

Gemini

VIDEO LINK EXPANDER

- Transmits up to four video channels over one link.
- Fast update rate per channel by video field multiplexing.
- Camera friendly: NTSC and PAL compatible without genlock.
- Optimised for use with wireless video surveillance links.
- Small and rugged DC powered units ideal for covert installations.
- Advanced picture-in-picture display options.



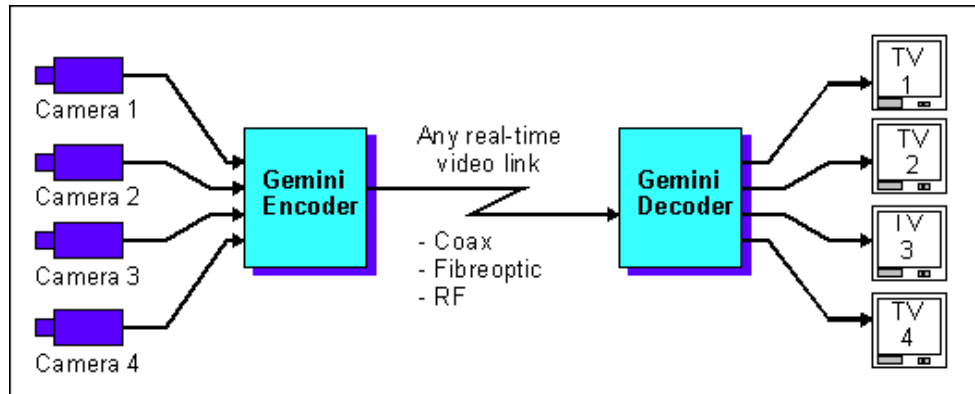
Gemini, is an advanced video multiplexer system that allows up to four independent video channels to be transported over a single link. By effectively quadrupling the number of cameras over a standard video connection, Gemini can dramatically save hardware and installation costs.

Gemini is compatible with any real-time PAL or NTSC video link, whether coax, fibre-optic or wireless. The Gemini encoder automatically configures itself to the number of active cameras connected, switching on each video field, ensuring the best possible picture update rate at all times. The decoder provides four independent video outputs, together with picture-in-picture options allowing several cameras to be monitored on one or a combination of two screens.

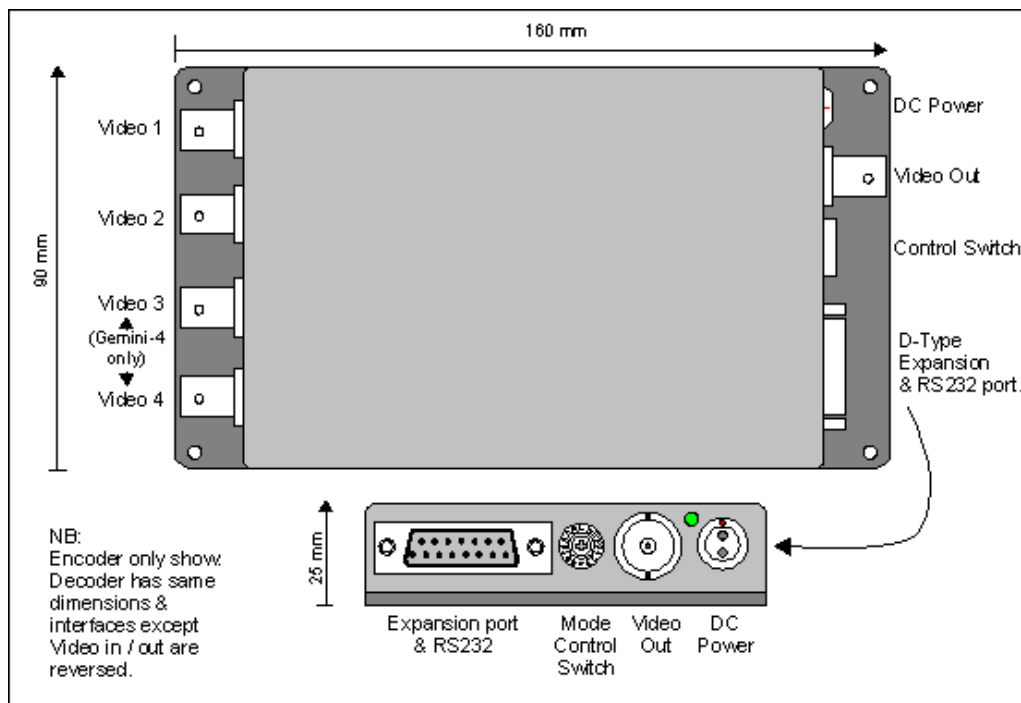
Gemini is ideally suited for expanding the capacity of RF & microwave wireless links as it performs well in difficult reception conditions and also makes best use of the limited number of RF frequencies available. The encoder and decoder units are simple to install, DC powered and housed in rugged watertight housings - ideal for any video surveillance installation.

With Gemini 4 there is now a highly cost effective way of adding capacity to any video surveillance link.

System Diagram



Gemini Dimensions & Interfaces



Picture-In-Picture

Gemini's picture-in-picture (PIP) modes allows up to four cameras to be monitored using one or two screens. This feature is especially useful in surveillance applications where there is a limited number of

TV monitors available. There are 16 modes including various quad displays together with side-by-side and picture-in-picture displays.

Some examples of Gemini's picture-in-picture modes are shown below:-



Camera 1



Camera 2



Camera 3



Camera 4



Cam 1 over 2 with scale



Cam 3 beside 4 with scale



PIP Cam 1 with insert of Cam 2



Quad

Gemini Specification



Outline Specifications:

Mechanical size	160 x 90 x 25 mm
Operating temperature range	-10 to + 55 deg C
Weight	450g (approx)
DC power input	7 to 32 V DC
Encoder power consumption	<3.6 Watts (< 300 mA @ 12 V)
Decoder power consumption	<5.0 Watts (<417 mA @ 12 V)
EMC compliance	EN5502 Class A & EN50082-1 FCC part 15B class A
Standard accessories	User guide, power leads, carrying case

Video:

Multiplexing method	Field sequential
Number of input / output channels	4 in, 4 out (configurable 1 to 4)
Video standards	PAL or NTSC 525 & 625 lines
Video input / output	BNC 1 Vpp 75R
Digital sampling	288 lines by 720 pixels, 16 bits YUV
Signal to noise	> 50 dB weighted (> 55dB typ)
Lock-in time	< 1 Second (typical)
Picture update rate:	1 camera; 50 fields per sec. (fps) 2 cameras; 25 / 25 fps 3 cameras; 25 / 12.5 / 12.5 fps 4 cameras; 4 x 12.5 fps