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**Echelon Peripheral Specifications**

There are a number of peripheral ports provided on the Echelon console. This tech note describes the particular requirement of these peripherals in order for them to operate correctly with the console.

**Video Monitor**

The video monitor is used to display information in a more complete format than is available on any of the console displays. Three video modes are available – all show the same information however the higher screen resolutions allow more data to be displayed on the screen at one time.

The specifications for each display mode are shown in table 1. To work with the console in all modes a video monitor must be capable of decoding the three combinations of vertical and horizontal frequencies.

A 17inch or greater screen size monitor is recommended for use with mode 3.

Mode	Horizontal Pixels	Vertical Pixels	Horizontal Frequency	Vertical Frequency
1	640	480	31.4KHz	60Hz
2	800	600	48.0KHz	72Hz
3	1024	768	56.5KHz	70Hz

Table 1: Video monitor modes

**Mouse/TrackBall**

The mouse or trackball is used to select items on the video monitor, and control the pan and tilt of selected fixtures. Either a trackball or a mouse can be used, however they must be Microsoft<sup>TM</sup> compatible, and be fitted with a 9 pin female 'D' connector to plug into the Echelon serial port.

**Keyboard**

The keyboard provides a more ergonomic way of entering text labels into the console. The keyboard must be IBM AT<sup>TM</sup> compatible, and be fitted with a 5 pin 180<sup>o</sup> male DIN connector to plug into the Echelon keyboard port. Windows 95<sup>TM</sup> keyboards fitted with the correct connector are suitable.

**Printer**

The software to enable the printer is not available at present, however the interface is a standard Centronics parallel interface and will use PCL Level 5 or Postscript Level 2 languages. Any connected printer must support this interface and languages.