**IQ Panel 2 and mobile app**

# Qolsys' Alarm Panel Is a Hub Above
## By Robert D. Grossman

**IN DECEMBER 2014**, we reviewed the Qolsys IQ Panel, mentioning that it was an extremely difficult product to review. This is not a single function device but rather what I would term a partnership product. It requires the panel itself, myriad accessories, the back-end support of Alarm.com, and the involvement of a skilled and trained dealer for installation, support, and alarm monitoring.

The IQ Panel 2 remains the Swiss army knife of alarm panels and includes several features we believe are unique to this platform. It continues to include all the features you would expect from a residential or small business alarm panel, including supervised wired and wireless contacts (primarily wireless), a variety of sensors and integration with a wide variety of other devices. Alarm.com continues to provide a robust and well-integrated back-end to this panel, with advanced programming features offered by its website and mobile apps (more on these coming up).

We spent more time than usual evaluating this product, as we were part of a Qolsys beta test team. For more on the beta experience, check out a companion blog at *securitysales.com/IQ2-Review.*

### Construction

The previous version was a marvel of miniaturization, containing five radios and a cabinet's worth of electronics inside what was essentially a tablet with a large bezel. The touchscreen remains a 7-inch screen, but the bezel has shrunk and the front panel buttons have been removed. The depth has shrunk as well, sitting less than an inch out when wall mounted. The touchscreen is now capacitive multitouch and looks great from any angle with just the right sensitivity. The front panel camera has been upgraded to 5MP and there is now an internal glass-break detector. In short, every feature of the original IQ Panel has been improved upon from an aesthetics and operability point of view. Our impression of the previous version was "a system head-end with a touch-

screen bolted on." IQ Panel 2 is very much an Android tablet that includes an integrated security and home automation head-end.

The unit can be wall mounted or used with the included table top easel (somewhat flimsy, I used a third-party one for testing IQ Remotes), and it was the wall mounting that led to our two complaints about the construction, one of which was negated by frequent use. The case can be extremely difficult to close. It is a tight-fit clamshell design, and if you use the header inside to connect wired alarm contacts and an external siren (as we did), getting everything back in and closing the unit takes some practice, particularly when wall mounted. We eventually mastered it, and this is an area where an experienced dealer could chalk it up to a learning curve.

The second concern is the hanging antenna needed for RF sensor range. It is 8 inches and must hang straight down for best performance. This is fine when using a tabletop design or mounting it on an interior wall where it will drop down into an empty wall cavity. On an exterior wall, we were never able to get it to reliably drop down into the wall without bunching up, and we ultimately decided to just put up with an antenna hanging down and giving up on the "clean install" look. If you're in that situation, we recommend installing it on an interior wall,

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**Qolsys IQ Panel 2 and System**

**SPECS**
◆ Evolutionary improvement of a tremendously versatile touchscreen alarm panel and keypad that can be the brains of a secure smart home
◆ Integration with locks, thermostats, and other devices, coupled with extreme reliability, make this a lifestyle product as well as an alarm panel

**PROS**
◆ Solid construction
◆ Easy to install and configure
◆ Continually improving with software updates

**CONS**
◆ Unreliable weather forecasting
◆ Protruding antenna when wall mounting on an exterior wall

Up to three IQ remote panels can be wirelessly paired to the IQ Panel 2, allowing for full system control throughout your home or business.

clearing out the insulation (and any other obstructions) in a section of the exterior wall, or placing the IQ Panel 2 somewhere else and mounting an IQ Remote panel by the front door.

### Features
The panel's user interface has improved over time and is truly intuitive. There are several screens the user can swipe through, including arming and disarming (no passcode needed to arm so anyone can do so when they exit), Z-Wave device status and control, lock status and controls, thermostat controls, system status (WiFi, Bluetooth and Software). There's also a screen showing arm/disarm and alarm events, complete with images taken by the front panel 5MP camera, and a notoriously unreliable four-day weather forecast. When the panel isn't in use, a screensaver turns it into a small virtual picture frame, showing your own photos (loaded via a micro-SD card slot) or those included in the panel. It may also be used to show the time and current weather. The screen can be programmed to shut off on a schedule, awakened by a touch, and if you are using multiple IQ Remote panels, each can be programmed for a different "do not disturb" schedule.

Other features include a method for temporally shutting off the touchscreen to clean it, a countdown timer that is both visual and announced by the robotic woman inside the panel when arming for Away mode, and the same robotic annunciation of device activity, programmed by device. If you arm the panel Away and don't leave, it is smart enough to see that a door wasn't opened, and it changes the arming mode to Stay. You can have an alert when the front or back door is opened even when the panel is disarmed, and you can custom name each device for voice annunciation.

I found the camera built into the bezel to be even more useful with the resolution improvement. It can be configured to take a picture of the person disarming the panel, whether a valid code is entered or not, and is sharp enough to get the room as well. If a person uses someone else's password, you'll know it instantly as every image is annotated with the time, date and the name of the event that caused it.

Another feature we particularly liked was the integration with Z-Wave locks (panel tested with both Kwikset and Yale).

In operation, the keypad on the lock will disarm the panel, and that can be put on a schedule as well; in our case the lock keypad would disarm the panel on weekdays during working hours, but not on evenings or weekends. Integration was bi-directional and arming the panel Away locked the backdoor immediately and the front door after 45 seconds, giving you time to get out. Arming the panel Stay locked both doors immediately. We also set up a schedule that armed the system in Stay mode (if it was disarmed) at 10 p.m., 11 p.m. and midnight. With the panel annunciating the arming, you never forget to arm the system before going to bed. This could also be used to arm and lock up a store after hours as a double check.

### Setup and Testing
Physical installation of the IQ Panel is simple and straightforward, with plenty of installer-friendly features. The back plate can be mounted on a wall and there's an integrated hanging strap that secures the panel during installation. A terminal on the back provides connection for two separate supervised alarm loops (normally open contacts), a DC power supply, and an open collector output for a hardware siren (300mA max) using an external 12V power supply wired in series. Beyond that, all other connections are wireless.

Connecting devices has gotten simpler, although it should be noted that this panel is not designed to be installed by an end user and some level of training is required, if only because of the myriad options. Most devices are connected automatically; you bring up the menu and activate each device in accordance with the instructions provided. We successfully connected a variety of magnetic contacts, motion detectors, image sensors (including a camera and motion detector), water (flood) sensors, smoke and CO detectors, wireless key fob panic buttons and keypads, and Bluetooth devices. Using the Alarm.com site we connected a camera, and numerous Z-Wave devices were installed and tested as well, including the aforementioned door locks, thermostats, remote temperature sensors, smart switches, additional sirens, and even a Z-Wave lightbulb.

We also wirelessly connected three IQ Remote panels that mimic the IQ Panel 2 in almost every way, allowing up to four control panels. As previously mentioned, a way around the cosmetic antenna issue would have been for us to use an IQ Remote panel at the front door as it has no external antenna, and that's a viable alternative. Keep in mind that by doing so you may give up some range on Bluetooth disarm; more on that in the following section.

### Testing
While the panel appearance and ease of use may be the initial attraction, it is the integration features that create a dependence on the panel far and above what you'd expect from an alarm panel. Case in point: thermostat integration. Prior to installing this panel, I had two HVAC zones, each with Nest thermostats, which were switched out to Alarm.com devices. They weren't as pretty, but they added a few features including remote sensors that allow you to do temperature averaging across rooms.

As with Nest and others, you can set sophisticated schedules, but arming the system Away also sets a temperature bypass, raising or lowering your temperature to save energy. Also, opening a window for longer than a preprogrammed duration turns off the heat or AC in that zone. In both cases, the schedule resumes when you return or close the window(s).



The IQ Panel 2 next to a legacy keypad. The only issue was the difficulty of hiding the antenna wire (right) when mounting to an exterior wall.

One feature that was tested extensively was remote Bluetooth disarm, and I was surprised at how well it worked. Enrolling a phone allowed it to disarm the system from Away mode when the phone showed up, subject to rules set up through Alarm.com. The process was invisible; you show up with your phone and the panel is disarmed, and in our case the front door was unlocked as well. The phone could also be connected to my car stereo or Bluetooth headset at the time of disarming and this feature would still work like magic. During the test period I grew so attached to this feature that I was reluctant to move the panel away from the front door as I was concerned it would reduce the Bluetooth range and therefore reliability.

Alarm notifications through Alarm.com were also well implemented. It was nice getting instant messages on my phone (through the app, via text, or both) if I left and did not arm the system, if there was a pending alarm, or for other preset events. The image sensors can be used to take a picture the first time they are activated each day and email it to you, so if this is used in a store or office you can see who the first person in is, who entered the storeroom, or any other programmed event. Lights can go on or off based on motion detectors, time of day, sunrise/sunset, arrival of a specific person (there is geofencing for enrolled phones as well), or a host of other features.

## Conclusions

The Qolsys IQ Panel 2 remains a well-designed, solidly built alarm panel that can serve as the brains of a smart home while reliably handling routine alarm duties. Qolsys actively promotes these home automation features, rightly stating that the Qolsys/Alarm.com integration can serve as a home automation hub, and I would agree in many (if not most) cases. In my application, I already have a fairly sophisticated home automation system incorporating almost 100 devices and I found it made more sense just to run the two systems in parallel, but it's good to have choices. When my phone arrives, Qolsys disarms, unlocks the door and sets the temperature, and SmartThings turns on and off certain lights, with both being controlled through Alexa when needed.

On the one hand, there are things I can do with SmartThings home automation that would be far more difficult, if not impossible with the IQ Panel 2. But the area where the IQ Panel has it over all others in this field is reliability. Alarm events are instantaneous and (in my experience) 100% reliable. It is fairly common to see periods of high latency with Cloud-based home automation; not so with the IQ Panel 2 and Alarm.com. In fact, it is tempting to tell Qolsys that I want out of the beta program so I can dump my old monitored panel and use this one instead. It's that good. SSI

**VERDICT**
FEATURES ★★★★★
CONSTRUCTION ★★★★★
SETUP ★★★★☆
PERFORMANCE ★★★★★
OVERALL ★★★★★

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