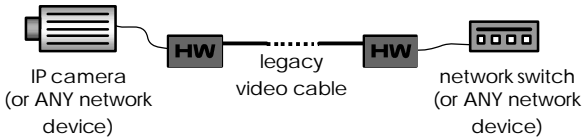


# HIGHWIRE INSTALLATION GUIDE



## Where to use HIGHWIRE



HIGHWIRE units are used to convert conventional Ethernet to a signal that can be carried by 75ohm coaxial video cables such as RG59.

HIGHWIRE makes it possible to upgrade installed analogue cameras to high-quality digital IP cameras without the expense of replacing existing cabling.

In the example shown a pair of HIGHWIRE units is used to allow an IP (network) camera to communicate with other network devices over an existing coaxial video cable.

## Cable connection diagram



## Installation sequence

### 1. Mounting

**⚠ The HIGHWIRE unit should only be installed indoors or in an appropriately rated enclosure**

If the unit is to be located on a horizontal surface then the enclosed rubber feet should be affixed to the underside of the enclosure

The unit should be securely mounted and should not be supported by the attached cables

Mounting bracket part no VHW-WMB can be used for bolting the unit to a wall or structure

Rack panel part no VHW-1U allows installation of up to eight HIGHWIRE units in 1U of a 19 inch rack

The unit's chassis should be earthed using either a mounting bracket or a ground strap, secured by the BNC connector nut, before any other cables are connected

Inline ground isolator part no VHW-XF should be fitted where there is a significant ground potential difference between each end of the cable.

### 2. Power Connection

**⚠ HIGHWIRE should only be used with a Class II Isolated power supply**

The unit can be powered from either a 12V DC or 24V AC power supply (PSU), and adjusts to its type and voltage automatically.

If the PSU is shared with other equipment such as a camera, ensure that the total load current will not exceed the PSU's rated output.

If in any doubt, measure the voltage at the PSU's connector before and after connecting the HIGHWIRE or other equipment, to ensure it is within range.

If an existing power supply is not available, up to two HIGHWIRE units can be powered by PSU part no VWH-12VPSU-xx (xx = UK or USA). Part no VHW-RMPSU-xx is designed for rackmount installations and can power up to eight units.

The PSU cables should be bared, tinned and securely connected to the HIGHWIRE power plug before switching on the PSU. Only one wire should be connected to each of the power plug's screw terminals, with polarity as indicated on the unit's top panel.

The green LED will blink every 1~2 seconds to indicate the presence of power

### 3. Coaxial Cable Connection

Connect the unit's BNC socket to the coaxial cable. If another HIGHWIRE unit is connected at the far end and powered up, then the green LED will light steadily to indicate a good connection.

In some installations, cable condition will force the units to reduce their connection speed, and this is indicated by the green LED flashing (approximately half-on, half-off).

Only two units should be connected, one at each end of the cable. HIGHWIRE is not compatible with other equipment such as analogue video amplifiers.

### 4. Ethernet Cable Connection

Connect the unit's RJ45 Ethernet jack to the camera or other network equipment using a standard Ethernet cable. Both patch and crossover type Cat5 or Cat6 cables are supported.

The amber LED will light to indicate a network connection, and will blink off during network activity.

## Manufacturer's declaration of conformity

The manufacturer declares that the equipment enclosed with this certificate conforms with the essential protection requirements of the EMC Directive 89/336/EEC and has been designed and manufactured to the following specifications:

BS EN 55022:1998 Emissions (Radiated)

BS EN 55024:1998 Immunity

BS EN 61000-4-2:1995 Immunity to ESD

BS EN 61000-4-3:20002 Immunity to Radiated RF Fields (3V/m)

RoHS

FC

CE