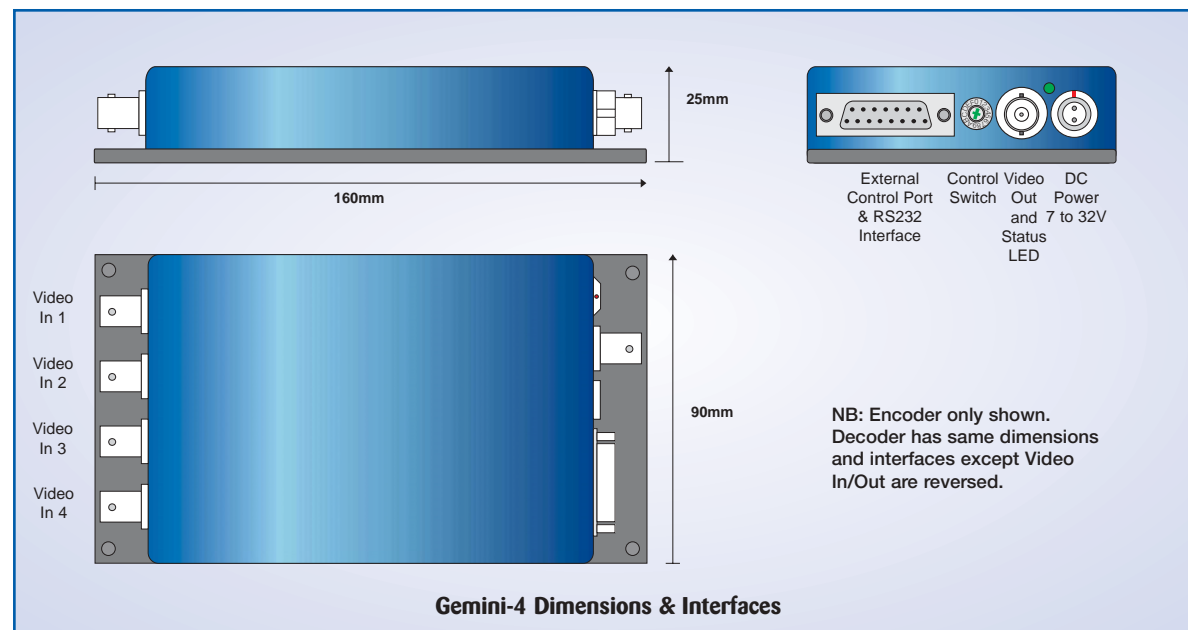


Product Code	Description
GM4B - 5092	Gemini-4 four channel PAL video link expander system (encoder / decoder pair) supplied with user guide and carrying case.
GM4B - 5095	Gemini-4 four channel NTSC video link expander system (encoder / decoder pair) supplied with user guide and carrying case.
GM2B - 5099	Gemini-2 two channel PAL video link expander system (encoder / decoder pair) supplied with user guide and carrying case.
GM2B - 5102	Gemini-2 two channel NTSC video link expander system (encoder / decoder pair) supplied with user guide and carrying case.



## OUTLINE SPECIFICATION

**General:**

Operating temperature range	-10 to +55°C
Mechanical size	160 x 90 x 25mm
Finish	Hard black anodised aluminium
Weight	220g (approx.)
DC power connector	2 pin Lemo
DC Input range	7 to 32 V DC
Encoder DC power consumption	< 3.6 Watts (< 300 mA @ 12V)
Decoder DC power consumption	< 5 Watts (< 417 mA @ 12V)
Standard accessories	User guide, power leads, carrying case

**Video:**

Video connectors	BNC
Video standards supported	PAL, NTSC
Video input / output	1 Vpp into 75Ω, ± 10%
Digital sampling (per field PAL)	288 lines by 720 pixels
Lock-in time	< 1 second
Multiplexing method	field sequential
Number of channels	4 in, 4 out (configurable)
Picture update rate (auto-mode)	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

Please note, due to continual product improvement, Ovation Systems reserves the right to change specifications without notice. E&OE

# Gemini-4

## VIDEO LINK EXPANDER



### Gemini-4

Quadruples the channel capacity of any real-time video surveillance link.

- **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**

**G**emini-4 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-4 can dramatically save hardware and installation costs.

Gemini-4 is compatible with any real-time PAL or NTSC video link, whether coax, fibre-optic or wireless. The Gemini-4 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 screen.

Gemini is ideally suited for expanding the capacity of RF and 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.



### Video Source

Gemini will operate with 1 to 4 active inputs and is compatible with any PAL or NTSC video source. All inputs can be totally independent with no camera genlock required.



### Encoder

The Gemini encoder combines all the video inputs together into one multiplexed video output. As standard, the encoder automatically optimises itself to provide the fastest possible update rate dependant upon the number of active inputs. Manual modes are also provided to allow the certain cameras to be given priority.



### Link

The Gemini encoder's output is compatible with any real-time analogue NTSC or PAL video link, such as coax, fibreoptic or wireless (RF and Microwave) connections.



### Decoder

The Gemini decoder splits the multiplexed transmission back into 4 separate outputs. If required, user selectable picture-in-picture modes enable several cameras to be monitored on one or two screens.



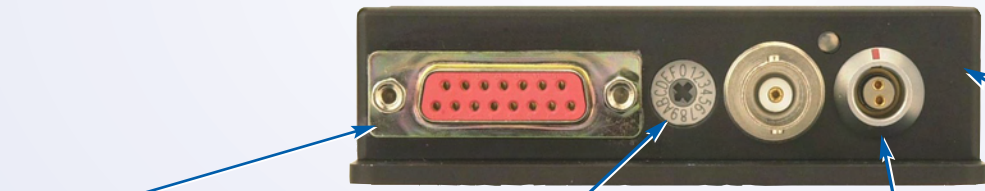
### On-Screen Display

A colour on-screen text display identifies the source of each output.



### RS232 / External Control

For ease of integration into larger systems, it is possible to control Gemini modes remotely either by a simple 16 way switch or by an external PC / controller via the system's RS232 port.



### Mode Switch

Simple user control of Gemini's mode is provided. The decoder's switch controls the picture-in-picture modes, whilst the encoder's switch allows for the selection of camera priorities etc.

### DC Power

Gemini requires a 7 to 32 volt DC supply and is therefore ideal for battery operation. From a 12 volt supply the encoder requires less than 300mA, the decoder around 400mA.

### Rugged Enclosures

Gemini units are housed in milled weatherproof rugged enclosures, with a hard black anodised finish, especially designed for convert installations.

### Picture-In-Picture

For ease of monitoring multiple-cameras the decoder includes picture-in-picture modes to allow more than one camera to be viewed on a single screen.

### Examples of Gemini's 16 Picture-in-Picture modes



4 way Quad Split



Picture-In-Picture (PIP)



Cam 1 over Cam 2 (With Scaling)



Cam 3 Beside Cam 4

# Gemini-4

## VIDEO LINK EXPANDER