

Sentryhound Pro Quickstart Guide

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1. Drawing of the single pole system for reference

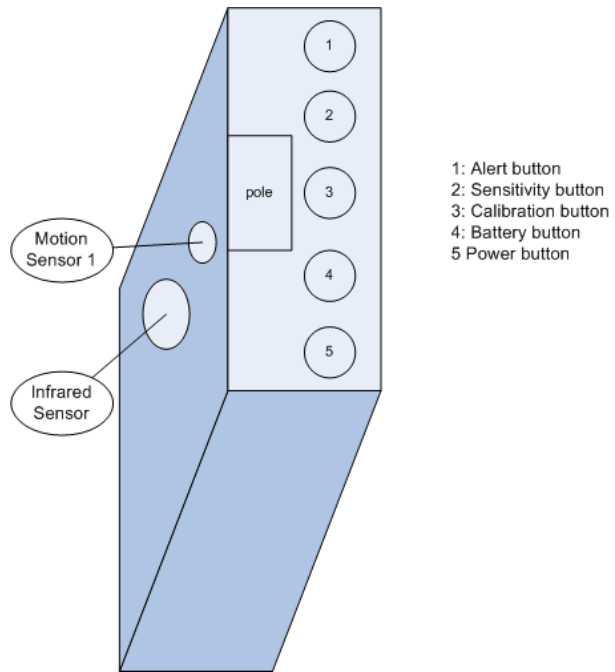


Figure 1: base showing motion sensor 1 and infrared sensor on one side

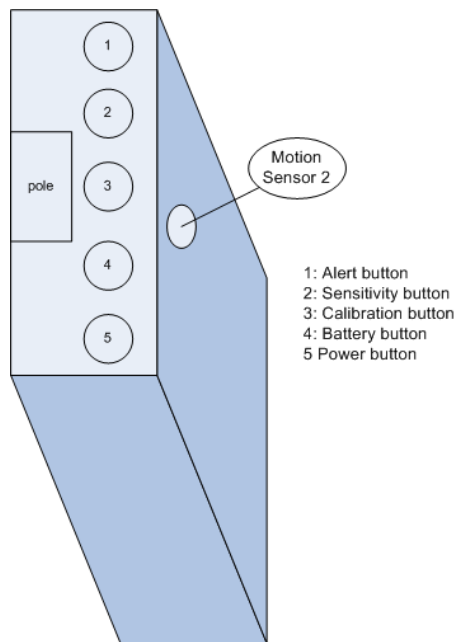


Figure 2: base showing motion sensor 2 on the other side

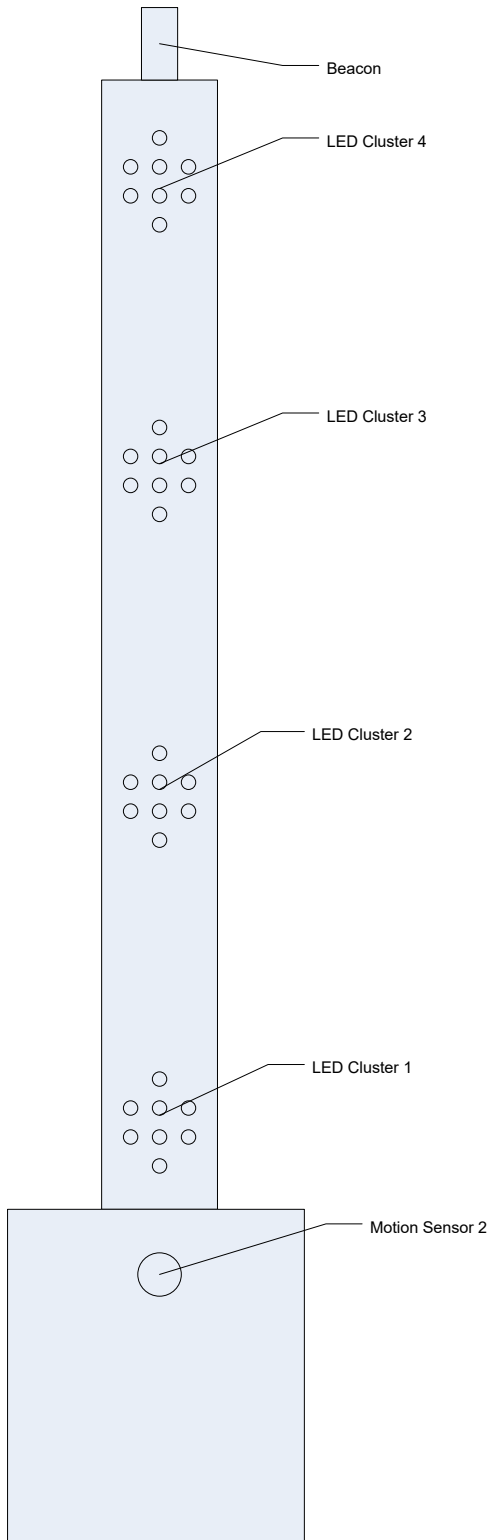


Figure 3: single pole system showing location of LED clusters and Beacon light

2. Various modes of operation

Table 1: Various modes of Sentryhound Pro

mode	Brief Description
1	Free standing gated tethered portal
2	Free standing gated untethered portal
3	Wall-mounted unidirectional
4	Free standing unidirectional
5	Free Standing omnidirectional
6	Free standing bidirectional

In this document, we will focus on mode 4 and mode 1 since they are most commonly used.

3. Default mode from factory

The default mode from factory depends whether single pole systems or dual-pole systems are ordered. If single pole systems are ordered, then the default will be mode 4. Simply turn on the system by pressing the Power button only. If the dual-pole systems are ordered, follow the procedure in section 6 “Powering up to mode 1 (Free standing gated tethered portal)”.

Other default setting from factory:

Setting	Default value
Sensitivity	Level 1: recommended (when checking Sensitivity level by pressing Sensitivity button once, visual feedback is LED Cluster 1 lit blue)
Alert	Level 1: audio: 0.5s; visual: 4s (when checking Alert level by pressing Alert button once, the visual feedback is LED Cluster 1 lit white)

4. User Interface Lock

After the system is setup and running, it is good idea to lock the system and safeguard the key. When the system is locked, certain user interfaces are disabled: Power button, Sensitivity button, Alert button, USB port.

In addition, during system calibration (yellow beacon light) and positive detection (blinking red beacon), some of buttons might also be disabled. In general, user interface button is only accessible when the beacon light is green and the key is in unlock position.

5. Powering up to mode 4 (Free standing unidirectional)

If the system was previously used in mode 4, then to power back to mode 4, just press/hold the Power button for about 1.5 seconds to power up.

If you are not sure whether the system was previously used in mode 4, and you want to power it up to mode 4, press ALERT+CALIBRATION+POWER combo for about 1.5 seconds to power up to mode 4. Once in mode 4, subsequent power-cycle requires pressing the Power button only.

For both scenarios, the confirmation that the system is in mode 4 is that the ALERT button LED flashes 5 times around 5 seconds after power-on.

6. Powering up to mode 1 (Free standing gated tethered portal)

First place two single pole units about 3-ft apart, with infrared sensors directly facing each other.

If the system was previously used in mode 1, turn on one unit first by pressing/holding the POWER button until the front panel LED light comes on; then within 4 seconds of pressing the Power button of first unit, turn on the other unit by pressing/holding its POWER button until the front panel LED light comes.

If you are not sure whether the system was previously used in mode 1, replace the POWER button action above with (ALERT+POWER) combo action.

For both scenarios, the confirmation that the system is in mode 1 is that the ALERT button LED flashes 2 times for the first unit powered up, and 3 times for the second unit powered up.

It doesn't matter which unit is powered up first, as long as they are powered up within 4 seconds of each other while two infrared sensors are facing each other.

This procedure needs to be repeated each time a dual pole system is powered on.

7. Changing from mode 1 to mode 4

Versatility of the Sentryhound Pro system also allows turning a dual pole system into two separate single pole unidirectional units (mode 4):

Take a unit, and just turn on with ALERT+CALIBRATION+POWER combo. Make sure that ALERT button flash 5-times. Subsequent power-cycle of the unit only needs to press/hold POWER button alone if the unit is to be used in mode 4 still.

8. Changing from mode 4 to mode 1

Versatility of the Sentryhound Pro system also allows combining two single poles into dual-pole gated tethered portal mode 1 (thus allows for wider passage of the traffic).

First place two single pole units about 3-ft apart, with infrared sensor directly facing each other.

Turn on one unit first by pressing/holding the ALERT+POWER combo until the front panel LEDs light up; then within 4 seconds of pressing the Power button of first unit, turn on the other unit by pressing/holding its ALERT+POWER combo until the front panel LEDs light up.

Subsequent power-cycle of the two units into mode 1 only needs to replace the (ALERT+POWER) combo above with POWER button alone.

For both scenarios, the confirmation that you are in mode 1 is that the ALERT button LED will flash 2 times for the first unit powered up, and 3 times for the second unit powered up.

It doesn't matter which unit is powered up first, as long as they are powered up within 4 seconds of each other while two infrared sensors are facing each other.

9. Changing the audio/visual alert duration

Upon a positive detection, the system will emit audio and visual alert. The duration of alert can be customized according to following table by pressing the ALERT button when the system is on and done with calibration (i.e., when the beacon light on the top of the pole shows green):

Table 2: Alert Levels

Audio/Visual Settings	Visual feedback when changing the setting
1: audio muted, visual 4s;	LED Cluster 1 will be lit a red horizontal bar
2: audio: 0.5s; visual: 4s;	LED Cluster 1 will be lit white
3: audio: 1s; visual: 4s;	LED Cluster 1,2 will be lit white
4: audio: 2s; visual: 4s;	LED Cluster 1,2,3 will be lit white
5: audio: 4s; visual: 4s;	LED Cluster 1,2,3,4 will be lit white
6: audio: 0.5s, visual: 0.5s;	LED Cluster 1 will be lit green
7: audio: 0.5s, visual: 1s;	LED Cluster 1,2 will be lit green
8: audio: 1s, visual: 2s;	LED Cluster 1,2,3 will be lit green

To display current setting: press the ALERT button once, and the LED clusters will be lit according to above table for about 3 seconds

To change, press ALERT once first to display the current setting, then before the expiration of 3 seconds, press again to change. Press repeatedly will cycle through all levels. Wait for the beacon light to turn green before start using the system as usual.

10.Sensitivity

The default sensitivity setting is 1 (LED Cluster 1 will be lit blue). Level 1 is recommended setting for best overall performance.

Table 3: Sensitivity Levels

Sensitivity Settings	Visual feedback when changing the setting
1: filter mode 1-high used	LED Cluster 1 will be lit blue
2: filter mode 2 used	LED Cluster 1,2 will be lit blue
3: filter mode 3 used	LED Cluster 1,2,3 will be lit blue
4: filter mode 4-high used	LED Cluster 1,2,3,4 will be lit blue
5: filter mode 1-low used	LED Cluster 1 will be lit green
6: filter mode 1-medium used	LED Cluster 1,2 will be lit green
7: filter mode 4-low used	LED Cluster 1,2,3 will be lit green
8: filter mode 4-medium used	LED Cluster 1,2,3,4 will be lit green

To display current setting: press the Sensitivity button once, and the LED clusters will be lit according to above table for about 3 seconds before the beacon light goes green again.

To change, press Sensitivity button once first to display the current setting, then before the expiration of 3 seconds, press again to change. Press repeatedly will cycle through all levels. Once you are done with the selection of the sensitivity level, simply wait for the beacon light to turn green before start using the system as usual.

Notice that for release 1.4.6, the sensitivity levels have been extended to include levels 5-8. Levels 5 and 6 have the same filter mode as Level 1, but provide two additional levels for fine tuning. For these three filter mode 1, filter mode 1-high has the highest sensitivity, and filter mode 1-low has the lowest sensitivity.

Similarly, levels 7 and 8 have the same filter mode as level 4, but provide two additional levels for fine tuning. For these three filter mode 4, filter mode 4-high has the highest sensitivity, and filter mode 4-low has the lowest sensitivity.

Levels 1 to 4 remain unchanged from release 1.4.5.

11. Calibration

The system will undergo calibration each time it is powered on, or when manually initiated by user (by pressing the Calibration button), and takes less than 30 seconds to complete.

It is a good idea to manually start the Calibration process if the system is moved while on.

12. Battery button

Press to see the status of internal battery, from 25% (LED cluster 1 lit) to 100% (all four LED clusters lit).

13. Basic functional check for single pole mode 4 (Free standing unidirectional)

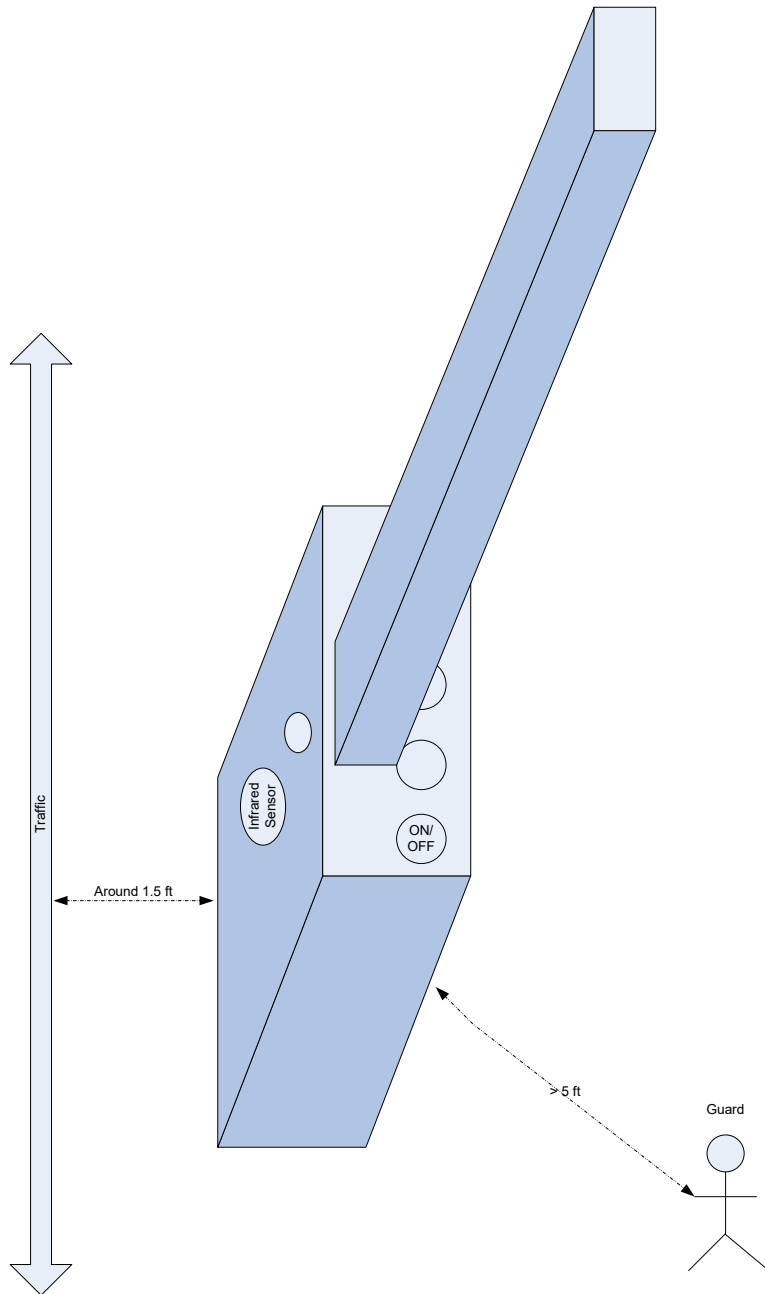


Figure 4: Functional check for mode 4 (Free standing unidirectional)

Make sure that the ALERT button LED blinks 5-times when powering on to make sure the system is operating in mode 4.

Wait until the beacon light goes green. Traffic should pass in a straight line about 1½-ft from the pole, on the same side as the infrared sensor at normal walking speed.

If subject is free of ferrous object, the beacon light will continue to display green and you won't hear any audio alert; if ferrous object is detected, the beacon light will blink red, and you will also hear audio alert if it's enabled (duration of audio and visual alert can be customized using the Alert button).

In some situation, when the subject passes by, the beacon light will blink blue accompanied by the audio alert. This indicates that there is either high magnetic noise in the environment (such as trucks driving by nearby), or the subject has multiple ferrous objects (e.g., shoe with ferrous material on it, belt buckle with ferrous material, a cellphone on the sheet pocket etc...). If this happens, ask the subject to shed as much ferrous material as possible, and pass through again.

In this mode, it is intended that a security personnel will be standing at least 5-ft away on the side of unit that is opposite to the traffic to observe the visual zone indicator on the pole. The LED cluster lit red indicates the approximate zone where the ferrous object was detected. It's important to reduce ferrous background noise while the system is being used. So for example, when the beacon light is green and is being used to screen subjects, it is best if the security personnel could minimize the movement to reduce the ferrous background noise, especially if he/she carries a heavy/big ferrous object such as a gun, or sitting on a swivel chair with movable ferrous material. Of course, once a positive detect is made, he/she is free to move around to carry out the duty as needed.

14. Basic functional check for dual pole mode 1 (Free standing gated tethered portal)

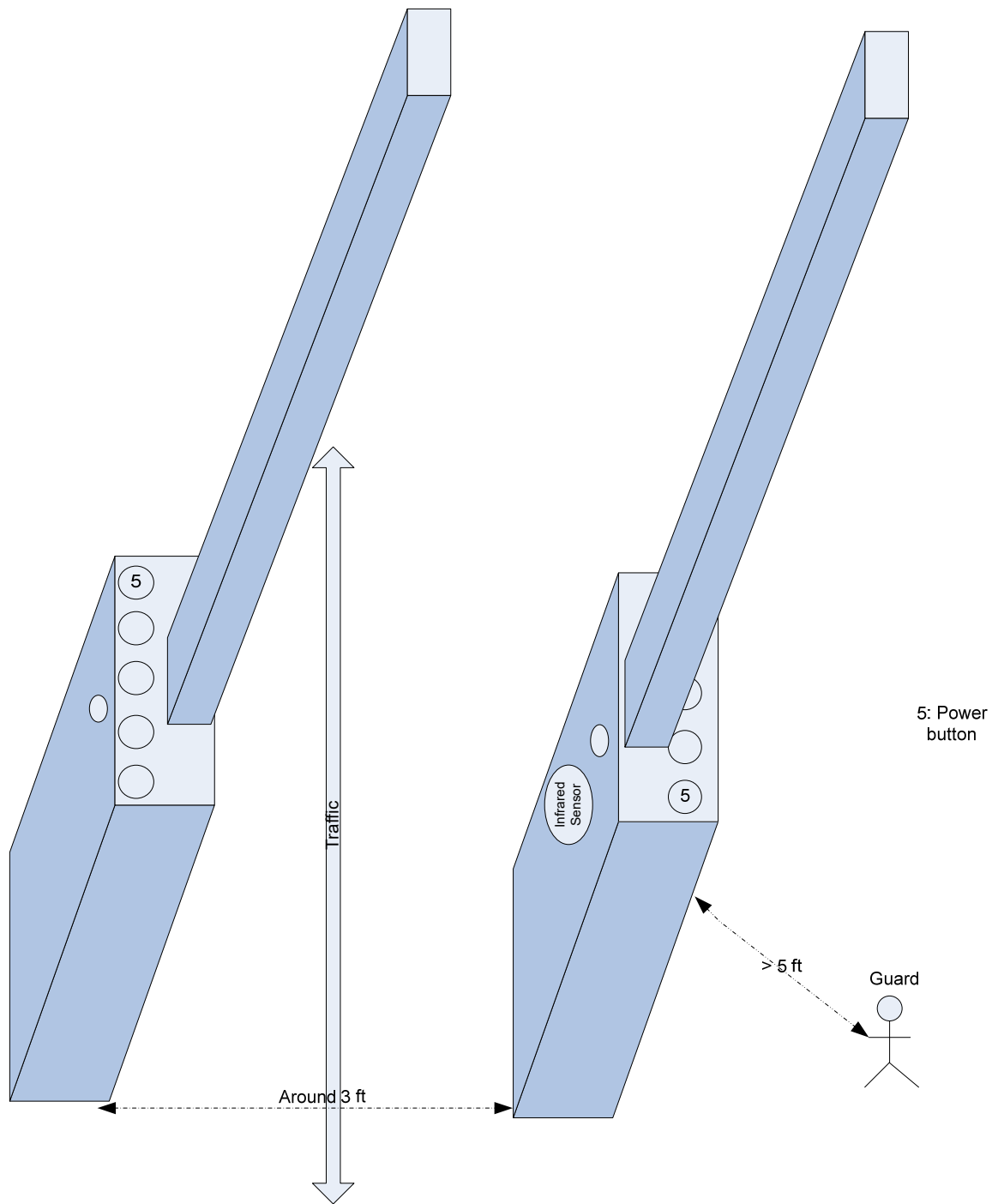


Figure 5: Basic functional check for dual pole mode 1 (Free standing gated tethered portal)

Make sure that infrared sensor of both unit faces each other and units are spaced about 3-ft apart, and then power on two units within 4 seconds of each other. The first pole to turn on should blink 2 times, and the 2nd pole to turn on should blink 3 times about 5 seconds after the units are turned on.

Wait until the beacon light goes green on both units. Traffic should pass in a straight line through the middle between two units at normal walking speed.

If subject is free of ferrous object, beacon lights of both poles will continue to display green and you won't hear any audio alert; if ferrous object is detected, one or both unit might be triggered to produce blinking red beacon and audio alert. Sometimes only one pole will be triggered (when ferrous object is only strong enough to be detected by one pole), while other times both pole will be triggered (the zone indicator might not agree with each other all the time, but should be next to each other).

In some situation, when the subject passes by, the beacon light will blink blue accompanied by the audio alert. This indicates that there is either high magnetic noise in the environment (such as trucks driving by nearby), or the subject has multiple ferrous objects (e.g., shoe with ferrous material on it, belt buckle with ferrous material, a cellphone on the sheet pocket etc...). If this happens, ask the subject to shed as much ferrous material as possible, and pass through again.

In this mode, it is intended that a security personal will be standing at least 5-ft away on the side of unit that is opposite to the traffic to observe the visual zone indicator on the pole. The LED cluster lit red indicates the approximate zone where the ferrous object was detected. . It's important to reduce ferrous background noise while the system is being used. So for example, when the beacon light is green and is being used to screen subjects, it is best if the security personnel could minimize the movement to reduce the ferrous background noise, especially if he/she carries a heavy/big ferrous object such as a gun, or sitting on a swivel chair with movable ferrous material. Of course, once a positive detect is made, he/she is free to move around to carry out the duty as needed.

Version History

Version	Date
1.4.5	9/10/2018
1.4.6	9/18/2018