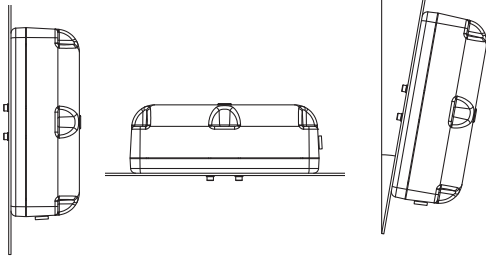


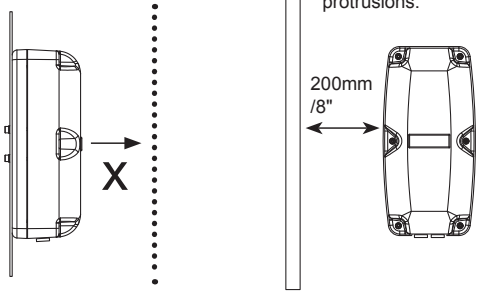
## Antenna mounting

Mount antenna vertically (best) or horizontally on a flat surface. For vertically mounted antennas in high positions, angle unit downwards.

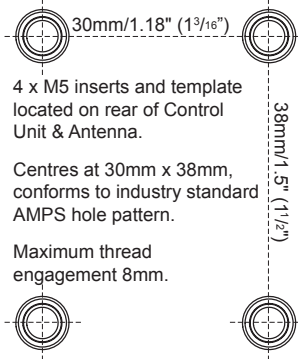
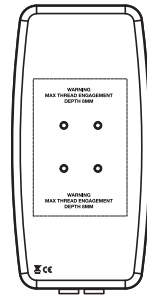


Do not mount antenna behind metal.

Mount at least 200mm away from metal protrusions.



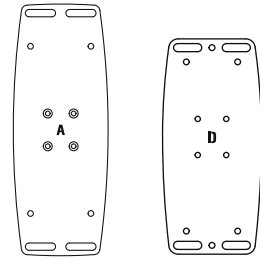
## Control Unit and Antenna fixing



4 x M5 inserts and template located on rear of Control Unit & Antenna.

Centres at 30mm x 38mm, conforms to industry standard AMPS hole pattern.

Maximum thread engagement 8mm.



Controller Unit and Antenna mounting plates are available.

## Turn system on

1) Insert DRIVER tag into Control Unit

2) Turn Vehicle Ignition ON



3) Button LED Illuminates GREEN  
Detection Zone ACTIVE



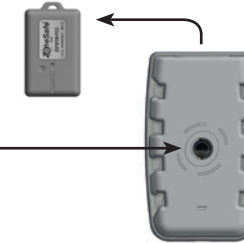
## Turn system off

1) Turn Vehicle Ignition OFF

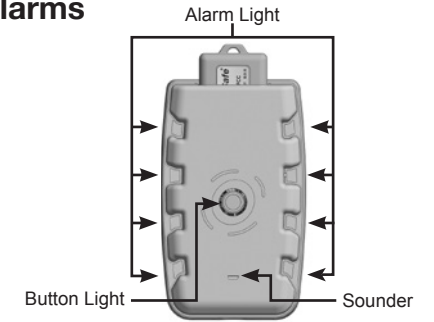


2) Remove DRIVER tag from Control Unit

3) Button LED turns off  
Detection Zone INACTIVE



## Alarms



State	Alarm Light	Sounder	Button
1 tag detected	Red (Slow Flash)	Two Tone Slow	Red
2+ tags detected	Red (Fast Flash)	Two Tone Fast	Red
System Error	Pink (Flash)	System Beep	Red
No Ignition	Red (Fading Pulse)	One Tone	Red
No Driver Tag	Red (Fading Pulse)	One Tone	Red
Wi-Fi Connected	Blue (Fading Pulse)	X	Green
System OK	X	X	Green

## Connect using Control Unit WiFi

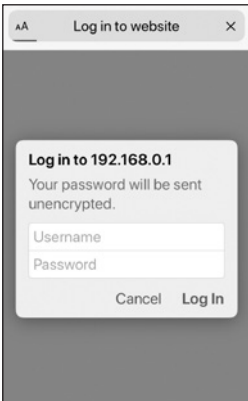
Connect to Control Unit WiFi network:  
**Note:** Requires both permanent and ignition  
**ZoneSafe\_XXXXX**

Substitute 'XXXXXX' for the serial number of your Control Unit (found on rear of control unit).

WiFi password: **ZONESAFE**

Open a web browser.

Enter address: <http://192.168.0.1/>



Enter:

Username: **admin**  
Password: **PASSWORD**

Usernames and passwords are case-sensitive.

**Note:** A changed password is not recoverable unless returned for factory resetting

## View & change settings

To change system settings, select the 'Settings' button in the Control Unit section of the SUMMARY page. Settings can be changed in the following sections:

### • Date/Time

### • General

Set number of antennas: 1 (only change this if further antennas are added).

### • Alarm

Set Volume: Low, Medium or High  
Alarm Time: Number of seconds the alarm continues after tag leaves detection zone  
Alarm Acknowledge: Disabled, Mute One or Mute All (Mute One is recommended). This is to allow the driver to silence the alarm once a detected tag has been acknowledged.

Alarm Tone = Default or Alternative

### • Driver

Driver Tag Alarm = Enable (Unit alarms if tag is left in the controller when the ignition is off)

**ALL other settings should remain as pre-set**



To change antenna settings, select the 'Settings' button in the Antenna section of the SUMMARY page.

### • Antenna Power

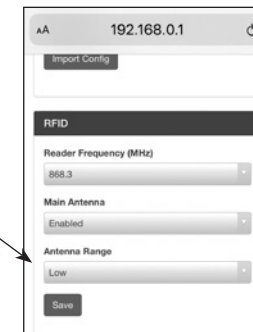
This determines the Antenna power/detection range. Enter: **1** (approx 3m/10') =Min to **15** (approx 10m/33') =Max

**Note:** SW1 on Control Unit **must** be set to **0** (see 'Antenna switch settings' overleaf)

### Important!

The system has two range levels which must be set depending on the required detection distance.

This setting can be located by following:  
**ADMIN \ GENERAL \ RFID**



Select:

**Low** = for detection range between 2-5m/6.5'-16.5'

**High** = (default) for detection range between 3-10m/ 10'-33'

## Available Tags

### Pedestrian (grey) & Driver (yellow) VibraTags

Carried by personnel. VibraTags provide short bursts of vibration when detected. VibraTags are hermetically sealed and the high-capacity battery can be wirelessly charged within two hours and can last up to three months between charges. USB wireless desktop charger sold separately.



### AssetTag

AssetTags fit into PVC safety cones with an internal neck diameter of between 39 and 42mm/1.5" and 1.75" (1 1/2" and 1 3/4"). AssetTags are shockproof and weatherproof. The replaceable batteries last up to three years under normal use.





**BRIGADE**

# RFID Detection System

Control Unit - ZS-1000-ECU/ZS-1001-ECU(NA)

Antenna - ZS-1000-AP/ZS-1001-AP(NA)



## Quick Installation Guide

brigade-electronics.com

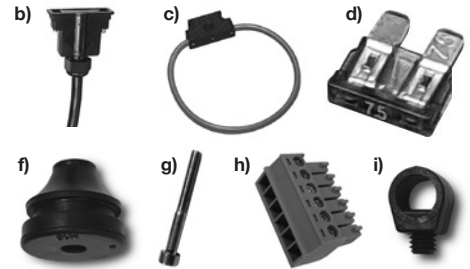
Installation Guide 6051

### Box contents

- ZoneSafe Control Unit: ZS-1000-ECU**
- a) ZoneSafe Control Unit (x1) Part No: 5881
  - b) Cable Loom & Connector (x1)
  - c) Inline Fuse Holder (x2)
  - d) 7.5 Amp Blade Fuse (x2)
- ZoneSafe Antenna Unit: ZS-1000-AP**
- e) ZoneSafe Antenna (x1) Part No: 5882
  - f) IP67 cable grommets (x3)
  - g) M4 x 35mm Hex Screw (x6)
  - h) 6 Way Screw Terminal (x2)
  - i) Collar cable grip (x2)



**Note:** Driver, Pedestrian or Asset Tags required to operate system (available separately)



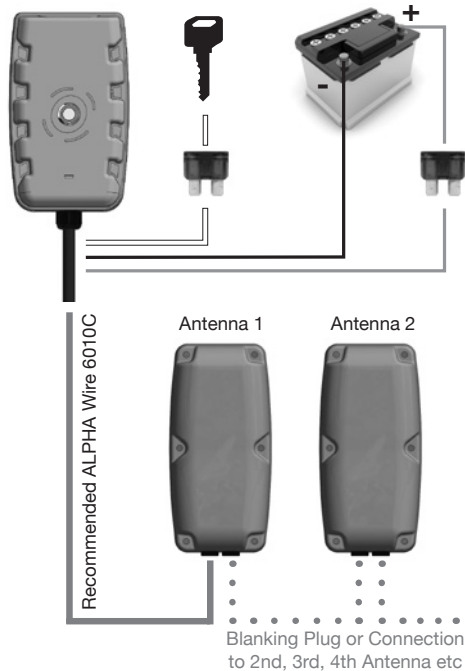
### Installation requirements

- 12-24V DC Supply Voltage
  - 1 Amp Per Antenna
  - 0V Earth
  - 4 x M5 screws (Max thread engagement 8mm)
  - Control Unit serial number for WiFi connection
  - ALPHA Wire 6010C\*
  - Mounting/Fixing Option\*
  - Driver, Pedestrian or Asset Tags\*
- \* Available separately

For this Quick Start Guide in other languages and Full User Manual in English only visit:  
[www.brigade-electronics.com](http://www.brigade-electronics.com)

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### 12-24V System wiring



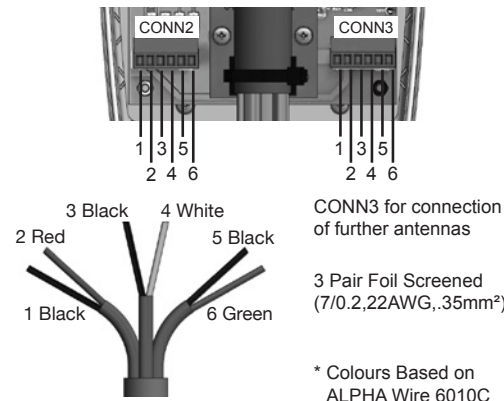
### Control Unit wires

Description	Colour	To
0V_OUT	Red/Brown	Antenna CONN2/1
VIGN_OUT	Red/Black	Antenna CONN2/2
SYNC_B	Violet	Antenna CONN2/3
SYNC_A	Yellow/Red	Antenna CONN2/4
RS485_B	Yellow	Antenna CONN2/5
RS485_A	Green/Red	Antenna CONN2/6
VBAT_IN	Red	Vehicle Battery + V
0V_IN	Black	Vehicle Battery 0V
VIGN_IN	White	Vehicle Ignition + V
RL_COM	White/Red	Optional
RL_NO	Brown	Optional
RL_NC	Orange	Optional
IN1 +	Blue	Optional
IN1 -	Red/Blue	Optional
IN2 +	Pink	Optional
IN2 -	Green	Optional
IN3 +	Turquoise	Optional
IN3 -	Grey	Optional

### Antenna wiring

Pin No.	Description	*Colour
1	0V_IN	Black (Red Pair)
2	VIGN_IN	Red
3	SYNC_B	Black (White Pair)
4	SYNC_A	White
5	RS485_B	Black (Green Pair)
6	RS485_A	Green

Connect to CONN2 inside antenna unit.

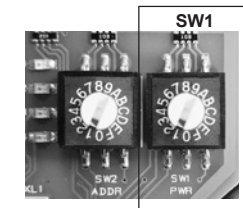


### Antenna switch settings

Locate SW1 & SW2 inside antenna unit.

#### SW1 = Antenna Power/Detection range

To set detection range manually, select: No.1=Min to F=Max  
**Note:** Manual settings cannot be overridden by WiFi controller.  
To set detection range via Control Unit WiFi network, select: 0



**Important!**  
The system has two range levels which must be set depending on the required detection distance. See 'Connect using Control Unit WiFi' (overleaf) for instructions.

#### SW2 = Antenna Address

Set first connected antenna to No.1  
Set up to 6 antennas sequentially:  
(Second antenna to No.2, third antenna to No.3 etc.)

