Manuals+ — User Manuals Simplified.

VIMAR 02094 Ethernet Line Coupler Instruction Manual

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VIMAR 02094 Ethernet Line Coupler

Ethernet line coupler, power supply 24 V d.c. SELV, installation on DIN rail (60715 TH35), occupies 9 modules size 17.5 mm.

The device enables interfacing between the Ethernet and the secondary back bone of the system in order to share and/or transfer the data messages between the modules; in addition, it creates functional separation between the backbones (if a line coupler shorts the other backbones continue to work correctly). The device is equipped with three LEDs that enable displaying the state of operation. Each line coupler can be connected with up to 127 devices (display modules, communication terminals, telephone couplers) of the Call-way system. The configuration of the coupler line is done using the Lantronix configurator at:
www.lantronix.com/support/downloads/?=DEVICEINSTALLER.

FEATURES.

- Rated supply voltage: 12-24 V d.c. ± 10 %.
- Absorption: 250 mA.
- Operating temperature: +5 °C – +40 °C (indoor).
- Relative humidity during operation: max. 90%.
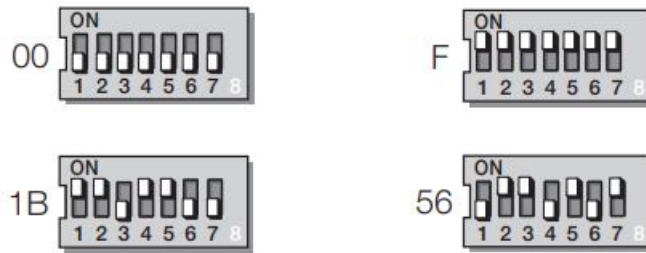- 9 modules of 17.5 mm

CONNECTIONS.
See figures overleaf.

CONFIGURATION.

- The line coupler address should be set using contacts 1 to 7 of DIP-Switch S1; it
- consists of the "family code" (in this case "10") and the 7 least significant bits of
- the DIP-Switch (address field in hexadecimal format: 100000-10007F) for a total of 128 addresses.

Address examples.

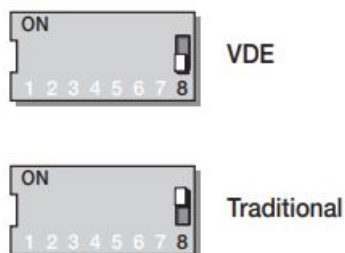## OPERATING MODE.

- The line coupler features two operating modes: VDE and traditional.
- The selection is made via contact No.8 of DIP-Switch S1:
- VDE mode: set the contact to OFF
- Traditional mode: set the contact to ON
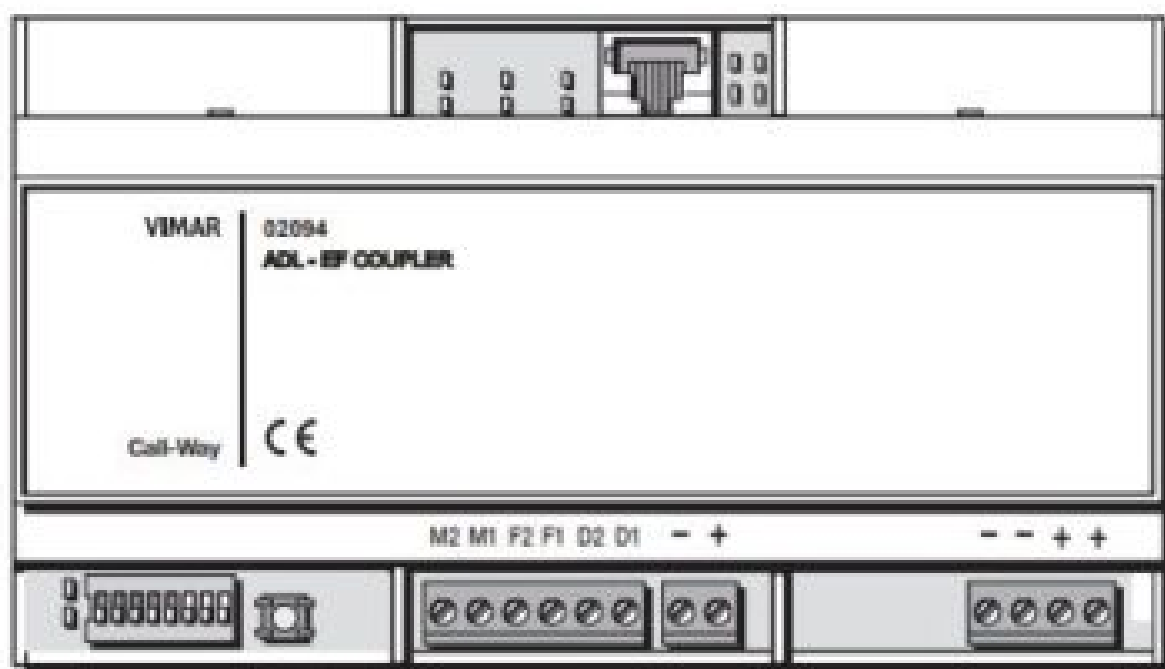
Operating mode setting.

IMPORTANT:
To configure the network parameters of the line coupler, please contact Vimar S.p.A. Customer Service.

FRONT VIEW.

VIMAR | 02094
ADL - EF COUPLER

Call-Way | CE

M2 M1 F2 F1 D2 D1 − +   − − + +

DIP-Switch S1

SECONDARY BACKBONE
+,- : system power supply terminals
D1,D2   : data connection
F1,F2   : telephone connection
M1,M2   : music connection

AUX POWER SUPPLY OUTPUTS
+, +, −, − : auxiliary outputs for
              power equipment
              neighbors

Connections

- 1 vertical 2-pole female flying terminal. Step 5.08 (secondary backbone power supply) – max sect. 2.5 mm2.
- 1 vertical 6-pole female flying terminal. Step 5.08 (secondary backbone signals)

- 1 RJ45 connector for connection to Ethernet.

- 1 vertical 4-pole female flying terminal – Step 5.08 with auxiliary power supply labeling (max sect. 2.5 mm2).

INSTALLATION RULES.
Installation should be carried out by qualified staff in compliance with the current regulations regarding the installation of electrical equipment in the country where the products are installed.

ATTENTION: Installation is advised in a network-specific to Call-Way devices, in order to ensure better service quality.

REGULATORY COMPLIANCE.
EMC directive. Standards EN 60950-1, EN 61000-6-1, EN 61000-6-3. REACH (EU) Regulation no. 1907/2006 – Art.33. The product may contain traces of lead.

CONNECTIONS.

Connection diagram Ethernet backbone and main systems with speech and music – Mixed topology (star-bus).

Secondary backbone connection diagram

NETWORK CONNECTION TO ETHERNET SWITCH (UTP cable)

Screening must be applied for the entire length of the bus and connected on a single side, as close as possible to the negative terminal of the power supply unit.

VIMAR 02094 ADL - EF COUPLER
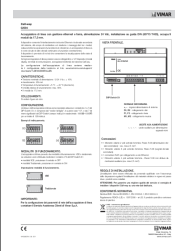
Call-Way CE

SECONDARY BACKBONE

D1 — D1
D2 — D2
F1 — F1   Data/Telephone/Music
F2 — F2   SSTP 4cp
M1 — M1
M2 — M2

Power supply (2 x 2.5 mm²)

Secondary backbone connection method

The secondary backbone consists of one power supply pair and three balanced signal pairs: data, telephone and music. Balanced signals are normally connected using twisted pairs, to increase immunity to external interference; conversely, if a balanced pair is connected over wires which are not twisted together, there may be a significant increase in disturbances influencing the signal. Below is an example of signal/colour pairing if an SSTP cable is used:

- D1: white-orange
- D2: orange
- F1: white-green
- F2: green
- M1: white-brown
- M2: brown

For bus connection on RJ45 sockets, use the "B" colour sequence, connecting the white-blue wires to the power supply positive and negative respectively.

Documents / Resources

References

- X **Support | Lantronix**