



Introduction

The Future is HDTV

The Society of Motion Picture and Television Engineers (SMPTE) has developed several standards for serial digital video transmissions (SDI) and a 540 Mb/s format is currently under development. There is also a European standards body known as the ITU (formerly CCIR) that has developed the composite video standard for Europe known as PAL/SECAM. The most common is the 270 Mb/s SDI (Serial Digital Interface). All of the specifications differ in bandwidth requirements and transmission technology, i.e. composite, component and digital:

Data Rate	Bandwidth	Standard	Description
143 Mb/s	71.5 MHz	SMPTE 259M	NTSC
177 Mb/s	88.5 MHz	ITU-R BT.601	PAL/SECAM
270 Mb/s	135.0 MHz	SMPTE 259M	Component Video 4:3
360 Mb/s	180.0 MHz	SMPTE 259M	Component 16:9
540 Mb/s	270.0 MHz	SMPTE 344M	Component Widescreen
1.5 Gb/s	750.0 MHz	SMPTE 292M	HDTV

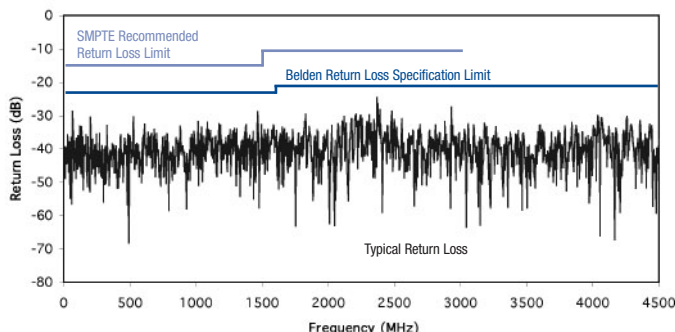
High Definition Television (HDTV) will require upgrades throughout the broadcasting industry, creating additional opportunities. International competitions such as the Olympic Games, Formula One, football and many other sporting events are very popular and demand the best broadcasting technology to guarantee viewer satisfaction.

Belden has a range of available coaxes that exceeds the SMPTE RL specification for HDTV distribution and provides maximum "RL headroom" to ensure that the user can achieve the SMPTE's requirement for signal distribution:

Specification RL Limit	RL	Frequency
SMPTE Recommendation	> 15 dB	5 - 1.5 GHz
Belden Guaranteed RL	> 23 dB	5 - 850 MHz
Belden Guaranteed RL	> 21 dB	850 MHz - 4.5 GHz

Using Belden coaxial cable will result in a minimum 6 dB of headroom to accommodate RL reduction created by connectors and patch-bays etc.

Below you will find the actual RL data of Belden 1505A. The cable is typically -30 dB:



Belden's extremely popular HDTV Brilliance® Broadcast video cables are now 4.5 GHz sweep tested! Prepared for 1080p formats, 1855, 1505A, 1694A and 7731A cables are sweep tested to 4.5 GHz. Belden has always tested every finished put-up to be certain of a top quality product. This is the only way in which damage introduced in finishing operations can be detected. This process sets Belden apart from competitors who only test in batches.