

## HDVDP & HDVDPM



Emerson Network Power Connectivity Solutions offers Trompeter's HDVDP and HDVDPM Patch Jacks designed and engineered to exceed SMPTE 292M specifications for high definition video transmission and connectivity.

The normal-thru contact interface design of HDVDP/HDVDPM consists of a self-aligning normal-thru U-slot, two redundant points of contact, an independent applied normal force at each contact point, and a mechanical wipe region at each contact interface location. These design attributes provide reliable and repeatable patching/un-patching, resulting in low-level contact resistance stability. Samples and information can be obtained by contacting Trompeter's customer service department at: **800.247.8256**, or through the website at **[www.EmersonConnectivity.com](http://www.EmersonConnectivity.com)**

### Key Features & Benefits

- Lightweight design:
  - HDVDPT (full size): 47.8 grams
  - HDVDPM (mini) 34.2 grams
- High-reliability normal-thru contact design
- Self wiping normal thru contact
- Streamlined design for repeatable manufacturability

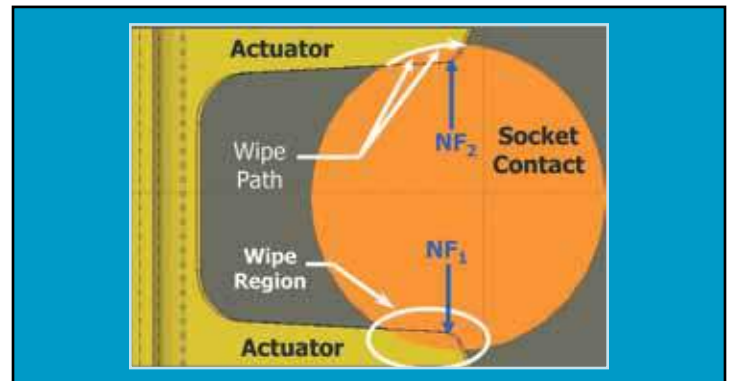
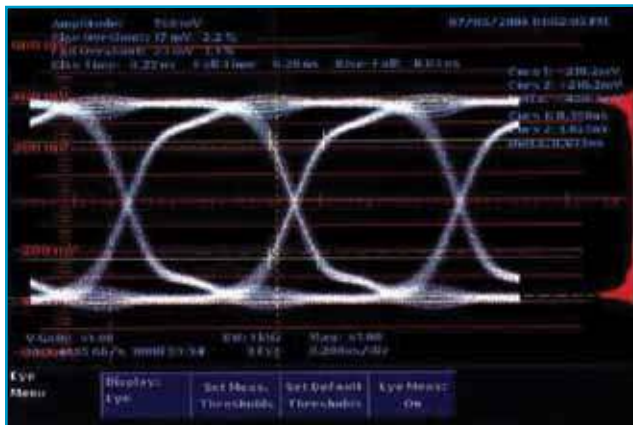
## SMPTTE Requirements

Parameter	HD (SMPTE 292)	SD (SMPTE 259)	Comments
Connection Medium	Coaxial Cable	Coaxial Cable	75 ohm, low loss, double shielded
Connector Type	BNC	BNC	75 ohm version
Cable Length	80 meters	300 meters	Depending on cable type
Bit Rate	1.485 Gbps	270 Mbps	145.5 MHz word clock x 10 27 MHz work clock x 10
Return Loss	-15dB or better @ 5MHz to 1.485 GHz	-15dB or better @ 5MHz to 1.485 GHz	Nominal into 75 ohm termination
Voltage Levels	800 mV P-P +/- 10%	800 mV P-P +/- 10%	Nominal into 75 ohm termination
Jitter	<0.2 UI or <134.68 pS	<0.2 UI or <134.68 pS	HD UI = 673.4 pS SD UI = 3.7 nS
DC Offset	0.0 V +/- 0.5 V	0.0 V +/- 0.5 V	Nominal at mid-amplitude
Rise/Fall Times	<270 pS, <100pS diff.	<270 pS, <100pS diff.	20% - 80%

## HDVDP/HDVDPM Performance vs. SMPTE 292 Requirements

Parameter	SMPTE 292 M	HDVDPMT (mini)	HDVDPT (full size)
Return Loss (S1,1)	-15 dB or better @ 5 MHz to 1.485 GHz	S1, 1 <-26 dB	S1, 1 <-26 dB
Voltage Levels	800 mV P-P +/- 10%	760 mV	760 mV
Jitter	<0.2 UI or <134.68 pS @ 1.485 Gbps	.082 UI or 55 pS	.082 UI or 55 pS
Rise/Fall Times	<270 pS, ΔRFT <100 pS @ 1.485 Gbps	RT = 220 pS FT = 200 pS ΔRFT = 30 pS	RT = 220 pS FT = 200 pS ΔRFT = 30 pS

**Typical Time-Domain Eye Pattern**  
Full Size and Mini Patch-Jacks  
(jitter and Rise time measures shown in table)



Part Number	Description
HDVDPT	Full-size WECO format, terminated
HDVDP	Full-size WECO format, non terminated
HDVDPMT	mini WECO format, terminated
HDVDPM	mini WECO format, non-terminated
HDVDPN	Fill-size WECO format, non terminated
HDVDPMN	mini WECO format, non-terminated

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