TECHNICAL MANUAL

RIVERTECH

Concentrator for ETR
serial line for
technological applications

090000466

CE

EL.MO. SPA

FOREWORD

FOR INSTALLERS:

Please follow carefully the specifications about electric and security systems realization further to the manufacturer's prescriptions indicated in the manual provided.
Provide the user the necessary indication for use and system's limitations, specifying that there exist precise specifications and different safety performance levels that should be proportioned to the user needs. Have the user read carefully the instructions provided in this document.

FOR USERS:

Carefully check the system functionality at regular intervals making sure all enabling and disabling operations were made correctly.
Have skilled personnel make the periodic system's maintenance. Contact the installer to verify correct system operation in case its conditions have changed (e.g.: variations in the areas to protect due to extension, change of the access modes, etc.)

This device has been designed, assembled and tested with the maximum care, adopting control procedures in accordance with the laws in force. The full correspondence to the functional characteristics is given exclusively when it is used for the purpose it was projected for, which is as follows:

Concentrator for ETR serial line for technological applications

Any use other than the one mentioned above has not been forecast and therefore it is not possible to guarantee the correct functioning of the device. Similarly, any other use of this technical manual other than the one it has been compiled for - that is: to illustrate the devices technical features and operating mode - is expressly prohibited.
The manufacturing process is carefully controlled in order to prevent defaults and bad functioning. Nevertheless, an extremely low percentage of the components used is subjected to faults just as any other electronic or mechanic product. As this item is meant to protect both property and people, we invite the user to proportion the level of protection that the system offers to the actual risk (also taking into account the possibility that the system was operated in a degraded manner because of faults and the like), as well reminding that there are precise laws for the design and assemblage of the systems destined to these kind of applications.

The system's operator is hereby advised to see regularly to the periodic maintenance of the system, at least in accordance with the provisions of current legislation, as well as to carry out checks on the correct running of said system on as regular a basis as the risk involved requires, with particular reference to the control unit, sensors, sounders, dialler(s) and any other device connected. The user must let the installer know how well the system seems to be operating, based on the results of periodic checks, without delay.

Design, installation and servicing of systems which include this product, should be made by skilled staff with the necessary knowledge to operate in safe conditions in order to prevent accidents. These systems' installation must be made in accordance with the laws in force. Some equipment's inner parts are connected to electric main and therefore electrocution may occur if servicing was made before switching off the main and emergency power. Some products incorporate rechargeable or non rechargeable batteries as emergency power supply. Their wrong connection may damage the product, properties and the operator's safety (burst and fire).

1. GENERALS

ETR control units can control many zones, either directly connected to the motherboard or to expansion modules called "CONCENTRATORS".
Among the advanced applications that can be managed by ETR control units, the technologial events generated in environments where electrical noise is extremely high can be controlled using RIVERTECH concentrator.

2. FEATURES

Model:	**RIVERTECH**
Performance level:	I
Supply voltage:	12 V ⎓ (9 ÷ 15 V).
Current draw:	92 mA without connected outputs.
Number of zones:	8.
Zone interface:	NC galvanically isolated (isolation higher than 1000V).
Wirings:	Zones must be connected in two groups of four, using ISO1 and ISO2 outputs.
Outputs:	8 outputs with static relay, C - NA contacts.
Relay capacity:	60 V max OFF - 500mA ON
Serial line:	RS-485 serial line galvanically isolated from the on-board electronics, isolation higher than 1000V.
Serial line max length:	1000 m.
Connections:	Extractable terminal board.
Selections:	Dip switch front selector to set identification code and tamper exclusion.
Case:	Plastic vertical ABS case suitable for mount on DIN bar, with transparent shutter for protection of dip switches and LEDs.
LED indications:	Front LEDs for indication of zone status, serial line activity, Tamper protection status.
Cable type:	Standard 2 x 0,75 mm^2 + 2 x 0,22 mm^2 (power supply + signal), shielded. Use 2 x 1 mm^2 + 2 x 0,5 mm^2 or higher sections in case of long routes.
Operating temperature and humidity:	-10° / +55°C certified by manufacturer - 93% R.H.
Dimensions:	H 112 - P 119 - L 23 mm.
Weight:	185 g.
Parts supplied:	Technical manual.

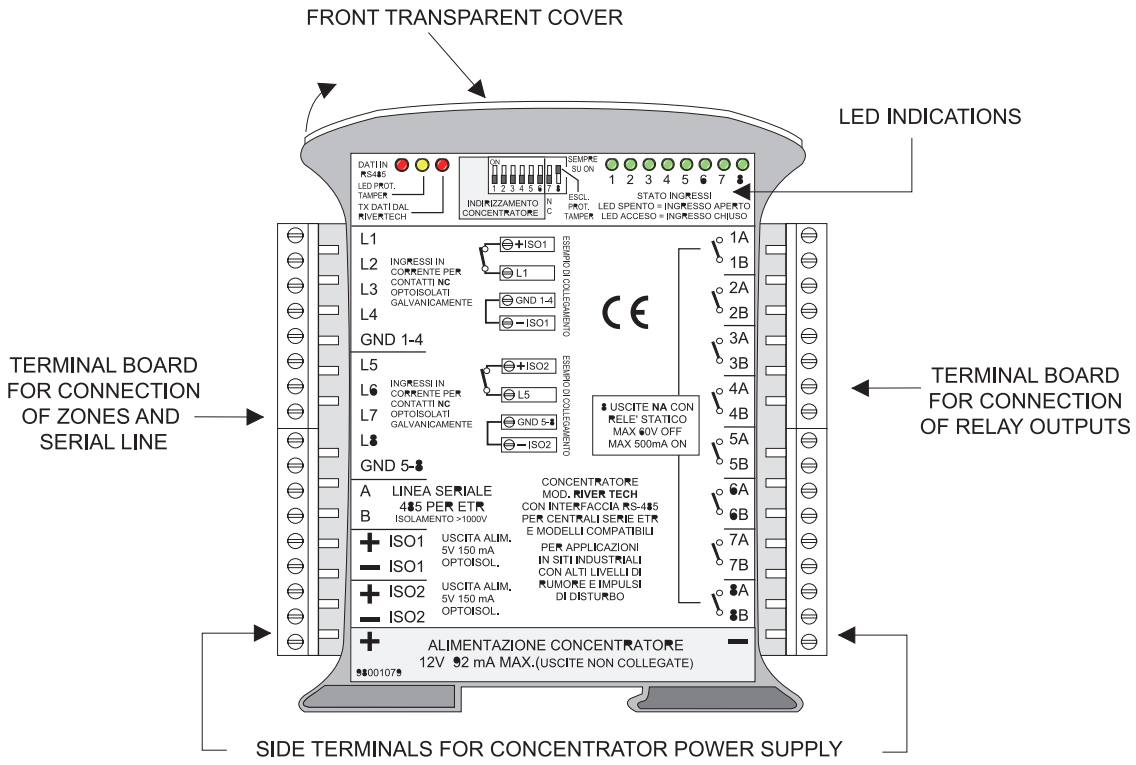
EU DECLARATION OF CONFORMITY

The product complies with current European EMC and LVD directives. The full text of the EU declaration of conformity is available at the following Internet address: elmospa.com – registration is quick and easy.

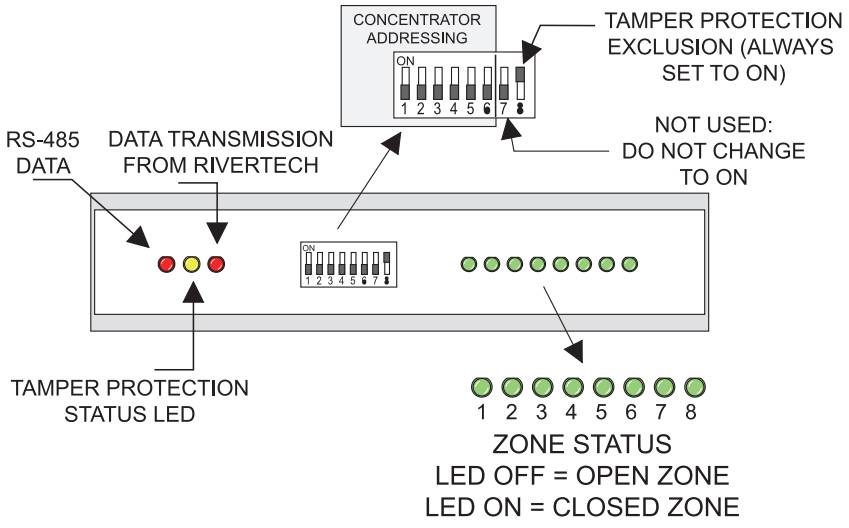
Note: the concentrator must be inserted in a case equipped with suitable protection against removal and opening.

3. WIRING

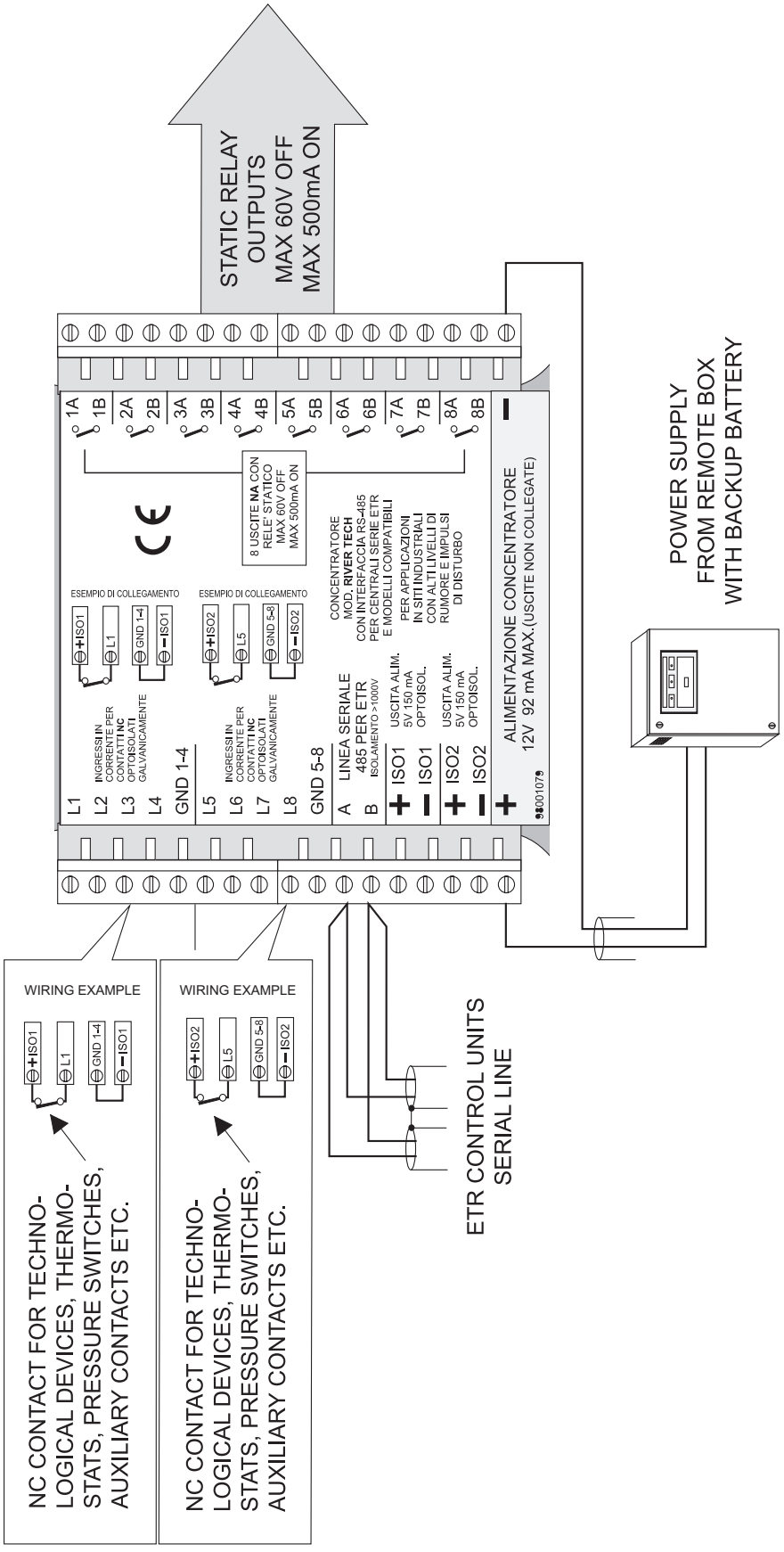
Side view.



Front view.



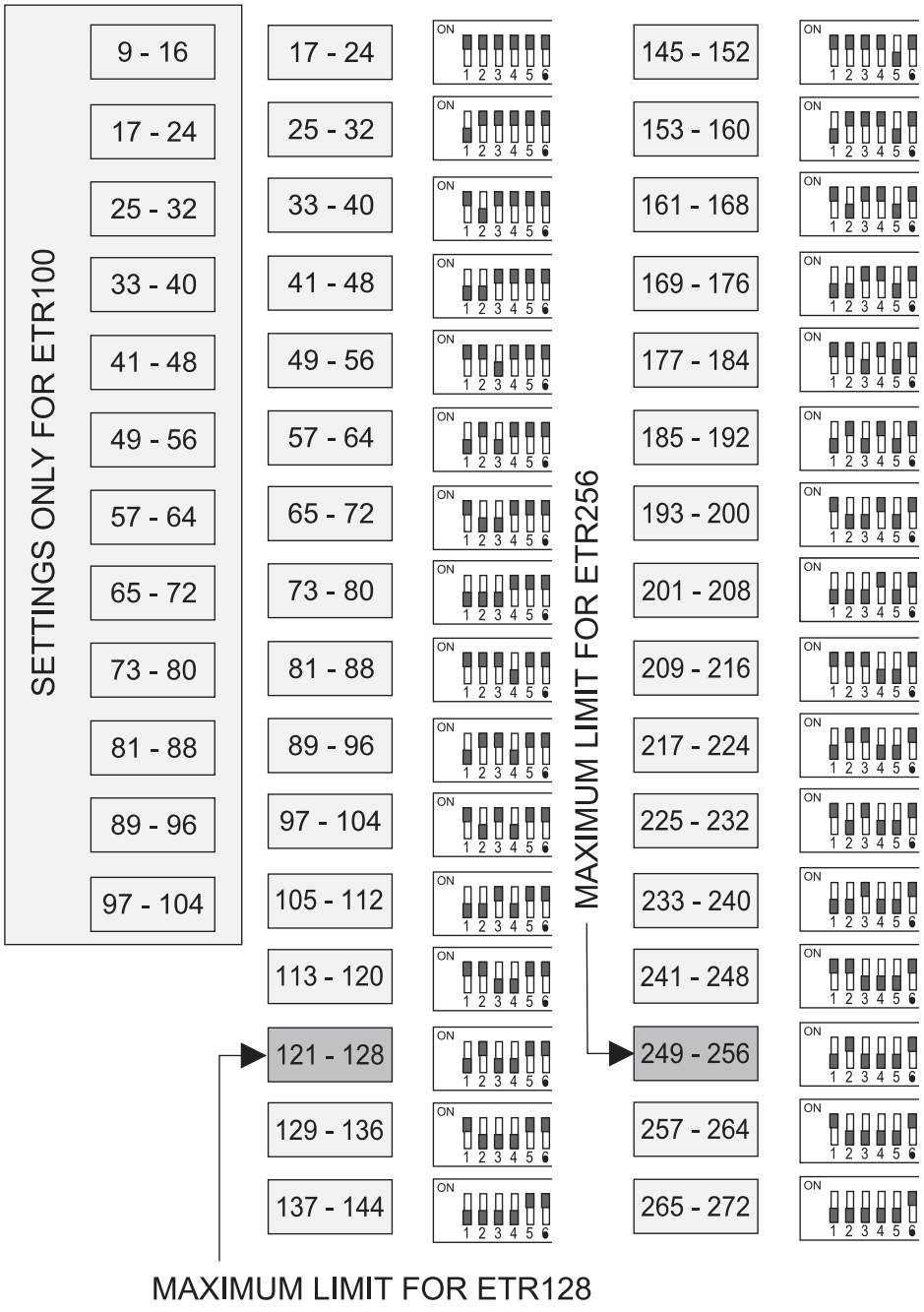
Terminal board connections.

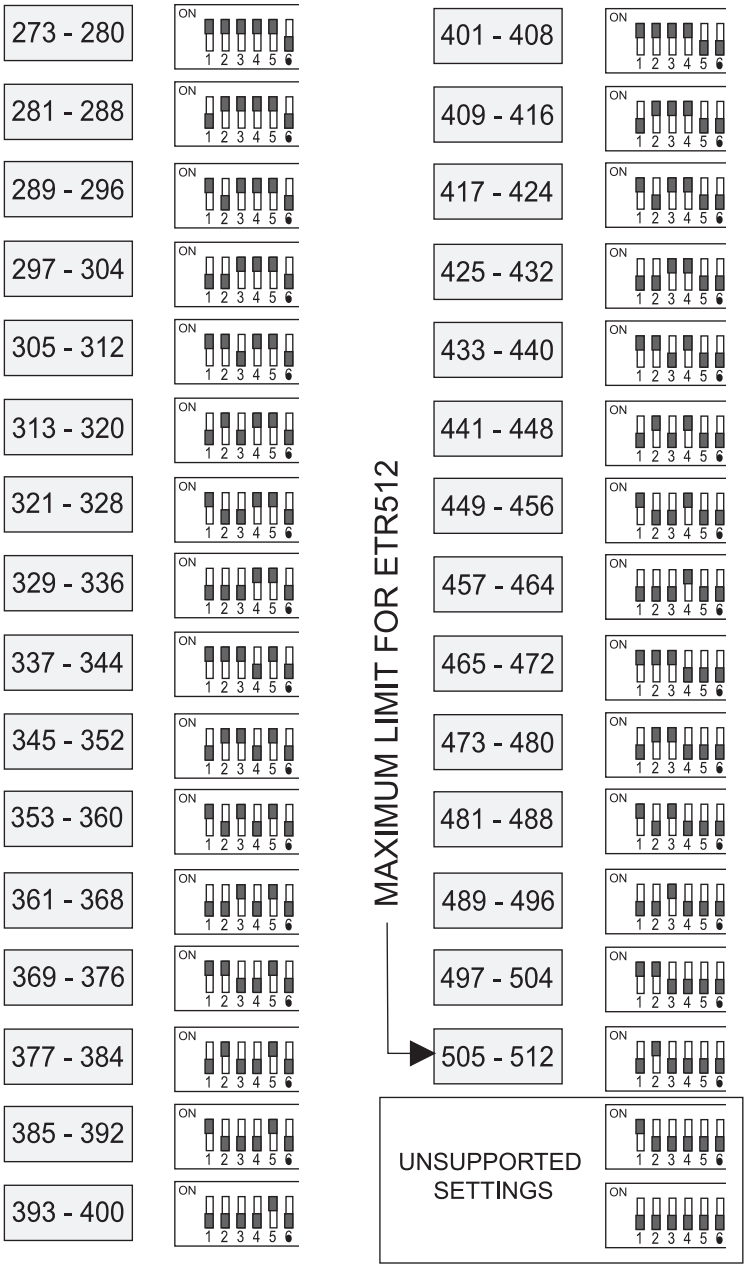


international@elmospa.com
elmospa.com

4. PROGRAMMING

Dip switch sequence for proper address setting.




273 - 280
281 - 288
289 - 296
297 - 304
305 - 312
313 - 320
321 - 328
329 - 336
337 - 344
345 - 352
353 - 360
361 - 368
369 - 376
377 - 384
385 - 392
393 - 400
401 - 408
409 - 416
417 - 424
425 - 432
433 - 440
441 - 448
449 - 456
457 - 464
465 - 472
473 - 480
481 - 488
489 - 496
497 - 504
505 - 512
MAXIMUM LIMIT FOR ETR512
UNSUPPORTED SETTINGS
ON
1 2 3 4 5 6

5. DISPOSAL WARNINGS

The device must be disposed of according to municipal rules in force and conferred to an authorized dump for disposal of electronic products; in case of necessity, ask local authority for information.
The materials used for this product are very harmful and polluting. Do not disperse them in the environment.

EL.MO. Spa Via Pontarola, 70 - 35011 Campodarsego (PD) - Italy
Tel. +390499203333 - Fax +390499200306 - Help desk +390499200426 - www.elmospa.com - international@elmospa.com