# TRAKGARD<sup>TM</sup> - Portal Alarm System

# Instruction Manual



Model TRK
FCC ID W39TRK

Version 20110223X0.01

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Parts supplied:
- 1 babysitter unit
- 1 baby unit
-  2 UL certified 9 V DC power supply modules
- 8 AA 1.5 V *non-rechargeable* batteries

**TrakGard™** is a portable wireless motion sensing alarm system designed to alert a user of human (or animal) activity occurring in front of its sensing lens. In its simplest form, it consists of one ***babysitter*** (Portal) device and one ***baby*** (Guard) device. In the absence of obstacles, these two devices communicate over distances well in excess of 1000 feet. Even in the presence of obstacles, the wireless waves ricochet around obstacles over long distances. It is therefore not necessary for the babysitter and baby to be in line of sight to communicate with one another.

The baby can be placed inside such places as the interiors of cars and trucks, or around freight or container boxes, hallways, door entrances, inside small closed spaces including backpacks, gym bags, tool boxes, medicine cabinets, safes, or any other area to be monitored for activity.

The babysitter-baby combination can also be used in helping alert a caregiver of the ambulatory activity of a loved one walking about in the privacy of their own home or apartment, or in an assisted living facility. It can also be shared by neighbors looking after the homes of their neighbors absent or on vacation from their home, providing a means of alerting a watchful neighbor of an intrusion in time to call for help, and hence serve a role in neighborhood crime prevention programs.

Security alerts (intrusion events sensed by babies) display on the front panel of the babysitter as flashing LEDs and are accompanied by an audible repeating beep.  The front face panel of each device has a total for five LEDs arrayed across the top edge of the panel in an arc. The LED in the middle of the array designated "P" is reserved for the babysitter. The remaining LEDs, two to the left of the P LED designated I and II and two to the right of the P LED designated III and IIII, are reserved for assignment to babies.  Additional babies can be obtained from **TrakGard™** for linking up with a babysitter currently in operation by a user.

A plug-in receptacle is located on the side of each device for supplying power in maintaining



operation of the device using a UL 9V power supply module plugged into a standard wall outlet.[1]

Devices run off of a set of 4 AA batteries. If *rechargeable* batteries are used in the battery holder, periodic use of the power module connected to the device through the plug-in receptacle will automatically recharge the batteries.

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[1] *The polarity of the barrel plug (5.5 mm OD x 2.1 mm ID x 9.5 mm length) conveying power from a DC power supply module must be positive on the inside and negative on the outside.* To work properly when connected to an external power source, babies and babysitters require a power source supply between 7V to14V having a 3 Watt (or better) output.

Whereas the use of batteries provides portability of the babysitter and babies, babysitters, and babies, whenever practical, should preferably be operated using the 9V power module plugged into a wall outlet with its DC barrel adapter inserted into the power receptacle. Babies, and babysitters, will also power up, recharge and operate using UL certified DC power supply modules designed for powering up electronic devices in a car or truck.

Babysitters will run off of a single set of batteries over a period of several hours unplugged from the power supply module. Depending upon how much activity occurs in front of babies, they can operate on battery power over a period of several months.

*Operating Instructions*
*Getting Started – What is a babysitter and baby and how do they work together?*

When devices are turned off they appear identical. Once they are powered up, however, it will be evident that there are two types of devices working together in establishing an operating surveillance system. The device reporting security alerts to a user is a ***babysitter***.  A ***baby***, under its management, is the second device placed at a site to be surveyed for activity. The babysitter is not limited to managing one baby – additional babies can be managed by a babysitter.

 When powered up and operating, the ***babysitter*** is recognizable by the presence of a blinking green LED in the "P" position on the front panel of the device.
The babysitter is used to assign babies identities in reporting security alerts to it, and the place to look in determining what is going on in front of babies placed in surveillance positions a user desires to monitor. Is human or animal activity occurring, or has it occurred, in front of a baby carrying out surveillance? If so, the babysitter will emit a repeating audible beep, its "P" LED will flash red. The LED assigned to the baby reporting the security alert will also blink in green.

 ***Babies*** simply report activity as it occurs in their field of view. Whenever human or animal movement occurs in proximity to a baby, it instantly senses the activity, awakens and sends a security alert to the babysitter, that was used to give it an LED identity (position I, II, III, or IIII). In the absence of activity, the baby drops back into a sleeping state. A baby ordinarily displays no lit LED unless it is awakened, and is easily recognized by the absence of a lit LED after it is powered up and has dropped into its sleeping state.

The first time a baby is brought into service it must be given an LED assignment with a babysitter (e.g., assigned LED position I, II, III or III).

Unless a user intends to change the assigned LED position of a baby, once a baby has been assigned its LED position, it is not necessary to repeat the assignment each time the device is turned off and back on.

*Powering Up Devices*

Slide the on/off switch on the back of each device to the right "on" position.

## Assigning a Baby (or Babies) to a Babysitter

Pick up the *babysitter*, the device after powering up flashing the "P" LED on its front display panel, and using both thumbs, or two fingers, simultaneously press, then release, both red buttons on its front display panel. LED "P", and one of the LED positions (I) reserved for assignment to a baby (I, II, III, or IIII), and the "P" LED, will light up in green.

Press, and release, either one of the red buttons on its display panel to advance the lit LED to the LED position you wish to assign to the baby (I, II, III or IIII).

Now identify a **baby,** the device showing no lit LEDs, and simultaneously press, and release, both red buttons on its display panel. All five LEDs light up in green.

Return to the **babysitter** and press, then release, either red button on its display panel. This will cause the baby in the previous step to briefly flash its new LED assignment on its display panel. The baby then extinguishes its LED display and is now ready for service. The babysitter will simultaneously advance the lit LED assignment position one step forward on its display panel.

*To assign another baby to the same babysitter, repeat the same sequence with another baby.*

When finished, simultaneously press, and release, the two red buttons on the babysitter.

## Placing the babysitter and baby (babies) into service

At a site to be monitored for human or animal activity, place the **baby** on its side, or standing vertically, with the cover shield opened up and the infrared lens aimed at the area you wish monitored for human or animal activity.

Place the **babysitter** at a convenient viewing site where it can be monitored for incoming alerts on a regular basis.

Verify by walking in front of the **baby** that it reports activity as it is occurring (the baby should flash a red LED in the P position and simultaneously lights up its assigned LED on its front display panel). Confirm on the **babysitter** that the alert was sent.

## *Reading and Clearing Security Alerts Received by the Babysitter*

Alerts occur on the babysitter as a repeating beep, a flashing red LED at "P" and a green flashing LED signifying the baby reporting the alert. Clear alerts by pressing and releasing either one of the two buttons on its front display panel.

## *Other Issues to Keep in Mind*

If for any reason a device does not appear to be reporting or sending an alert, verify that power is getting to the device. This usually involves simply changing or recharging the batteries using the power supply module, or the device itself can be checked for proper operation by simply plugging it into the power supply module. When devices are plugged into the power supply module, a lit green light will show through the lower right side of the shell housing indicating power is accessible to the device. Under these circumstances, when powered up, the device should respond normally, flashing its LEDs whenever its cover shield is open and human activity is occurring in front of the infrared lens.

Devices placed outdoors can be kept waterproof by wrapping the devices in a water-proof polyethylene plastic or snap-lock bag. Even an opaque plastic bag will not impair the lens from detecting and reporting activity in front of the device.

After an alert is elicited, the device sending the alert pauses momentarily before resuming surveillance. During this phase, the LED will flash an alert on its display panel anytime it senses human or animal activity, allowing a user to verify its correct positioning in covering the area to be surveyed for activity.

The motion detection range for babies, and the babysitter, is slightly elliptical, projecting outward from the plane of the device in an arc of approximate 10 ft radius, and at the nearest point to the device at 20° from the plane of the lens.
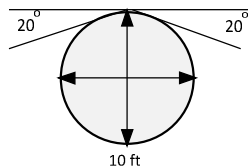


Certain dense objects lying between the babysitter and baby can block receipt of a security alert. This can usually be resolved by relocating the position of the baby relative to that of the babysitter. The wireless system is very efficient in bouncing waves around walls and other objects. It is not necessary to be in a direct line of sight between a babysitter and baby to receive security alerts sent by the baby to the babysitter.