

## Features

### Single Channel HD Video & Power Transmitter & Receiver (12V/24V DC/AC)

- Real-time transmission over UTP cat5e/6
- NTSC, PAL & SECAM video format compatible
- Compatible with all HD-TVI, HD-CVI, AHD & CVBS analog cameras
- Color video max up to 440m(1443ft) for HD-CVI 720P camera  
If you adjust saturation of DVR, max up to 480m(1574ft)
- Color video max up to 220m(721ft) for HD-CVI 1080P camera
- Color video max up to 190m(623ft) for Hikvision TVI 720P camera  
Color video max up to 190m(623ft) for Hikvision TVI 1080P camera
- Color video max up to 210m(688ft) for TVT HD-TVI 720P camera  
Color video max up to 230m(754ft) for TVT HD-TVI 1080P camera
- Color video max up to 300m(984ft) for AHD 720P camera  
Color video max up to 240m(787ft) for AHD 960P camera  
Color video max up to 220m(721ft) for AHD 1080P camera
- Male BNC with extended 5.9inch(150mm)mini-coax pigtail
- RJ45 Jack for UTP cable
- Built-in TVS (Transient Voltage Suppressor) for surge protection
- Wave Filter Design, Anti-Static Design
- Lightning protection design Grade: III
- 60 dB crosstalk and noise immunity
- Exceptional interference rejection
- ABS engineering plastic housing

## Overview

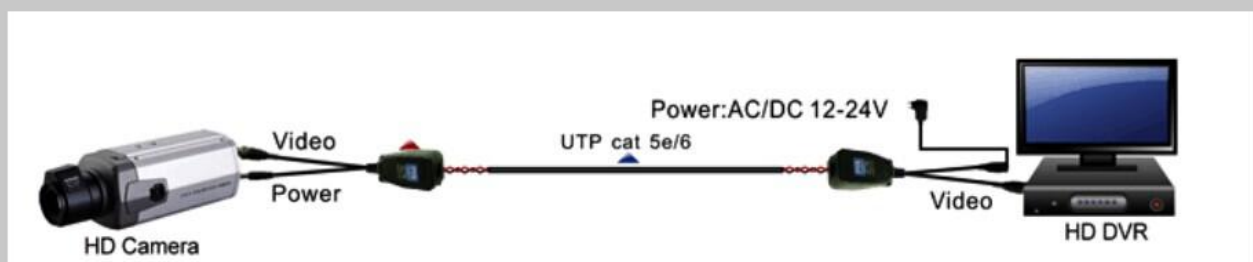
The **NVL-219** is video & power transmitter and receiver that allows the transmission of real-time CCTV HD video and power signal via cost-effective unshielded Twisted Paired (UTP) cable. Baseband (composite) signals of any type are supported.

The **NVL-219** is compatible with all HD-TVI, HD-CVI and AHD analog camera. Used in pairs, **NVL-219** eliminates costly and bulky coaxial cable.

The superior interference rejection and low emissions of the **NVL-219** allow video & power signals to coexist in the same wire bundle as telephone, datacom, or low-voltage power circuits. This allows the use of a shared or existing cable plant.

The **NVL-219** and **NVL-219** is built-in surge suppressor to protect video equipment against damaging voltage spikes. Its crosstalk and noise immunity ensure quality video signals.

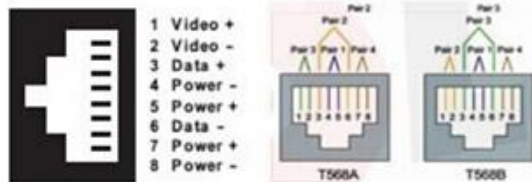
## Specifications



## Wire and Cable Recommendations

The **NVL-219** is recommended to use with Unshielded Twisted Paired (UTP) wiring from 24AWG through 22AWG. Individually shielded pairs should be avoided, as they reduce the operating range of the systems drastically. Multi-pair cable (25-pair or more) with an overall shield are acceptable. Video signals can coexist in the same wire bundle as telephone, datacom, or low-voltage power circuits. While video may be routed through telephone punch-down block terminals, any bridge-taps, also called T-taps and any resistive, capacitive or inductive devices **MUST BE** removed from the pair.

For more specific information regarding wire types, gauges and proper installation techniques, please contact us for technical assistance.



**EIA/TIA-568A Wiring Specifications**

Wire	Pin #	Configuration
Green White	1	Video (+)
Green	2	Video (-)
Orange White	3	Data (+)
Blue	4	Power (-)
Blue White	5	Power (+)
Orange	6	Data (-)
Brown White	7	Power (+)
Brown	8	Power (-)

**EIA/TIA T-568B Wiring Specifications**

Wire	Pin #	Configuration
Orange White	1	Video (+)
Orange	2	Video (-)
Green White	3	Data (+)
Blue	4	Power (-)
Blue White	5	Power (+)
Green	6	Data (-)
Brown White	7	Power (+)
Brown	8	Power (-)

## Applications

- Security Monitoring System
- Multimedia Network Teaching System
- Medical Monitoring Display System
- Industrial Automation Control System
- Banking, securities, financial information display system
- Remote Network Server Monitoring
- Department Store Security
- Casino Security
- Hospitals, Airports and banks
- School Campuses

## Power Distance Chart ( over one UTP cat 5e/6, one pair for video, 3 pairs for power)

Camera Type	HD-CVI 720P			
	12V DC	15V DC	18V DC	24V DC
Power Supply Voltage	12V DC	15V DC	18V DC	24V DC
Voltage at the Camera	5.7V DC	5.5V DC	5.5V DC	5.5V DC
100mA camera	500m	>450m	>475m	>450m
200mA camera	450m	>450m	>475m	>450m
300mA camera	315m	450m	>475m	>450m
400mA camera	230m	350m	475m	>450m
500mA camera	180m	270m	370m	>450m
600mA camera	140m	215m	295m	450m
800mA camera	110m	160m	215m	345m
1000mA camera	85m	125m	170m	265m

Camera Type	HD-CVI 1080P			
	12V DC	15V DC	18V DC	24V DC
Power Supply Voltage	12V DC	15V DC	18V DC	24V DC
Voltage at the Camera	8.8V DC	8.8V DC	8.8V DC	8.8V DC
100mA camera	>180m	>250m	>250m	>250m
200mA camera	>180m	>250m	>250m	>250m
300mA camera	150m	250m	>250m	>250m
400mA camera	115m	220m	>250m	>250m
500mA camera	90m	170m	250m	>250m
600mA camera	60m	140m	210m	>250m
800mA camera	40m	110m	160m	>250m
1000mA camera	30m	85m	130m	220m