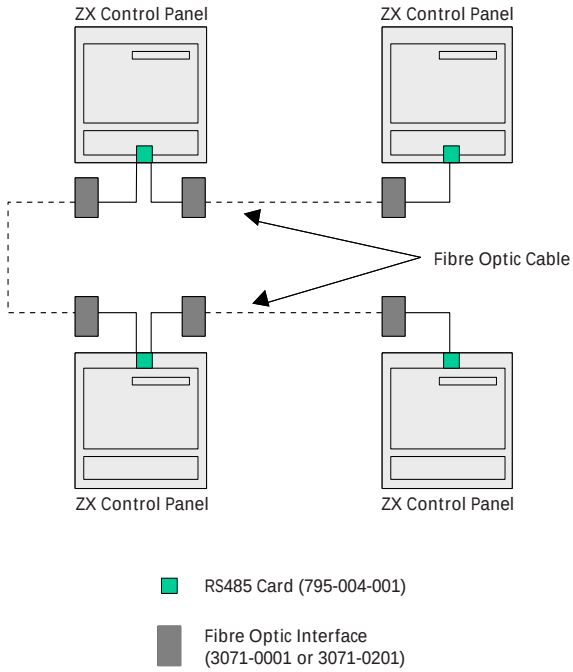
# features

- Withstands harsh environments with severe interference
- RS485 interface
- Galvanic isolation
- Protects connected units from lightning/ transients
- Suitable for multi-mode fibre
- Very low time delay through units
- Ideal for connecting equipment with different earth potentials
- Guarantees reliable long-distance communications




The RS485 fibre optic cable interface can be used for point to point communication between the Morley-IAS "ZX" range of fire alarm control panels and peripheral equipment utilising existing RS485 communications.

Fibre optic cable is completely immune to external interference, which makes this unit ideal for use with Morley-IAS control equipment when installed in harsh industrial environments or where the distances between the control equipment need to be extended.

The RS485 fibre optic cable interface is particularly useful when networking the "ZX" range of control panels. Often the inter-connecting network cable is installed in cable ducts with other services where noise suppression cannot be guaranteed. The use of fibre optic cable as opposed to conventional copper cables will significantly increase the integrity of the network.

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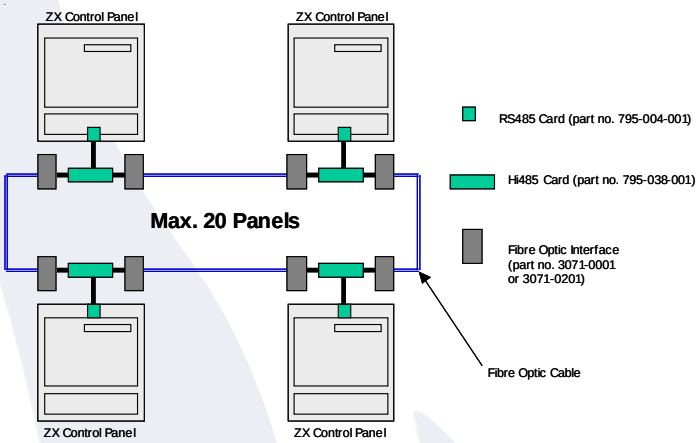
# RS485 Fibre Optic Cable Interface

# Application Sheet

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We reserve the right to change or amend any design or specification in line with our policy of continuing development and improvement.

This is particularly important when the control panels are networked together across a large site where “Life Safety” is paramount, such as a hospital. Additionally larger sites often require control panels to be installed in numerous remote locations and may be susceptible to lightning strikes. Although there can be no guarantee to complete immunity from lightning strikes, the use of fibre optic cable can significantly reduce the risks of damage to other parts of the critical fire alarm system network.




Problems can be experienced where control panels are networked together on sites with different and varied earth potentials using conventional copper cables.

Although instances are rare when using the robust “ZX” network the use of fibre optic cable will eliminate any potential problems.

# installation

The following switch settings should be used when connection the fibre optic cable interface to either a ZX1e (can only be used in conjunction with port “D”), ZX2e or ZX5e equipped with an RS485 communications card (part no. 795-004-001), Hi-485 communications card (part no. 795-038-001) or any one of the following items of peripheral equipment.

| | |
|---|---|
| Passive repeater panel | 709-701-001 |
| Active repeater panel | 709-601-001 |
| 4 way relay module | 795-014 |
| 4 way sounder card | 795-015 |
| 8 way input module | 795-029 |
| 40 way mimic interface module | 795-065 |
| VisualeyeZ Graphics | |

The fibre optic cable interface is supplied suitable for DIN-rail mounting and requires an enclosure to accommodate the unit. It may be possible to mount the unit within a standard control panel by installing a short length of 35 mm DIN-rail.

However this is entirely dependent on the plug-in cards, printer option and batteries fitted to a particular panel, as space is limited.

The unit requires a 24 VDC supply and again this may be derived from the auxiliary supply within the panel, however this is also dependant on whether the auxiliary supply (limited to 350 mA) is being utilised to drive other peripheral cards.

An RS485 communications card, (part no. 795-004-001) must be fitted to the control panel when using the fibre optic cable interface unit.

**Switch settings:**

| SW1 Settings | | SW2 Settings | |
|---|---|---|---|
| 1 | Off | 1 | On |
| 2 | Off | 2 | On |
| 3 | Off | 3 | Off |
| 4 | Off | 4 | Off |
| 5 | Off | 5 | Off |
| 6 | On | | |
| 7 | Off | | |
| 8 | On | | |
| 9 | Off | | |

# part numbers

| | |
|---|---|
| **3071-0001** | RS485 Fibre Optic Cable Interface (820 nm Unit) |
| **3071-0201** | RS485 Fibre Optic Cable Interface (1300 nm Unit) |