

## Introduction

### Brilliant in Every Way

Everyone in HDTV wants unmatched high life cycle performance, quality, longevity and peace of mind. Brilliance Assemblies are designed and optimized for HDTV. This requires the cabling to conform to the very highest of standards so it can deliver the very best in performance throughout its long lifetime. Quite simply, nothing beats a Belden cable – a proven fact, perfectly demonstrated by a product range that delivers top performance in every way and enhances the assurances offered by Brilliance Assemblies.

From precise installation with materials perfectly suited to their requirements to rigorous and proven testing methods supported by the Belden Installable Performance™ processes, users find that Brilliance Assemblies offer a peace of mind that is unmatched.

### Key Applications

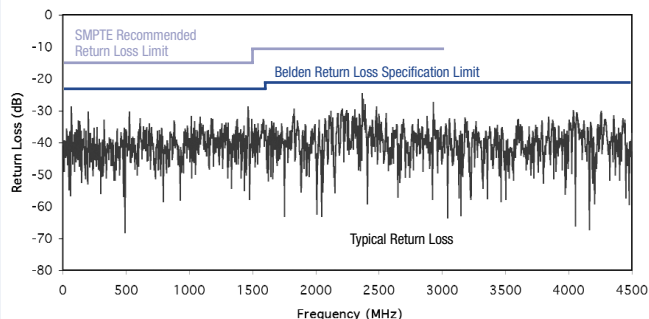
- High-resolution monitors
- Project imaging
- OB Vans
- Satellite head ends
- Video networks
- CCTV
- Ethernet professional audio

### Special Features

- **1505F:** This cable is the focus product for video cords, a super high flex coax developed by Belden for digital patch panel cabling requirements. The 1505F has a soft matte PVC jacket which envelopes two tinned copper braids with a unique compacted stranded central conductor. This combines the flexibility borne from its stranded design to stability and RL performance that come right from its solid core. The 1505F is fully sweep tested to 4.5 GHz.
- **Low Return Loss (RL):** Use your head room! Belden delivers Return Loss (RL) performance that offers ample head room below the SMPTE 292M -15dB requirement. Belden products offer a best in class RL performance.

### Bandwidth

Broadcasting needs are evolving at a rapid rate. Brilliance Assemblies offer the most significant scope for ensuring growth whatever the bandwidth. Belden products offer a best in class RL performance tested to 4.5 GHz throughout the entire installation and monitoring processes and even after packaging.



- **Exceptional Flexibility and Superior Cable Life:** Under the stress of repeated pulling, flexing, bending and crushing, cables can quickly display discrepancies that lead to degraded signal transmission – or even breakage. To combat these usage problems, Belden offers robust performance and enhanced flexibility in all Brilliance Assemblies. An abrasion-resistant jacket adds further protection and flexibility.
- **Crush Resistance:** Improves bending/flexing without pushing out the centre pin and/or damaging attached equipment – ideal for the more rugged installations.

High resistance to crushing is provided by the foamed high-density polyethylene. Belden products have as much as twice the crush resistance of similar commercially available products. This means that the cables are less susceptible to diameter variations during their installation and use – resulting in minimal degradation of impedance and RL.

### The Connectors

Brilliance Assemblies are put together using true 75 Ohm connectors that constantly perform to the very highest levels. Nominal 75 Ohm connectors can cause high BER (Bit Error Rate) and significantly reduce transmission distance.

Belden perfectly complements innovative products such as ADC's ProAx™ triax connectors and Neutrik's OpticalCon® next generation of HDTV camera connectors. The Belden line includes three one-piece connectors, a stripping tool and a compression tool that facilitates swift cable connection.

High quality BNC, RCA and F connectors, recommended for RGB patch cables, feature a brass and nickel construction with nickel-plated centre pins. In addition, they offer twin compression points that seal and hold the connector to the coaxial cable. By having two compression points, and a patent-pending viewing window on the connector, installation is made much simpler.

To meet the requirements of the market, Belden is able to deliver Brilliance Assemblies with other popular connector brands.

### Availability

Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find your assembly in this catalog section that meets your technical requirements contact technical support at +31-77-3875-414 or techsupport.venlo@belden.com.

ProAx™ is an ADC Krone trademark.  
OpticalCon® is a Neutrik trademark.