

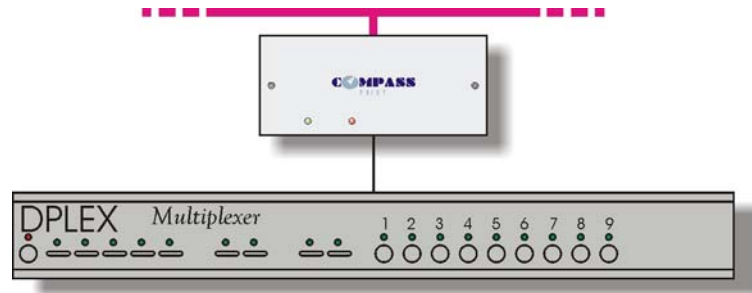
Product Engineering Guide

Compass v22 CptrDplx v10 RS232

Introduction

The CptrDplx Compass Point links the Computar DPLEX 16 Video Multiplexer to the Compass Network. The Multiplexer can be controlled from the Compass point either directly, or using Views to integrate with detector status to control the main monitor display.

A multiplexer provides facilities for surveillance monitoring and can record images from connected cameras to an external video recorder (VCR). The purpose of multiplexing is to reduce the number of VCRs and cassettes required on a site. A PAL compatible TV shows a series of 25 still pictures per second, which gives the impression of motion. Normally a VCR would record every picture, however a multiplexer uses time division multiplexing, which combines all the camera signals, one picture from each and then back to the first. This means that a small amount of information is lost.



Supported Range

- Computar DPLEX 4 - Up to 4 camera inputs. Viewing modes: Full, PIP and Quad.
- Computar DPLEX 9 - Up to 9 camera inputs. Viewing modes: Full, PIP, Quad and 3x3.
- Computar DPLEX 16 - Up to 16 camera inputs. Viewing modes: Full, PIP, Quad, 3x3 and 4x4.

Notes

The CptrDplx Compass Point allows 'views' to be set up. This 'view' method allows trigger inputs to be linked from, say, an intruder system to the DPLEX system, so that as an intruder alarm occurs, a view showing images from cameras in the area to be displayed automatically.

The CptrDplx Compass Point has to assume that commands it sends are received by the DPLEX, as the DPLEX does not send any confirmation or acknowledgement to any write instruction. It is possible for the DPLEX to become out-of-sync with the point - if this occurs, the easiest remedy is to reset the CptrDplx Compass Point. When the Point is reset, it sends the DPLEX to a known state, thereby synchronising both.

The CptrDplx Compass Point cannot read any values from the DPLEX, so on reset the Point sets the Dx.Wx objects as follows :

D1.W1 = 1
D2.W1..D2.W2= 1..2
D4.W1..D4.W4= 1..4
D9.W1..D9.W9= 1..9
D16.W1..D16.W16= 1..16
MD=0
DF=1

The Computar system does not report alarms to Compass. If alarms are needed then an AlarmGen Compass point will be required.

Engineering

Step 1 – Mount the Compass Point

Refer to the 'Mounting' section within the '[Compass Point RS232 Installation Guide](#)' document for details on how to mount the Compass Point securely to a wall or within a cabinet.

Step 2 – Connect Compass Point to Computer DPLEX Video Multiplexer

Using cable, connect the Computer DPLEX Video Multiplexer to the RS232 port of the Compass Point. Refer to the section 'Cable' below for details of the cable.

Step 3 – Apply Power to the Compass Point

Refer to the 'Power' section within the '[Compass Point RS232 Installation Guide](#)' document. Once power is applied, the green LED should be lit continuously to show that the Compass Point is working correctly on the Compass Network.

Step 4 – Configure the CptrDplx driver within Compass Point

The device number is configured using objects. Use object engineering software to view and modify the objects within the Compass Point.

Synchronising the DPLEX and Compass Point.

The CptrDplx Compass Point has to assume that commands it sends are received by the DPLEX, as the DPLEX does not send any confirmation or acknowledgement to any write instruction. It is possible for the DPLEX to become out-of-sync with the point - if this occurs, the easiest remedy is to reset the Compass Point. When the Point is reset, it sends the DPLEX to a known state, thereby synchronising both.

Step 5 – Access Objects within the Computer DPLEX Video Multiplexer

Values from the Computer DPLEX Video Multiplexer are made available as objects on the Compass Network. Any object software that is connected to the Compass Network can access these objects.

The red LED near the RS232 port of the Compass pulses when a valid message is transmitted or received by the Compass Point.

Step 6 – Configure the Transfers within the Compass Point

Compass Point transfers are also configured using objects. Refer to the '[Introduction to Compass Transfers](#)' document for more details.

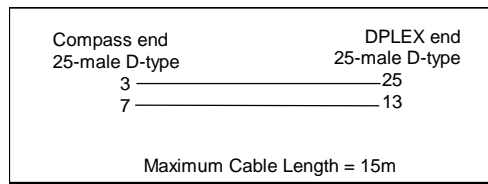
Step 7 – Configure the Alarm Handling within the Compass Point

Compass Point alarm handling is also configured using objects. Refer to the '[Introduction to Compass Alarms](#)' document for more details.

Engineering Reference

Cable Specification

The cable between the Compass Point and the Computer DPLEX Video Multiplexer hardware is as follows:



Objects

When the Compass Point is powered-up the following objects are created on the Compass Network, use object software to access these objects.

Object	Label	R/W	Type
$Dn^{[1]}$	CptrDplx Device	-	[CptrDplx v10]
$Pp^{[2]}$	CptrDplx Compass Point	-	[Compass v22\ CptrDplx v10]

Notes

- [1] The Device Number, n , is a number in the range 0...63.
- [2] If the Compass Point has its device number configured the Point address, p , is a number in the range 1...63. If no device number is set the Point address, p , is the Compass Point serial number in the range 1000000...99999999