

Recommended Transmission Distance at Serial Digital Data Rates

Data Rate:	143 Mb/s		177 Mb/s		270 Mb/s		360 Mb/s		1.5 Gb/s		3.0 Gb/s	
Spec:	SMPTE 259M		ITU-R BT. 601		SMPTE 259M		SMPTE 259M		SMPTE 292M		SMPTE 424M	
Cable Part Number	Composite SD-SDI (NTSC)		Composite SD-SDI (PAL)		Component SD-SDI		Widescreen SD-SDI		HD-SDI		1080p/50-60 3G-SDI	
	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m	Ft.	m
179DT	542	165	498	152	416	127	362	110	115	35	81	25
1865A*	686	209	627	191	517	158	446	136	134	41	90	27
1855P	986	301	904	276	746	227	640	195	190	58	125	38
1855A	1022	312	932	284	781	238	680	207	215	66	149	45
1505F	1173	358	1060	323	858	262	732	223	220	67	147	45
1506A***	1354	413	1243	379	1030	314	887	270	265	81	177	54
1694F	1460	445	1312	400	1066	325	916	279	280	85	189	58
1505A**	1440	439	1317	401	1105	337	958	292	304	93	210	64
1695A	1706	520	1566	477	1276	389	1104	337	322	98	211	64
1694WB****	1733	528	1597	487	1333	406	1161	354	363	111	249	76
1694A****	1791	546	1650	503	1371	418	1188	362	371	113	256	78
1694D	1791	546	1650	503	1371	418	1188	362	371	113	256	78
7732A	2575	785	2335	712	1929	588	1638	499	451	137	283	86
1794A	2276	694	2078	633	1746	532	1510	460	469	143	320	98
7732LL	2400	732	2202	671	1818	554	1580	482	515	157	354	108
7731A	2791	851	2613	796	2146	654	1871	570	580	177	393	120

The serial digital interconnect standards are designed to operate where the signal loss at 1/2 the clock frequency does not exceed the approximate loss values listed below. The recommended length values shown are based on typical attenuation values for the cables listed and the following criteria: **Maximum length = 30 dB loss at 1/2 the clock frequency: SMPTE 259M, PAL, Widescreen. Maximum length = 20 dB loss at 1/2 the clock frequency: SMPTE 292M and SMPTE 424M.**

The bit error rate (BER) can vary dramatically as the calculated distances are approached. BER is dependent on receiver design and the losses of the actual coax used. Distribution and routing equipment manufacturers should be contacted to verify their maximum recommended transmission.

- * Includes cables that use 1855A as a constituent, such as 7787A, 7788A, 7789A, 7790A, 7791A, 7792A, 1855S3, 1855S5, 1855S6
- ** Includes cables that use 1505A as a constituent, such as 7794A, 7795A, 7796A, 7798A, 1505S3, 1505S5, 1505S6
- *** Includes cables that use 1506A as a constituent, such as 1283S3, 1283S5, 1283S6
- **** Includes cables that use 1694A as a constituent, such as 7710A, 7711A, 7712A, 7713A, 1694S3, 1694S5, 1694S6, 1694WB, 1694D