Adapters

Video Adapters

BNCF-RCAM
BNC female to RCA male adapter
Part # 100-226-01 (Qty. 10)
Part # 100-226-03 (Qty. 50)
Part # 100-226-04 (Qty. 100)

RCAF-BNCF
RCA female to BNC male adapter
Part # 100-229-01 (Qty. 10)
Part # 100-229-03 (Qty. 50)
Part # 100-229-04 (Qty. 100)

BNCF-BNCF
BNC female to female barrel connector
Part # 100-227-01 (Qty. 10)
Part # 100-227-03 (Qty. 50)
Part # 100-227-04 (Qty. 100)

BNCF-BNCF PM
BNC female to BNC female panel mount adapter
Part # 100-228-01 (Qty. 10)
Part # 100-228-03 (Qty. 50)
Part # 100-228-04 (Qty. 100)

BNCF-BNCF T
(1) BNC female to (2) BNC female T connector
Part # 100-231-01 (Qty. 10)
Part # 100-231-03 (Qty. 50)
Part # 100-231-04 (Qty. 100)

BNCM-BNCF T
(1) BNC male to (2) BNC female T connector
Part # 100-230-01 (Qty. 10)
Part # 100-230-03 (Qty. 50)
Part # 100-230-04 (Qty. 100)

BNCF-BNCF Right Angle
BNC male to BNC female right angle connector
Part # 100-232-01 (Qty. 10)
Part # 100-232-03 (Qty. 50)
Part # 100-232-04 (Qty. 100)

T-BNC
75 ohm, BNC male termination adapter
Part # 100-234-01 (Qty. 10)
Part # 100-234-03 (Qty. 50)
Part # 100-234-04 (Qty. 100)

RCAF-RCAF Gold
RCA female to female Gold barrel connector
Part # 100-233-01 (Qty. 10)
Part # 100-233-03 (Qty. 50)
Part # 100-233-04 (Qty. 100)

SVHSF-SVHSF PM
4-pin mini-DIN female-female panel mount adapter
Part # 100-105-01 (Qty. 10)
Adapters 9-pin D, 15-pin HD, S-Video and Audio Adapters (continued)

Video Adapters (Continued)

A/V Adapter Kit
Offering an easy way to try many of our most popular A/V adapters, the A/V Adapter Kit includes the following adapters housed in a plastic case:
- (5) BNCF-RCAM
- (5) RCAF-BNCFM
- (5) BNCF-BNCF
- (5) BNCFM-BNCF T
- (5) BNCF-BNCF T
A/V Adapter Kit Part# 42-066-01

Video DC Block
BNC male to BNC male. Removes DC offset from video signal
Part # 26-495-02

SY VGAM-RGBHVF (molded)
15-pin male VGA to 5 BNC female 2’ (60 cm)
Part # 26-397-01

SY VGAM-RGBHVF (pigtail)
15-pin male VGA to 5 female BNCs, 2’ (60 cm)
Part # 26-493-01

IN9101
BNC male to RCA male 6’ (1.8 m)
Part # IN9101
Adapters 9-pin D, 15-pin HD, S-Video and Audio Adapters (continued)

Video Adapters (Continued)

Male S-Video Adapters
4-pin mini DIN male to (2) BNC adapters
S-Video Male to 2 Female BNCs
SVHSM-BNCF 8" (0.2 m) ............... 26-353-01
S-Video Male to 2 Male BNCs
SVHSM-BNCM 1' (0.3 m) .............. 26-353-02
SVHSM-BNCM 3' (0.9 m) .............. 26-353-03
SVHSM-BNCM 6' (1.83 m) .......... 26-353-04

Female S-Video Adapters
4-pin mini DIN female to (2) BNC adapters
S-Video Female to 2 Female BNCs
SVHSF-BNCF 8" (0.2 m) ............... 26-353-01
S-Video Female to 2 Male BNCs
SVHSF-BNCM 1' (0.3 m) .............. 26-353-02
SVHSF-BNCM 3' (0.9 m) .............. 26-353-03
SVHSF-BNCM 6' (1.83 m) ........... 26-353-04

Audio Adapters

MSR 6
3.5 mm mini stereo male to (2) RCA female adapter 6" (15 cm)
Part # 26-592-01

CSR 6
(1) Captive screw male to
(2) RCA female adapter 6" (15 cm)
Part # 26-575-01

IN9107
Stereo audio adapter cable - (1) 3.5 mm stereo mini male to (2) RCA male, 6' (1.8 m)
Part # IN9107
Adapters 9-pin D, 15-pin HD, S-Video and Audio Adapters (continued)

**DVI Adapters**

**SY DVIA-RGBHV**
DVI-A Male to 5 BNC Female 6” (15 cm)
Part # 26-609-01

**DVIAM-VGAF**
DVI-A Male-VGA Female Cable 6” (15 cm)
Part # 26-619-01

**DVIIM-VGAF/DVIIF**
DVI-I Male to 15-pin HD Female and DVI-D Female “Y” Adapter 12” (30 cm)
Part # 26-612-01
Adapters 9-pin D, 15-pin HD, S-Video and Audio Adapters (continued)

**Computer and Control Adapters**

- **T-VGA**
  VGA and Super VGA termination adapter plug
  Part # 26-106-01

- **USPA-VGA**
  Universal Sync Process Adapter
  Part # 26-602-01

- **15HD GCM**
  VGA male-male gender changer
  Part # 10-439-01

- **15HD GCF**
  VGA female-female gender changer
  Part # 10-439-10

- **VGAF-9DM**
  VGA female to 9-pin D male adapter
  Part # 26-170-03

- **9D GCM**
  9-pin D male-male gender changer
  Part # 10-438-01

- **9D GCF**
  9-pin D female-female gender changer
  Part # 10-438-10

- **NETXC M-M**
  Ethernet crossover cable to connect a computer directly to an IP Link® product
  Part # 26-591-01

- **NETXA M-F**
  Ethernet crossover adapter to connect a computer directly to an IP Link® product
  Part # 26-615-01
Custom Cables

For applications requiring a unique, customized cable solution, Extron can provide a quick custom cable assembly for many cables, of various lengths, and with most popular connector terminations. From the most basic to the most complex, Extron’s world-class manufacturing department can produce custom cable assemblies in a matter of days. Consider these factors:

- Quality materials and components
- Most advanced quality control standards
- Manufacturing capacity to meet any expectations
- Highly skilled technicians and assemblers
- Extron quality and performance

Extron can partner with you to meet your exact specifications, providing solutions for many different applications. We can provide you with these benefits:

1. One-stop shopping for all your cable needs
2. Just-in-time delivery to reduce inventory overhead
3. Expanded service and support capabilities
4. Build only what is needed to reduce wasted material
5. Decreased technician time = increased profitability

We understand that time, quality, and profitability are crucial in any installation. Extron has the experience and manufacturing capacity to provide on-time delivery and the highest quality backed by our Lifetime Cable Performance Warranty. To access this service, please call your Extron Representative at 800-633-9876 (if in the United States or Canada), or call 714-491-1500. Fill out the Extron Custom Cable Request Form (page 82) and fax it in for an expedited quote.

**Video Cables**

**MHR-2**

- Two Color-Coded 26 AWG Stranded Coax Conductors
- Non-Plenum SuperFlex Jacket
- Polyolefin Foam Insulation
- Sheath
- Braided Shield

**MHR-2P**

- Two Color-Coded 26 AWG Stranded Coax Conductors
- Polyolefin Foam Insulation
- SuperFlex Jacket
- 100% Foil Shield
- Drain Wire
- Double-Shielded Foil and Copper Serve
- Stranded Filler

**MHR-5**

- SuperFlex Jacket
- Center Conductor 26 AWG (Stranded)
- Polyolefin Foam Insulation
- Sheath
- Ripcord
- Five Mini High Resolution Coax Conductors

**MHR-5P**

- Center Conductor 26 AWG (Stranded)
- FEP Foam
- SuperFlex Plenum Jacket
- Sheath
- Ripcord
- Five Mini High Resolution Coax Conductors

**MHR-5STP-2**

- SuperFlex Jacket
- Center Conductor 26 AWG (Stranded)
- Foil Shields
- Ripcord
- Drain Wires
- Two Stranded Twisted Pair Sets (Red/Black, Green/White)

**MHR-5STP-2P**

- SuperFlex Plenum Jacket
- Center Conductor 26 AWG (Stranded)
- Foil Shields
- Ripcord
- Drain Wires
- Two Stranded Twisted Pair Sets (Red/Black, Green/White)
### Video cables (continued)

<table>
<thead>
<tr>
<th>Video Cables</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHR-6</td>
<td>Polyolefin Foam Center Conductor 26 AWG (Stranded) Six Mini High Resolution Coax Conductors Ripcord Sheath SuperFlex Jacket</td>
</tr>
<tr>
<td>MHRHF-5</td>
<td>Polyolefin Foam Center Conductor 26 AWG (Stranded) Five Mini High Resolution Coax Conductors Fiber Wrap Ripcord Sheath SuperFlex Jacket Halogen-Free Rod Filler</td>
</tr>
<tr>
<td>M59-3</td>
<td>Polyolefin Foam Center Conductor 24 AWG (Stranded) Copper Braid Shield Ripcord Sheath SuperFlex Jacket Filler</td>
</tr>
<tr>
<td>M59-6</td>
<td>Polyolefin Foam Center Conductor 24 AWG (Stranded) Copper Braid Shield Ripcord Sheath SuperFlex Jacket Filler</td>
</tr>
<tr>
<td>RG59</td>
<td>Double-Shielded Foil &amp; Copper Braid 22 AWG Solid Copper Coax FEP Foam Jacket</td>
</tr>
<tr>
<td>RG59-3MHR-3</td>
<td>Three Coax 26-Gauge (Black/Yellow/White) Center Conductor (Stranded) Double Shielded Foil and Copper Braid Three Coax 20-Gauge (Red/Green/Blue) Center Conductor (solid copper) Sheath</td>
</tr>
</tbody>
</table>
Video cables (continued)

Multi-Conductor Cables

A/V UTP Cables
Audio and Control Cables

**RS-232**
- Double-Shielded Foil & Copper Braid
- Nine 26 AWG Wires

**CTL**
- Fiber Wrap
- Two 18 AWG (Red & Black)
- Two 22 AWG (White & Violet) One 24 AWG, Tinned Copper Drain Wire (foil-shielded group)

**CTLP**
- Fiber Wrap
- Two 18 AWG (Red & Black)
- Two 22 AWG (White & Violet) One 24 AWG, Tinned Copper Drain Wire (foil-shielded group)

**STP22**
- Foil Shield
- Two 22 AWG (Red & Black)
- Plenum Jacket
- Drain Wire

**STP22P**
- Foil Shield
- Two 22 AWG (Red & Black)
- Plenum Jacket
- Drain Wire

**STP22-2**
- 2 Stranded Twisted Pair Sets
- Four 22 AWG conductor (Red/Black, Blue/White)
- Foil Shields
- Plenum Jacket
- Drain Wires

**STP22-2P**
- 2 Stranded Twisted Pair Sets
- Four 24 AWG conductor (Red/Black, Green/White)
- Foil Shields
- Plenum Jacket
- Drain Wires

**STP20**
- Foil Shield
- Two 20 AWG (Red & Black)
- Jacket
- Drain Wire

**STP20P**
- Foil Shield
- Two 20 AWG (Red & Black)
- Plenum Jacket
- Drain Wire

**STP20-2**
- 2 Stranded Twisted Pair Sets
- Four 22 AWG conductor (Red/Black, Blue/White)
- Foil Shields
- Jacket
- Drain Wires

**STP20-2P**
- 2 Stranded Twisted Pair Sets
- Four 24 AWG conductor (Red/Black, Green/White)
- Foil Shields
- Plenum Jacket
- Drain Wire

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Audio and Control cables (continued)

**STP24LC**
- Foil Shield
- Two 24 AWG conductor (Blue/White)
- PVC Jacket

**STP24LC-2**
- Foil Shield
- Drain Wires
- 2 Stranded Twisted Pair Sets
- Four 24 AWG conductor (Red/Black, Blue/White)
- PVC Jacket

**STP24LC-2P**
- Foil Shield
- Drain Wires
- 2 Stranded Twisted Pair Sets
- Four 24 AWG conductor (Red/Black, Blue/White)
- Plenum Jacket

**Speaker Cables**

**SPK18**
- PVC Jacket
- Sheath
- Two 18 AWG (Red & Black)

**SPK16**
- PVC Jacket
- Sheath
- Two 16 AWG (Red & Black)

**SPK14**
- PVC Jacket
- Sheath
- Two 14 AWG (Red & Black)

**SPK18P**
- Plenum Jacket
- Sheath
- Two 18 AWG (Red & Black)

**SPK16P**
- Plenum Jacket
- Sheath
- Two 16 AWG (Red & Black)

**SPK14P**
- Plenum Jacket
- Sheath
- Two 14 AWG (Red & Black)
## Connectors

<table>
<thead>
<tr>
<th>BNC 4 Block (Female 2’ Length)</th>
<th>BNC 5 Block (Female 2’ Length)</th>
<th>4-pin Mini-DIN</th>
<th>Male or Female BNC Connectors</th>
<th>F-Type Connector</th>
<th>Compression RCA Connector</th>
<th>3.5 mm Stereo Plug Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="BNC 4 Block" /></td>
<td><img src="image" alt="BNC 5 Block" /></td>
<td><img src="image" alt="4-pin Mini-DIN" /></td>
<td><img src="image" alt="Male or Female BNC Connectors" /></td>
<td><img src="image" alt="F-Type Connector" /></td>
<td><img src="image" alt="Compression RCA Connector" /></td>
<td><img src="image" alt="3.5 mm Stereo Plug Connector" /></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>3.5 mm Captive Screw Connector</th>
<th>13W3 Connector</th>
<th>DB 9 Connector</th>
<th>DB 15 Connector</th>
<th>DB 25 Connector</th>
<th>HD 15 Connector</th>
<th>HD 26 Connector</th>
<th>RJ-45 Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="3.5 mm Captive Screw Connector" /></td>
<td><img src="image" alt="13W3 Connector" /></td>
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<td><img src="image" alt="HD 26 Connector" /></td>
<td><img src="image" alt="RJ-45 Connector" /></td>
</tr>
</tbody>
</table>
## Custom Cable Request Form

### INSTRUCTIONS
1. Follow the instructions on Sections A-F
2. Fill out all sections COMPLETELY (call Extron at 800.633.9876 (US/Canada) or call 714.491.1510 with any questions). Incomplete forms will be returned and can delay quotation.
3. Fax to 714.491.1517 Attn: Custom Cable Dept.

**NOTE:** Once created, Extron will contact you with the price and part number of your cable. An Extron representative will provide a ship date once your order is placed.

### CUSTOMER INFORMATION
- **Name:**
- **Date:**
- **Company:**
- **Telephone #:**
- **Fax #:**
- **E-mail:**
- **Description of Application:**
- **Signature (Required):**

### A. Similarities
- Is this cable similar to an existing Extron Cable?
  - Yes (Complete sections A - C and return to Extron)
  - No (Fill out sections A - F)

### B. Cable Length
**Feet or Meters** (circle one)

### C. Quantity Needed
**NOTE:** If you answered “Yes” in Section A please stop here and fax to Extron.

### D. Cable Type
- **(Jacket Type)**
  - MHR-2
  - MHR-5
  - MHR-6
  - MHR-STP-2
  - MHR-H-5
  - MS9-1
  - Non-Plenum
  - Plenum
  - (PVC only)

### E. CONNECTOR #1 (C1)
1. **GENDER:**
2. **Backshell type (D-sub only)**
   - Male
   - Molded
   - Female
   - Backshell

3. **CONNECTOR TYPE:** (Check all that apply)
   - (qty.) BNC connectors
   - BNC 4 Block (Female, 2’ length)
   - BNC 5 Block (Female, 2’ length)
   - DB 9
   - DB 15 (two row)
   - DB 25
   - DVI-A (male only)
   - HD 15 (VGA style)
   - HD 26
   - 4-pin mini DIN (5-video)
   - 13W3
   - 3/(qty.) RCA (male only)
   - F-Type (male only)
   - 3.5 mm stereo plug (male only)
   - 3.5 mm captive screw
   - RJ-45

4. **DRAIN WIRE:**
   - Cut drain wire
   - Attach drain to shell
   - Connect drain to pin #

5. **SCREW CONNECTION:** (D-sub only)
   - Thumbscrews (for molded connectors only)
   - 4/40 screws
   - 4/40 hex

6. **SPECIAL INSTRUCTIONS:**
   - Ferrite bead
   - Leave this end unterminated
   - Flying lead, length ___ inches
   - Label: (3 rows, 10 characters)

### E. CONNECTOR #2 (C2)
1. **GENDER:**
2. **Backshell type (D-sub only)**
   - Male
   - Molded
   - Female
   - Backshell

3. **CONNECTOR TYPE:** (Check all that apply)
   - (qty.) BNC connectors
   - BNC 4 Block (Female, 2’ length)
   - BNC 5 Block (Female, 2’ length)
   - DB 9
   - DB 15 (two row)
   - DB 25
   - DVI-A (male only)
   - HD 15 (VGA style)
   - HD 26
   - 4-pin mini DIN (5-video)
   - 13W3
   - (qty.) RCA (male only)
   - F-Type (male only)
   - 3.5 mm stereo plug (male only)
   - 3.5 mm captive screw
   - RJ-45

4. **DRAIN WIRE:**
   - Cut drain wire
   - Attach drain to shell
   - Connect drain to pin #

5. **SCREW CONNECTION:** (D-sub only)
   - Thumbscrews (for molded connectors only)
   - 4/40 screws
   - 4/40 hex

6. **SPECIAL INSTRUCTIONS:**
   - Ferrite bead
   - Leave this end unterminated
   - Flying lead, length ___ inches
   - Label: (3 rows, 10 characters)

### PIN ASSIGNMENTS - Very important

#### INDICATE PIN CONNECTIONS FROM C1 TO C2
**Description (if applicable) Example:**

<table>
<thead>
<tr>
<th>CL PIN#</th>
<th>Red</th>
<th>Green</th>
<th>CL PIN#</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 5</td>
<td></td>
<td></td>
<td>2 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Amplitude
The level or strength of a signal as measured by the height of its waveform. Electronic waveforms can be displayed and measured on an oscilloscope.

Attenuation
To reduce the amplitude (strength) of a signal or current, a.k.a. insertion loss. Measured in decibels (dB).

AWG
American Wire Gauge. A standard measurement for wire conductor diameter.

Capacitance
The ability to store an electrical charge. Capacitance is a condition that exists between conductors in a cable. As signal frequencies become higher, an impedance called “capacitive reactance” (Xc) becomes greater, causing signal loss and distortion.

Crosstalk
This is caused by interference between two signals, usually from an adjacent channel, which adds an undesired signal to the desired signal. Crosstalk is caused by magnetic induction or capacitive coupling and can occur when there are grounding problems or improper cable shielding. Video symptoms include noise and ghosting, while audio symptoms include signal leakage.

D1 component
A parallel digital recording format that handles digital component video with a 4:2:2 sampling of Y, Cb, and Cr.

Decibels (dB)
The standard unit used to express gain or loss of power. It indicates the logarithmic ratio of output power divided by input power. A power loss of 3 dB is an attenuation of half of the original value. The term “3 dB down” is used to describe the half power point. In audio work, 0 dB is the threshold of hearing. 120 dB level is the threshold of pain. A change of 3 dB halves or doubles the apparent loudness.

Diode
An electronic device that allows current to flow in one direction only.

DV
Digital video. A serial digital video format. During the 4:1:1 sampling process, all video samples are kept, and half of the color samples are discarded.

DVI
Digital Visual Interface. A serial/parallel digital format for computer graphics connection between a computer and its local display.

EMI
Electromagnetic interference. Caused by high current machinery such as air conditioning units or electric motors. The interference is a low frequency induced magnetic field that can manifest itself as bars rolling through the image, similar to a hum bar.

ETL
Edison Testing Laboratories. When marked by the ETL symbol, a product has been tested and evaluated to nationally recognized safety standards with regard to fire, electric shock, and related safety hazards. There is also an ETL symbol for Canada. Test results are equivalent to UL.

FireWire™
Also known as 1394 or IEEE-1394. A data communication standard used with digital camcorders, the 1394 FireWire manages the digitization, compression, and audio synchronization processes while shooting. This puts broadcast quality video footage directly into your computer or DV (digital video) editing system. FireWire supports data transfer rates of 100 to 400 Mbps.

Frequency
The number of times a particular event happens per a given time. In A/V, the number of complete cycles per second of a musical tone or electronic signal, expressed in Hertz (Hz).

HD-SDI
High Definition-Serial Digital Interface. A serial digital format that handles HD signals in a television plant at a data rate of 1.485 gigabits per second.

HDTV
High definition digital television. A serial digital format based on the timing parameters of SDTV. HDTV uses more than twice the samples of SDTV. HDTV also refers to a device that can receive and display all ATSC video formats: 720p, 1080p, or 1080i.

High impedance
Hi Z or high Z. A relative term that is different for each application. In video, when the signal is not terminated it is said to have a hi Z load. Hi Z is typically 800 to 10 kohms or greater.

Hum bar
Interference in the form of a horizontal bar moving vertically on the display screen. Hum bars can be caused by ground loops.

ID bit termination
ID bit termination is used to indicate (identify) what type of device (what type of monitor) is attached to a computer-video output port or at the end of a daisy chain. ID bit termination involves connecting specific data lines/pins to the electrical ground. For example, VGA-type displays use pins 4, 11, and 12 for ID bits; but pins 4, 7, and 10 are used for Macintosh ID bits; and pins 3, 4, 8, and 9 are used for many Sun display devices. ID bit termination ensures that the correct video signals will be sent to the display device. A computer checks for ID bits during the power-up self diagnosis, and sets the video output frequency and resolution based on how the ID bits are set. Some computers will not send any video signal if they do not sense any ID bits on hookup, so no picture will be displayed. ID bits are also called “sense lines.”

IEEE 1394
IEEE (Institute of Electrical and Electronics Engineers) 1394. Also known as FireWire. A serial digital format that handles a wide range of data. IEEE 1394 offers peer-to-peer interface capability, so it does not require computer support. This is the interface used by the DV format.
Impedance
The opposition or “load” to a signal, measured in ohms and abbreviated \( R, \Omega, \) or \( Z \). In video, typical low impedance circuits (low \( Z \)) are 600 ohms or less, and high impedance circuits (high \( Z \)) may be 10 kilohms or greater. Video termination impedance is 75 ohms. See “high impedance” or “low impedance.”

Impedance-matching
Circuits that generate audio or video signals are designed to work with a certain “load” (impedance). When connecting devices in a system, it is important that the impedance specifications are adhered to. If the impedance of the load is not matched to that of the source, there could be undesirable results, such as loss or distortion of the original signal, reflections, etc.

Low capacitance
Capacitance is defined as the ability to store an electrical charge. It is usually measured in picofarads per foot (pF/ft). The lower the capacitance of a cable, the better it performs at higher frequencies maintaining the desired waveform definition and minimizing errors.

Low impedance
The condition where the source or load is at a lower impedance than the characteristic impedance of the cable. Low source impedance is common; low load impedance is usually a fault condition. Example: 30-600 ohms.

Ohm
The unit of electrical resistance, limiting a current of 1 amp when subjected to a potential difference of 1 volt. Represented by \( \Omega \), \( R \), or \( Z \).

Oscilloscope
A test device that allows measurement of electronic signals by displaying the waveform on a visual display calibrated to show signal amplitude per unit of time.

Plenum cable (CL2P/CMP)
Cable having a construction that meets Underwriters Laboratories specifications for resistance to fire under UL 910.

Power (electrical)
The dissipation of heat by passing a current through a resistance. Measured in watts (W), it is expressed by Ohm’s law from the three variables: voltage (E), current (I), and resistance (R). That is, \( P = I \times R \), \( P = E^2/R \) or \( P = E \times I \).

Resistance
The opposition to the flow of electric current. See “power” and “ohms.”

RFI
Radio frequency interference. High frequency interference from transmissions such as telephones, microwaves, and television stations.

SDI
Serial Digital Interface. The serial digital version of the D1 component television recording format. SDI simplifies the connection and routing of component digital signals to one coaxial cable.

SDTI
Serial Digital Transport Interface. Uses the SDI data format for the transport of digital data other than component digital video signals. SDTI is frequently used for transporting compressed SDTV and HDTV through a television plant.

SDTV
Standard Digital Television. A serial digital format whose samples and timing are derived from 4:2:2 digital component video sources. The main difference between existing digital component video and SDTV is an MPEG-2 compression step to reduce the channel bandwidth. Also known as Standard Definition Television, referring to a device that can receive and display NTSC, PAL, or SECAM video formats.

Signal loss
The resulting signal output of a system is less than the signal input. In video systems, the problem usually manifests as a lower contrast picture.

Sync
Synchronization. In video, sync is a means of keeping the image display in step with the changing image source. This is accomplished with timing pulses to ensure that each step in a process occurs at exactly the right time. For example, horizontal sync determines exactly when to begin each horizontal line (sweep) of the electron beam. Vertical sync determines when to bring the electron beam to the top left of the screen to start a new field. There are many other types of sync in a video system. Also called “sync signal” or “sync pulse.”

Termination
A load resistance or impedance at the end of a cable or signal line used to match the impedance of the equipment that generated the signal to ensure maximum transmission of power. The impedance absorbs signal energy to prevent signal reflections from going back toward the source. For video signals, termination impedance is typically 75 ohms; for sync signals it is usually 510 ohms.

UL
Underwriters Laboratories. When marked by the UL symbol, a product has been tested and evaluated to nationally recognized safety standards with regard to fire, electric shock, and related safety hazards. There is also a UL for Canada, sometimes called CUL, and a UL “recognized component” with its own symbol, resembling a backward “UR.”

USB
Universal Serial Bus. A serial digital format that promotes the concept of Plug and Play to computer peripherals. USB requires a host computer for support. USB 1.1 supports a data transfer rate up to 12 Mbps, while USB 2.0 supports a data transfer rate up to 480 Mbps.

Volt
The potential difference or electromotive force that will cause a current of one ampere to flow through the resistance of one ohm. Symbolized by \( E \) or \( V \).
Extron Cables
Specifically Designed and Precision Engineered for the A/V Industry

One stop Cable Shopping
Extron Electronics offers a complete line of cable products specifically designed and engineered for the professional A/V industry. Our cable product portfolio includes high quality bulk cables and cable assemblies, problem-solving adapters, as well as Extron’s new Universal Crimp Tool and precision machined BNC crimp connectors with Secure-Lock pin positioning.

Multiple Cable Warehouses
In order to provide timely and cost-effective delivery, we maintain a robust worldwide distribution network with warehouses in California, North Carolina, The Netherlands, Singapore and Japan. Each of our cable products is backed by a 24-hour Sales and Technical Support Hotline, and range of support services that is second to none.

General Purpose Cable Cross-Reference
For your convenience in selecting the right cable for each application, we have prepared cross-reference tables for some of the most commonly used cables A/V professionals have come to rely on in integrating systems.

Low Capacitance Digital Audio Cable

<table>
<thead>
<tr>
<th>Extrnet Model</th>
<th>Belden*</th>
<th>West Penn*</th>
<th>Page #</th>
</tr>
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<tbody>
<tr>
<td>RG59C</td>
<td>18088</td>
<td>262-401</td>
<td>54</td>
</tr>
<tr>
<td>RG59C-C</td>
<td>18094</td>
<td>262-402</td>
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Low Capacitance Serial Control Cable

<table>
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Serial Control/Audio Cable

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<tr>
<td>STP22-2</td>
<td>8723</td>
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<td>STP22-P</td>
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Low Capacitance Analog Audio Cable

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Speaker Cable

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<tr>
<td>SP143-C</td>
<td>8473</td>
<td>226</td>
<td>56</td>
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Crimp Connector to Cable Cross-Reference
The Extron BNC crimp connectors are designed to fit every Extron coaxial cable, as well as many other coaxial cables used by A/V professionals. The chart below shows some of the many cables that are compatible with our Extron BNC crimp connectors.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>Extrnet</th>
<th>Belden Canare Liberty</th>
<th>West Penn</th>
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</thead>
<tbody>
<tr>
<td>103-259-01</td>
<td>Bulk RG59, 250 ft.</td>
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<tr>
<td>103-259-02</td>
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<tr>
<td>103-259-03</td>
<td>Bulk RG59, 1,000 ft.</td>
<td>RG59</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Some of the most commonly used cables A/V professionals have come to rely on in integrating systems.
Cable Product Guide

- MHR-2 Cable
- MHR-5/6 Cable
- MHRHF-5 Cable
- MS9-3/5/6 Cable
- RG59 Cable
- RG59-3MHR-3 Cable
- RG6 Cable
- MHRVGA Cable
- CTL Cable
- UTP23SF-4 Cable
- STP Series Cable
- STP24LC Cable
- SPK Series Cable
- Cable Assemblies
- Adapters
- Custom Cables

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Extron Electronics, Japan
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Chiyoda-ku, Tokyo 102-0082
Japan
+81.3.3571.7655 (inside Japan)
+81.3.3571.7656

MHR-2
Two Conductor Mini High Resolution S-Video Cable

MHR-5/6
Five Conductor Mini High Resolution Cable

MHRHF-5
Five Conductor Mini High Resolution Halogen-Free Cable

MS9-3/5/6
Three/Six Conductor Mini S9 Flex Cable

RG59
Single Conductor RG59 High Resolution Cable

RG59-3MHR-3
Three Conductor RG59 High Resolution and Three Conductor MHR Cable

MHR-5STP-2 Cable
Five Conductor MHR and Two 22 AWG Shielded Twisted Pairs Cable

RG6
Single Conductor RG6 Super High Resolution Cable

MHRVGA
Mini High Resolution Audio, Video, Control Cable

STP Series
Serial Control/Audio Cable

STP24LC
Low Capacitance Serial Control/Digital Audio Cable

SPK Series
Speaker Cable