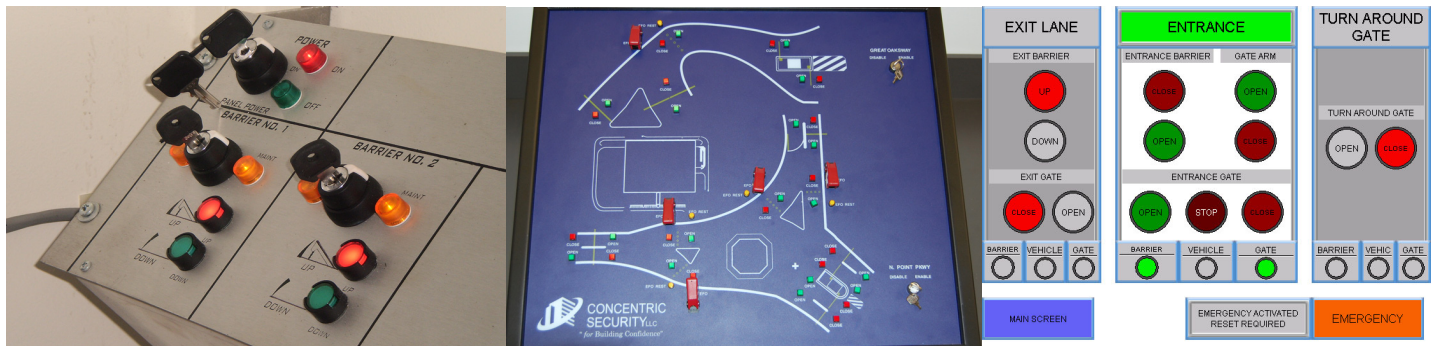


## When Is It Smart To Upgrade To An Integrated Barrier Control System?

When the task turns to determining barrier controls and requirements, the first thought generally goes to the interface point, the control panel. Nice graphic panels with colorful visuals or fancy touch screens are important, but do not provide the brains of a good integrated control system. These interface points should look nice and be very user friendly and easy to operate and understand, but they do not provide the *intelligence* to operate your Access Control Point.



The detail functionality of your Access Control Point is determined by the control system. Most barrier systems have basic controls, and allow you to tell your device to go up or go down. It may also tell it to go up very fast (EFO, Emergency Fast Operation). However, if this is all the functionality you have, you are missing out on a huge opportunity to provide additional safety, security and diagnostics features, as well as site specific theory of operation for your barrier control system, such as:

- Vehicle Tracking
- Alarm Reporting
- Security Concerns
- Barrier Operational Monitoring
- Barrier Performance Diagnostics

The use of PLCs (Programmable Logic Controllers) allows for a tremendous amount of flexibility and information. Through custom programming, detailed theories of operation can be carried out and the use of safety loops, card readers, and other detection devices can be integrated into a homogenous system that allows safe and secure access. The PLC can make your control system 'smarter', and allow it to work for you.

Here are some valuable ways a customized PLC system can improve and enhance your facility:

**Safety Features:** Add safeguards that enhance the entire system. For example, a function can be added that locks out all other functions while maintenance is being performed, and thus protecting the technicians who are performing the required routine maintenance or repair functions.

**Security Enhancements:** Programming to notify you if a barrier fails to close when it is supposed to. This indicates a potential security breach that needs to be addressed. With this information, the source of the problem can be investigated. Perhaps there is a hydraulic pressure problem, a limit switch problem, etc. Now the potential security breach is reported by the system, so it can be addressed before a major security issue develops. Investigation and proper maintenance, repair, or replacement can take place.

**Diagnostics:** If designed properly, diagnostics can be incorporated into your system as well. For example, you can monitor the amperage draw of a barrier, and determine if there is a potential component failure, power surge issue, etc. The availability of this diagnostic information will allow proactive corrective action to be taken prior to an operational failure, which can cause either a safety or security issue or both. These diagnostic features also help extend the life of the barrier system, provide information to predict replacement of systems or major components, and reduce downtime due to unforeseen failures.

Now we can go back to these interface points - the nice touches. Graphic panels or touch screens are very necessary to communicate information to the system operator. These safety, security or diagnostic messages must be delivered in some fashion; these interface points provide that opportunity. Whether audible alarms, flashing lights, changing icons or all of the above, the control panels and touch screens provide the medium to inform the operator.

An Access Control Point control system should be fully-integrated to include basic system operation, emergency controls, safety, security, and diagnostic features, and should follow your site specific theory of operation. Don't settle for a "one-size-fits-all" solution for your facility. You may be thinking, "I have what I have, I guess I am stuck", but any system can be upgraded to incorporate this functionality.

There are many sound, basic security measures that should always be in place for your Access Control Point; such as, vehicle presence detection, proper signs and warning signals, EFO, etc. But it does not have to be a "one-size-fits-all" scenario. Through PLC programming and touch screen control panels, you can upgrade and customize your current system. It is never too late to improve your current system's functionality, safety and security!



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