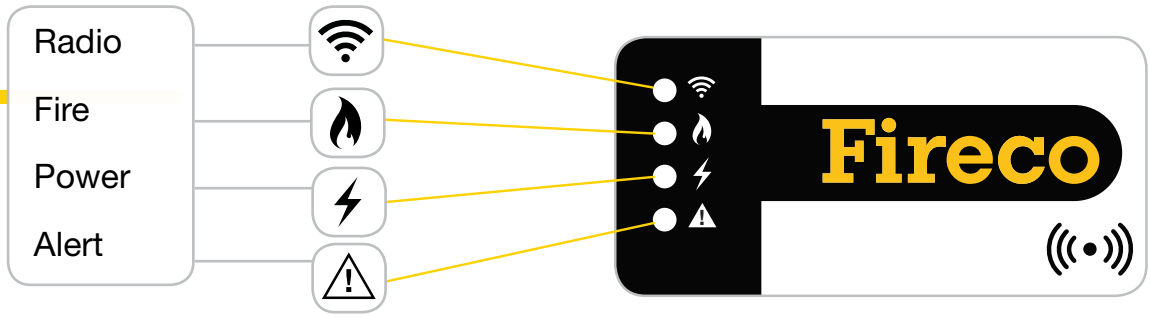


- Overall Height: 205mm
- Casing Height: 150mm
- Width: 195mm
- Depth: 45mm
- Weight: 700g

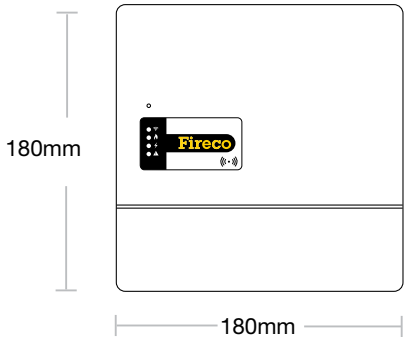
FR120M

Fireco Transmitter

The Fireco Transmitter is a radio control unit for the Dorgard Pro system. Connecting to a fire alarm relay or listening to the sound of your fire alarm, it controls and monitors the system.



Power	8-30V AC or DC
Battery back-up	Two x LR14 C-size batteries, capable of operating system for 7 days
Triggers	Volt free NC/NO/COM or Acoustic
Radio Frequency	433.050 MHz to 434.790 MHz
Range	Typically 40-50m
Maximum System Capacity	50 Repeaters and 500 Dorgard Pro
Compliant to	EN1155, EMC Directive, Radio Equipment Directive
Operating Temperatures	-5 to +70C

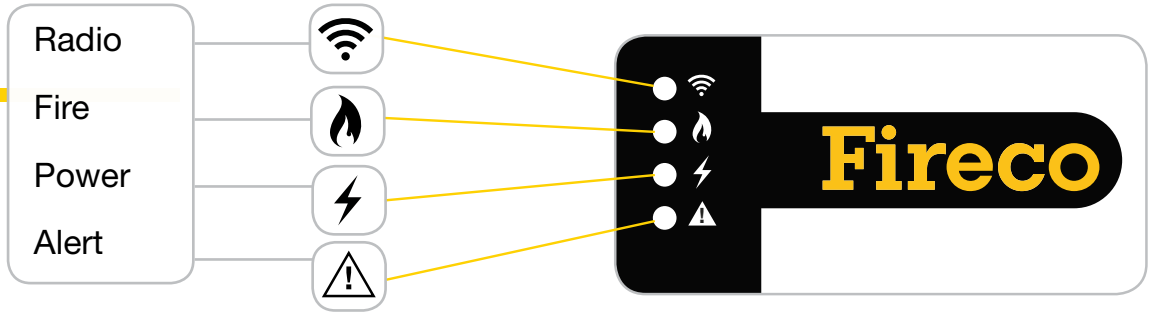


- Casing Height: 180mm
- Width: 180mm
- Depth: 48.5mm
- Weight: 532g

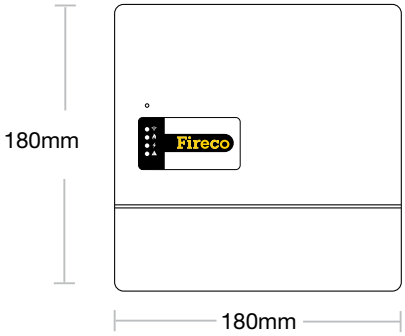
CE

Fireco Repeater

The Fireco Repeater extends the radio range from the Fireco Transmitter allowing you to connect more units over a greater distance. Up to 50 Fireco Repeaters may be used in any installation.



Power	8-30V AC or DC
Battery back-up	Two x LR14 C-size batteries, capable of operating system for 7 days
Triggers	Fireco Transmitter
Radio Frequency	433.050 MHz to 434.790 MHz
Range	Typically 40-50m
Maximum System Capacity	8 Repeaters and 120 Dorgard Pro
Compliant to	EN1155, EMC Directive, Radio Equipment Directive
Operating Temperatures	-5 to +70C

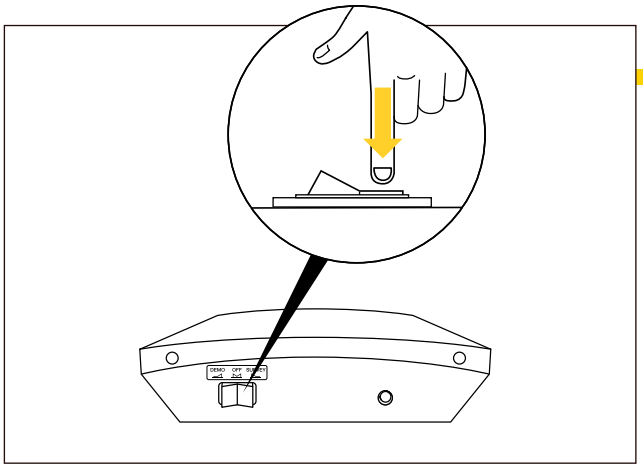


- Casing Height: 180mm
- Width: 180mm
- Depth: 48.5mm
- Weight: 532g

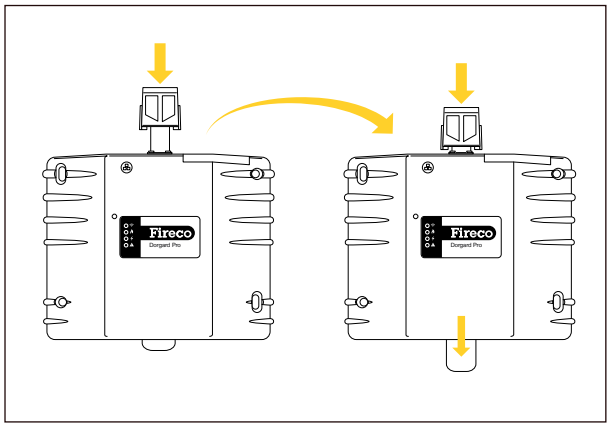
CE

Surveying a building prior to installation

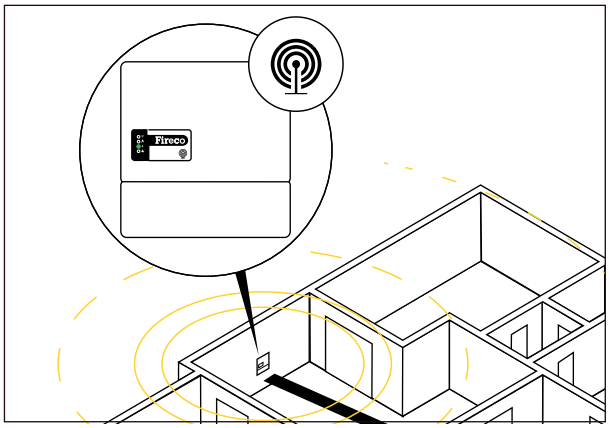
https://goo.gl/CMxYW8



1. Switch your Dorgard Pro Demo & Site Survey Transmitter into survey mode by flicking the switch on the base of the Survey Transmitter to the right.

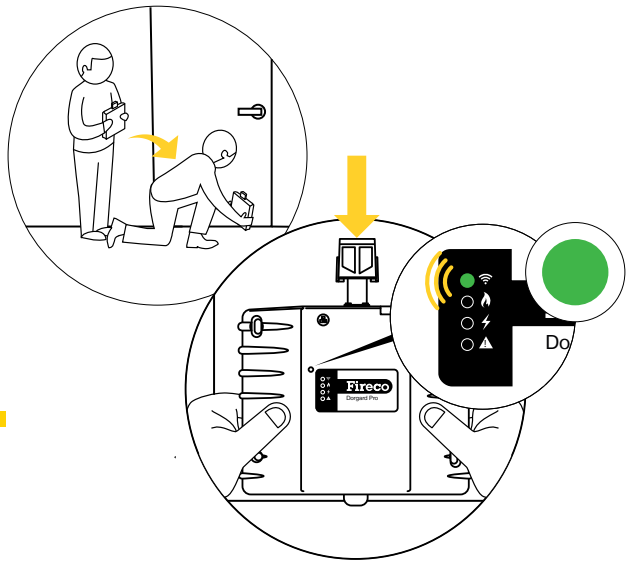


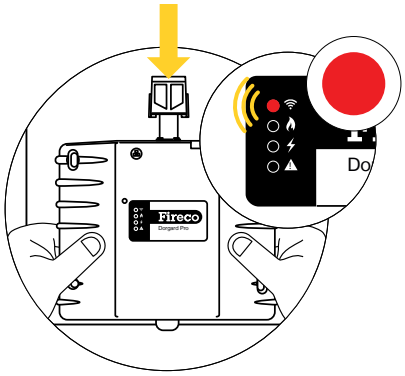
2. Press down the plunger on your Demo Dorgard Pro. This will sync the two units and enable you to survey a building.



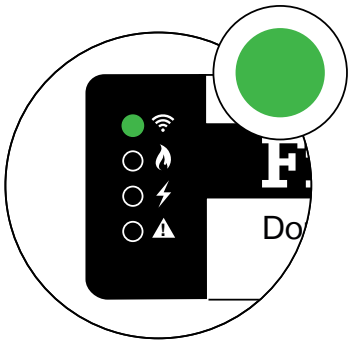
3. Place the Survey Transmitter where you are proposing to install the Fireco Transmitter. This should be within 2 metres of the fire alarm relay if you are planning on directly connecting the Transmitter.
If proposing an acoustically activated Transmitter, place the Survey Transmitter where it is able to hear the sound of the fire alarm above the background noise. Do not site Transmitters within 1 metre of power sources or metal surfaces (including Georgian wire glass).

4. Place the Survey Dorgard Pro at the position a Dorgard Pro is to be fitted. Ensure you hold it at the bottom of the fire door with the rubber foot touching the floor. Press the plunger down to get a radio reading. If the Dorgard Pro is in range of the Survey Transmitter the top LED of the Dorgard Pro will flash green for 4 seconds. If the Survey Dorgard Pro is no longer in range it will flash the top LED red for 4 seconds.

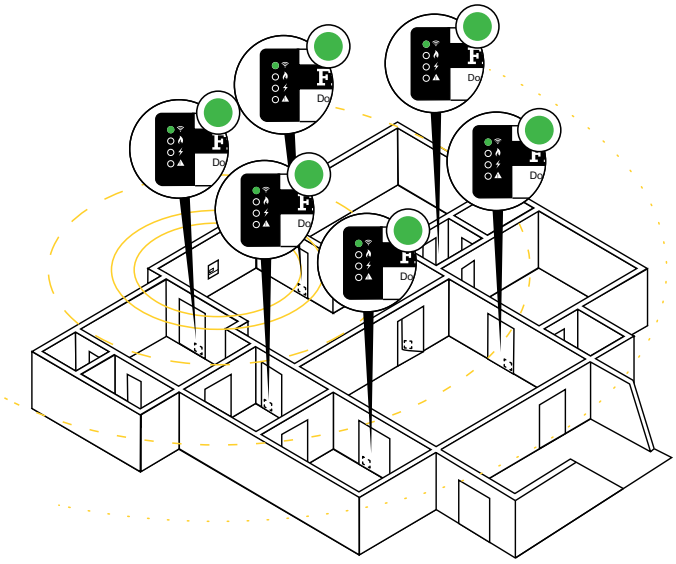




Repeat this process for all of the doors you wish to cover. If at a door position the Dorgard Pro gives a red LED indicating it is no longer in range of the Survey Transmitter, the installation will require a Fireco Repeater to be located at the end of the range.



6. To identify a suitable location for the new Repeater bring the Survey Dorgard Pro closer to the Survey Transmitter until you are again in range (confirmed by getting a green light on the top LED of the Survey Dorgard Pro after you press the plunger down).



7. Assess a position for the required Fireco Repeater to be installed, i.e. not within 1 metre of a power source or metal surface (including Georgian wire-glass).

8. Move your Fireco Survey Transmitter to this new position and repeat the first steps of the survey until you have a positive radio range reading at each door you require to be held open with Dorgard Pro.

Power

Dorgard Pro

Dorgard Pro is supplied with two C-size batteries. To replace the batteries, unscrew the battery compartment on the top face of Dorgard Pro using an PZ2 screwdriver. Lift the battery shaft out and insert two new batteries positive up.

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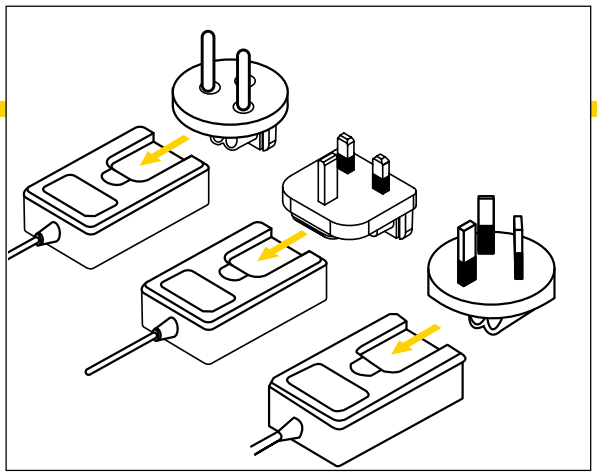
https://goo.gl/XQyoHw

Transmitter & Repeater

Provided

- **EZ6016** 24V 1A DC Power Supply with 2-way terminal block
- **EC7922** Power cable C7 with stripped ends
- **EC5217** UK plug adaptor
- **EC2083** EU Plug adaptor
- **EC0000** AU Plug adaptor

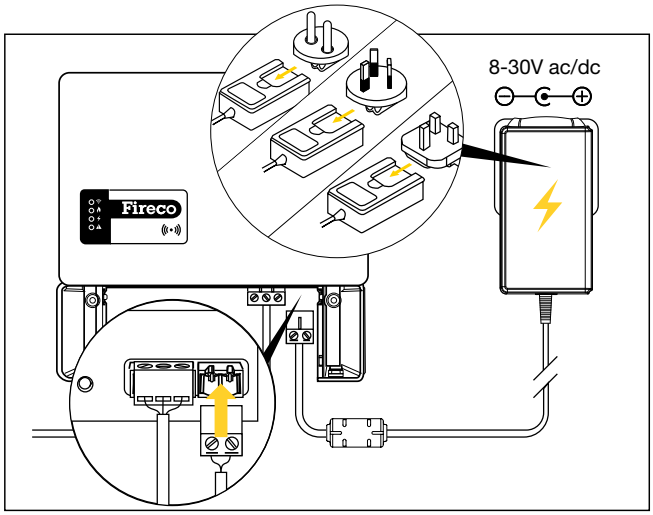
The Transmitter and Repeater require 8-30V AC or DC.



Connecting to power

Option 1. Using the supplied power supply EZ6016 connect either the UK, EU or AU plug adaptor by slotting one into the fixing point.

Option 2. Fit the C7 power cable EC7922 into the Power Supply EZ6016 at the base of the unit and connect to a non-switched fused 1A spur.



Option 3. Connect to another source such as the auxiliary power from the fire panel. The power supply must be between 8v and 30v (AC or DC).

Connect the green two way terminal block into the two way green connector located at the base of the Transmitter or Repeater.

The Transmitter or Repeater will beep twice and the power LED on the label will show a green light to say it has been successfully powered. The Transmitter will carry out its channel scan indicated by a flashing amber radio LED.

4

Setting up an acoustically-activated Transmitter

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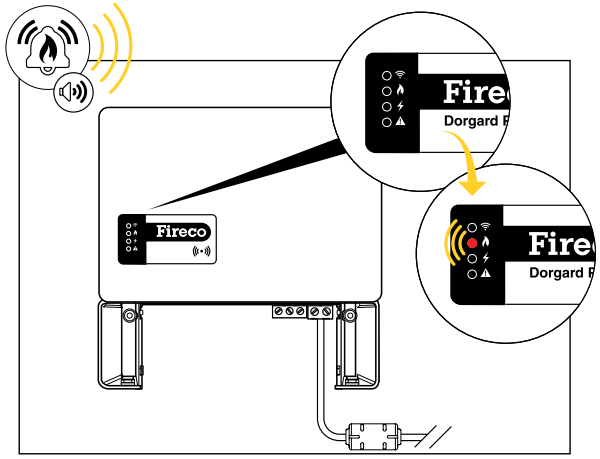
The Transmitter is factory set to be triggered acoustically by the sound of the fire alarm. The resistor factory fitting across the green three way terminal block denotes the Transmitter is in Acoustic Mode.



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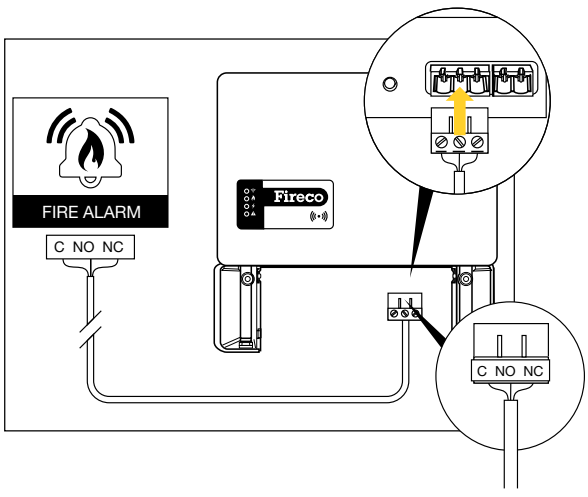
5

Connecting Transmitter to fire alarm CIE relay



Remove green three way terminal block from the base of the Transmitter.

Remove resistor from the green three way terminal block.

Wire the COM NC NO from the volt free contacts of the fire alarm relay into the green three way terminal block.

Connect the green three way terminal block into the corresponding green three way connector on the base of the Transmitter.

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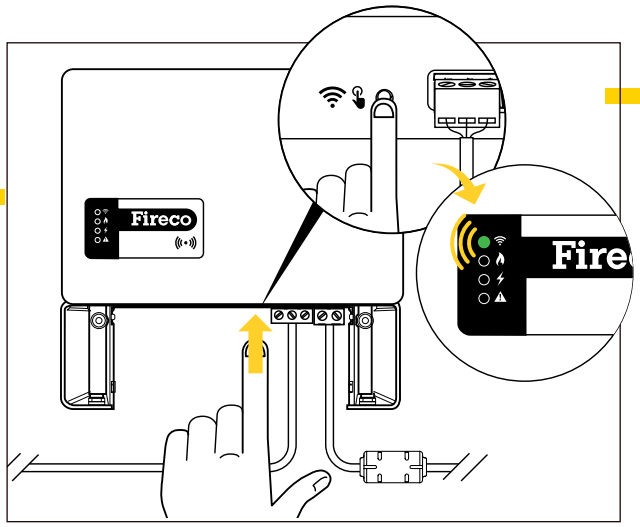
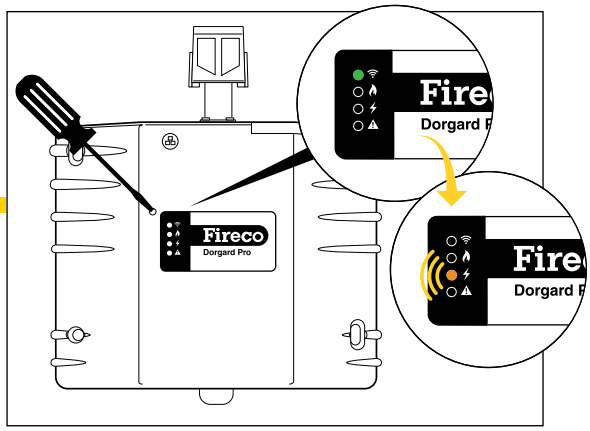
Binding a Dorgard Pro to a Transmitter or Repeater

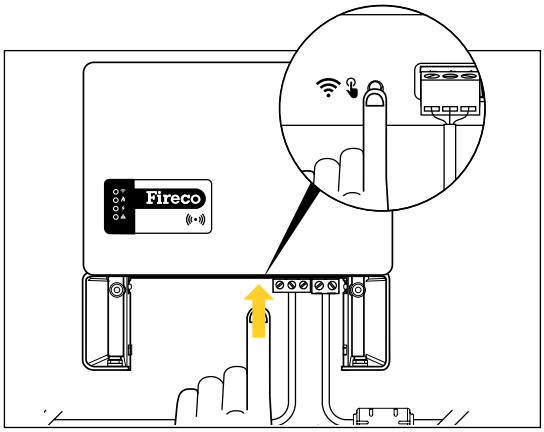


1. Press the blue bind button on the base of the Transmitter or Repeater. This will put the Transmitter/Repeater in bind mode, indicated by the top radio LED flashing green, and allow Dorgard Pros and Repeaters to be bound to it.

The Transmitter/Repeater will stay in this mode for one hour or until you press the bind button for a second time. The radio LED will then stop flashing.

2. Insert an object <3mm diameter and press the bind button in the hole located to the left of the label on the front of Dorgard Pro. The top radio LED will flash green until it has found and bound to the Transmitter or Repeater. It will then show you a constant green radio LED for 4 seconds.



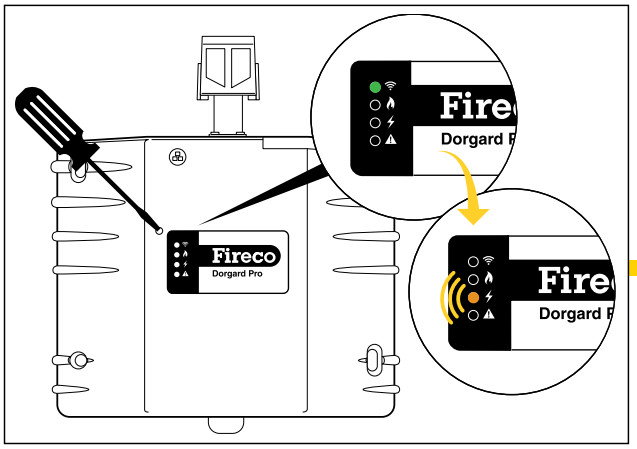


3. Press the bind button on the base of the Transmitter or Repeater once you have successfully bound all of the Dorgard Pro.

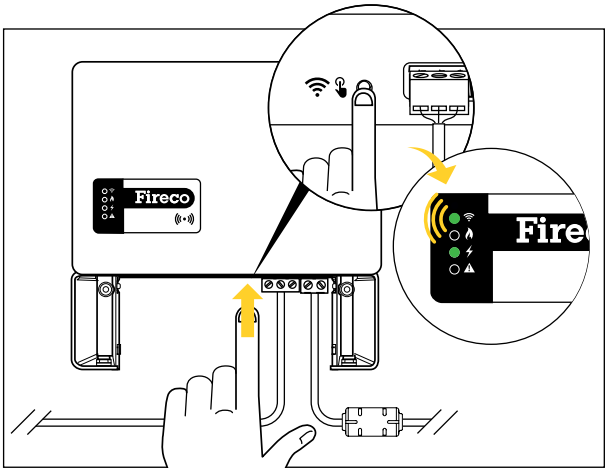
Binding a Repeater to a Transmitter or Repeater

https://goo.gl/ZrzuGd

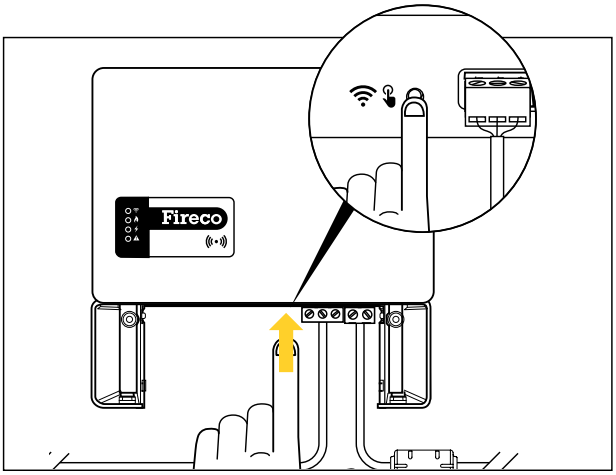
1. Press the blue bind button on the base of the Transmitter or Repeater. This will put the Transmitter/ Repeater in bind mode (indicated by the top radio LED flashing green) and allow Repeaters to be bound to it.



Press the blue bind button on the Transmitter or primary Repeater again to take the unit out of binding mode and allow you to bind further units to the recently bound secondary Repeater.



2. Once the Repeater has successfully bound to the Repeater or Transmitter it will stop flashing the top radio LED green and come out of binding mode. When the Repeater is successfully bound it will carry out a channel scan, this is indicated by a flashing amber power LED.



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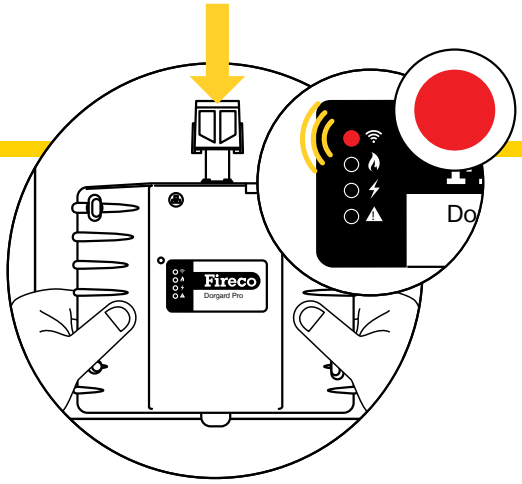
Scan to watch our technical support videos

Troubleshooting section

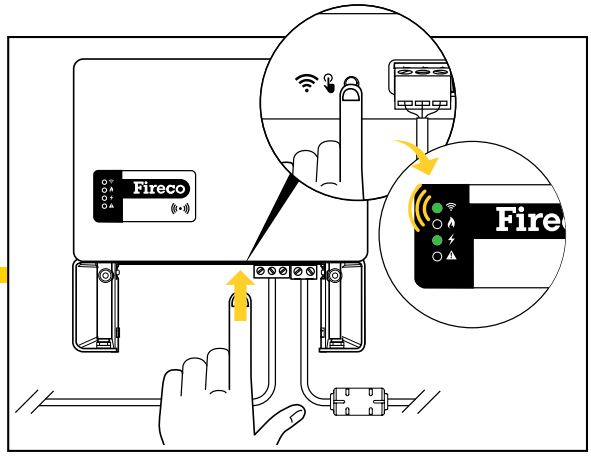
Failing to to bind

Dorgard Pro



State

Dorgard Pro will show you it has unsuccessfully bound by showing you the radio LED as red for 4 seconds. It will then take itself out of binding mode and remain in acoustic mode.



Check

Check that the Transmitter or Repeater to which you want the Dorgard Pro to bind is in binding mode. The Transmitter or Repeater will be flashing its top radio LED green.

Fix

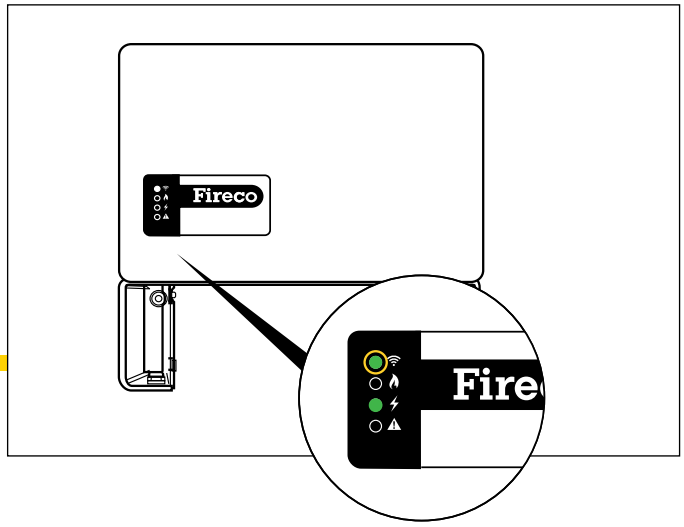
While the Transmitter or Repeater is in binding mode, try pushing the bind button on the Dorgard Pro again. The Dorgard Pro will flash its top radio LED green and retry binding to the Transmitter or Repeater.

If Dorgard Pro again lights its radio LED red (4s) it has unsuccessfully bound to the Transmitter or Repeater.

You will need to re-site the Transmitter or Repeater closer to the Dorgard Pro

OR bind the Dorgard Pro to a different Repeater

OR add another Repeater to your system to increase the coverage.



Repeater

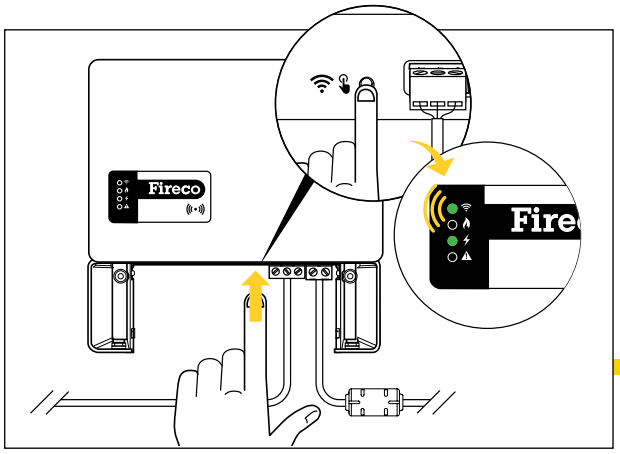
State

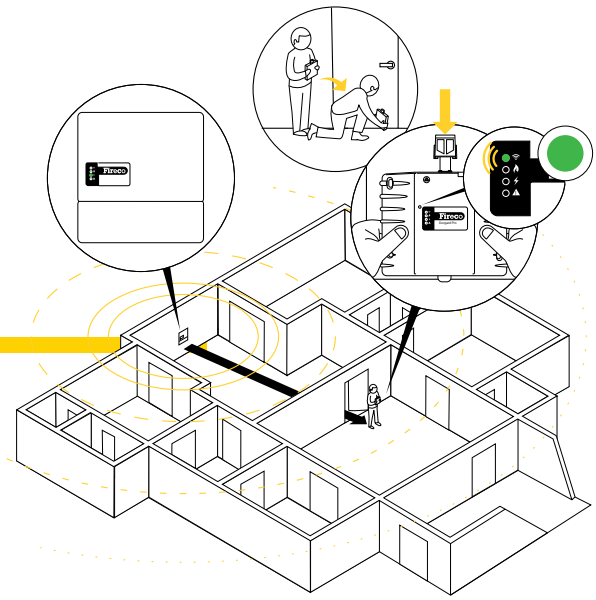
The Repeater is still flashing its top radio LED green 1 minute after the bind button on the base of the Repeater has been pressed down.

Check

Press the bind button on the Repeater again. If the top radio LED stops flashing it has bound to the Transmitter or primary Repeater.

OR Check that the Transmitter or primary Repeater is in bind mode, displayed by the top radio LED flashing green.





Fix

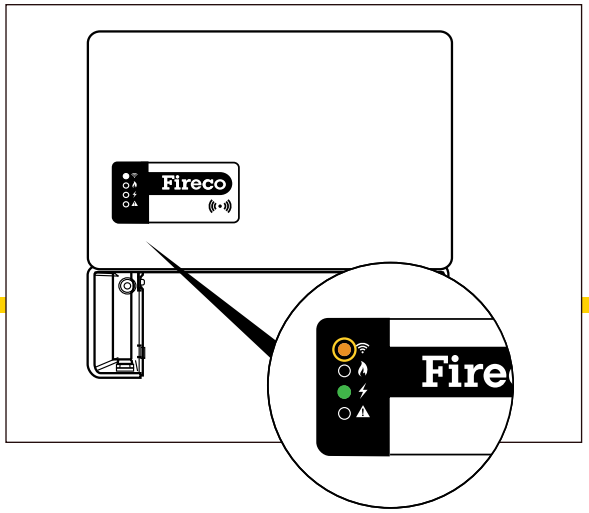
You will need to move either the Transmitter or Primary Repeater closer to the Secondary Repeater.

OR move the Secondary Repeater closer to the Transmitter or Primary Repeater

OR bind the Secondary Repeater to a different Repeater

OR add another Repeater to your system to increase the coverage.

Amber radio LED on the Transmitter



State

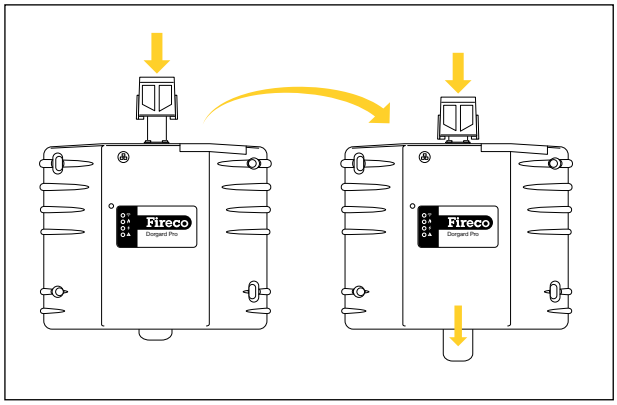
The top LED is amber on the Transmitter. This indicates it has lost communication with one or more of the devices that are bound to it indirectly (if it was directly bound to the lost device the alert LED would also be flashing amber, section 11).

Check

Repeaters;

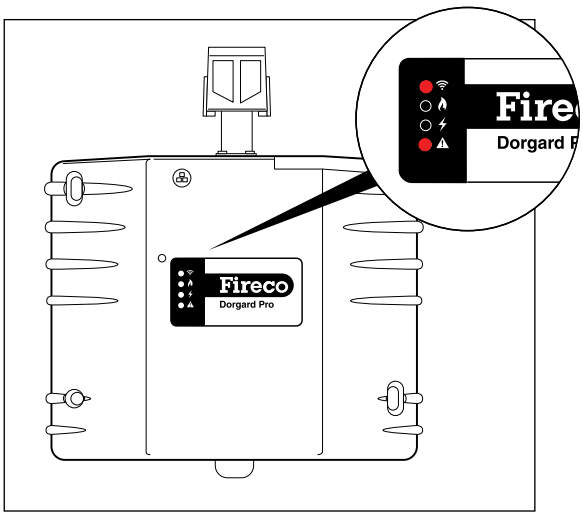
If the top LED is red it has lost its communication with its Transmitter/Repeater that it receives its signal from (ie its parent device).
(Transmitter/Repeater - see section 10).

If the alert LED is flashing amber with radio amber then check all the devices directly bound to it.



Fix

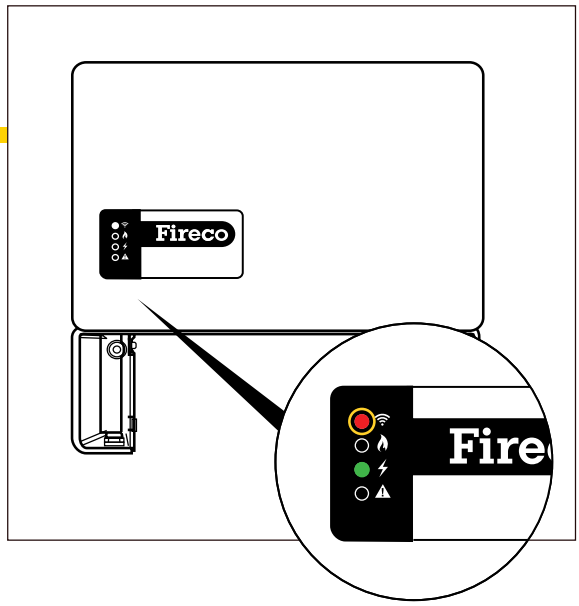
Push the plunger down on each of these Dorgards, if lost communication temporarily they will attempt to rebind automatically. If successful this will clear the amber LED on the Transmitter and both amber LEDs on the Repeater.



If the plunger fails to stay down and the Dorgard shows red radio LED and red alert LED then it has failed to rebind and will need detaching and rebinding. If it does not rebind then an additional repeater may be required.

10

Red radio LED on Repeater



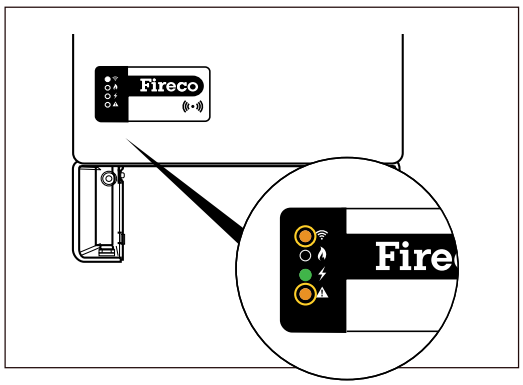
State

This is indicating the Repeater is no longer in communication with its parent device (Transmitter or Repeater). All the devices that are bound to the Repeater will also show lost communication fault.

Fix

Check the parent device to check for faults and that its powered. If there are no faults, it may be necessary to move the Repeater closer to its parent device or fit an additional Repeater to bridge the distance.

11



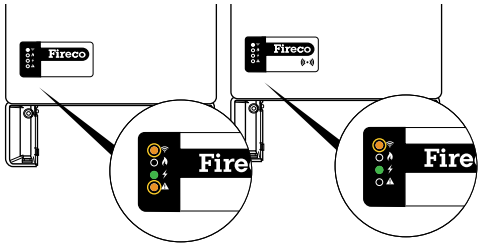
Amber radio LED and amber flashing fault LED on Transmitter/Repeater

State

Indicates that one or more of the devices DIRECTLY bound to it has lost communication.

Check

Repeaters. If showing red radio LED see section 10.



Dorgards. Push the plunger down on each of the Dorgards, if lost communication temporarily they will attempt to rebind automatically. If successful this will clear the both amber LEDs on the Repeater.

If the plunger fails to stay down and the Dorgard shows red radio LED and red alert LED then it has failed to rebind and will need detaching and rebinding. If it does not rebind then an additional Repeater may be required to bridge the distance.

Detach

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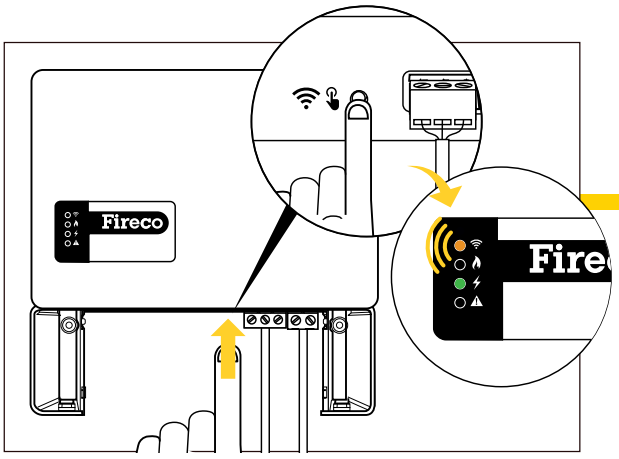


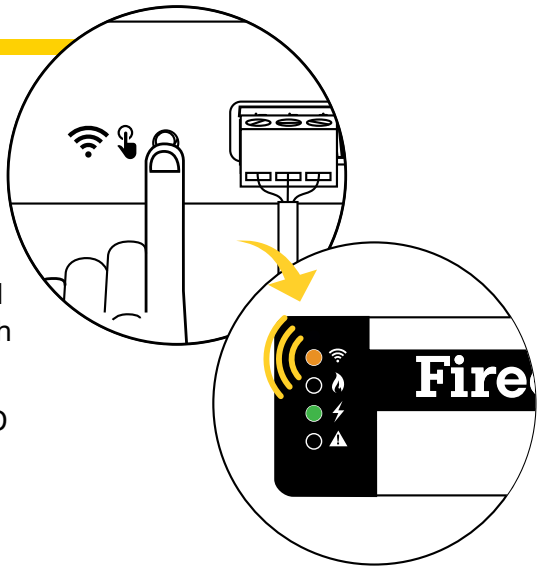
Detaching is a way of removing a Repeater or Dorgard Pro from the network.

Detach

In order to remove a Dorgard Pro or Repeater from a network, hold the bind button down on the products you wish to detach, until the top radio LEDs show amber. Whilst they are showing amber, they are detaching themselves from the network. Once they have finished detaching, they will no longer show amber, and Dorgard will revert back to acoustic. Press the bind button again to stop the detach process.

If you are detaching a Repeater from a network which has other Repeaters or Dorgard Pro bound to it, they will lose communication and go into a fail to safe state, releasing any doors they are holding open. They will continue to be bound to the Repeater, however, and will no longer retain any doors until the Repeater is re-bound to a Transmitter or Repeater which is connected (acoustically or wired) to a fire alarm relay.

One way detach on Transmitters/Repeaters

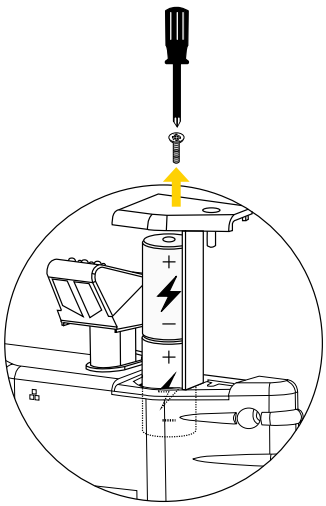


It may be that the Repeater or Transmitter which the Dorgard Pro or Repeater is bound to is no longer operational, in which case you cannot unbind from both products.

If this happens hold the bind button in until the top radio LED flashes amber. It will continue to flash amber whilst it clears any lost devices. This can take several minutes. The amber LED will go solid temporarily when cleared, then continue to flash. Turn off detach by pressing bind button.

To carry out a one way detach on a Dorgard, factory reset it. (see section 13.)

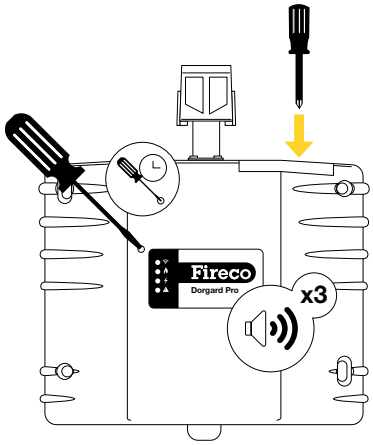
https://goo.gl/kTmrjh



Factory reset

Performing a factory reset returns the product to the original system state by erasing all of the information stored. This restores the device's software to its original manufacturer settings.

After carrying out a factory reset, the device will lose all of its retained memory so will no longer be bound to or control any products. It will no longer retain any doors until it is re-bound to a Transmitter or Repeater which is connected (acoustically or wired) to a fire alarm relay.



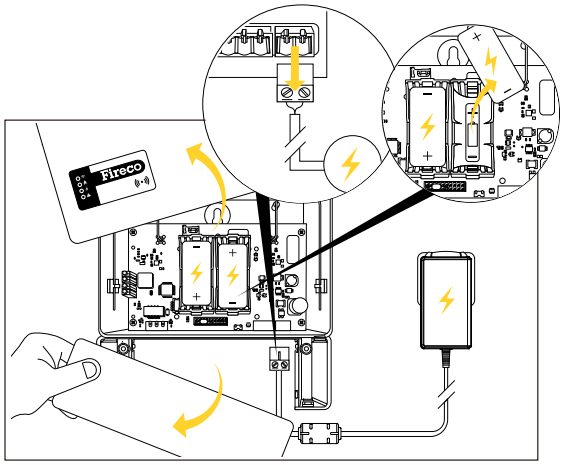
Dorgard Pro

1. Remove the batteries.

2. Hold the bind button in whilst putting the batteries back in.

3. Release the bind button after Dorgard Pro beeps **3 times.**

https://goo.gl/kTmrjh



Transmitter & Repeater

1. Remove power.

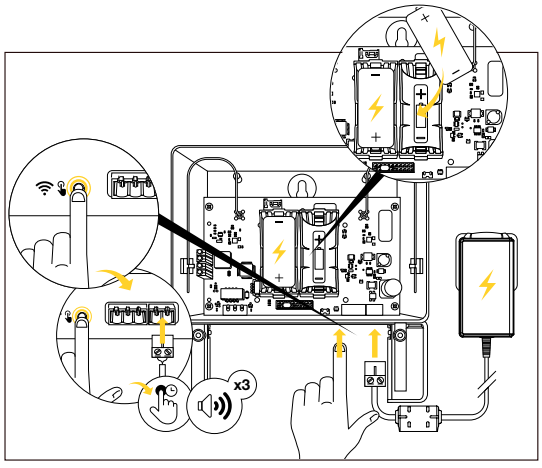
2. Remove the bottom and top covers.

3. Remove one of the batteries.

4. Replace the power whilst holding down the bind button.

5. Wait for three beeps, to indicate the Transmitter or Repeater is reset.

6. Replace battery.

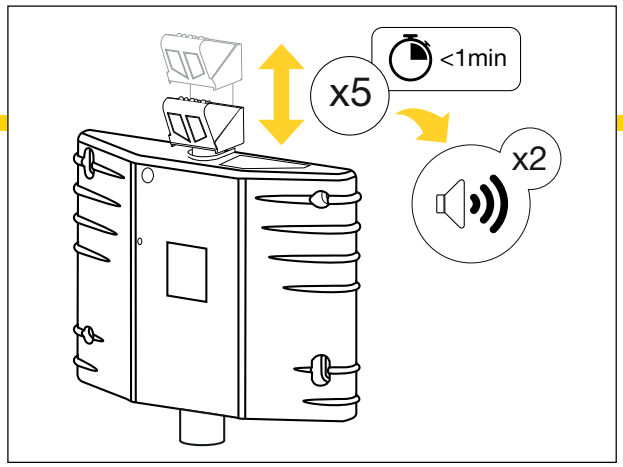


14

Dorgard Pro is marking the floor

https://goo.gl/4F5JnS

Press and release the plunger 5 times within 1 minute. Wait for 2 beeps.



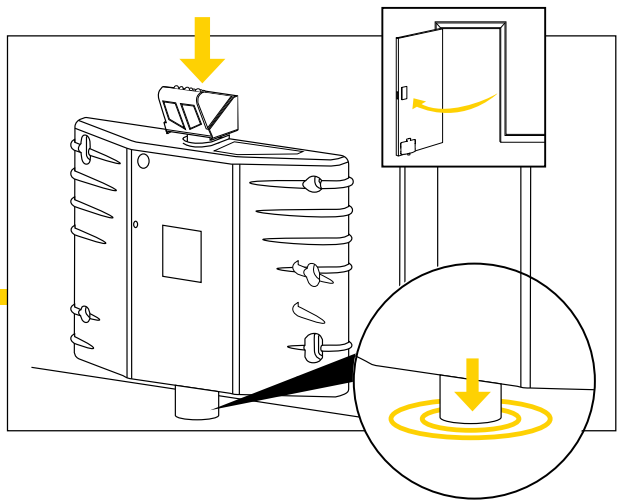
This will activate the anti-drag feature so when the door is pulled, Dorgard Pro will release the door.

Use the QR code (above right), to view our video of how to turn the anti-drag feature on or off.

https://goo.gl/cNDrMG

15

Dorgard Pro is slipping on the floor



Check

Check the rubber foot is making good contact with the floor and the plunger is fully pressed down.

Fix

Resite the Dorgard Pro lower on the door to ensure the rubber foot makes good contact with the floor.

OR Install a Dorgard Floorplate

Maintenance

For indoor use only.

It is essential that the system is subject to periodic inspection and servicing so that faults are identified and preventive measures can be taken to ensure the continued reliability of the system.

Routine testing of the system also provides an opportunity for occupants of the building to become, and remain, familiar with the system. Periodic inspection and servicing needs to be carried out by a competent person with knowledge of the system.

All equipment should be examined, as far as practicable, to ensure that it has not been damaged, painted, or otherwise adversely affected.

A visual inspection should be made to confirm that all readily accessible cable fixings are secure and undamaged. Each Dorgard Pro should be manually released to ensure they close suitably.

The Declaration of Performance is available upon request

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Notes

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