

**Detailed Specifications &
Technical Data**



7988R Paired - Brilliance VideoTwist™ Enhanced Category 5e

	<p>For more information please call 1-800-Belden1</p> <p><u>See Put-ups and Colors</u></p> <p>Color Code Chart : No. 8 for DataTwist Cables (Modified Western Electric).pdf</p>
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Description:

4 Pair UTP, 24 AWG solid bare copper conductors, polyolefin insulation, bonded pairs, PVC jacket, rip cord. Sequential marking at two foot intervals.

SUITABLE APPLICATIONS:

Suitable Applications Category 5e, UPT Based Video Applications, and KVM

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Pairs	4
Total Number of Conductors	8
AWG	24
Stranding	Solid
Conductor Material	BC - Bare Copper

INSULATION:

Insulation Material PO - Polyolefin

Pair Color Code Chart :

Number	Color	Number	Color
1	White/Blue Stripe & Blue	3	White/Green Stripe & Green
2	White/Orange Stripe & Orange	4	White/Brown Stripe & Brown

OUTER SHIELD:

Outer Shield Material Unshielded

OUTER JACKET:

Outer Jacket Material	PVC - Polyvinyl Chloride
Outer Jacket Ripcord	Yes

OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter 0.204 in.

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MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-20°C To +75°C
Bulk Cable Weight	29 lbs/1000 ft.
Max. Recommended Pulling Tension	40 lbs.
Min. Bend Radius (Install)	0.25 in.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

NEC/(UL) Specification	CMR
CEC/C(UL) Specification	CMG
IEC Specification	11801 Category 5
TIA/EIA Specification	ANSI/TIA/EIA-568-B.2 Category 5e
Other Specification	NEMA WC-63.1 Category 5e, UL Verified to Category 5e

FLAME TEST:

UL Flame Test	UL1666 Riser
CSA Flame Test	FT4

PLENUM/NON-PLENUM:

Plenum (Y/N)	N
Plenum Number	7988P

ELECTRICAL CHARACTERISTICS:

Nom. Mutual Capacitance @ 1 KHz	15 pF/ft
Maximum Capacitance Unbalance (pF/100 m)	66 pF/100 m
Nominal Velocity of Propagation	70 %
Maximum Delay (ns/100 m)	510 ns/100 m
Typical Delay Skew (ns/100m)	9 ns/100 m
Maximum Conductor DC Resistance @ 20 Deg. C	9 Ohms/100 m
Maximum DCR Unbalance @ 20 Deg. C	3 %
Max. Operating Voltage - UL	300 V RMS

ELECTRICAL CHARACTERISTICS - PREMISE:

Premise Cable Electricals Table 1 :

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Frequency (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min. Return Loss (dB)	Min. Structural Return Loss (dB)
1	2.0	65.3	65.3	60.3	60.3	20.0	
4	4.1	56.3	53.3	49.2	49.2	23.0	
8	5.8	51.8	48.8	43.0	43.0	24.5	
10	6.5	50.3	47.3	40.8	40.8	25.0	
16	8.2	47.3	44.3	36.0	36.0	25.0	
20	9.3	45.8	42.8	33.5	33.5	25.0	
25	10.4	44.3	41.3	30.9	30.9	24.3	
31.25	11.7	42.9	39.9	28.2	28.2	23.6	
62.5	17.0	38.4	35.4	18.4	18.4	21.5	
100	22.0	35.3	32.3	10.3	10.3	20.1	
155	28.1	32.5	29.5	2.0	2.0	15.8	
200	32.4	30.8	27.8	1.0	1.0	15.0	

Premise Cable Electricals Table 2 :

Frequency (MHz)	Input (Unfitted) Impedance (Ohms)	Fitted Impedance (Ohms)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	63.8	60.8
4	100 ± 15	100 ± 15	51.7	48.7
8	100 ± 15	100 ± 15	45.7	42.7
10	100 ± 15	100 ± 15	43.8	40.8
16	100 ± 15	100 ± 15	39.7	36.7
20	100 ± 15	100 ± 15	37.7	34.7
25	100 ± 15	100 ± 15	35.8	32.8
31.25	100 ± 15	100 ± 15	33.9	30.9
62.5	100 ± 15	100 ± 15	27.8	24.8
100	100 ± 15	100 ± 15	23.8	20.8
155	100 ± 25	100 ± 15	19.9	16.9
200	100 ± 25	100 ± 15	17.7	14.7

NOTES:

Notes

US Patent #'s 5, 606, 151; 5, 734, 126.

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
7988R N3UU1000	4 PR #24 PP PVC	U1000	22	GREEN, MIL	
7988R N3UU1640	4 PR #24 PP PVC	U1640	34.44	GREEN, MIL	

Revision Number: 3

Revision Date: 07-01-2004

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