



VIDEO & SOUND PROFESSIONAL BROADCAST

- Cables Audio & Vídeo • Conexiones • Conectores
- Accesorios • Soporte Técnico
- Equipos Comunicaciones por Fibra Óptica • Calidad Broadcast

TVL 2011
0456

DIGITAL COAXIAL VIDEO MULTICORE TVL CABLE

Descripción/ Description



Cable a la carta. Cables especiales compuestos de video
(Analógico/ Digital), Audio (Twister/ Quad), potencia, UTP, etc.

The customer ask for a composition, and with an initial minimum order we can prepare it.Special cables composed of video (Analog/ Digital), Audio (Twister/ Quad), Power, STP, etc.

Construcción / Construction

- COMPOSICION/COMPOSITION:**
- 2 digital video coaxial cable VK 5/0.6
 - 1 UTP Cat. 6 Solid wire (0493)
 - 2 x 4 x 0.50 mm² data cables.

1. 2 digital video coaxial cable VK 5/0.6:

1. Conductor

Cu Ø 0,6mm (AWG 23)
UNE 21-011

2. Aislante / Insulation

Foam High Density FHDPE (GAS INJECTED)
Ø 2,8 mm
IEC 708

3. Pantallas / Shields (3 pantallas/ 3shields)

3.1 Primera Pantalla /First shield

100 % Al/ PET/Al PE H199

3.2 Segunda Pantalla /Second shield

95 % CuSn UNE 21-064

4. Cubierta externa / General Jacket

Ø 4,5 mm

FRLS (NPI) IEC 60332-3-25 EN 50266-2-5 CEI 20-22/3-5 (test for vertical flame spread)

Conectores recomendados / Suggested connectors:

SDI : 5017-V

HDTV (HD-SDI) : 5017-HDTV



VIDEO & SOUND PROFESSIONAL BROADCAST

TVL 2011
0456

- Cables Audio & Vídeo • Conexiones • Conectores
- Accesorios • Soporte Técnico
- Equipos Comunicaciones por Fibra Óptica • Calidad Broadcast

DIGITAL COAXIAL VIDEO
MULTICORE TVL CABLE

2. 1 UTP Cat. 6 Solid wire (0493):

1.Cada par/Each pair (4 pares/4 pairs):

1.1 Cada conductor/Each conductor:

1.1.1 Conductor

Cu O.F.C.
1 x 0,57 mm Ø (AWG 23)
UNE 21-011

1.1.2 Aislante / Insulation

PE IEC 708
Ø 1,00 mm

2.Cubierta Externa / General Jacket

Ø 6,2 mm
PTC UNE 21-031

3. 2 x 4 x 0.50 mm² Data Cables:

1. Cada cuadrete/ Each quad (2 quad^(*)/2 quad^(*)):

1.1 Cada conductor/Each conductor:

1.1.1 Cada conductor

Cu
AWG 20
Sección/Section: 0.50mm²
DIN 1787

1.1.2 Aislante / Insulation

PTC UNE 21-031
Wall thickness / espesor : 0.60 mm

4. Cubierta General/General Jacket:

Ø 17,10 mm
PTC UNE 21-031

Colors: Black

REVISION DATE: 19-05-2009



VIDEO & SOUND PROFESSIONAL BROADCAST

- Cables Audio & Vídeo • Conexiones • Conectores
- Accesorios • Soporte Técnico
- Equipos Comunicaciones por Fibra Óptica • Calidad Broadcast

TVL 2011

DIGITAL COAXIAL VIDEO

0456

MULTICORE TVL CABLE

Datos Técnicos / Data Sheet

Propiedades Eléctricas / Electrical Properties

DIGITAL VIDEO COAXIAL CABLE VK 5/0.6 DATA:

| | | | | | | |
|---------------------------------------------------|-------------------|----------------|---------|--------|--------|--------|
| Velocidad de Propagación/Velocity of propagation | % | 81,3 | | | | |
| Retraso Nominal/Nominal Delay | ns/m | 4,095 | | | | |
| Impedancia Nominal / Nominal Impedance | W | 75±1 W | | | | |
| Capacidad Nominal / Nominal Capacitance | PF/m | 54,52 | | | | |
| Máxima tensión de trabajo/Max. Operation Voltage | V | 300 | | | | |
| Inductancia nominal/ Nominal inductance | µH/m | 0,3074 | | | | |
| Resistencia núcleo en DC/ Conductor DC resistance | W/Km | 58,01 | | | | |
| Resistencia malla en DC/Shield DC resistance | W/Km | 17,62 | | | | |
| ATENUACION/ATTENUATION: | Freq (Mhz) | dB/100m | | | | |
| | 1,003 | - 1,111 | | | | |
| | 5,430 | - 2,593 | | | | |
| | 24,886 | - 5,396 | | | | |
| | 81,242 | - 8,958 | | | | |
| | 120,288 | - 10,697 | | | | |
| | 163,896 | - 12,369 | | | | |
| | 211,261 | - 14,022 | | | | |
| | 270,032 | - 15,912 | | | | |
| | 540,028 | - 22,885 | | | | |
| | 720,50 | - 26,581 | | | | |
| | 1000 | - 31,359 | | | | |
| | 2000 | - 46,40 | | | | |
| | 3000 | - 59,741 | | | | |
| Minimum STRUCTURAL RETURN LOSS (SRL) | Sweep | dB | | | | |
| | 5Mhz – 300Mhz | -24,01 | | | | |
| | 300 Mhz- 650 Mhz | -20,13 | | | | |
| | 650Mhz – 1100Mhz | -20,17 | | | | |
| SMITH CHART (300Khz-270Mhz) | | | | | | |
| Frequency (Mhz) | 8,62 | 85,33 | 116,565 | 162,49 | 223,09 | 266,46 |
| Ohms (O) | 75,58 | 75,34 | 74,38 | 74,81 | 75,59 | 74,47 |

Las especificaciones están sujetas a cambio sin previo aviso

Specifications subject to change without prior notice



VIDEO & SOUND PROFESSIONAL BROADCAST

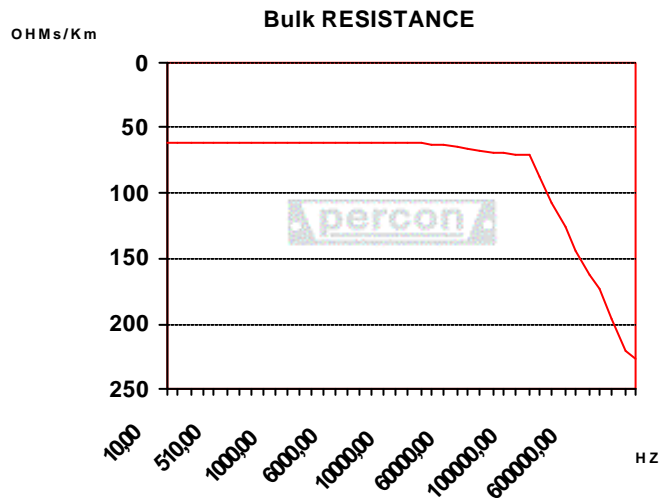
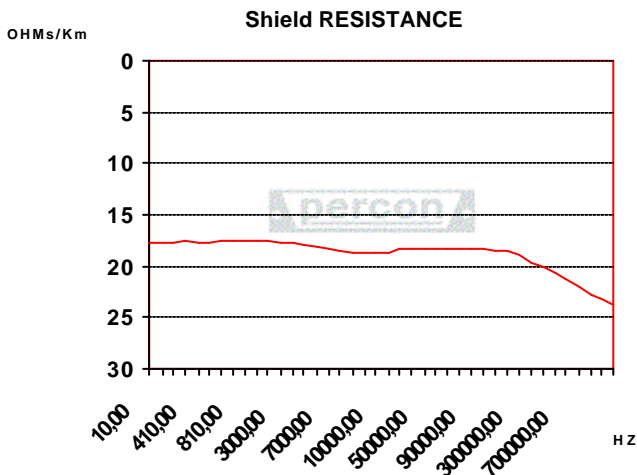
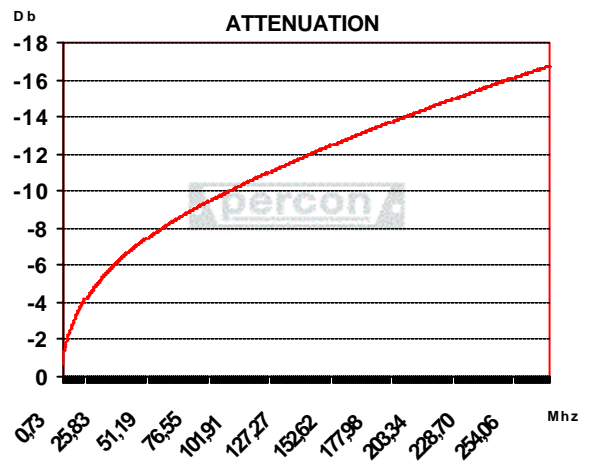
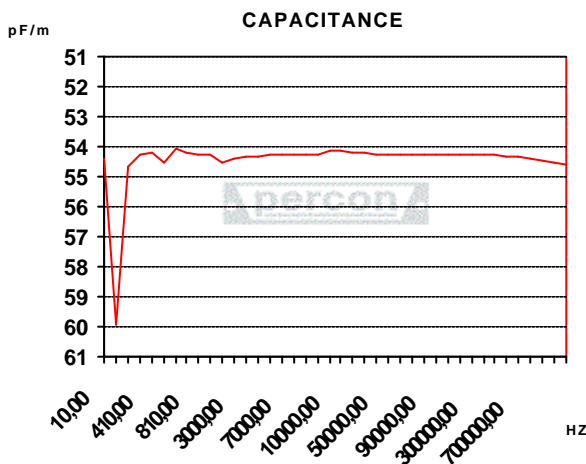
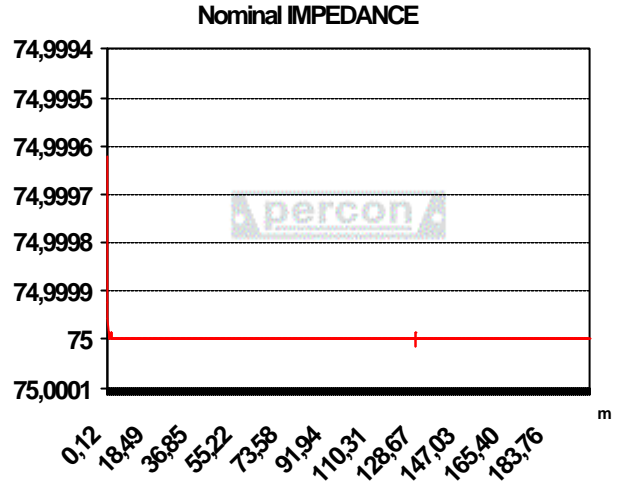
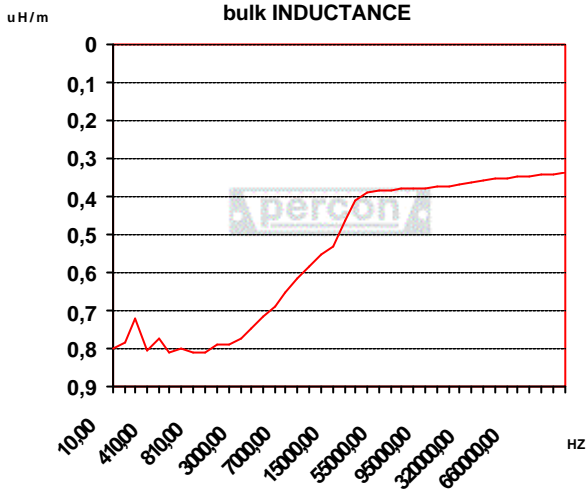
TVL 2011

0456

- Cables Audio & Vídeo • Conexiones • Conectores
- Accesorios • Soporte Técnico
- Equipos Comunicaciones por Fibra Óptica • Calidad Broadcast

DIGITAL COAXIAL VIDEO

MULTICORE TVL CABLE



Las especificaciones están sujetas a cambio sin previo aviso

Specifications subject to change without prior notice

Diputació 203 • 08011 Barcelona • Spain • Tel. 34 93 451 78 30 • Fax 34 93 323 75 88 • <http://www.percon.es>



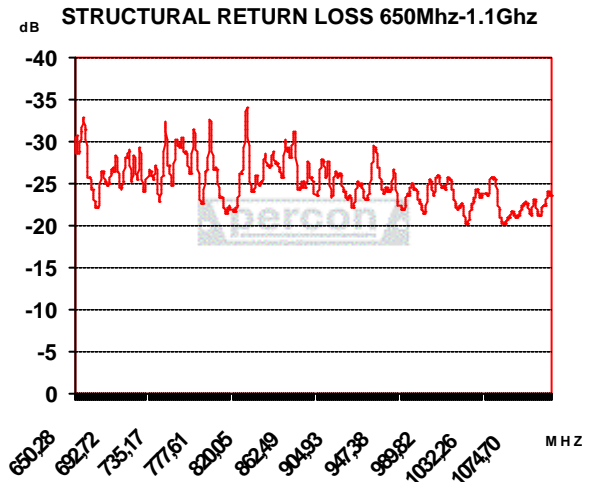
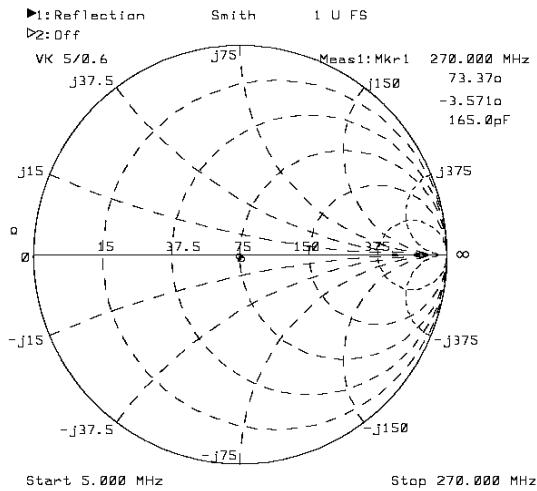
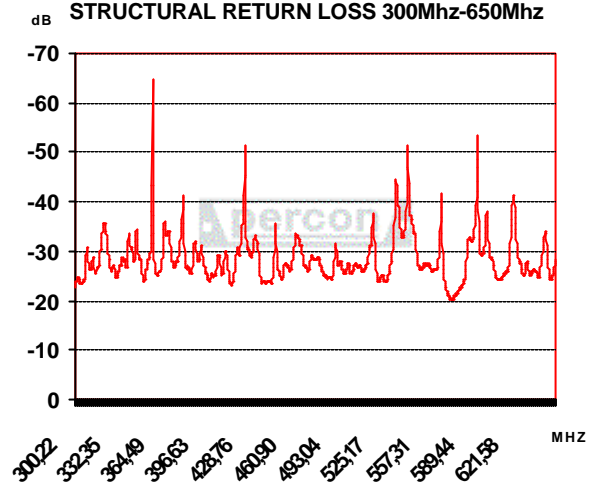
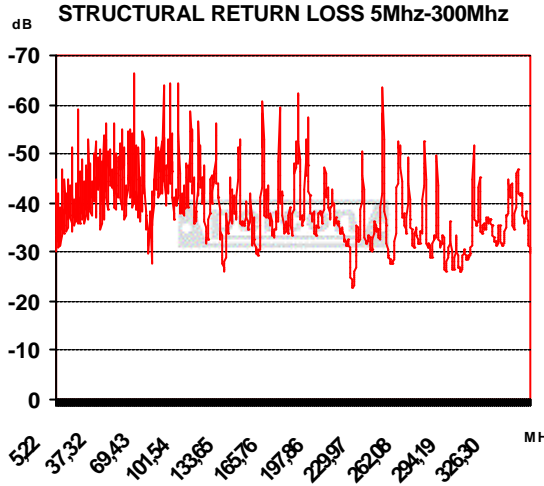
VIDEO & SOUND PROFESSIONAL BROADCAST

- Cables Audio & Vídeo • Conexiones • Conectores
- Accesorios • Soporte Técnico

- Equipos Comunicaciones por Fibra Óptica • Calidad Broadcast

TVL 2011
0456

DIGITAL COAXIAL VIDEO
MULTICORE TVL CABLE



Datos de aplicación / Application Data:

Formato digital / Digital format:

| | MAXIMUM TRANSMISSION DISTANCE (meters) AT SERIAL DIGITAL DATA RATES (SDI) |
|--------------------------------------------------------------------|---------------------------------------------------------------------------|
| 71,5 Mhz/143 Mbps (SMPTE 259M, Composite NTSC) | 335,57 |
| 88,5 Mhz /177 Mbps (ITU-R BT. 601, Composite PAL) | 306,18 |
| 135 Mhz/270 Mbps (SMPTE 259M, Component video) | 252,31 |
| 180 Mhz/360 Mbps (SMPTE 259M, widescreen) | 220,42 |
| 270 Mhz/540 Mbps (SMPTE 344M, widescreen) | 179,21 |
| 750 Mhz/1.5 Gbps (SMPTE 292M, HDTV) THEORETICAL | 61,95 |
| 750 Mhz/1.5 Gbps (SMPTE 292M, HDTV) SDI BNC's | 107 |
| 750 Mhz/1.5 Gbps (SMPTE 292M, HDTV) HDTV BNC's | 116 |
| 1,50 Ghz/3.0 Gbps (SMPTE 424M, Prog. Scan HDTV) THEORETICAL | 52 |
| 1,50 Ghz/3.0 Gbps (SMPTE 424M, Prog. Scan HDTV) HDTV BNC's | 90 |

**WE SUGGEST TO USE ONLY 85% OF THE RECOMMENDED DISTANCE*

Las especificaciones están sujetas a cambio sin previo aviso

Specifications subject to change without prior notice



VIDEO & SOUND PROFESSIONAL BROADCAST

- Cables Audio & Vídeo • Conexiones • Conectores
- Accesorios • Soporte Técnico
- Equipos Comunicaciones por Fibra Óptica • Calidad Broadcast

TVL 2011
0456

DIGITAL COAXIAL VIDEO
MULTICORE TVL CABLE

Formato video analógico / Analogue video format:

| | TRANSMISSION DISTANCE IN METERS OF ANALOGUE VIDEO SIGNAL WITH MINIMUM LOSSES (MAX -3 dB) |
|-----------------------------------|------------------------------------------------------------------------------------------|
| M-II (COMPONENT 5,0 Mhz BW) | 110,29 |
| EBU-C (COMPOSITE 5,5 Mhz BW) | 104,16 |
| BETACAM SP (COMPONENT 4,5 Mhz BW) | 115,83 |
| U-MATIC SP (COMPOSITE 4 Mhz BW) | 121,9 |
| S-VHS (COMPOSITE 5,0 Mhz BW) | 110,29 |
| ANALOG COMPONENT/RGB (5,0 Mhz BW) | 110,29 |

*DISTANCE BASED UPON THE LIMIT FREQUENCY OF 5,5 Mhz, 5 Mhz, 4,5 Mhz AND 4 Mhz.

Audio Formato digital / Digital Audio format (SMPTE 276M- unbalanced audio):

| | MAXIMUM TRANSMISSION DISTANCE (meters) AT SERIAL DIGITAL AUDIO DATA RATES (AES3-1992) |
|-----------------------------------------------|---------------------------------------------------------------------------------------|
| DSR (Sampling Rate 32Khz/BW 4,096 Mhz) | 871 |
| CD/DVD (Sampling Rate 44,1 KHz/BW 5,6448 Mhz) | 741 |
| DAT (Sampling Rate 48 KHz/BW 6,144 Mhz) | 701 |
| DVD (Sampling Rate 96 KHz/BW 12,228 Mhz) | 489 |
| DVD (Sampling Rate 192 KHz/BW 24,576 Mhz) | 356 |

Pruebas de HDTV a 116 metros de VK 5/ 116 meters of VK 5 under HDTV transmission: 1080i/720p

| RATE NAME | BIT RATE | H FREQ / V FREQ |
|-----------------------|----------------------------|--------------------|
| 720 p 1280 x 720 | 1.485/1.001 (1.4835) Gbps | 44.96Khz / 59.94Hz |
| 720 p 1280 x 720 | 1.4850 Gbps | 45.00Khz / 60.00Hz |
| 1080i 1920 x 1080 | 1.4850/1.001 (1.4835) Gbps | 33.72Khz / 29.97Hz |
| 1080i 1920 x 1080 | 1.4850 Gbps | 33.75Khz / 30.00Hz |
| 1080p 1920 x 1080 | 1.4850 Gbps | 33.75Khz / 30.00Hz |
| 1080p 1920 x 1080 | 1.4850/1.001 (1.4835) Gbps | 33.72Khz / 29.97Hz |
| 1080p 1920 x 1080 | 1.4850 Gbps | 27.00Khz / 24.00Hz |
| 1080p(sf) 1920 x 1080 | 1.4850 Gbps | 27.00Khz / 24.00Hz |
| 1080p(sf) 1920 x 1080 | 1.4850/1.001 (1.4835) Gbps | 26.97Khz / 23.98Hz |

Pruebas de 3G-SDI a 90 metros de VK 5/ 90 meters of VK 5 under 3G-SDI transmission: 1080p

| RATE NAME | BIT RATE | V FREQ / FORMAT |
|---------------------|------------|-----------------------------|
| 1080p (1920 X 1080) | 2.970 Gbps | 50 Hz / YCbCr 4:2:2 10 bits |
| 1080p (1920 X 1080) | 2.970 Gbps | 60 Hz / YCbCr 4:2:2 10 bits |

Las especificaciones están sujetas a cambio sin previo aviso

Specifications subject to change without prior notice



VIDEO & SOUND PROFESSIONAL BROADCAST

TVL 2011
0456

- Cables Audio & Vídeo • Conexiones • Conectores
- Accesorios • Soporte Técnico
- Equipos Comunicaciones por Fibra Óptica • Calidad Broadcast

DIGITAL COAXIAL VIDEO
MULTICORE TVL CABLE

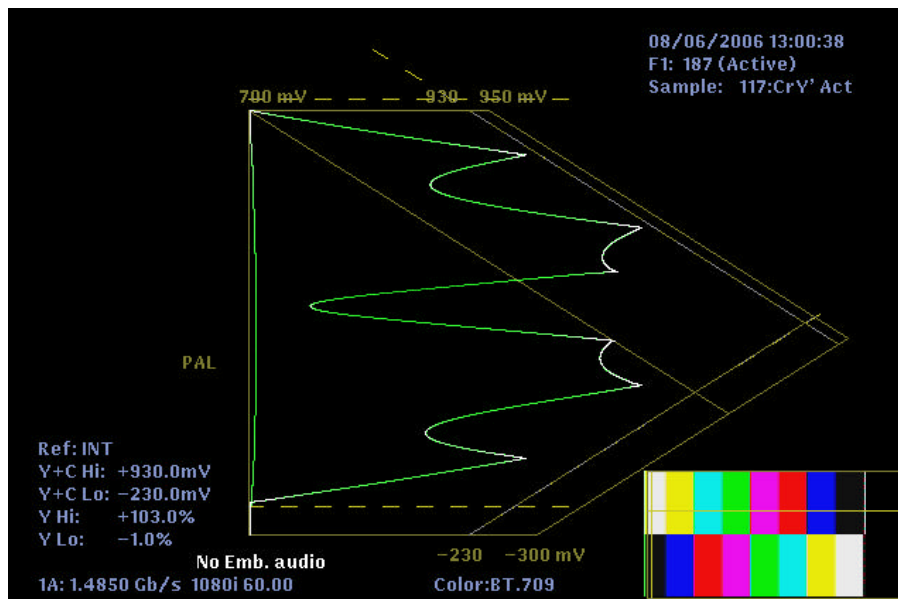
1080i/720p

Se utiliza un generador de señal de video de alta definición EXTRON VTG400D con una tensión de salida de pico a pico de 800 milivoltios ,una velocidad de datos de 1485Mbps o 1485/1001 Mbps, un jitter timing no superior a 1 UI (673 picosegundos) y un jitter alignment no superior a 0,2 UI (134,6 picosegundos) / We use an EXTRON VTG400D high definition video signal generator with an output peak-to-peak voltage of 800 millivolts, a data speed of 1485Mbps or 1485/1001 Mbps, a jitter timing under 1 UI (673 picoseconds) and a jitter alignment under 0,2 UI (134,6 picoseconds).

El receptor es un WFM700M de Tektronix / The receiver is WFM700M Tektronix

| Video Status | | Video Session – Running | |
|----------------------|---------------|-------------------------|-------|
| Input: | 1A (WFM7M) | SMPTE 292 CRC: | |
| Changed since reset: | No | Y Errored Seconds: | 0 |
| Signal: | 1.4850 Gb/s | Y Errored Fields: | 0 |
| Format Exp: | Any Supported | Y % Errored Fields: | 0.00% |
| Format Det: | 1080i 60.00 | Y Status: | OK |
| Colorimetry: | BT.709 (AUTO) | C Errored Seconds: | 0 |
| Embedded Audio: | No Emb. audio | C Errored Fields: | 0 |
| Ancillary Data: | None | C % Errored Fields: | 0.00% |
| Active Video Width: | 10 bits | C Status: | OK |
| Timecode: | None | RGB Errored Seconds: | 0 |
| Selected Ref: | INT | RGB Errored Fields: | 0 |
| Ref Format: | N/A | RGB % Errored Fields: | 0.00% |
| CC: | Missing | RGB Gamut Status: | OK |
| Y Stuck Bits: | ----- | Y+C Errored Seconds: | 0 |
| C Stuck Bits: | ----- | Y+C Errored Fields: | 0 |
| | | Y+C % Errored Fields: | 0.00% |
| Y Errored Lines: | 0 | Y+C Gamut Status: | OK |
| C Errored Lines: | 0 | Luma Errored Seconds: | 0 |
| | | Luma Errored Fields: | 0 |
| Time since reset: | 0:00:24:36 | Luma % Errored Fields: | 0.00% |
| | | Luma Gamut Status: | OK |

Errores en tx. de señal de video / Video session errors.



Gamut Arrowhead.

Las especificaciones están sujetas a cambio sin previo aviso

Specifications subject to change without prior notice

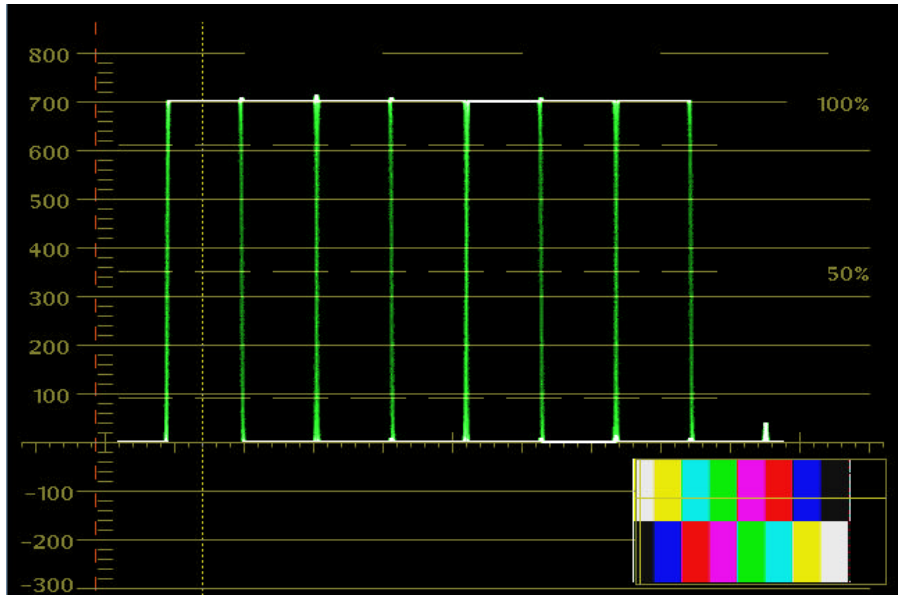


VIDEO & SOUND PROFESSIONAL BROADCAST

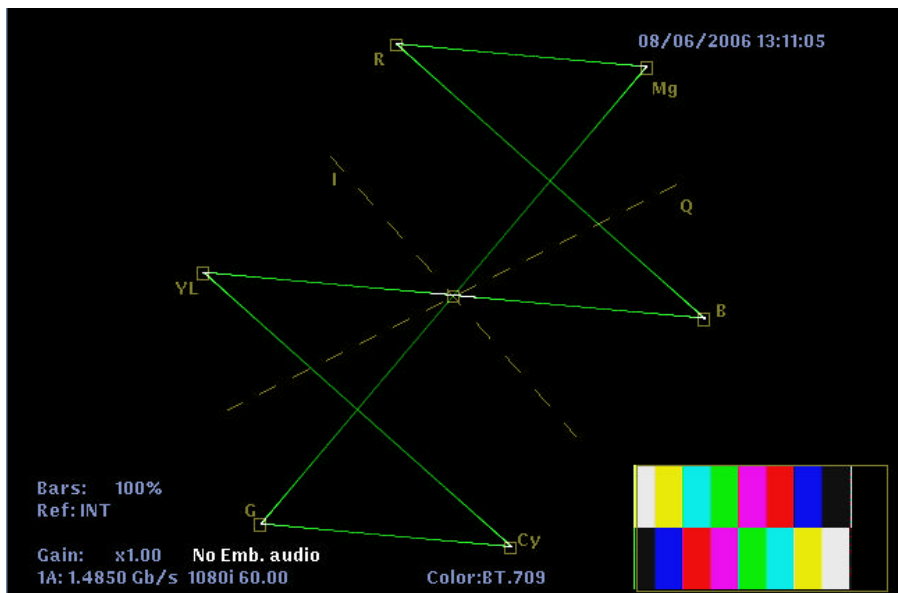
TVL 2011
0456

- Cables Audio & Vídeo • Conexiones • Conectores
- Accesorios • Soporte Técnico
- Equipos Comunicaciones por Fibra Óptica • Calidad Broadcast

DIGITAL COAXIAL VIDEO
MULTICORE TVL CABLE



For ma de onda / Waveform.



Vector.



VIDEO & SOUND PROFESSIONAL BROADCAST

- Cables Audio & Vídeo • Conexiones • Conectores
- Accesorios • Soporte Técnico
- Equipos Comunicaciones por Fibra Óptica • Calidad Broadcast

TVL 2011
0456

DIGITAL COAXIAL VIDEO
MULTICORE TVL CABLE

1080p

Se utiliza un generador de señal de video progresivo de alta definición (3G-SDI) y monitor de forma de onda de la marca Tektronix, modelo WFM 7120, con una velocidad de transmisión de datos de 2.970 Gbps (SMPTE 424/425M) y un refresco de pantalla de 50/59.94/60 Hz.

We use a progressive high definition video signal generator (3G-SDI) and a Tektronix WFM 7120 waveform monitor, with a data transmission speed of 2.970 Gbps (SMPTE 424/425M) and a screen refresh rate of 50/59.94/60 Hz.



Picture / Report/WFM/Gamut Arrowhead



Errores en tx. de señal de video / Video session errors.

Las especificaciones están sujetas a cambio sin previo aviso

Specifications subject to change without prior notice



VIDEO & SOUND PROFESSIONAL BROADCAST

- Cables Audio & Vídeo • Conexiones • Conectores
- Accesorios • Soporte Técnico
- Equipos Comunicaciones por Fibra Óptica • Calidad Broadcast

TVL 2011
0456

DIGITAL COAXIAL VIDEO
MULTICORE TVL CABLE

Cat 6 UTP Solid Wire (0493) DATA:

Propiedades Eléctricas / Electrical Properties

| | | |
|------------------------------------------------------------------------------------------|------|-----|
| Impedancia nominal/ Nominal impedance | W | 100 |
| Cap. entre conductor y conductor a @ 1Khz/ Cap. between conductor to conductor @ 1Khz | pF/m | 48 |
| Resistencia de bucle/ Loop resistance | W/Km | 176 |

| FREQ. (Mhz) | ATTEN. (dB/100m) | NEXT (dB) | PS NEXT (dB) | ACR (dB/100m) | PS ACR (dB/100m) | ELFEXT (dB/100m) | PS ELFEXT (dB/100m) | Return Loss (dB) |
|----------------|---------------------|--------------|--------------------|------------------|---------------------|---------------------|---------------------------|------------------------|
| 1 | 1.9 | 78 | 75 | 76.1 | 73.1 | 82 | 80 | 20 |
| 4 | 3.8 | 69 | 66 | 65.2 | 62.2 | 70 | 68 | 23 |
| 10 | 6.0 | 63 | 60 | 57.0 | 54.0 | 62 | 60 | 25 |
| 16 | 7.6 | 60 | 57 | 52.3 | 49.3 | 58 | 56 | 25 |
| 20 | 8.5 | 59 | 56 | 50.0 | 47.0 | 56 | 54 | 25 |
| 31,25 | 10.7 | 56 | 53 | 45.0 | 42.0 | 52 | 50 | 23.6 |
| 62,5 | 15.1 | 51 | 48 | 36.0 | 33.0 | 46 | 44 | 21.5 |
| 100 | 19.1 | 48 | 45 | 28.9 | 25.9 | 42 | 40 | 20.1 |
| 125 | 21.3 | 47 | 44 | 25.2 | 22.2 | 40 | 38 | 19.5 |
| 155 | 23.8 | 45 | 42 | 21.3 | 18.3 | 38 | 36 | 18.8 |
| 175 | 25.3 | 44 | 41 | 19.1 | 16.1 | 37 | 35 | 18.4 |
| 200 | 27.0 | 44 | 41 | 16.5 | 13.5 | 36 | 34 | 18.0 |
| 250 | 32.0 | 42 | 39 | 10.0 | 7.0 | 34 | 32 | 17.3 |
| 300 | 36.1 | 41 | 38 | 4.8 | 1.8 | 32 | 30 | |
| 400 | 41.7 | 39 | 36 | -2.7 | - 5.7 | 30 | 28 | |

Las especificaciones están sujetas a cambio sin previo aviso

Specifications subject to change without prior notice