BlueGuard Model Descriptions

BlueGuard Models		BG-FE	BG-VK1	BG-VK2	BG-VK3
INDICATORS	Blue status LED	●	●	●	●
	Remote mount status LED			●	●
HANDS-FREE OPERATION	10 bonded cell phones	●			
PIN ENTRY OPERATION	Unlimited users (1)		●	●	●
OUTPUT RELAY RATING	2A @ 30VDC, 0.5A @120VAC	●	●		
	5A @ 240VAC			●	●
OUTPUT RELAY MODE	PRESENCE/PULSE (1 sec.)	●			
	PULSE (5 sec.)		●		
	PULSE (adjustable 3-90 sec.)			●	●
	TOGGLE (on-off)			●	●
ENCLOSURE	Sealed, water-proof	●	●		

NOTES:
(1) All users activate with the same PIN.

BlueGuard FE (Free Exit)

- Up to 10 cellphones may be "bonded" with the BG allowing hands-free activation when any of the bonded phones come into range.

- Output can be set to PULSE (1 second) or PRESENCE (output activated while bonded phone is in range).

- The sealed BlueGuard case is designed for both indoor and outdoor use.
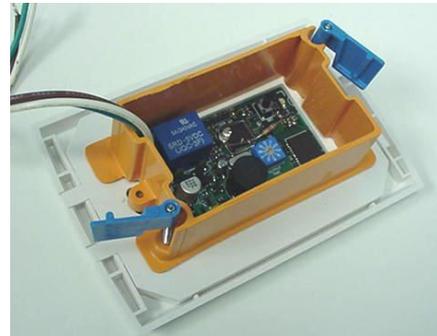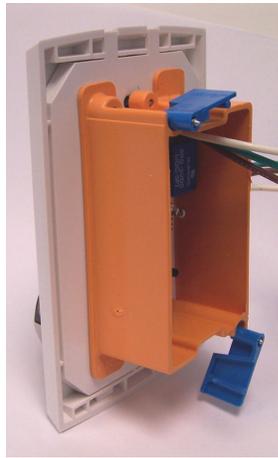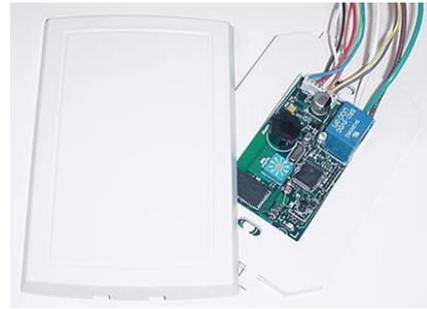
BlueGuard VK1 (Virtual Keypad)

- BlueGuard Virtual Keypad allows secure access using any cell phone (Bluetooth enabled) by entry of the unique PIN, allowing an unlimited number of users (all users activate with the same PIN).

- Output 5-second activation PULSE

- The sealed BlueGuard case is designed for both indoor and outdoor use.

BlueGuard VK2 (Virtual Keypad)

- Adjustable activation pulse period 3 to 90 seconds (allows direct connection to magnetic door lock)

- Provides a output toggle feature, connect to BG and activate output, connect again to deactivate the output

- BlueGuard Virtual Keypad allows secure access using any cell phone (Bluetooth enabled) by entry of the unique PIN, allowing an unlimited number of users.

- Recessed wall-mount package with tamper switch

- Remote LED status indicator

BlueGuard VK3 (Virtual Keypad)

- Same as VK2, but in surface mountable enclosure

BLUETOOTH COMMON TERMS

Bluetooth wireless technology A new protocol developed jointly by industry leaders in many fields, including Microsoft, Plantronics, Nokia, Ericsson, IBM, 3Com and Motorola. Bluetooth is still in its infancy, but the design allows for seamless, wireless, automatic connectivity between a large numbers of devices. Bluetooth headsets are among the first Bluetooth devices available. It allows real-time AV and data communications between Bluetooth enabled hosts. The link protocol is based on time slots.

Bluetooth Profiles Bluetooth profiles are general behaviors through which Bluetooth enabled devices communicate with other devices. Bluetooth technology defines a wide range of profiles that describe many different types of use cases. In order to use Bluetooth technology, a device must be able to interpret certain Bluetooth profiles. The profiles define the possible applications.

Device Discovery A procedure for retrieving the Bluetooth device address, clock, class-of-device field and used page scan mode from discoverable devices.

Paired Device A Bluetooth enabled device with which a link key has been exchanged (either before connection establishment was requested or during connecting phase).

Pairing The process of establishing a new relationship between two Bluetooth enabled devices. During this process a link key is exchanged (either before connection establishment was requested or during connecting phase).

PIN A user-friendly number that can be used to authenticate connections to a device before paring has taken place.

Range Area that a Bluetooth enabled radio can cover with signal. This area can be affected by many different factors.

BLUEGUARD FAQ

How does BlueGuard work and what does it do?
You can use BlueGuard to control many different types of devices.

BG-FE Model
> *The way that it works is, you bond your cell phone to BlueGuard, when you enter into range, BlueGuard detects your cell phone and activates its output. Up to 10 phones may be bonded to BG-FE for hands-free operation.*
> *When set to presence mode, the output will remain activated as long as the phone is in range.*
> *When set to pulse mode, the output will activate for a 5 seconds, then deactivate. In Pulse mode this phone then must leave BlueGuard range for a minimum of 60 seconds before it can reactivate BlueGuard.*

BG-VK Models
> *To operate the BG-VK models, search for Bluetooth devices on you cell phone, select BlueGuard and enter the PIN. The output will activate when the correct PIN is entered. An unlimited number of users may activate BlueGuard by entering the PIN (all users activate with the same PIN).*

> | | |
> |---|---|
> | *BG-VK1:* | *Cylindrical, sealed housing, 5 second output pulse* |
> | *BG-VK2:* | *Wall mount housing, 3-90 second output pulse, on-off toggle feature, 5A relay* |
> | *BG-VK3:* | *Surface mount housing, 3-90 second output pulse, on-off toggle feature, 5A relay* |

Do I need to download any software to my phone?
No, BlueGuard uses existing Bluetooth features in the phone.

How do you stop a door or gate opening if you are walking near the object etc.?
BlueGuard provides an ARM input that can be used to prevent BlueGuard from activating until the ARM input is ON. The ARM input may be connected to a loop detector that will detect the presence of a vehicle. If a vehicle is not present, then BlueGuard is not Armed and will not activate even if the phone is in range. In addition, the ARM input could be connected to a manual switch allowing you to disable BlueGuard manually as required.

Programming the BlueGuard?
BG-FE Model
Programming the BlueGuard is similar to bonding your phone with a Bluetooth headset. The BlueGuard is placed in discovery mode and you search for it with your cell phone. When it is found, you select it and choose to bond, enter the PIN and your done.
BG-VK Models
Programming not required.

How would you program an additional phone unit?
BG-FE Model
All phones are added by placing the BlueGuard into discovery mode using the magnet supplied with the unit. This is done one phone at a time. The first phone entered is the master and allows a unique PIN to be entered. Phones can be added during installation or at any time.
BG-VK Models
To allow access/activation with additional phones, simply provide the users with the BG PIN.

How do you program this device with the cell phone ID's?
The cell phone ID is automatically exchanged with BlueGuard during the initial bonding process; there is no need for the user to do anything more than to authorize the bonding request by entering the PIN.

Do you have to have all the phones together at one time to program them or can phones be added individually?
BG-FE Model
Phones can be added at any time, providing that you have the PIN, by placing the BlueGuard in discovery mode using the magnet supplied with the unit.
BG-VK Models
To allow access/activation with additional phones, simply provide the users with the BG PIN.

Is there a way to increase the number of users or cell ID's to use?
BG-FE Model
No, this limitation is primarily related to the response time of the Bluetooth functions in the cell phones. When you open your Bluetooth headset, you may notice that it takes several seconds to pair with your phone.
BG-VK Models
To allow access/activation with additional phones, simply provide the users with the BG PIN.

What is the operating range of the unit?
The range of the BlueGuard is limited to the capability of the Bluetooth feature included in most cell phones and is specified as 10 meters (33ft.).

What affects the response time of BlueGuard?

1. *Distance - up to 10m*
2. *Obstructions in line of sight between the phone and BlueGuard*
3. *Speed of travel*
4. *Housekeeping actions the phone may be busy with at the time there is a request to connect to BlueGuard.*

Can I use the BlueGuard on my garage door?
BG-FE Model
BlueGuard is not designed for use in applications where a single button is used to open, stop or reverse a door (ex. residential garage doors).
BG-VK Models
Yes, the BlueGuard provides a momentary switch function necessary to operate a garage door. BG-VK is connected the same way a remote switch is connected to the operator.

Do you have to have an arming loop to prevent unwanted gate openings?
BlueGuard will detect the presence of an authorized phone when it comes into range. The arming loop allows activation of BlueGuard when the authorized phone is in range and a vehicle is on the loop.   Using the arming loop will prevent the gate from opening if the owner walks near the gate (within range of BlueGuard). Use of the ARM input is optional; it may be left unconnected when not used.

Is BlueGuard Weigand compatible?
Not at this time.

How do I edit the Bluetooth friendly name in my iPhone?
Although the iPhone does not allow editing of the name from the phone keypad, it can be edited by connecting to iTunes.

Should I use PULSE or PRESENCE mode?
BG-FE Model

In PRESENCE mode, BlueGuard will activate its output when an authorized phone comes into range. The output will remain activated as long as the phone is in range. In the PULSE mode, BlueGuard will activate its output for 1 second when an authorized phone comes into range. BlueGuard will not activate its output again until the phone moves out of range and returns or the phone moves out of range and a different authorized phone moves into range. Pulse mode is recommended in gate operator applications to initiate an open cycle. Once the open cycle has been initiated the gate operator controls the rest of the sequence.

BG-VK Models

The BG-VK model provides PULSE activation and the BG-VK2 and VK3 also provide a toggle on-off feature.

Can you hack into the system?
The security level is the same as the Bluetooth in your cell phone. See www.bluetooth.org for detailed security specifications.

Where should I install BlueGuard?
Bluetooth® devices have a specified range of 33ft. (10 meters) in open air. This range may be reduced by obstructions. It is recommended that BlueGuard be mounted in a secure location that is not easily accessed to prevent tampering or damage.

BG-FE and BG-VK1 Models

The BlueGuard housing is durable PVC, watertight and designed for outdoor use.

BG-VK2 and VK3 Models

Designed for indoor use but may be mounted in separate enclosure for outdoor use.

My hands-free connection in my car, when paired with my phone, does not allow BlueGuard to activate. What can I do?
This limitation is common with current cell phones and is being addressed by the cell phone manufacturers. The Bluetooth protocol is designed to communicate with multiple devices at the same time, however until now the cell phone manufacturers did not take the advantage of this possibility. So, or now there is a short time (several seconds) that the voice communication via Bluetooth headset needs to be interrupted when connecting to BlueGuard.