



HD-One DX/DX500 HDMI Extender User Guide V2.10

CSG-DX-500-V2.10
May 2019

Welcome

Thanks for buying this Magenta HD-One DX or DX500. The Magenta HD-One DX/DX500 series of video extenders extends HDMI or DVI signals over category 5e/6/6a/6e/7 cable.

The Magenta HD-One DX/DX500 does not support distribution through an Ethernet network. Do not connect your unit to any sort of networking or telecommunications equipment.

For best results

- Use one continuous F/UTP cable with as few breaks as possible, for example, patch bays, wall plates, or floor boxes.
- Use F/UTP CAT6 or better cable with solid 24 AWG copper wire.
- Mount and connect all cables to the HD-One DX/ DX500 series components before applying power.
- Make sure that the category cable you intend to use has been tested to comply with the T568B wiring specification. For more information, see Cabling pinouts on page 6.

Getting started

Equipment

- HDMI cables
- HDMI to DVI adapter cables
- Category 5e/6/6a/6e/7 cable

Quick start

1. Connect and then your DX or DX 500 units.

At the transmitter end:



- a. Connect the video source to the HDMI INPUT port on the HD-One DX/DX500 transmitter.
Use an HDMI type A cable. If you have a DVI source use, an HDMI to DVI adapter.
- b. Connect the category cable to the HDBASET OUTPUT port on the transmitter.
- c. Apply power to the transmitter.

At the receiver end:



- a. Connect the display to the HDMI OUTPUT port on the HD-One DX/DX500 receiver.
Use an HDMI type A cable. If you have a DVI source use, an HDMI to DVI adapter.
 - b. Connect the Category cable to the HDBASET INPUT port on the receiver.
 - c. Apply power to the receiver.
2. Connect and then power on your display.
 3. Connect and then power on your video source.

LED status indicators

STATUS Video Status Indicator
ON = HDMI content w/HDCP present
BLINKING = HDMI content w/o HDCP

LINK Data Link Indicator
ON = HDBASET link

PWR Power Indicator
ON = Power



Troubleshooting

Most issues with the HD-One DX/DX500 Series are caused by problems with Ethernet cable terminations. Make sure they are pinned to the T568B wiring specification.

I can't see any video

- Check that both units are powered.
- Power units on in the sequence given in this guide.
- Check that the Ethernet cable is terminated to the T568B wiring standard.
- Some HDMI sources can take up to 5 minutes to initialize and will not output video signals during this time.
- Cell phones may cause interference at close range and cause the video to be interrupted or lost.
- Try powering off and on again.
- If you use protected content, check all your connected devices are HDCP compliant.
- Check that you haven't exceeded the maximum distance.
- Use a higher quality cable.
- Disable deep color on your video source.
- Reduce the resolution of your source.

My video is poor quality

- Check that the Ethernet cable is terminated to the T568B wiring standard.
- Check for faulty or poor-quality HDMI cables.
- Ensure the display is compatible with the source.
- Try an alternative source.
- Reduce the resolution of your source.

Specifications

Cable Required:	CAT5e, CAT6, CAT6a, CAT6e, CAT7 (CAT6 or better is recommended).	Bandwidth:	3.4 Gbps
Video Support:	HDMI/DVI Video modes HDMI 1.4, HDCP Compliant including standard formats;	Connectors:	Tx: (1) HDMI type A, (1) RJ45, (1) DC power Rx: (1) HDMI type A, (1) RJ45, (1) DC power
60Hz	640x480, 800x600, 1024x768, 1152x864, 1280x768, 1280x960, 1280x1024, 1360x760, 1366x768, 1600x1200, 1680x1050, 1920x1080 & 1920x1200	Temperature Tolerance:	Operating: 32 to 131°F (0 to 55°C); Storage: -4 to +185°F (-20 to 85°C)
HDTV 4K	480p, 720p, 1080i & 1080p 3840x2160p30 & 4096x2160p24 (DX only)	Humidity Tolerance:	Up to 95% non-condensing
Maximum Resolution and Distance:	WUXGA (1920x1200) @ 60 Hz 100 meters (328 feet) for DX 152 meters (500 feet) for DX500 4k: 3840x2160p30 & 4096x2160p24 60 meters (196 feet) DX only	Enclosure:	Metal

Size:	3.2" x 1.9" x 1.0" (82 mm x 48.6 mm x 24.8 mm)	Power:	+5 VDC @ 1.2A max each unit
Weight:	0.30 lb. (0.14 kg) - each unit	Compliance:	RoHS, CE, FCC Class A, UL

FCC Statement

Class B Device: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide a reasonable protection against harmful interference when the equipment is operated in all environments. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the Instruction Manual, may cause harmful interference to radio communications.

This Class B Digital Apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet Appareil Numerique de la Classe B respecte toutes les exigences du Reglemente Sur Le Material Brouilleur Canada.

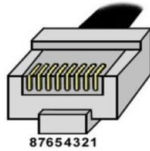
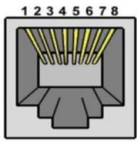
WARNING: An AC adapter with a ferrite core must be used for RF interference suppression.

To assure continued FCC Class B emission limit compliance, the user must only use shielded video cables with two ferrite cores to avoid potential harmful interference when connecting to external units and F/UTP± type Category cable must be used.

This equipment has more than one interface connector, do not leave cables connected to unused interfaces.

Any unauthorized changes or modifications to this equipment could void the user's authority to operate it.

Cabling pinouts



Pin	Color	Pair
1	Orange/White	2
2	Orange	2
3	Green/White	3
4	Blue	1
5	Blue/White	1
6	Green	3
7	Brown/White	4
8	Brown	4

Cabling must be the same on both ends

Use for all CAT cables

Contact us

tvone.com

info@tvone.com

Support NCSA: tech.usa@tvone.com

Support EMEA: tech.europe@tvone.com

Support Asia: tech.asia@tvone.com

Information in this document is subject to change without notice. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or any means electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of tvONE.

Copyright © 2019 tvONE™. All rights reserved. Registered in the U.S. Patent and Trademark Office.