

These easy-to-use C.C.T.V. Multiplexers provide excellent performance and picture quality combined with a comprehensive set of features. The latest technology has been used in these new generation products to deliver maximum reliability and value for money.

### Simplex

Simplex Operation  
Loop-Through  
S-Video Record & Play

Order Codes:  
VM-1601M (mono)  
VM-1601C (colour)



### Duplex Plus

Duplex Operation  
Dual Multi-Screen Outputs  
Loop-Through  
S-Video Record & Play  
19" 1U Case

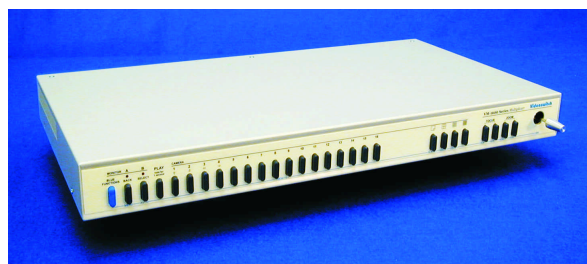
Order Codes:  
VM-1603M (mono)  
VM-1603C (colour)



### Telemetry Duplex Plus

Duplex Operation  
Dual Multi-Screen Outputs  
Joystick for Dome and Receiver Control  
Coax and Twisted Pair Telemetry  
Loop-Through  
S-Video Record & Play  
19" 1U Case

Order Codes:  
VM-1604M (mono)  
VM-1604C (colour)



### All These Multiplexers Feature...

- Easy Set Up
- Very High Image Quality
- 5 Year Warranty
- 16 Camera Inputs
- 2 Monitor Outputs (one may be configured as Public)
- Both Monitors can display all Screen Modes and Text
- Accept Colour, Monochrome and Switching Cameras
- 50 Fields per Second Maximum Multiplexing Rate (PAL)
- Time-Lapse Multiplexing up to 960 Hour Mode
- 720 x 546 Image Resolution (PAL)
- Analogue or Digital Live Full Screen Display
- Quad Displays
- 8-Way & 16-Way Multi-Screen
- Picture-in-Picture
- Freeze Frame
- x4 Digital Zoom
- Anti-Flicker Mode for Multi-Screen Images
- Activity Detection, 14 x 10 zones with sensitivity control
- Alarm Inputs (individually set to normally open/closed)
- Video Loss detection
- Covert (Hidden) on any Cameras
- Automatic VCR Synchronisation
- Auto Sequencing
- Random Sequencing
- Remote Control via RS232, RS485 and RS422 using Videoswitch VXP-4 Protocol
- Time and Date, Battery Backup
- 16 Character Camera Identification
- Daily Timers for Alarms/Activity/Time-Lapse Modes
- Alarm Relay Contacts
- Selectable Termination on each Camera
- Adjustable Gain (Brightness) on each Camera
- PAL and NTSC
- Password Protected Menus
- Different Password Access for User, Manager & Installer
- Powered via External 12Vdc Linear Supply
- Designed, Manufactured and Supported in the UK

Duplex *Plus* is the Videoswitch feature which enables you to display a different multi-screen image on each monitor.

## VM-1600 Series Technical Data

### Multiplexing

Max Image Rate (PAL/NTSC) 50/60 per second (3 hour mode)  
 Configuration Auto Configured (using VCR Sync Cable) or Set via Menu  
 Recording Mode Full Field Images.

### Digital Frame Stores

PAL/ NTSC Auto Sense  
 Colour/Monochrome Auto Sense  
 Sampling 13.5MHz CCIR601 (4:2:2)  
 Active Pixels per Line 720  
 Active Lines PAL: 546, NTSC: 480  
 Colours/Grey Levels 16.8 Million/256

### Live Display Modes

Simplex Full Screen Only  
 Duplex *Plus* Full Screen/Picture-in-Picture/Quad/x8 Multi-Screen/x16 Multi-Screen/Freeze/Zoom

### Replay Display Modes

Simplex & Duplex *Plus* Full Screen/Picture-in-Picture/Quad/x8 Multi-Screen/x16 Multi-Screen/Freeze/Zoom

### Video Inputs/Outputs

Composite 0.5V to 2V pk-pk 75Ω (Individually Adjustable via Menu)  
 S-Video Record/Play 1V pk-pk 75Ω  
 Camera Termination 75Ω or High Impedance (Individually Set via Menu)

### Alarms

Contact Inputs Normally Open/Closed (10kΩ pull-up to 5V on each input)  
 Polarity Individually Set via Menu  
 Activity Detection 14 x 10 zones, Adjustable Sensitivity and Feature Size  
 Actions on Alarm Change Multiplexing Mode, Pull-up Full-screen & Auto-Sequence  
 Relay Contact Rating 24Vdc 500mA max, Change-over Contacts

### VCR Synchronisation

Camera Switch Pulse Input 3-12V Pulse or Open Collector (10kΩ pull-up to 5V may be enabled/disabled via menu)

### Remote Control

Interface RS232/RS485/RS422, 9600 baud, 8 bits no parity or 7 data bits & odd parity  
 Compatibility Videoswitch VXP-4 Protocol

### Dome/Telemetry Control

Interface RS232/RS485/RS422/20mA Current Loop, 7812 or 9600baud, 8 bits no parity  
 Compatibility Domes (various makes) and all Videoswitch Receivers

### Power

DC Input 12 to 24Vdc 2Amps max  
 Mains Adaptor 230Vac Input (115V option), 30W max

### Dimensions

Unit 438 x 284 x 52 mm  
 Power Supply 114 x 74 x 62 mm  
 Packaged 582 x 450 x 120 mm

### Weight

Unit 3.5Kg  
 Power Supply 1.4 Kg  
 Packaged 5.8Kg

### Environmental

Humidity (non-condensing) 5 to 95%  
 Operating Temperature 0 to 40° C  
 Storage Temperature -20 to 60° C

### Included Accessories

User/Installation Manual  
 Power Supply  
 VCR Sync Cable  
 Alarm Connector

### Optional Accessories

Remote Keyboards  
 Rugby Clock Receiver  
 Remote Control Software  
 VXP-4 Communications Manual  
 Rack-mount Ears

These 16 camera multiplexers can display a different 8-way Multi-Screen on each monitor, or other combinations of full-screen, multi-screen or picture-in-picture images.

As with all VM-series multiplexers, 50 field per second multiplexing is standard.

**Typical Configuration**

