

## Chapter Fifteen:

### **CONTROLS AND EQUIPMENT ARE NEEDED**

**EQUIPMENT** All controls and equipment should be of external build quality, fit-for-purpose and fitted correctly. They should be wired with appropriate cabling, designed to suit the environment and location of the system.

Control cables should be of the correct type and adequately protected throughout, with spare cores provided for additional product support as may be required (spare cores should be installed to all control items of the system for back-up or double-up as a matter of good working practice and possible future need).

**Poor examples are:**



**Good examples are:**



Each part should be installed with adequate weather proofing and securely so that it can resist at least minimal abuse (children, pets, light accidental impact, etc.)

Every part should be located to allow for its safe use, to suit the best performance of the part and its functionality within the system (weather permitting), as well as customer/user needs.

Combined controls or equipment are commonplace with their description remaining as their primary function. The command, safety, or other use/facility remains a consequence of their ability.

**For example:** an Audio entry link gate/door station that has a code pad incorporated within it, is primarily an Audio link unit with code pad command ability. An Audio link hand set within a property that has a button to open the system, remains as an Audio hand set with command ability.



The use of combined products makes some practical sense, however a failure of one aspect of the product often puts the other in jeopardy and the items replacement value becomes less competitive accordingly.

Systems that use combined or complimentary products will need to identify the responsibility of each part to assist maintenance and product support.

Interactive systems should be designed and built with neutral interface points that are a good defining location for connectivity between products or systems, with access to isolate and prove each system status, without interference or influence from another.

All equipment and controls should be chosen to suit the end users current needs as well as their possible future needs. Current requirements should be clear to the customer, so alternative or additional components should be recommended as a future consideration accordingly (e.g. cost effective, push button only control, to help protect young children from running out into a busy road, will be of less/little use as the children grow up).

- **What needs are likely to affect the system between installation and the following Twenty years?**
- **Are there any local developments planned that could affect the environment or types of passersby?**

**Some controls and equipment can be used for more than one function, so they may be used in command, safety, miscellaneous and other (security, information, etc.) roles.**

Three main functional roles are defined in most systems as **‘Command’** telling the system to operate, **‘Safety’** telling the system to react to its safety protocol and **‘Miscellaneous’** all the controls and equipment that compliment or complete the functionality of the system, such as supplementary locking, weatherproof enclosure, letterbox, etc.

Other typical roles could be **‘Intelligence’** the storage or reporting of useful data, such as number of operations or user’s entering/exiting/balance, car-park-full, etc. **‘Security’** may be additional alarm sensing for unauthorized use or system abuse. **‘Recording’** could be registration recognition and recording requirements or policing.

Consequentially **‘Communications’** or **‘Surveillance’** may be a requirement of the owner or users of a system

Each category of product has numerous options and choice within, all of which offer different features, benefits & disadvantages. Every system design and build should include compatible and suitable items throughout.