**ARGUS SECURITY**

VLD100
VEGA LINE DRIVER

CE

GENERAL DESCRIPTION

The Vega Line Driver is a device which interfaces a personal computer to a Vega loop which is composed of a wired system of analogue addressable fire security devices.

Vega Line Driver must be used only in conjunction with computer applications designed and implemented for analogue addressable devices using the Vega protocol.

GENERAL OVERVIEW
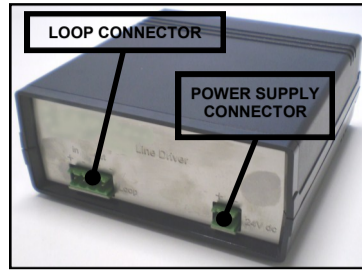
Picture 1 - Line Driver front view

Picture 2 - Line Driver back view

TECHNICAL SPECIFICATIONS

External power supply min. to max. range	20 to 40 V_{DC}
Loop power supply min. to max. range	18 to 38 V_{DC}
Suggested external power supply range	24 to 29 V_{DC}
Suggested loop power supply range	22 to 27 V_{DC}
Voltage drop across Line Driver	2 V_{DC}
Minimum loop voltage to guarantee LED operation on most Vega devices	18 V_{DC}
Recommended external power supply characteristics	24 V_{DC} - 1 A
Maximum supplied current by Line Driver to the loop	500 mA
Maximum supplied current by Line Driver to the loop (in limited current supply condition)	50 mA
Connection type with the personal computer	RS232 or through USB - RS232 adapter
Operating temperature range	-30 °C / +70 °C (no condensation)
Maximum tolerated humidity	95% RH (no condensation)
Dimensions	135 x 125 x 55 mm
Weight	370 g

LINE DRIVER SETUP - GENERAL OVERVIEW

The Line Driver must be connected to the analogue loop, computer and power supply as schematized in picture 3.

Picture 3 - Line Driver setup scheme

POWER SUPPLY CONNECTION

To supply power to the Line Driver insert the supplied pluggable terminal block into the device's power supply socket and connect the power supply wires as shown in picture 4.
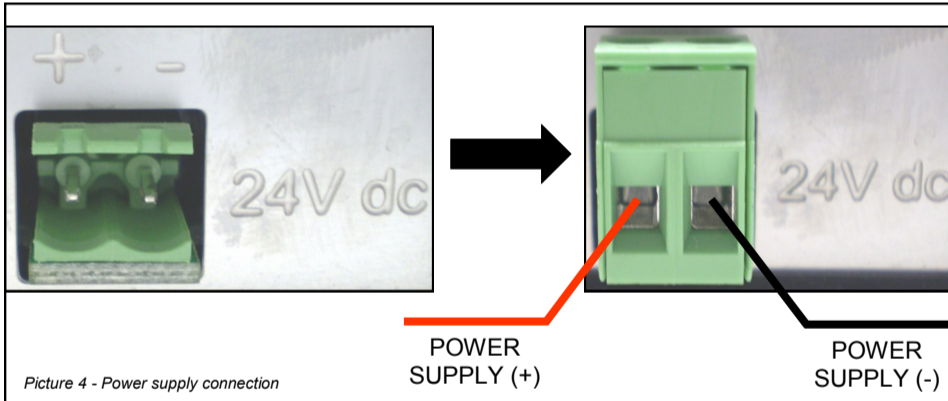
Picture 4 - Power supply connection

POWER SUPPLY (+)

POWER SUPPLY (-)

LOOP CONNECTION

To connect the loop to the Line Driver insert the supplied pluggable terminal block into the loop socket, and connect the loop wires as shown in picture 5.
Remember that dipole LOOP LINE IN (SIDE A) is active by default, while LOOP LINE OUT (SIDE B) is inactive by default.
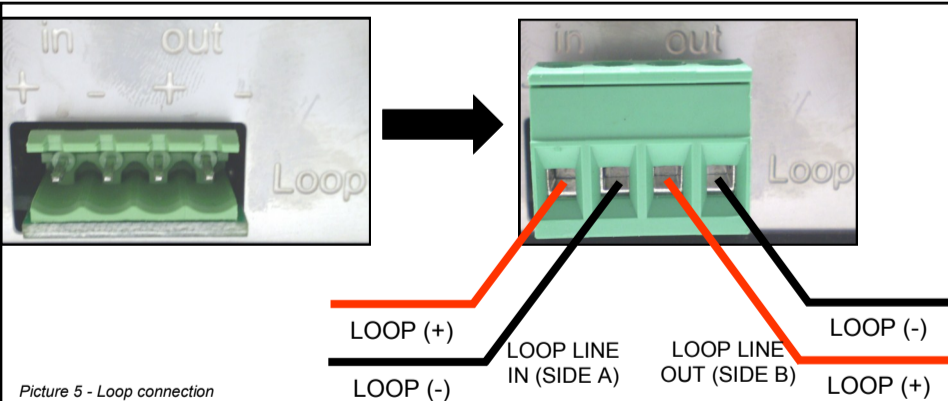
Picture 5 - Loop connection

LOOP (+)
LOOP LINE IN (SIDE A)
LOOP (-)

LOOP LINE OUT (SIDE B)
LOOP (-)
LOOP (+)

CONNECTIONS TO THE TERMINALS ARE POLARITY SENSITIVE, THUS PLEASE CHECK BY REFERRING TO THE WIRING DIAGRAMS IN THIS MANUAL!

RS232 CONNECTION

Connect the RS232 terminal to the Line Driver's RS232 socket; connect the other terminal to the computer's serial port; if the computer is not equipped with a RS232 port, install and use a USB-RS232 adapter (picture 6).

Picture 6 - Connection of the RS232 terminal to the Line Driver

LIMITED CURRENT SUPPLY CONDITION

When the Line Driver supplies to the loop an amount of current grater than a certain value, automatically limits its supply (see the TECHNICAL SPECIFICATIONS paragraph for normal and limited current supply for the Line Driver).
In order to restore the device from this condition do as follows:

1) solve the cause of excessive current absorption of the loop
2) disconnect the loop pluggable terminal block a few seconds, then plug it in again.
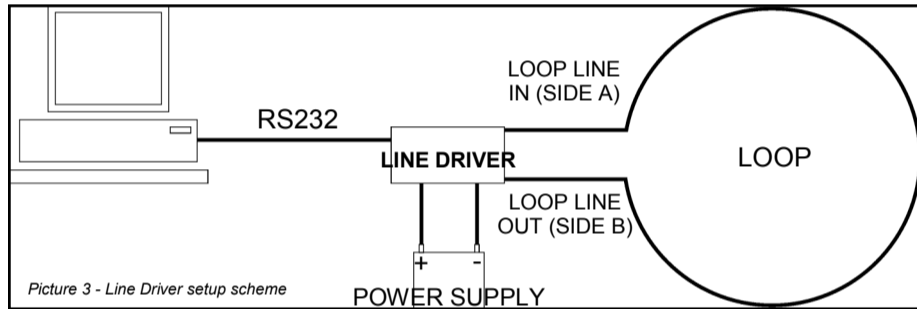
The Line Driver will be restored to normal operation.

VEGA LOOP ANALYSER NOTE

The "INSTALLATION MAP" functionality of the "Vega Loop Analyser" program requires, in order to work, the physical disconnection of dipole LOOP LINE OUT (SIDE B). After the operation is performed, completely terminated and the analogue loop is NOT being polled, reconnect the dipole.

WARNINGS AND LIMITATIONS

Our devices use high quality electronic components and plastic materials that are highly resistant to environmental deterioration. However, after 10 years of continuous operation, it is advisable to replace the devices in order to minimize the risk of reduced performance caused by external factors. Ensure that this device is only used with compatible control panels.

Detection systems must be checked, serviced and maintained on a regular basis to confirm correct operation.

Smoke sensors may respond differently to various kinds of smoke particles, thus application advice should be sought for special risks. Sensors cannot respond correctly if barriers exist between them and the fire location and may be affected by special environmental conditions.

Refer to and follow national codes of practice and other internationally recognized fire engineering standards.
Appropriate risk assessment should be carried out initially to determine correct design criteria and updated periodically.

WARRANTY

All devices are supplied with the benefit of a limited 3 year warranty relating to faulty materials or manufacturing defects, effective from the production date indicated on each product.

This warranty is invalidated by mechanical or electrical damage caused in the field by incorrect handling or usage.
Product must be returned via your authorized supplier for repair or replacement together with full information on any problem identified.

Full details on our warranty and product's returns policy can be obtained upon request.