

HDTV Ready **UPL2000**
True 75 Ohm Digital Connector



TROMPETER

STEALTH BNC

UPL2000 PURE PERFORMANCE

The Trompeter UPL2000 is a classically robust, high frequency, true 75 ohm BNC connector that is designed to handle high bit-rate digital video signal transmissions in conjunction with the low loss coaxial cables used in broadcast applications.



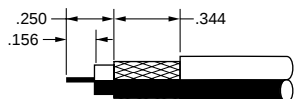
With Trompeter's typical

emphasis on exceptional signal clarity, low noise, rugged design, and tight tolerance construction, the UPL2000 gives long-term field performance at high frequency to allow error-free transmission of digital signals. This is true over the entire bandwidth utilized by HDTV signal transport whether the signal is compressed or uncompressed.

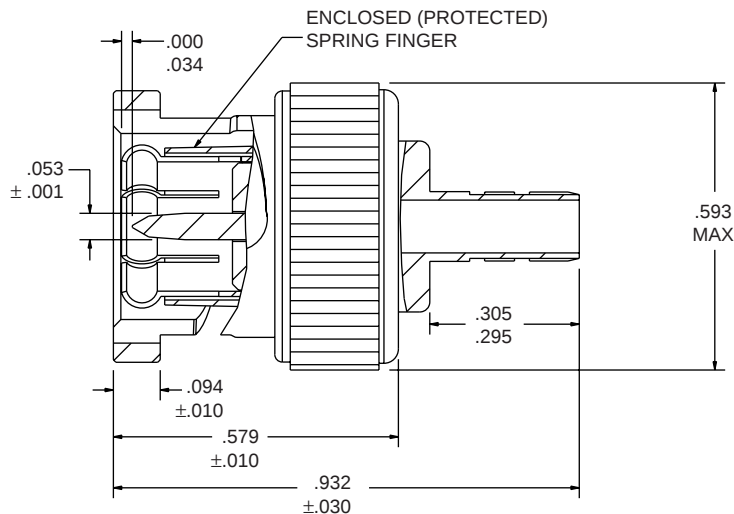
Our test engineers are looking at return loss performance of -30 dB up through 3GHz and calling it the **stealth connector**, so good you almost don't know it is there... (see chart).

Trompeter design engineers understand the unique problems associated with the combination of high data rate digital traffic and high frequency transmissions. The unique design of the UPL2000 allows for an impedance matched transition through the connector, taking advantage of the electromagnetic effects that are so unique to high frequency transmission lines. The signal is contained within the inside surface of the outer shield through the connector in much the same way that the braid of the coax cable contains the electromagnetic energy of the signal within the cable itself. This effect is more pronounced as transmission frequency rises, as is the case with DTV and HDTV.

The connector is offered in the larger diameter cable sizes that are supporting transmission of the video broadcast signal in stations, post-production, and CATV headends.

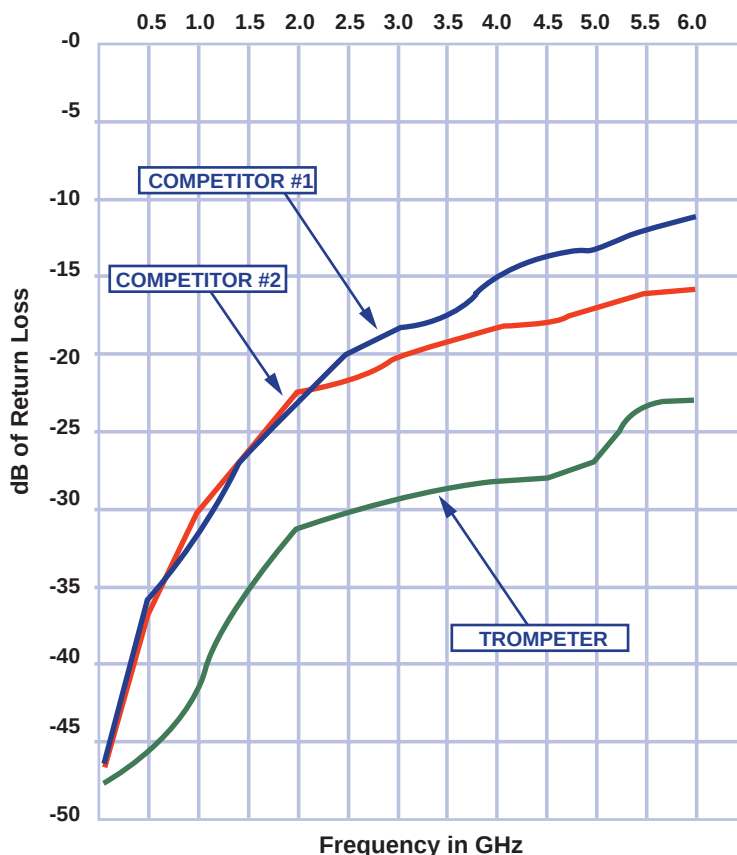


Cable Stripping Dimensions



RETURN LOSS DATA

Only variable is manufacturer of BNC connectors



NOTE: Test setup includes one foot Belden 1505A coaxial cable with BNC plug each end plus adapter and termination.

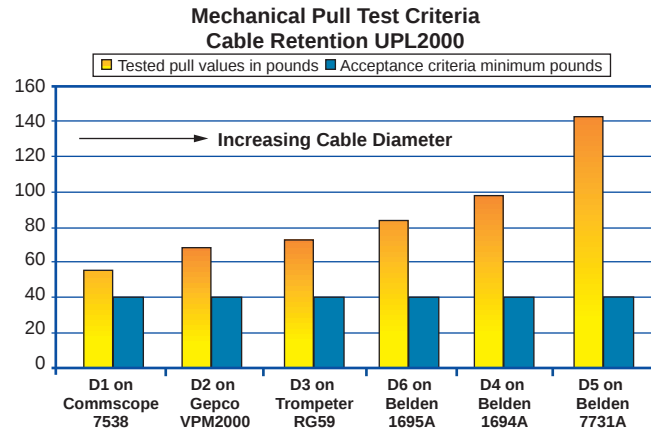
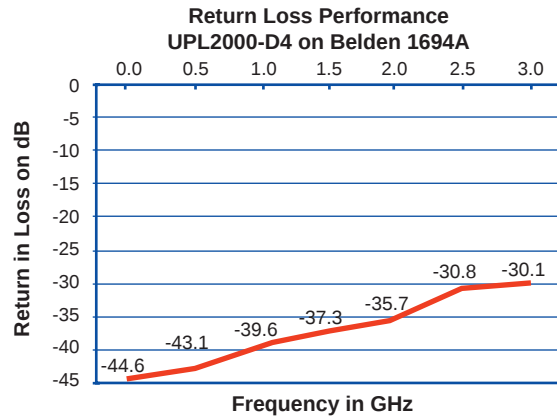
ORDERING: UPL2000-(Dash Number Listed Below)

Dash No.	Cable Accommodation
D1	Belden 1855A and Comm/scope 7538
D2	Belden 1505A and GEPCO VPM2000
D3	RG-59/U
D4	Belden 1694A and GEPCO VSD2001
D5	Belden 7731A and GEPCO 5906
D6	Belden 1695A
D7	Belden 9221, RG179
D8	Belden 1506A and GEPCO VPM2000TK
D9	Belden 9209
D10	Belden 8281
D11	Westpenn 25815
D12	Nokia 0.6/2.8
D13	CommScope 7530

Features: -----> Benefits:

- | | |
|--|--|
| 1 Center Contact
• Captivated and Locking

• 50 Micro Inches Gold
2 Outer Contact
• Gold Flash Palladium Ni
• Heat Treated BeCu
• Fully Enclosed
3 Crimp Sleeve
• Interior Precision Step | <p>Insures correct center contact location during outer braid crimp operation.
 Tactile feedback for error free installation.
 Eliminates pistoning of contact over product life.
 Exceptional electrical conductivity and durability for long life.</p> <p>Combination of high conductivity, ductility, and mechanical durability extended field conditions.
 Extremely high strength alloy which resists compression set over time, maintaining high contact normal forces.
 Reduces RF leakage.</p> <p>Eliminates potential for exposed braid by positive grip on cable jacket for excellent cable retention over time.</p> |
|--|--|



Electricals and Electromagnetics:

True Impedance with Tolerance:	75 ohms +/- 3 ohms
Voltage Rating:	500 VAC RMS
Insertion Loss:	0.2 dB max up to 3 GHz, testing to 6 GHz
Return Loss:	See chart - test method and result is one UPL2000 plug on each end of 12 inches of cable, network analyzer calibrated with load prior to each test, statistical sampling.
Contact Resistance:	4 milliohm max end-point after environmental testing (see below) with a current of 5 ma max; 20 mv open circuit
Insulation Resistance:	5000 megohms minimum
Operational Frequency:	Up through 6GHz
VSWR:	Not more than 1.2 up to 3 Ghz
Dielectric Withstanding Voltage:	1500 VAC RMS with no breakdown

Materials:

Body:	Electrolytic nickel over brass
Bayonet:	Black electroless nickel over zinc
Dielectric:	Machined polytetrafluoroethylene (PTFE)
Spring Finger:	Gold flash palladium over nickel over copper over heat treated beryllium copper
Gasket:	Silicone rubber
Wave Washer:	Electrolytic nickel over beryllium copper
Center Contact:	Thick (50 millionths of an inch minimum) gold over nickel over copper over brass

Environmental:

Thermal Shock:	-40 to +85 degrees C operating
Moisture Resistance:	MIL-STD-1344 Method 1002, test condition C, 500+ hours/40 degrees C/90-95% RH
Corrosion Resistance:	MIL-STD-1344 (48 hours salt spray)
Vibration:	MIL-STD-1344 Method 2005 with no bit loss @ 45 Mbps @ 20G's (BER test)
Solvent Resistance:	MIL-STD-202 Method 215

Mechanical Tested Values:

Mating Cycle Rating:	500 cycles
Center Contact Retention:	6 lbs minimum axial load
Coupling Mechanism Pull Test	100 lbs typical
Force to Engage	5 lbs maximum
Interface Dimension	MIL-C-39012 modified for true 75 ohms (TEI TGS-5)
Outer Contact Pin Gauge Retention	> 260 grams minimum after 500 cycles
Cable Retention at Crimp Sleeve	See table

UPL2000 BNC TOOLS



BROADCAST TELEVISION DATA RATES

	Vertical Lines	Horizontal Lines	Data Rate in Gbps
NTSC	525	487	.0-
SDTV	480	640	.270
DTV-W	480	704	.270
HDTV	1080	1920	1.485

- (800) 982-2629 Toll Free (Domestic)
- (818) 707-2020 Direct
- (818) 706-1040 FAX
- sales@trompeter.com

TROMPETER ELECTRONICS, INC.
http://www.trompeter.com

An ISO 9001 Registered Company



700-0024
MANUAL CABLE CUTTER

POWERED CABLE STRIPPER
(Use cutter head from chart below)

DASH NO	CABLE	CABLE OUTSIDE DIAMETER	CUTTER HEAD 3-BLADE CUT
D1	Belden 1855A	.159	C26T3I
	CommScope 7538	.163	C26T3I
D2	Belden 1505A	.235	C26T3D
	Gepco VPM2000	.242	C26T3D
D3	RG-59/U	.242	C26T3D
D4	Belden 1694A	.275	C26T3U
	Gepco VSD2001	.273	C26T3U
D5	Belden 7731A	.405	C26T3G
	CommScope 5906	.405	C26T3G
D6	Belden 1695A	.235	C26T3D
	Belden 9221	.102	C26T3A
D7	RG179	.105	"
	Belden 1506A	.201	C26T3C
D8	Gepco VPM2000TK	.200	"
	Belden 9209	.200	C26T3C
D9	Belden 8281	.307	C26T3U
D10	Westpenn 25815	.214	C26T3C
D11	Nokia 0.6/2.8	.213	C26T3B
D12	CommScope 7530	.318	C26T3E

BWS
DC Driver only
AWS
AC Driver only



ST1
MANUAL CABLE STRIPPER
STC-F
STRIPPING CASSETTE

010-0055
8-POINT OCTADENT
CENTER CONTACT
CRIMP TOOL



CT4L
CRIMP TOOL (See chart for crimp dies)

UPL2000-



DASH NO.	CRIMP SLEEVE			CENTER CONTACT	
	HEX SIZE	DIE SET NUMBER	CAVITY POSITION	CAVITY POSITION	OPTIONAL CENTER CONTACT CRIMP TOOL (RECOMMENDED)
D1	.178	CD3-1/-19	B / A	D	010-0055
D2	.255	CD3-2/-19	B / B	D	010-0055
D3	.255	CD3-2	B	D	010-0055
D4	.290	CD3-3	B	D	010-0055
D5	.403	See Below	See Below	See Below	See Below
D6	.290	CD3-3	B	D	010-0055
D7	.178	CD3-1/-19	B / A	-	010-0055
D8	.255	CD3-2/-19	B / B	-	010-0055
D9	.255	CD3-2/-19	B / B	-	010-0055
D10	.324	CD3-2	A	D	010-0055
D11	.255	CD3-2/-19	B / B	-	010-0055
D12	.213	CD3-1	A	D	010-0055
D13	.344	CD3-3	A	D	010-0055

TOOL: TROMPETER CRIMP TOOL CT4L
WITH DIE SET NO. (See Above)

For D5: Crimp center contact using **M22520/1-01** handle setting 6 with **Positioner 010-0045**. Can also use cavity position C from CD3-1, -2, or -3 for center contact crimp. For outer crimp sleeve use **M22520/5-01(HX4)** with Trompeter Die Set CD5-16.



010-0133
BNC COAX CABLE
ASSEMBLY TESTER



RT1L
REMOVAL TOOL
(Type: Straight,
Length: 12")