

Common Installation Issues - Famco MasterMinder MLC

Below we have listed the type of common faults found that prevent or impedes the commissioning of this System.

Australian Standard AS2293 and the MLC system require the provision of **dedicated actives to all emergency lighting**. This circuit must commence at the distribution board and be isolated from all other circuits.

1. The major problem encountered along the reticulation of these cables, is the inevitable mix up (cross over) between the dedicated active and the switched active wires. This results in standard fittings being energised by the emergency cable and the reverse. Under this condition we cannot communicate with the emergency fittings.
2. **Security Lighting** . When there is a requirement for 24 hour security lighting, past work practices would be to use the dedicated unswitched active instead of running another cable. Depending on the type of security lighting employed, this approach may impede communication.
3. **Stairwells**. Frequently stairwell lighting is required to be on 24 hours. There is a practice to run one unswitched cable to serve both general lighting and emergency. This is unacceptable to Australian standards.

With the three instances above, the problem with communication is caused by excessive numbers of HPF and RFI capacitors, because of incorrect wiring, being shunted across the emergency cable causing signal attenuation.

4. *It is essential that all distribution boards which have final emergency circuits are linked together with and then back to the central control "SCU" by a suitable cable i.e. CAT5 cable. This allows for the mounting an ITU (Intelligent Transponder) at these boards if required. It is common for the cable to be forgotten or have continuity problems.*
5. **Mounting of ITUs**. In the majority of installations this will require the provision on the distribution board of a three phase circuit breaker. The ITU can be mounted on the board or adjacent within the electrical cupboard. Please provide for the 16 Amp three phase circuit breaker.
6. **Dimmers** . Always isolate the dimmed active from the emergency circuits. A few brands of dimmers now provide labelled emergency lighting terminals on the load side of the dimmer rack. These are not to be used with this system. New dimmers are EMC compliant which requires RFI suppression on the input and output which again impedes communication.

The emergency dedicated circuit must always commence directly from the distribution board with its associated ITU. Refer to the installation literature.