**₹** (€

Dispose an obselete

Smart Shield at a

collecting point for

electronic waste or with

your supplier. Dispose

the packaging material

point for paper recycling You may not dispose an

Within the legal warranty

time we intend to repair

all defective devices or

replace them - whether

the defect is caused by

material or assembly.

The warranty expires

after a third-party repair.

In case of a system failure

or a defective Smart

Shield please contact

at a paper collecting

obsolete device in the

general waste.

Warranty

Service

vour dealer

Disposal

#### **DIP Switch Functions**

Default factory settings shown, move as required.

No Automatic Alarm Automatic Alarm Switch-off 180 sec No Automatic Reset Automatic Reset

Delayed Alarm(15 sec)

#### **Terminal Connection**

1 - 3 Potential free relay, 30 V/0.5 A max. 4+5 Mains supply, 12 V (max 13 V). For GND do not use cl. 7 or 9 6+7 External key switch with reset (ground 7

8+9 External opening contact (ground 9)

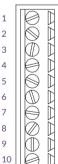
9+10 Reed contact

#### Mains supply

12 V (- 0.5V/+ 1 V) o Battery

9 V (max. 10 V) Current consumption

12 mA Activated mains operation 10 uA Activated battery operation 66 mA Alarm (siren active)



Potential free relay, 30 V/0.5 A max. NO Potential free relay, 30 V/0.5 A max, NC Potential free relay, 30 V/0.5 A max, COM Mains supply input + 12 V/DC Mains supply input GND External key switch with reset External key switch with reset ground External opening contact External opening contact ground/Reed contact Reed contact

#### Operation



turn back to 0

0

0

**(1)** 

Single Release Short pulse (< 5 sec) to 1

After that turn back to 0

After that

## Sounds

Interval	Meaning
	Door-too-long-open-alarm
3 sec	OR: Metric screws (pic. 6) are loose/missing <sup>1</sup> (tamper alarm)
	OR: magnet too far away
permanent	Permanent alarm when door is opened
<u></u>	OR: tamper alarm
60 sec	Battery monitoring
<u></u>	Voltage drops below 7.5 V
<b>*</b>	Permanent opening command

<sup>&</sup>lt;sup>1</sup> just during initial installation

# **INSTALLATION GUIDE**

SG-IG 960 960 REV: 02/18



# SMART\SHIELD

**Protecting Emergency Exits** 

# FOR STANDARD DOORS SG-960-960



Designed to monitor the use of emergency exits and windows, the Smart Shield standard model can be installed flush with, or onto the door frame itself.

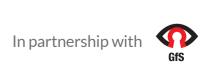
#### **SMART\SHIELD** is also available for:









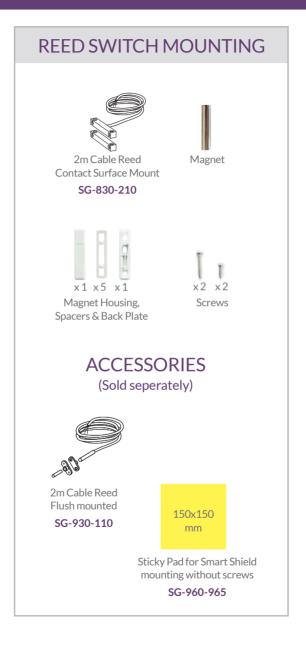


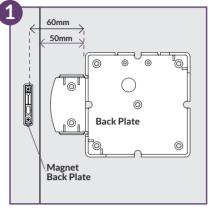


# **SMART SHIELD HOUSING** STOP EMERGENCY USE ONLY Front Back Back Plate removed Back Plate 1 x 2 Housing Screws Back Plate Fixing Screws STICKER, BATTERY AND KEYS Fluorescent Stop Sticker SG-960-966 **VARTA**

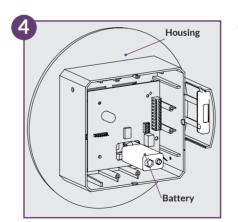
9V Battery

Keys SG-960-973

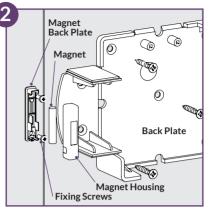




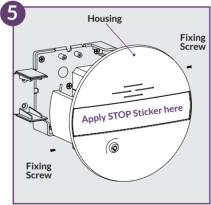
Remove screws from the side of the Smart Shield to release the **Back Plate** and place in the desired position, ensuring the side of the Back Plate is 50mm from the edge of the door. Fix Back Plate to the door with the screws provided. Position the Magnet Back Plate centrally to the Back Plate, 60mm away from the side of the **Back Plate** on the door frame.



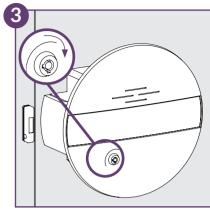
Insert Battery into Smart Shield housing and connect. After 5 seconds two short signals sound.



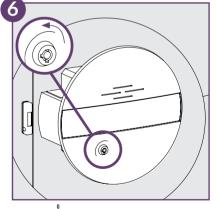
Fix the Magnet Back Plate to the door frame with the supplied Fixing Screws. Insert the Magnet into the Magnet Back Plate and cover with the Magnet **Housing.** Ensure the **Magnet** is opposite the **Reed** Contact within the Back Plate. Use Reed Contact **Spacer** as required. The **Reed Contact** is available with a 2m cable, should you wish to mount the Reed Contact away from the Smart Shield. See Parts & Accessories.

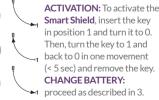


Place the **Housing** on to the **Base Plate**, and fix with the two small Fixing Screws provided. Please tighten the two screws carefully. Place the "STOP EMERGENCY USE ONLY" sticker on the front of the Smart Shield.



DEACTIVATION: Insert and turn key into position 1, then remove it. The Smart Shield is now deactivated. Note: Orientation of the key will depend on the orientation of the Smart Shield.





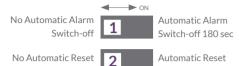
## **INSTALLATION GUIDE**

SG-IG 960 961 REV: 02/18



#### **DIP Switch Functions**

Default factory settings shown, move as required.



Immediate Alarm	3	Delayed Alarm(15 sec)
75dB	4	95dB

#### **Terminal Connection**

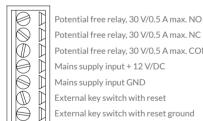
1 - 3 Potential free relay, 30 V/0.5 A max. 4+5 Mains supply, 12 V (max 13 V). For GND do not use cl. 7 or 9

6+7 External key switch with reset (ground 7 8+9 External opening contact (ground 9) 9+10 Reed contact 66 mA Alarm (siren active)

#### Mains supply 12 V (- 0.5V/+ 1 V) o

Battery

9 V (max. 10 V) Current consumption 12 mA Activated mains operation 10 uA Activated battery operation



Potential free relay, 30 V/0.5 A max, NC Potential free relay, 30 V/0.5 A max, COM External key switch with reset ground External opening contact External opening contact ground/Reed contact Reed contact

#### Operation

Орстацоп	
<b>Activation</b> Key switch on 0	0 1 1 <sub>1</sub>
Then short pulse (<5 sec) to 1	(a) 1
and back to 0	<b>1</b>
Quit Alarm short pulse (<5 sec) to 1	(a) 1
and back to 0	<b>1</b> 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Permanently Open Function Hold key in position 1 until it beeps twice	0 °
After that turn back to 0	0 ° 1

0

#### After that turn back to 0

Sounds

Single Release

Short pulse (< 5 sec) to 1

Journes	
Interval	Meaning
3 sec	Metric screws (pic. 6) are loose/missing <sup>1</sup> (tamper alarm)
	OR: magnet too far away
permanent	Permanent alarm when door is opened
<u></u>	OR: tamper alarm
60 sec	Battery monitoring
<b>₹</b>	Voltage drops below 7.5 V
<b>₹</b>	Permanent opening command

<sup>&</sup>lt;sup>1</sup> just during initial installation



#### Disposal

Dispose an obselete Smart Shield at a collecting point for electronic waste or with your supplier. Dispose the packaging material at a paper collecting point for paper recycling You may not dispose an obsolete device in the general waste.

#### Warranty

Within the legal warranty time we intend to repair all defective devices or replace them - whether the defect is caused by material or assembly. The warranty expires after a third-party repair.

#### Service

In case of a system failure or a defective Smart Shield please contact vour dealer

# SMART\SHIELD

**Protecting Emergency Exits** 

# FOR MUITIPOINT LOCKS SG-960-961



Smart Shield for multipoint locks secures a door with a multipoint lock vertical bar, creating a strong visual link with the door hardware.

#### **SMART\SHIELD** is also available for:





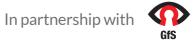




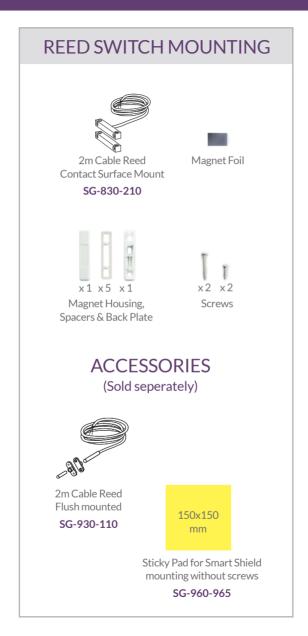


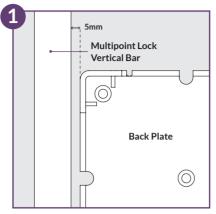


ParAid House, Weston Lane, Birmingham B11 3RS, United Kingdom +44 (0)845 230 2253 enquiry@sigmafs.com www.sigmafs.com

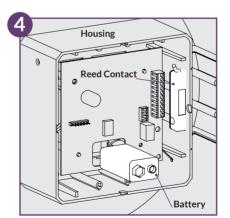


# SMART SHIELD HOUSING STOP EMERGENCY USE ONLY Front Back Plate removed **Back Plate** 1 x 2 Housing Screws **Back Plate Fixing Screws** STICKER, BATTERY AND KEYS Fluorescent Stop Sticker SG-960-966 Keys SG-960-973 9V Battery

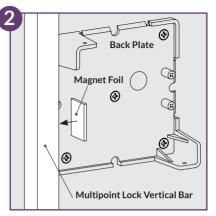




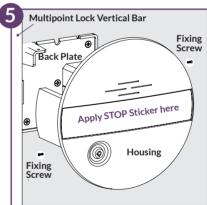
Remove screws from the side of the Smart Shield to release the Back Plate. Place the Back Plate in the desired position, ensuring the side of the Back Plate is 5mm from the edge of the Multipoint Lock Vertical Bar. Fix Back Plate to the door with the screws provided. The Reed Contact is already mounted inside the Smart Shield housing.



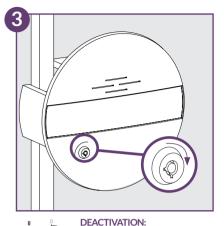
Insert Battery into Smart Shield housing and connect. After 5 seconds two short signals sound.



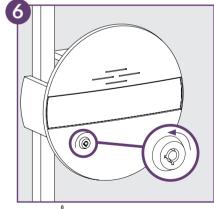
The Reed Contact comes with a 2m cable, which will allow it to be removed from the Smart Shield housing and fixed away from the Smart Shield if necessary. Please cut Reed Contact Cable to desired length and reattach to Terminal Connection 9 & 10. Stick the Magnetic Foil onto the Multipoint Lock Vertical Bar close to the **Reed Contact**. Make sure the alarm is triggered before the door is open.

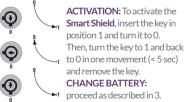


Place the **Housing** on to the **Back Plate**, and fix with the two small Fixing Screws provided. Please tighten the two screws carefully. Place the "STOP EMERGENCY USE ONLY" sticker on the front of the Smart Shield.



Insert and turn key to position 1, then remove it. The Smart Shield is now deactivated. Note: Orientation of the key will depend on the orientation of the Smart Shield.







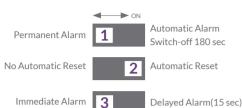
### **INSTALLATION GUIDE**

SG-IG 960 955 REV: 02/18



#### **DIP Switch Functions**

Default factory settings shown, move as required.



75dB	4	95dl

#### **Terminal Connection**

1 – 3 Potential free relay, 30 V/0.5 A max. 4+5 Power supply, 12 V (max 13 V) 500mA For GND do not use d.7 or 9

6+7 External key switch with reset (ground 7) 8+9 External opening contact (ground 9)

#### Power supply

 $12\,V\,(\text{--}\,0.5\,\text{V/+}\,1\,\text{V})\,500\text{mA}$  Battery

# 9 V (max. 10 V) Current consumption

12 mA Activated mains operation 10 μA Activated battery operation 66 mA Alarm (siren active)

# Potential free relay, 30 V/0.5 A max. NO Potential free relay, 30 V/0.5 A max. NC Potential free relay, 30 V/0.5 A max. NC Potential free relay, 30 V/0.5 A max. COM Power supply input + 12 V/DC Power supply input - 12 V/DC Remote key switch with reset Remote key switch with reset External disarming contact 15 second delay External disarming contact 15 second delay

#### Operation

Activation Key switch on 0	0 1 1 1
Then short pulse (<5 sec) to 1	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
and back to 0	1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Silence and Reset short pulse (<5 sec) to 1	
and back to 0	0 1 1 <sub>1</sub>
Disarm Hold key in position 1 until it beeps twice	
After that	0

**(1)** 

0

#### After that

Sounds

Single Disarm

turn back to 0

turn back to 0

Short pulse (< 5 sec) to 1

oounas	
Interval	Meaning
₹ 3 sec	Screw to fix - housing on base plate is loose/missing <sup>1</sup>
	OR: Magnet is not correctly positioned
permanent	Permanent alarm when door is opened OR: tamper alarm
60 sec	Battery monitoring
<b>**********</b>	Voltage drops below 7.5 V
<b>*</b>	Disarmed confirmation

<sup>&</sup>lt;sup>1</sup> just during initial installation

# ₩<u>₹</u>(€

#### Disposal

Dispose an obselete Smart Shield at a collecting point for electronic waste or with your supplier. Dispose the packaging material at a paper collecting point for paper recycling. You may not dispose an obsolete device in the general waste.

#### Warranty

Within the legal warranty time we intend to repair all defective devices or replace them - whether the defect is caused by material or assembly. The warranty expires after a third-party repair.

#### Service

In case of a system failure or a defective Smart Shield please contact your dealer.

# **SMART\SHIELD**

**Protecting Emergency Exits** 

# FOR PUSH BARS SG-960-955



If lightly pressed,
Smart Shield for push bars
triggers a pre-alarm which
is silenced upon release.
If the push bar is pressed
fully, the main alarm
resounds.

#### **SMART\SHIELD** is also available for:

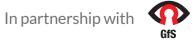








ParAid House, Weston Lane, Birmingham B11 3RS, United Kingdom +44 (0)845 230 2253 enquiry@sigmafs.com www.sigmafs.com



## **SMART SHIELD HOUSING**



Front



Front Housing





Back Plate and Green Trigger Plate



**Back Plate Fixing Screws** 

STICKER, BATTERY AND KEYS



Fluorescent Stop Sticker SG-960-966



9V Battery



Keys SG-960-973

**ACCESSORIES** (Sold seperately)

(Vertical arm) (Horizontal arm)

Trigger Kit with Reed Contacts

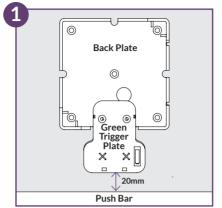
SG-960-945

Upper Red Plate x 2

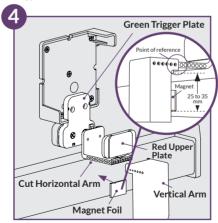
SG-951-292



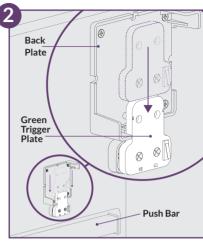
Sticky Pad for Smart Shield mounting without screws SG-960-965



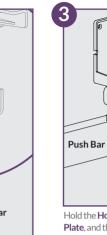
Remove screws from the side of the Smart Shield to release the Back Plate. Place the Back Plate in the desired position, ensuring the bottom of the Green **Trigger Plate** is 20mm above the Push Bar. Fix Back Plate to the door with the screws provided. Two screws are positioned behind the Green Trigger Plate, which are accessed by sliding the Green Trigger Plate upwards.



Glue Magnet Foil to push bar (as shown). Slide the Vertical Arm on to the end of the cut Horizontal Arm until it comes to a stop. Route the Reed Contact Cable into the grooves under the cut horizontal arm and out in front of the Green Trigger Plate. Insert the Red Upper Plate through cut Horizontal Arm and into Green Trigger Plate.



Slide the Green Trigger Plate back into the Back Plate.

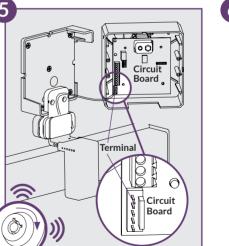


Hold the Horizontal Arm up to the Green Trigger Plate, and the Vertical Arm next to it, so that it sits in front and touching the push bar (as shown). Mark on the Horizontal Arm where it needs to be cut. Cut the Horizontal Arm.

Vertical Arm

**Green Trigger Plate** 

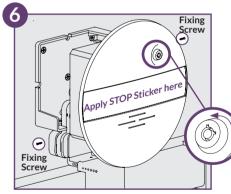
Horizontal Arm





Insert and turn key into position 1. then remove it. Connect the Battery ₹¹ After 5 seconds two short signals

sound. Insert the plug coming from the Reed Contact Cable on to the terminal located on the Circuit Board (as shown). Please refer to this step when Changing The Battery



Place the **Housing** on to the **Base Plate**.and fix with the two small screws provided. Tighten the two screws carefully. Place the "STOP EMERGENCY USE ONLY" sticker on the front of the Smart Shield



**ACTIVATION:**To activate the Smart Shield, insert the key in position 1 and turn it to 0. Then. turn the key to 1 and back to 0 in one movement (< 5 sec) and remove the kev.





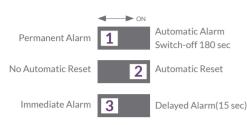
## **INSTALLATION GUIDE**

SG-IG 960 950 REV: 02/18



#### **DIP Switch Functions**

Default factory settings shown, move as required.



#### **Terminal Connection**

1 - 3 Potential free relay, 30 V/0.5 A max. 4+5 Power supply, 12 V (max 13 V) 500mA For GND do not use cl. 7 or 9

6+7 External key switch with reset (ground 7) 8+9 External opening contact (ground 9)

#### Power supply

12 V (- 0.5V/+ 1 V) 500mA Battery 9 V (max. 10 V)

#### Current consumption

12 mA Activated mains operation 10 uA Activated battery operation 66 mA Alarm (siren active)

# 

Potential free relay, 30 V/0.5 A max. NO Potential free relay, 30 V/0.5 A max, NC Potential free relay, 30 V/0.5 A max, COM Power supply input + 12 V/DC Power supply input - 12 V/DC Remote key switch with reset Remote key switch with reset External disarming contact 15 second delay External disarming contact 15 second delay

#### Operation

Activation Key switch on 0	
Then short pulse (<5 sec) to 1	<b>6</b> 1 1
and back to 0	<b>1</b>
Silence and Reset short pulse (<5 sec) to 1	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
and back to 0	<b>1</b>
<b>Disarm</b> Hold key in position 1 until it beeps twice	
After that turn back to 0	0 ° 1
Single Disarm	<u> </u>

#### Sounds

Short pulse (< 5 sec) to 1

After that

turn back to 0

Interval	Meaning
₹ 3 sec	Screw to fix - housing on base plate is loose/missing <sup>1</sup>
	OR: Magnet is not correctly positioned
permanent	Permanent alarm when door is opened OR: tamper alarm
60 sec	Battery monitoring
<b>?</b> ?	Voltage drops below 7.5 V
	Disarmed confirmation

<sup>&</sup>lt;sup>1</sup> just during initial installation

# ₩<u>₹</u>(€

#### Disposal

Dispose an obselete Smart Shield at a collecting point for electronic waste or with vour supplier. Dispose the packaging material at a paper collecting point for paper recycling You may not dispose an obsolete device in the general waste.

#### Warranty

Within the legal warranty time we intend to repair all defective devices or replace them - whether the defect is caused by material or assembly. The warranty expires after a third-party repair.

#### Service

In case of a system failure or a defective Smart Shield please contact vour dealer

# SMART\SHIELD

**Protecting Emergency Exits** 

# **FOR PANIC BARS** SG-960-950



If lightly pressed, Smart Shield for panic bars triggers a prealarm which is silenced upon release. If the panic bar is pressed fully, the main alarm resounds, the pins of the upper plate break and the vertical arm falls downward.

## **SMART\SHIELD** is also available for:



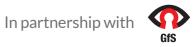








ParAid House, Weston Lane, Birmingham B11 3RS, United Kingdom +44 (0)845 230 2253 enquiry@sigmafs.com www.sigmafs.com



## **SMART SHIELD COMPONENTS**



Front



Front Housing



Back Plate and Green Trigger Plate



(Vertical arm)



(Horizontal arm)

Trigger Kit with Reed Contacts SG-960-915



Upper Red Plate x 2 SG-951-292





Housing Screws

**Back Plate Fixing Screws** 

## STICKER, BATTERY AND KEYS



Fluorescent Stop Sticker SG-960-966



9V Battery



Kevs **SG-960-973** 

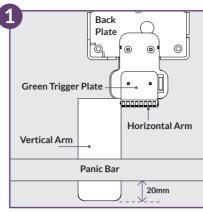
# **ACCESSORIES**

(Sold seperately)

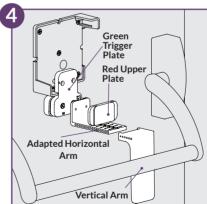


Sticky Pad for Smart Shield mounting without screws

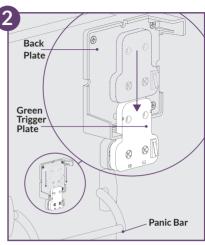
SG-960-965



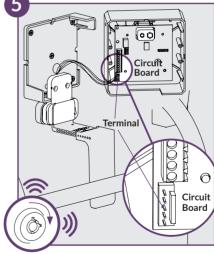
Remove screws from the side of the Smart Shield to release the Back Plate. Place the Back Plate in the desired position, ensuring the Vertical Arm overlaps the **Panic Bar** by 20mm. It is essential to ensure the Panic Bar can be pushed to its end stop. Fix Back **Plate** to the door with the seven screws provided. Two screws are positioned behind the Green Trigger Plate, which are accessed by sliding the Green Trigger Plate upwards.



Slide the VERTICAL ARM on to the end of the cut Horizontal Arm until it comes to a stop. Insert the Red Upper Plate through cut Horizontal Arm and into Green Trigger Plate.

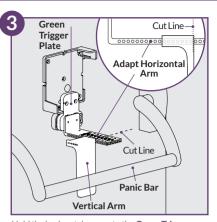


Slide the **Green Trigger Plate** back into the Back Plate.

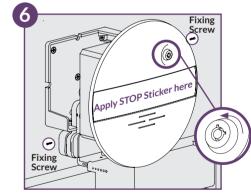


Insert and turn key into position 1, then remove it. Connect the battery. ▼ After 5 seconds two short signals

sound. Insert the plug coming from the Reed Contact Cable on to the terminal located on the Circuit Board (as shown). Please refer to this step when Changing The Battery



Hold the horizontal arm up to the Green Trigger Plate, and the Vertical Arm next to it, so that it sits behind and touches the Panic Bar (as shown). Mark on the Horizontal Arm where it needs to be cut. Cut the Horizontal Arm



Place the housing on to the base plate, and fix with the two small screws provided. Tighten the two screws carefully. Place the "STOP EMERGENCY USE ONLY" sticker on the front of the Smart Shield.



**ACTIVATION:**To activate the Smart Shield, insert the key in position 1 and turn it to 0. Then. turn the key to 1 and back to 0 in one movement (< 5 sec) and remove the kev.