

### Fiber Optic Video, Audio & Data Transmission

4-Ch Video + 4 Simplex Audio + 1 Duplex Data + IP Ethernet

4 →  
Video

#### System Design

Fiber Optic Video, Audio & Data Transmitter & Receiver VOS-44101FFDET/R provides for the digital transmission of 4-Channel Composite Video, 4 simplex analog audio, 1 duplex data and 10M/100M IP ethernet. Data support RS485, RS232, RS422 protocols.

4 →  
Audio

Stand-alone or rack-mount. All units of VOS-44101FFDET/R come in an insert card version. The cards can be inserted into our 14-slot, 19inch 4u or 6U rack-mountable card cage (VOS-CH04 or VOS-CH06).

1 ↔  
Data

Single-Mode or Multi-Mode, VOS-44101FFDET/R can support FC /PC or ST/PC Optical connector, can be used in Daisy-Chain system (Need to customize). The Transmission distance range according to the Optical Budget. Manufacturer's standard is: Single-mode 20km or Multi-mode 1.5km.

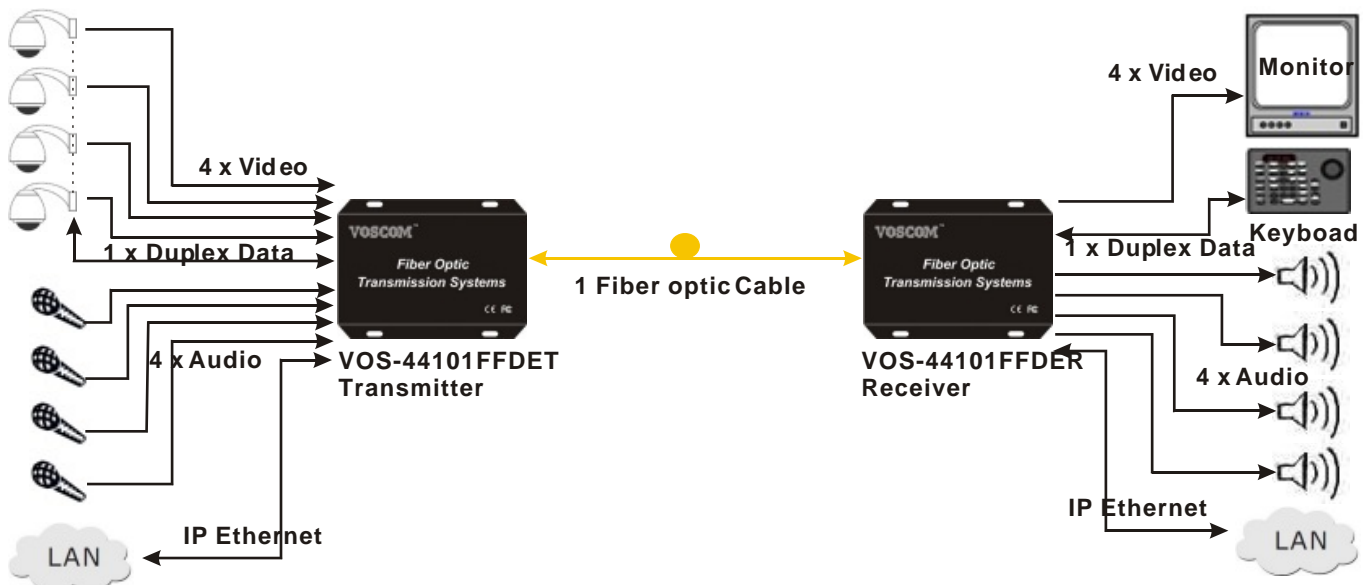
1 ↔  
Ethernet



#### Features

- Support Point-to-Point or Daisy-Chain connection
- Uncompressed Digital Composite Video over one fiber
- 24-Bit Digitally Encoded Audio over one Fiber
- Data support RS485(2-wire or 4-wire), RS232, RS422, Contact Closure
- Compatible with all PAL, NTSC, SECAM Video Systems
- Multi-mode Fiber Support for Distances up to 1.5 km
- Single-Mode Fiber Support for Distances up to 100 km

#### Typical Configuration



# Video, Audio & Data over Fiber

## Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-44101FFDEMT	VOS-44101FFDEMR	Multi-Mode	1310nm/1550nm	12dB	1.5km
VOS-44101FFDEST	VOS-44101FFDESR	Single-Mode	1310nm/1550nm	12dB	20km
VOS-44101FFDEST-4	VOS-44101FFDESR-4	Single-Mode	1310nm/1550nm	18dB	40km
VOS-44101FFDEST-6	VOS-44101FFDESR-6	Single-Mode	1310nm/1550nm	25dB	60km

## Specification

<ul style="list-style-type: none"> <li>• Video           <ul style="list-style-type: none"> <li>Number of Channels: 4-Channel Video</li> <li>Input/output impedance: BNC 75<math>\Omega</math></li> <li>Input/output Compatibility: PAL, NTSC, SECAM</li> <li>Input/output voltage: 1.0 Volt p-p</li> <li>Bandwidth: 6.5MHZ</li> <li>Bit Resolution: 8-Bit Digital Transmission</li> <li>Differential Gain: &lt; 1.5%</li> <li>Differential Phase: &lt; 1.5<math>^{\circ}</math></li> <li>Tilt: &lt; 5%</li> <li>Signal-to-Noise Ratio(SNR): &gt; 67 dB</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Ethernet/IP           <ul style="list-style-type: none"> <li>Standard: Ethernet IEEE 802.3</li> <li>Data Rate: 10/100 Mbps</li> <li>Connector: RJ-45, Auto MDI/MDI-X</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Audio           <ul style="list-style-type: none"> <li>Number of Channels: 4-Channel Simplex Audio</li> <li>Audio input/output Level: 6 dBm</li> <li>Audio in/output impedance: 600<math>\Omega</math> Unbalanced</li> <li>Bandwidth: 20Hz ~ 20KHz</li> <li>Bit Resolution: 24-Bit</li> <li>Signal-to-Noise Ratio(SNR): &gt; 80 dB</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Connectors           <ul style="list-style-type: none"> <li>Video: 75<math>\Omega</math> BNC (Gold Center Pin)</li> <li>Audio: Terminal Block</li> <li>Data: Terminal Block</li> <li>Optical: FC/PC or ST/PC Optional</li> <li>Stand-Alone Power: Screw terminal block</li> <li>Rack Power: AC line cord</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Data           <ul style="list-style-type: none"> <li>Data Formats: RS485(2-wire or 4-wire), RS232/422,Contact Closure</li> <li>Data Rate: DC to 115.2Kbps</li> <li>Bit Error Rate: 10E-9</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Electrical &amp; Mechanical           <ul style="list-style-type: none"> <li>Input Power Requirements: DC 5V@3A</li> <li>Power Adapter: AC 100V~240V</li> <li>Power Consumption: &lt; 5W</li> <li>Stand-Alone Dimensions: 176.5mm <math>\times</math> 158mm <math>\times</math> 36mm</li> <li>Card for 4U Rack Dimensions: 145mm <math>\times</math> 170mm <math>\times</math> 20mm</li> <li>Shipping Weight: 2.2kg (include TX &amp; RX)</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• Environmental           <ul style="list-style-type: none"> <li>Operating Temperature: -45<math>^{\circ}</math> C ~ +75<math>^{\circ}</math> C</li> <li>Storage Temperature: -45<math>^{\circ}</math> C ~ +85<math>^{\circ}</math> C</li> <li>Relative Humidity: 0%~95% (non-condensing)</li> <li>MTBF: &gt;100,000 hours</li> </ul> </li> </ul>