

## Chapter Nineteen:

### ***Miscellaneous Equipment***

Miscellaneous items are the other essential components of a system that make it complete. These items are often overlooked at the initial design stage and can seem less important. If consideration is not given early enough, the cost of including such items later can be far greater than it need be.

***M1 Enclosure/s***      *A suitable protective, weather proof and rust resistant, enclosure to house the power termination and isolation switch, together with the control panel and all other electrical control interfaces should be included on all system designs.*

*Where practical to do so, the enclosure should house all associated and connective control junction/termination points that complement the system (example; audio link power supply/controller, time clock, maintenance socket, etc.)*



*Enclosures should be securely installed, above ground, in a location that is accessible and serviceable to the system as well as out of harm's way. They should be lockable and all connections undertaken so that the integrity of the enclosure is withheld (all access points vertical from the underside, so that water ingress is least likely).*

*Effort should be made to ensure insect and rodent damage is not likely and all cables connected in a mechanically sound way with approved connectors.*

*Metal enclosures are not suitable for installations that require the radio control receiver unit to be housed within (signal strength reduction is greater when housed by metal).*

***M2 Locking device***      *Both Electric and Magnetic locks are used regularly on automatic systems, for both vehicular and pedestrian products. Mechanical locks are mostly used on manual pedestrian/side gates only.*

*Electric or magnetic can **fail secure or release**, with or without back-up, as well as latch*

*or pulse, constant, switch or periodical. Some have manual override or key release.*

*The type of lock and it's method of use are all relevant to their purpose on a specific System. All are only as effective as their fixing and security (a strong keep or lock, fitted securely, to a weak base may fall below requirements).*

*Locks provide security and often take the security role of the system. Therefore great care and thought is needed with their design and implementation on a system. Also the effect of abuse and the need to release during a power or system failure is important.*



*Multi-user sites that have non-locking operators and supplementary magnetic locking offer an ideal solution that caters for the majority of cases. As the power fails the gates revert to safe manual operation and users are not trapped in or out side. When the power comes back, the first command activates the system and everything goes back to normal, without the need to find release keys or someone to help (bills are not raised by maintainers as everything resets without user intervention).*



*The same design would not be suitable for sites where security is the higher requirement and either operator locking or fail secure locking may be better suited. This time someone with a release key would be necessary and damage would accrue if this system was forced at any time.*

**M2m Code lock**

Manual code locks are used when restricted access is required and power is not available. Mainly used on pedestrian gates, either single or dual sided as access and gate design requires.



**M7 Inhibit**

Hold open, inhibit, disengage, control and switch, etc. are all features that can be requirements of the system. Some systems have a 'Hold open' facility to enable a system to be left open until it is required to close (builder's access, party time, emergency, etc.).



**M7s Special**

Via an alarm or other such independent system that has a requirement for hold open interface with the entrance, or part of it.

- *Fire open, stay open etc...*
- *Security inhibit optional etc...*
- *Flood close inhibit entry etc...*

**M8 Letterbox**

*Post can be left at the entrance within a suitable post box.*



**M9 Switching**

*Automatic or manual switching of lighting may be a requirement of the system design.*



**M10 Closers**

*Pedestrian or side/manual gate closers are used to return manual gates back to the closed position, upholding the need for the gate in the first place.*

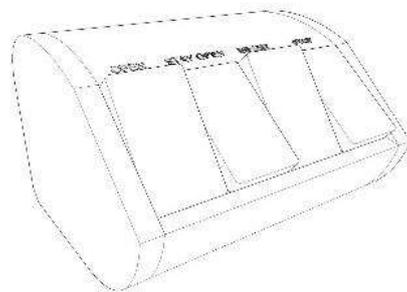
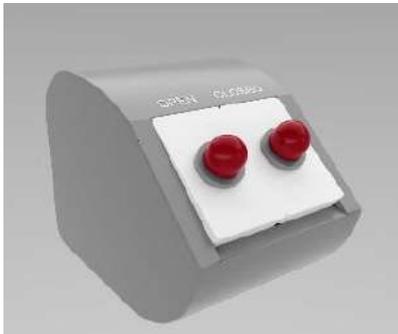




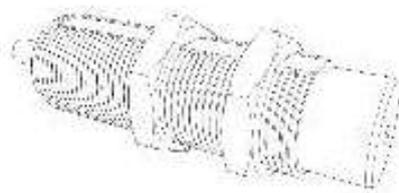
**M11 Management** *A combination of management controls and overrides of a system may be required and are common with sites of high security.*

*'Hold Open Display'*

*'Open or Closed indication display' Etc.*



**M12 Decelerators** *Cushioning devices to absorb impact are useful to avoid noise issues, mainly from manual gates, but also from some automated swing/sliding gates.*



**M13 Support posts** *Support posts to house controls or devices such as the audio link or a card reader, at a convenient location*



**Associated** Products and services that assist with customer needs for the installation

**Intelligence** *Devices may be added to systems for the gathering of intelligence that a customer or service provider requires, such as who is using a system and when.*

**Security** *Devices may be added to a system that would alert customers/agent to the unauthorized access, forced entry or abuse of a system. They may be physically attached or locally sensing with covert or overt presence.*

**Recording** *Operational recording equipment can be added to systems as well as diagnostic readers for numerous purposes.*

*Database access control may be added, vehicular recognition etc.*

**Recognition** *Number plate readers are used for different reasons from parking, through to alerting authorized persons (subject to design and requirement)*

**Remote diagnostics** *Remote interrogation of some features can be provided for, with more development in this area underway.*

It is good practice to allow for the possible addition of such complimentary controls and equipment by installing the right ducting and spare cable cores within the systems original configuration and physical design.