

USER MANUAL

Model:

CDA-VGA10, XGA Line Driver



For maximum results, use Comprehensive Brand Premium High Resolution cables and connectors.

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1 Introduction

Congratulations on purchasing your **CDA-VGA10 XGA Line Driver**, which is ideal for:

- Dual monitor systems (local and remote)
- Presentation systems: for remote transmission and cable equalization

The package includes the following items:

- **CDA-VGA10 XGA Line Driver**
- Power adapter (12V DC input) and this user manual

2 Getting Started

We recommend that you:

- Unpack the equipment carefully and save the original box and packaging materials for possible future shipment
- Review the contents of this user manual

3 Overview

The **CDA-VGA10 XGA Line Driver** is a high performance line driver for VGA/XGA signals that:

- Accepts one input, provides correct buffering and isolation, and then loops it out to a local monitor (or some other acceptor), as well as outputting an amplified and equalized signal to a remote acceptor
- Can drive very long high resolution lines¹ due to its large bandwidth that exceeds 480MHz. This ensures that it remains transparent even at highest resolution QXGA modes

In particular, the **CDA-VGA10 XGA Line Driver** includes:


- A TERM switch for input signal termination
- Cable equalization control
- ID Bit control (via a switch on its underside)

To achieve the best performance:

- Connect only good quality connection cables, thus avoiding interference, deterioration in signal quality due to poor matching, and elevated noise-levels (often associated with low quality cables)

¹ Up to 100 meters (300ft.) when using good quality cable

- Avoid interference from neighboring electrical appliances and position your machine away from moisture, excessive sunlight and dust



Caution – No operator-serviceable parts inside unit.

Warning – Use only the input power wall adapter that is provided with this unit.

Warning – Disconnect power and unplug unit from wall before installing or removing device or servicing unit.

4 Your CDA-VGA10 XGA Line Driver

Figure 1 and Table 1 define the **CDA-VGA10 XGA Line Driver**:

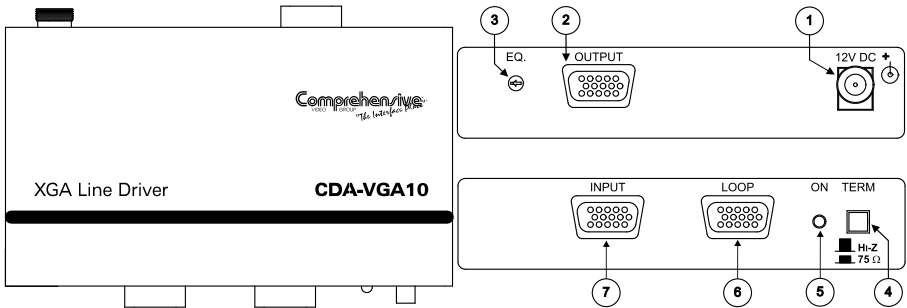


Figure 1: CDA-VGA10 XGA Line Driver (Topside)

Table 1: Features and Functions of the CDA-VGA10 XGA Line Driver (Topside)

| # | Feature | Function |
|---|------------------------|---|
| 1 | 12V DC | +12V DC connector for powering the unit |
| 2 | OUTPUT HD15F Connector | Connect to the VGA/XGA acceptor |
| 3 | EQ. Trimmer | Adjusts ¹ the cable compensation equalization level for the output |
| 4 | TERM Button | Pushing in selects 75Ω; releasing selects Hi-Z ² |
| 5 | ON LED | Illuminates when receiving power |
| 6 | LOOP HD15F Connector | Connect to an additional monitor |
| 7 | INPUT HD15F Connector | Connect to the VGA/XGA source |

¹ Insert a screwdriver into the hole and carefully rotate it, to trim the level

² For looping select Hi-Z

Figure 2 and Table 2 define the underside of the **CDA-VGA10 XGA Line Driver**:

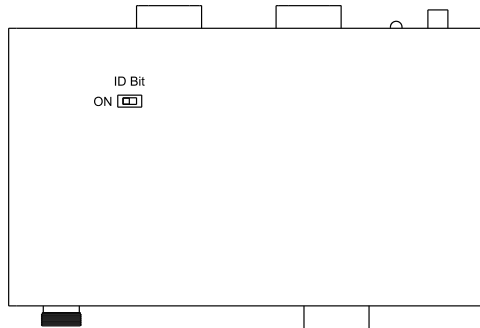


Figure 2: CDA-VGA10 XGA Line Driver (Underside)

Table 2: Features and Functions of the CDA-VGA10 XGA Line Driver (Underside)

| Feature | Function |
|---------------|---|
| ID Bit Switch | Sliding to the left selects the ID BIT, sliding to the right deactivates the ID BIT (when outputting the input signal from a laptop connected to an external VGA monitor ¹) |

5 Connecting Your CDA-VGA10 XGA Line Driver

To connect the **CDA-VGA10**, as the example in Figure 3 illustrates, do the following:

1. Connect an XGA source (for example, a laptop's graphics card) to the INPUT HD15F connector.
2. On the underside, slide the ID Bit switch to the left to set to ON.
3. Connect the OUTPUT HD15F connector to the acceptor (for example, a projector).
4. Connect the LOOP HD15F connector to a local PC monitor and release the TERM button to Hi-Z.
Note: if only a single output is required, leave the loop unconnected and push in the TERM button to 75Ω.
5. Connect the 12V DC power adapter to the power socket and connect the adapter to the mains electricity.
6. Adjust² the video EQ. (equalization) compensation, if required.

¹ Sometimes laptop computers refuse to output a VGA signal to an external VGA monitor if they do not detect the ID Bit as ON. Set the ID Bit to ON using this switch so that the laptop will output to an external VGA monitor

² Insert a screwdriver into the small hole and carefully rotate it, trimming the OUTPUT equalization level

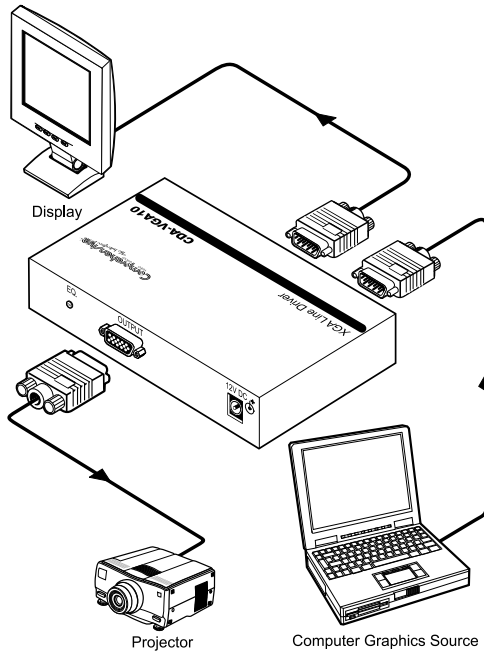


Figure 3: Connecting the CDA-VGA10 XGA Line Driver

6 Technical Specifications

Table 3 includes the technical specifications:

Table 3: Technical Specifications¹ of the CDA-VGA10 XGA Line Driver

| | |
|--------------------|--|
| INPUT: | Looping analog red, green, blue signals - 0.7Vpp / 75Ω, H & V sync, TTL level, on HD15F connectors |
| OUTPUT: | Analog red, green, blue signals - 0.7Vpp / 75Ω, H & V sync, TTL level, on an HD15F connector |
| MAX. OUTPUT LEVEL: | 1.9Vpp |
| BANDWIDTH (-3dB): | 480MHz |
| DIFF. GAIN: | 0.8% |
| DIFF. PHASE: | 0.2 Deg. |
| K-FACTOR: | <0.05% |
| S/N RATIO: | 73.5dB |
| CONTROLS: | EQ.: 0dB to +11.3dB @ 50MHz |
| COUPLING: | DC |
| POWER SOURCE: | 12 VDC, 101mA |
| DIMENSIONS: | 12cm x 7.5cm x 2.5cm (4.7" x 2.95" x 0.98"), W, D, H |
| WEIGHT: | 0.3 kg. (0.66 lbs.) approx. |
| ACCESSORIES: | Power supply, mounting bracket |

¹ Specifications are subject to change without notice