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## REVISION HISTORY

<u>REVISION</u>	<u>DESCRIPTION</u>	<u>DATE</u>
0.1	Start-up Guide	Dec 2010
0.2	Note added to the Connections sections	Dec 2012

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## 1. OVERVIEW

The 7800DA8-RS422 distribution amplifiers provide reliable distribution of serial RS-232, 422 and 485 unidirectional data. The 7800DA8-RS422 provides 8 copies of the original serial input. This product also provides intelligent monitoring of the input signal and can alarm if no activity is detected on the input. Thresholds for alarm notification are user configurable via SNMP.

The 7800DA8-RS422 modules are VistaLINK® PRO capable, offering remote monitoring, control and configuration via Simple Network Management Protocol (SNMP).

The 7800DA8-RS422 occupies one module slot within the 7700FR and 7800FR 3RU family of frames, which will hold up to 15 modules. It is VistaLINK® capable for remote monitoring, control and configuration capabilities via SNMP; using VistaLINK® PRO, CP-2116E or CP-2232E Control Panels. VistaLINK® is available when modules are used with the 3RU 7800FR frame and a 7700FC VistaLINK® Frame Controller module in slot 1 of the frame.

### Features & Benefits:

#### **Serial Data Input**

- Single receive of RS-232/RS-422 or 485 unidirectional serial data

#### **Serial Data Outputs**

- 8 fanout serial outputs via terminal strip connector

#### **Control**

- SNMP capable controls
- Fully integrated with the industry leading Evertz VistaLINK® PRO NMS

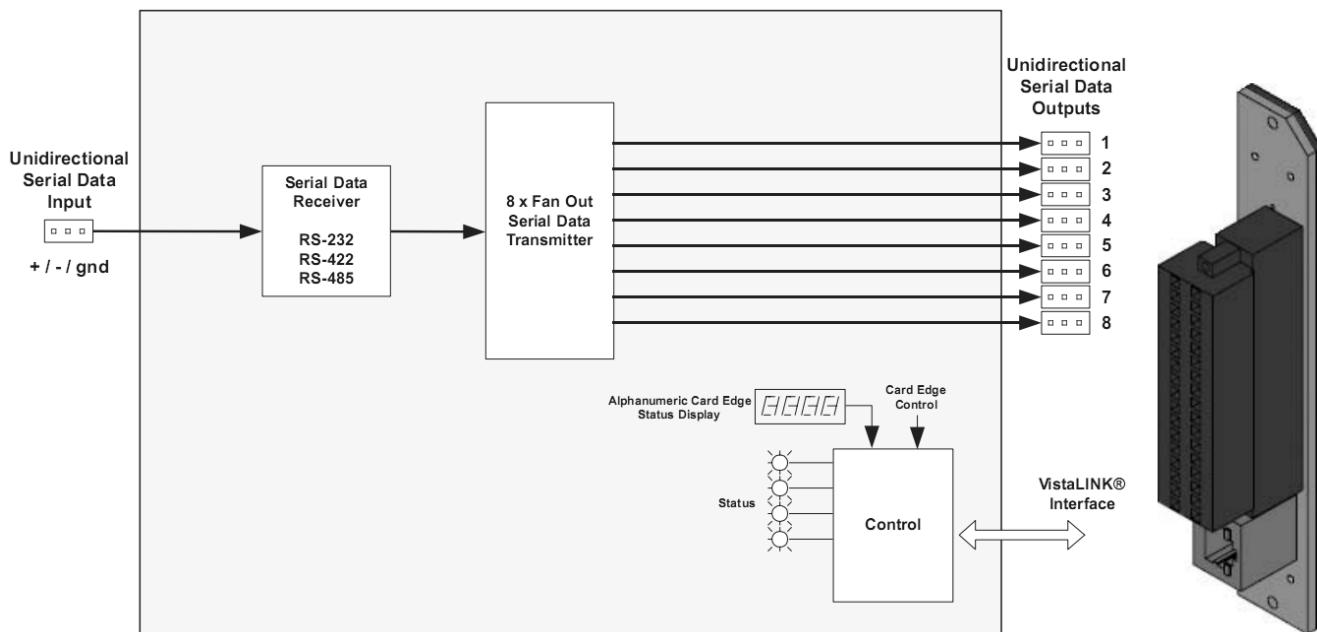


Figure 1-1: 7800DA8-RS422 Block Diagram

## 2. CONNECTIONS

The illustration shown in Figure 2-1 displays the 7800DA8-RS422 rear panel terminal block pinout. The rear panel contains a 34 pin terminal block that allows 1 input and 8 outputs. Please connect your device according to the pinout described below.

1	<b>IN +</b>	<b>IN -</b>	2
3	<b>GND</b>	<b>OUT1 +</b>	4
5	<b>OUT1 -</b>	<b>GND</b>	6
7	<b>OUT2 +</b>	<b>OUT2 -</b>	8
9	<b>GND</b>	<b>OUT3 +</b>	10
11	<b>OUT3 -</b>	<b>GND</b>	12
13	<b>OUT4 +</b>	<b>OUT4 -</b>	14
15	<b>GND</b>	<b>OUT5 +</b>	16
17	<b>OUT5 -</b>	<b>GND</b>	18
19	<b>OUT6 +</b>	<b>OUT6 -</b>	20
21	<b>GND</b>	<b>OUT7 +</b>	22
23	<b>OUT7 -</b>	<b>GND</b>	24
25	<b>OUT8 +</b>	<b>OUT8 -</b>	26
27	<b>GND</b>	<b>GND</b>	28
29	<b>n/c</b>	<b>n/c</b>	30
31	<b>n/c</b>	<b>n/c</b>	32
33	<b>n/c</b>	<b>n/c</b>	34

Figure 2-1: View of Rear Panel



**Please Note:** When using the 7800DA8-RS422 with RS232 signals, the TXD pin of the input signal should be connected to the negative pin of the input port (IN -), and the RXD pin of each output signal should be connected to the positive pin of each output port (OUT1 +, OUT2 +, etc.).

### 3. SPECIFICATIONS

#### 3.1. SERIAL DATA INPUT

**Standard:** RS-232, RS-422 or RS-485  
**Number of Inputs:** 1  
**Connector:** Terminal block  
**Baud Rate:** 110, 300, 600, 1200, 2400, 4800, 9600, 14400, 19200, 38400, 57600, or 115200  
**Format:** 8 data bits, parity (none, even or odd), 1 or 2 stop bits

#### 3.2. SERIAL VIDEO OUTPUTS

**Standard:** Same as input  
**Number of Outputs:** 8  
**Connector:** Terminal block  
**Baud Rate:** 110, 300, 600, 1200, 2400, 4800, 9600, 14400, 19200, 38400, 57600, or 115200  
**Format:** 8 data bits, parity (none, even or odd), 1 or 2 stop bits

#### 3.3. ELECTRICAL

**Voltage:** +12V DC  
**Power:** 9W  
**EMI/RFI:** Complies with FCC regulations for class A devices  
Complies with EU EMC directive

#### 3.4. PHYSICAL

##### Number of Slots:

**7700FR-C:** 1  
**7800FR:** 1

## **4. VISTALINK<sub>®</sub> REMOTE MONITORING/CONTROL**

### **4.1. WHAT IS VISTALINK<sub>®</sub>?**

VistaLINK<sub>®</sub> is Evertz' remote monitoring and configuration platform which operates over an Ethernet network using Simple Network Management Protocol (SNMP). SNMP is a standard computer network protocol that enables different devices sharing the same network to communicate with each other. VistaLINK<sub>®</sub> provides centralized alarm management, which monitors, reports, and logs all incoming alarm events and dispatches alerts to all the VLPro Clients connected to the server. Card configuration through VistaLINK<sub>®</sub> PRO can be performed on an individual or multi-card basis using simple copy and paste routines, which reduces the time to configure each module separately. Finally, VistaLINK<sub>®</sub> enables the user to configure devices in the network from a central station and receive feedback that the configuration has been carried out.

There are 3 components of SNMP:

1. An SNMP manager, also known as a Network Management System (NMS), is a computer running special software that communicates with the devices in the network. Evertz VistaLINK<sub>®</sub> Pro Manager graphical user interface (GUI), third party or custom manager software may be used to monitor and control Evertz VistaLINK<sub>®</sub> enabled products.
2. Managed devices (such as 7700DA8-RS422), each with a unique address (OID), communicate with the NMS through an SNMP Agent. Evertz VistaLINK<sub>®</sub> enabled 7700 series modules reside in the 3RU 7700FR-C MultiFrame and communicate with the manager via the 7700FC VistaLINK<sub>®</sub> frame controller module, which serves as the Agent.
3. A virtual database known as the Management Information Base (MIB) lists all the variables being monitored, which both the Manager and Agent understand. Please contact Evertz for further information about obtaining a copy of the MIB for interfacing to a third party Manager/NMS.

For more information on connecting and configuring the VistaLINK<sub>®</sub> network, see the 7700FC Frame Controller chapter.