

**Installation and
Operation Manual**
DL1142
RS422 Line Driver

NITEK[®]

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System Specifications

DL1142 system includes the following:

(1) DL1142 Line Driver and (1) wall power transformer

DL1142 Unit

Size	1.1"H x 2.6"W x 4.3"D
Power Requirements	14 to 18 VDC @ 140mA
Input	RS422
Output	Extended RS422 for use up to 12,000 feet

Introduction

DL1142 is a single unit that connects over twisted pair at the RS422 source or up to 4,000 feet away. It can extend RS422 type signals for an additional 12,000 feet and works with all RS422-based equipment, including Pelco, Phillips, Panasonic, Sensormatic, Kalatel and many others.

Installation

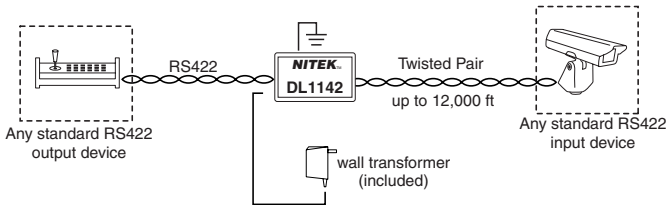
The DL1142 unit is a specially designed RS422 amplifier for connection in-line with any standard RS422 line. It may be connected anywhere in-line from the beginning of a run, up to 4000 feet down the run. From that point the DL1142 will re-amplify the RS422 signal and drive it for another 12,000 feet. The DL1142 can be used to increase the number of RS422 units in a chain or as a way to “Y” off an RS422 signal. The following two diagrams show how each of these ways can be used.

IMPORTANT NOTE !

Connecting the earth ground is important for the protection of both the DL1142 and the devices to which it is connected. Without proper grounding the DL1142’s built-in Surge Protection will not work.

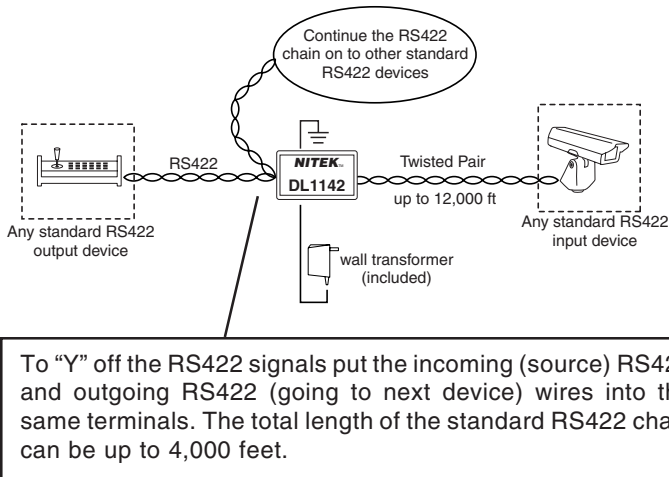
Connect the source RS422 data wires to the “RS422 IN” terminals. Connect the out going RS422 data wires to the “RS422 OUTPUT” terminals. Remember to connect the earth ground wire.

Standard straight through connection



This is a standard straight through hookup. The source RS422 line can be up to 4,000 feet long. The outgoing line can drive up to 32+ standard RS422 devices at up to 12,000 feet away from the Driver unit.

Standard RS422 “Y” connection

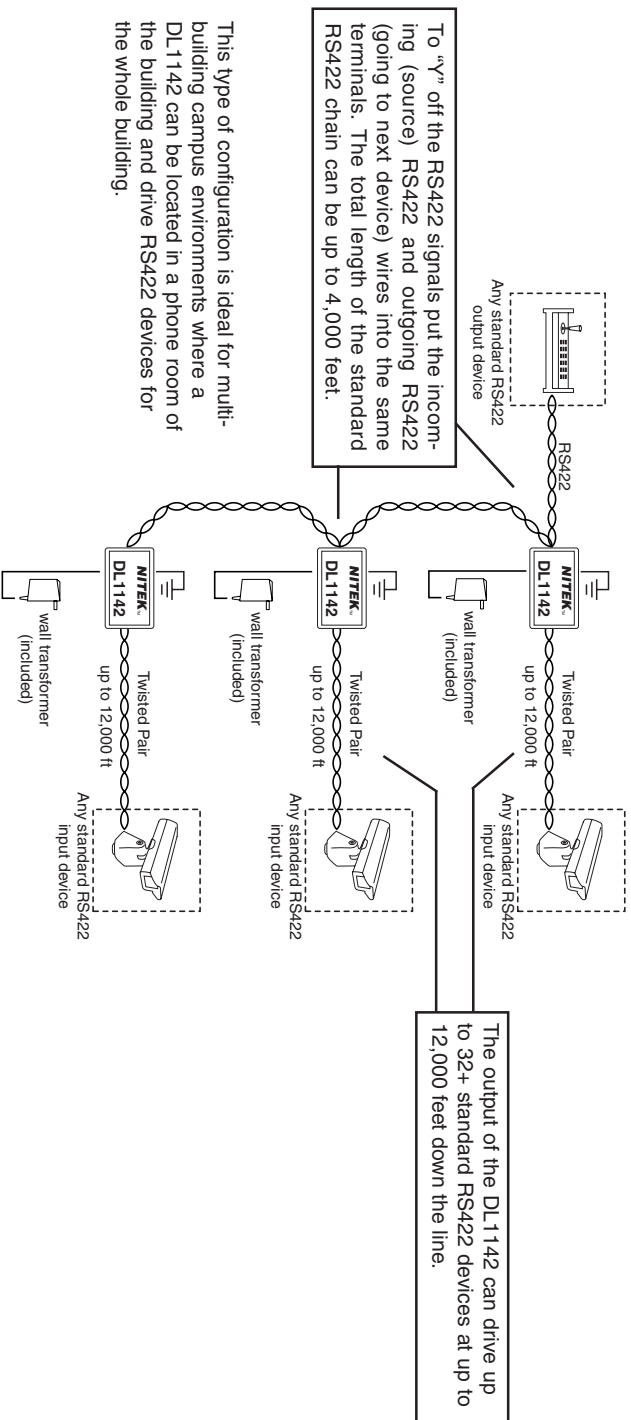


When connecting the DL1142 in a “Y” configuration; that is, using the DL1142 to split off a RS422 signal; the source RS422 data can be continued on down a chain of units. To do this put the source wire and the continuing wire connection into the “RS422 IN” connections.

RS422 Termination

Remove the slide off cover on the bottom of the DL1142 to access its termination jumper. The RS422 termination should be used in accordance with EIA standards regarding RS422 termination.

These are only a few of the many ways of using the DL1142 shown here. If you need additional help you may call the NITEK® Technical Department at 800-528-4343.



This type of configuration is ideal for multi-building campus environments where a DL 1142 can be located in a phone room of the building and drive RS422 devices for the whole building.

Common Multi-drop Application

Troubleshooting

Problem	Data does not appear to be going to the far end
Fix/Cause	<ul style="list-style-type: none">✓ Behind the bottom cover are a POWER and a DATA LED. Make sure that the power is ON and that the DATA LED comes ON when you are sending DATA.✓ Check the twisted pair for shorts to ground and between wires as well for open wires.✓ If you are not sure of the wire polarity; + and - try reversing the wires at one end.

For additional help with problems please call NITEK Technical Assistance at (800) 528-4343. Hours are from 8am to 5pm Central Standard Time Monday through Friday. We are always ready to help.

NITEK® Warranty

NITEK® warrants that the **DL1142** will be free from defects in materials and/or workmanship. Defective units will be repaired or replaced at our option within 2 years from the date of shipment. This warranty does not apply to units abused through misuse or subjected to improper and/or excessive voltage, beyond our control.

DL1142 Diagram

