

Recommendations for Home Theater and High-End Audio

We get many requests to recommend various types of cable for home theater and highend audio installations. Since Belden makes over five thousand standard products, and in the face of ever-changing technology, it is very difficult, even for the professional, to make correct choices.

So we have put together this suggested guide of wire and cable choices which, we feel, are particularly suited to these home applications. For more details on each cable, consult the appropriate <u>catalog</u> mentioned with each cable, or contact a Belden distributor. Connectors for Belden Coax/Twinax and Triax cables may be found in our connector cross-reference.

Some of the cables mentioned cross over between some categories. For instance, all of the *digital* audio cables will easily handle *analog* audio, but not the other way around! It is always easier to use one kind of cable for many applications than different cables for each.

| Signal | Type | Part | Description | Why this Cable? | Catalog |
|--------------|------------|-------|---------------------------------------|---|-------------|
| Analog Audio | Unbalanced | 1865A | Miniature precision coax, stranded | Small (115"), very high quality. Flexible | Audio-Video |
| Analog Audio | Unbalanced | 8241F | RG-59 sized standard video. | Very flexible, fits standard RCA's. Many jacket colors available | Audio-Video |
| Analog Audio | Unbalanced | 1505F | Flexible RG-59 sized precision video. | Flexible, for analog or digital applications. | Audio-Video |
| Analog Audio | Unbalanced | 1505A | RG-59 sized precision video | Fits some high quality RCA connectors. 10 colors | Audio-Video |
| Analog Audio | Unbalanced | 1694A | RG-6 sized precision video. | Top-of-the-line. There are RCA's, but hard to find. | Audio-Video |

| Signal | Туре | Part | Description | Why this Cable? | Catalog |
|---------------|------------|-------|---|--|-------------|
| | | | | 10 colors | |
| Analog Audio | Unbalanced | 89259 | All Teflon coax | Highly recommended on Internet newsgroups | Audio-Video |
| Analog Audio | Unbalanced | 7790A | 6 channel coax unbalanced snake, color coded inner jackets. | 5.1 channel unbalanced interconnect. | New |
| Analog Audio | Balanced | 1800F | Very flexible. | Super-low capacitance (13 pF/ft) super-high performance | Audio-Video |
| Analog Audio | Balanced | 9451 | Install-only industry standard. | Small (.135 O.D.) Cost effective. 10 colors | Audio-Video |
| Analog Audio | Balanced | 1883A | Install only, smaller size. | Smaller, 10 colors. | Audio-Video |
| Analog Audio | Balanced | 8778 | 6 channel 22 AWG snake | 5.1 channel balanced interconnect. | Audio-Video |
| Analog Audio | Balanced | 88778 | 6 channel 22 AWG all-Teflon snake. | 5.1 channel balanced interconnect. | Audio-Video |
| Analog Audio | Balanced | 1218B | 6 channel 22 AWG low-cap individual- jacketed snake. | 5.1 channel balanced interconnect. | Audio-Video |
| Analog Audio | Balanced | 1511C | 6 channel 24 AWG individual- jacketed snake. | 5.1 channel balanced interconnect. | Audio-Video |
| Digital Audio | Unbalanced | 1865A | Miniature precision coax, stranded | Very small (0.150") coax. | Audio-Video |
| Digital Audio | Unbalanced | 1855A | Miniature precision video. | Very small (0.159") coax. mad BNC buy RCA's are available. | Audio-Video |
| Digital Audio | Unbalanced | 1505A | RG-59 sized precision video | #1 most popular video cable in the world. Fits many RCA, BNC, and other connectors. | Audio-Video |
| Digital Audio | Unbalanced | 1694A | RG-6 sized precision video. | #1 cable for television station high-definition upgrades. BNC and some RCA's available | Audio-Video |

| Signal | Type | Part | Description | Why this Cable? | Catalog |
|---------------|------------|-------|---|---|-------------|
| Digital Audio | Unbalanced | 7787A | Miniature precision coax (1855A above) 3-coax. | 5.1 channel interconnect, 2-channels per coax. | Audio-Video |
| Digital Audio | Unbalanced | 7790A | 6 channel coax, color-coded | 5.1 channel (discrete) interconnect | Audio-Video |
| Digital Audio | Balanced | 1800F | Very flexible | 110 , specifically for AES/EBU patch cord or mic cable. | Audio-Video |
| Digital Audio | Balanced | 1800A | Install only | 110 , specifically for AES/EBU. | Audio-Video |
| Digital Audio | Balanced | 9730 | AES/EBU 3 channel snake (2 channel per pair mode), 100 ohms. | 5.1 channel interconnect. | Audio-Video |
| Digital Audio | Balanced | 89730 | AES/EBU 3 channel snake (2-channel/pair mode), all Teflon, 100 ohms. | 5.1 channel interconnect. | Audio-Video |
| Digital Audio | Balanced | 9731 | AES/EBU 6 channel snake, very low capacitance, 100 ohms. | 5.1 channel interconnect. | Audio-Video |
| Digital Audio | Balanced | 89731 | AES/EBU 6 channel snake, very low capacitance, 100 ohms, all Teflon. | 5.1 channel interconnect. | Audio-Video |
| Analog Video | Baseband | 1865A | Miniature precision coax, stranded. | Any precision digital video cable will work fine for analog., Bigger is better. Intended for BNC but RCA's readily available. | Audio-Video |
| Analog Video | Baseband | 1855A | Miniature precision coax. Analog/Digital. | Any precision digital video cable will work fine for analog. Bigger is better. Intended for BNC but RCA's readily available. | Audio-Video |
| Analog Video | Baseband | 1505A | RG-59 sized precision video. | Any precision digital video cable | Audio-Video |

| Signal | Type | Part | Description | Why this Cable? | Catalog |
|----------------|--|-------|---|---|--------------------|
| | | | Analog/Digital. | will work fine for analog., Bigger is better. Intended for BNC but RCA's readily available. | |
| Analog Video | Baseband | 1694A | RG-6 sized precision video. Analog/Digital. | RCA's do exist but made to fit BNC's | Audio-Video |
| Analog Video | Baseband | 8281 | Top-of-the-line in analog. | RCA's do exist but made to fit BNC's | Audio-Video |
| Analog Video | Broadband/ CATV/HDTV | 1505A | RG-59 sized precision video | Tested and guaranteed to 3 GHz. | Audio-Video |
| Analog Video | Broadband/ CATV/HDTV | 1694A | RG-6 sized precision video. | Tested and guaranteed to 3 GHz. | Audio-Video |
| Analog Video | Broadband/ CATV/HDTV | 1829A | RG-6 Broadband BROADBAND ONLY. | Tested to 2.25 GHz specifically for HDTV/DBS. | Broadband/ CATV |
| Broadband/Data | Home Automation 1 x 1 Composite | 7910A | | data cable. Multi- | Master |
| Broadband/Data | Home Automation 1 x 1 Composite | 7911A | One Cat 5e 4 pair bonded UTP cable (Siamese). | Composite CATV/broadband with Category 5e data cable. Multi- purpose home automation install cable. Verified to Cat 5e. | Master Catalog |
| Broadband/Data | Home Automation 1 x 1 Composite | 7912A | coaxial cable Duobond IV Quad shield + | Composite CATV/broadband with Category 5 data cable. Multi- purpose home automation install cable. Verified to Cat 5. | Master |
| Broadband/Data | Home Automation 2 x 2 Composite | 7876A | coaxial cables Duobond Plus + Two Cat 5e 4 pair bonded UTP | Composite CATV/broadband with Category 5e data cable. Multi- purpose home automation install cable. Verified to | Master Catalog |

| Signal | Type | Part | Description | Why this Cable? | Catalog |
|----------------------|---|-------|---|---|---------|
| | | | | | |
| | Home Automation 2 x 2 Banana Peel [®] | 7876S | Duobond Plus + | CATV/broadband with Category 5e data cable. Multi- | Master |
| Broadband/Data/Fiber | Home Automation 2 x 2 x 2 Composite | 7878A | Duobond Plus + Two Cat 5e 4 pair bonded UTP cables + One 2- fiber LANLite | CATV/broadband with Category data cable. Multi- | Master |
| | Home Automation 2 x 2 x 2 Banana Peel [®] | 7878S | Duobond Plus + | CATV/broadband with Category data cable. Multi- | Master |
| Broadband/Data | Home Automation 2 x 2 Composite | 7913A | Two Cat 5 4 pair UTP cable. | CATV/Broadband with Category data cable. Multi- | Master |
| | Home Automation 2 x 2 Banana Peel [®] | 79138 | coaxial cables Duobond IV Quad shield + Two Cat 5e 4 | CATV/Broadband | Master |
| Broadband/Data/Fiber | Home Automation 2 x 2 x 2 | 7914A | Two Cat 5 4 pair UTP cable + One 2-fiber LANLite | CATV/Broadband with Category data cable. Multi- | Master |

| Signal | Type | Part | Description | Why this Cable? | Catalog |
|--------------------------------|---|--------------|--|--------------------------------|--|
| Broadband/Data/Fiber | Home Automation 2 x 2 x 2 Banana Peel [®] | 7914S | Two Cat 5e 4 pair UTP cables + One 2-fiber | CATV/Broadband | Master |
| Keypad/Audio & Video | Home Automation Composite 1 Cat 5e + 4C x 16 AWG | 7949A | cable + Four 16 AWG | Keypad Audio & Video Cable. | HomeChoice Brochure or Master Catalog |
| Keypad/Audio & Video | Home Automation Composite 1 Cat 5 + 4C x 16 AWG | 7950A | UTP cable + Four 16 AWG conductors. | Keypad Audio & Video Cable. | HomeChoice Brochure or Master Catalog |
| Keypad/Audio & Video | Home Automation Composite 1 Cat 5 + 4C x 18 AWG | 7951A | UTP cable + Four 18 AWG conductors. | Keypad Audio & Video Cable. | HomeChoice Brochure or Master Catalog |
| Video | Home Automation Composite 1 Cat 5 + 4C x 14 AWG | 7952A | One Cat 5 4 pair UTP cable + Four 14 AWG conductors. | Keypad Audio & Video Cable. | HomeChoice Brochure or Master Catalog |
| Speaker Cable Speaker Cable | Zip Twisted/ jacketed | 9718 8477 | 12 AWG 12 AWG | Easier install. More rugged | Audio-Video Audio-Video |
| Speaker Cable | Teflon Flat cable | 8R28064 | 64 silver-coated copper 28 AWG conductors in FEP Teflon | | Flat cable or Master Catalog |
| Speaker Cable | Large Gage | 5T00UP | 10 AWG high- strand count twisted pair. | High power amps, sub-woofers. | |
| Speaker Cable | Bi-amp | 1810A | 14 AWG X 4 | Made for Neutrik Speakon | |
| Speaker Cable | Tri-amp etc. | 1811A | 14 AWG X 8 | Made for Neutrik Speakon. | Audio-Video |

Some Notes:

DBS means Direct Broadcast Satellite
HDTV means "high-definition television"
O.D. means "outer diameter".
AWG means American Wire Gage, the size of the wire.
RG-59 sized cable is generally .235" O.D.
RG-6 sized cable is generally .275" O.D.

A WORD ABOUT PUT-UPS

Put-ups are the sizes of reels available for a cable. Part of the problem with Belden and home installations is that many of our cables are only available in 500 or 1000-ft put-ups. If you only need 50 ft. or 100 ft, this can be a problem. Therefore, below is a list of which Belden distributors will *cut cable to length*. You might pay more, but not as much as if you wasted most of a put-up.

If you find another Belden distributor who cuts to length, or if any of those below do not cut to length or don't carry the cables listed above, please indicate this on the <u>comment</u> <u>page</u> of our web page, and we will modify the list below. The list below is in alphabetical order by distributor.

| Distributor | Phone |
|----------------------------------|--------------------------|
| Accu-Tech Federal | 800-490-4580 ext 127 |
| | 443-883-4405 |
| | Fax: 410-694-9737 |
| | www.accu-tech.com |
| Anixter | 800-264-9837 |
| | www.anixter.com |
| | sales@anixter.com |
| Industrial Electric Wire & Cable | 800-989-9502 (Western |
| | Region) |
| | 800-474-9984 (South |
| | Central) |
| | 800-344-2323 (North |
| | Central) |
| | 800-321-5601 (North |
| | Eastern) |
| | 877-643-5281 (So. |
| | California) |
| | 800-692-2323 (South |
| | Eastern) |
| | 877-809-4412 (New |
| | England) |
| | www.iewc.com |
| | wsales@iewc.com |
| Interstate Wire Co., Inc. | 800-527-0010 |
| | www.interstatewire.com |
| | sales@interstatewire.com |
| Joseph Electronics | 1-800-323-5925 |
| | 847-588-3800 |
| | Fax: 1-800-446-8366 |
| | Fax: 847-588-3300 |

| Distributor | Phone |
|------------------------------|---------------------------|
| | www.josephelectronics.com |
| Nemal Electronics Intl. Inc. | 1-800-522-2253 |
| | Fax: 305-895-8178 |
| | www.nemal.com |
| | info@nemal.com |
| Pacific Radio | 323-969-2035 |
| | 800-303-0969 (within CA) |
| | 800-634-9476 (outside CA) |
| | www.pacrad.com |
| | info@pacrad.com |
| Radio, Inc. | Tulsa, OK |
| | 918-587-9123 |
| | 800-364-9123 |
| | Fax: 918-587-6931 |
| | sales@radioinc.net |
| | Fort Worth, TX |
| | 918-587-9123 |
| | 817-429-1995 |
| | sales@radioinc.net |
| | Garland, TX |
| | 918-587-9123 |
| | sales@radioinc.net |