

## RIVERNANO2

Miniaturized serial line concentrator  
with 2 programmable inputs

090011225





## FOREWORD

### FOR THE INSTALLER:

Comply strictly with current standards governing the installation of electrical systems and security systems, and with the manufacturer's directions given in the manuals supplied with the products.

Provide the user with full information on using the system installed and on its limitations, pointing out that there are different levels of security performance that will need to suit the user's requirements within the constraints of the specific applicable standards. See that the user looks through the warnings given herein.

### FOR THE USER:

Check the system's operation thoroughly at regular intervals, making sure the equipment can be armed and disarmed properly.

Make sure the system receives proper routine maintenance, employing the services of specialist personnel who meet the requirements prescribed by current regulations.

Ask your installer to check that the system suits changing operating conditions (e.g. changes in the extent of the areas to be protected, change in access methods, etc...).

-----  
This device has been designed, built and tested with the utmost care and attention, adopting test and inspection procedures in accordance with current legislation. Full compliance of the working specifications is only achieved in the event the device is used solely for its intended purpose, namely:

### **Miniaturized serial line concentrator with 2 programmable inputs.**

The device is not intended for any use other than the above and hence its correct functioning in such cases cannot be assured.

Consequently, any use of the manual in your possession for any purpose other than those for which it was compiled - namely for the purpose of explaining the product's technical features and operating procedures - is strictly prohibited.

Production processes are closely monitored in order to prevent faults and malfunctions. However, the componentry adopted is subject to an extremely modest percentage of faults, which is nonetheless the case with any electronic or mechanical product.

Given the intended use of this item (protection of property and people), we invite you to adapt the level of protection offered by the system to suit the actual situation of risk (allowing for the possibility of impaired system operation due to faults or other problems), while reminding you that there are specific standards for the design and production of systems intended for this kind of application.

**We hereby advise you (the system's operator) to see that the system receives regular routine maintenance, at least in accordance with the provisions of current legislation, and also check on as regular a basis as the risk involved requires that the system in question is operating properly, with particular reference to the control unit, sensors, sounders, dialler(s) and any other device connected. You must let the installer know how well the system seems to be operating, based on the results of periodic checks, without delay.**

Work involved in the design, installation and maintenance of systems incorporating this product should be performed only by personnel with suitable skills and knowledge required to work safely so as to prevent any accidents. It is vital that systems be installed in accordance with current legislation. The internal parts of certain equipment are connected to the mains and therefore there is a risk of electrocution when maintenance work is performed inside without first disconnecting the primary and emergency power supplies. Certain products include batteries, rechargeable or otherwise, as an emergency backup power supply. If connected incorrectly, they may cause damage to the product or property, and may endanger the operator (explosion and fire).

## EU DECLARATION OF CONFORMITY

The RIVERNANO2 module complies with current European EMC and LVD directives.

You can log into the [elmospa.com](http://elmospa.com) website to read the full Declaration of Performance: registration is quick and easy.

## DISPOSAL INSTRUCTIONS - INFORMATION FOR THE USER



In accordance with Directive 2012/19/EU on waste electrical and electronic equipment (WEEE), please be advised that the EEE was placed on the market after 13 August 2005 and must be disposed of separately from normal household waste.

IT08020000001624



## 1. GENERALS

The intrusion detection control units can control a high number of inputs connected either directly to the main board, or to different expansion modules called *concentrators*.

To optimize the installation and the cable routing operations, concentrators operating via serial line are used.

The concentrators are placed in remote positions from the main board, and can provide different options for input wiring.

RIVERNANO2 is a very small sized concentrator that need to be controlled and managed via serial line.

This product features 2 double-balanced zones, programmable as an alternative as “fast inputs” for connection of inertial and/or roll-up shutter sensors.

The input type, the sensitivity and the integration of the RIVERNANO2 “fast” inputs can only be configured using the browser of the expressly compatible control unit module.

Compatible control units in detail:

- NET 832 browser 4.1.1 or higher.
- NET 9 browser 3.1.0 or higher.
- ETR48, ETR48M and Q version fw 2.1 or higher, browser 2.1 or higher
- ETR100, ETR100M and Q version fw 3.1 or higher, browser 3.0 or higher. G2 versions.
- ETR128, 256, 512 fw 4.1 or higher, browser 4.0 or higher. G2 versions.
- VIDOMO2K.
- PREGIO series.
- PROXIMA series.
- TITANIA and TITANIAPLUS series.

RIVERNANO2 is not compatible with the CP80, CP90, CP100 and ET8/48x series control units.

## 2. FEATURES

Model	RIVERNANO2
Performance level	I
EN 50131-1 compliance	Degree 2, Environmental Class II
Power supply voltage	12 V <sub>dc</sub> (from 10 to 15 V)
Current draw @12 V	12 mA (board only)
Number of inputs	2
Input interface	Programmable as double balanced or “fast” single balanced.
Default settings	Input 1: double balanced; input 2: “fast”, single balanced. All the inputs are also programmable as NC.
Outputs	2 open collector electronic outputs: 40 mA maximum current
Selections	Dip switches for identification code programming, repetition function.

Indicators	On board LED indicators for visualization of serial line operation.
Housing	None, board only.
Cable to use	Shielded standard cable 2 x 0,75 mm <sup>2</sup> + 2 x 0,22 mm <sup>2</sup> (power + signal); For long distances, use 2 x 1 mm <sup>2</sup> + 2 x 0,5 mm <sup>2</sup> or larger sections.
Wiring	Maximum length: 1000 m
Parts supplied	4 × 1500 Ω resistors, technical manual, insulating sleeve
Dimensions	W38 × H17 × D13 mm
Weight	10 g
Operating temperature	-10° / +55°C certified by the manufacturer, 93% r.h.



### 3. INSTALLATION

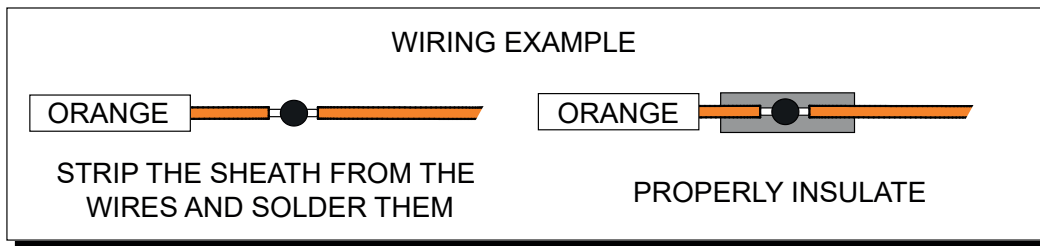
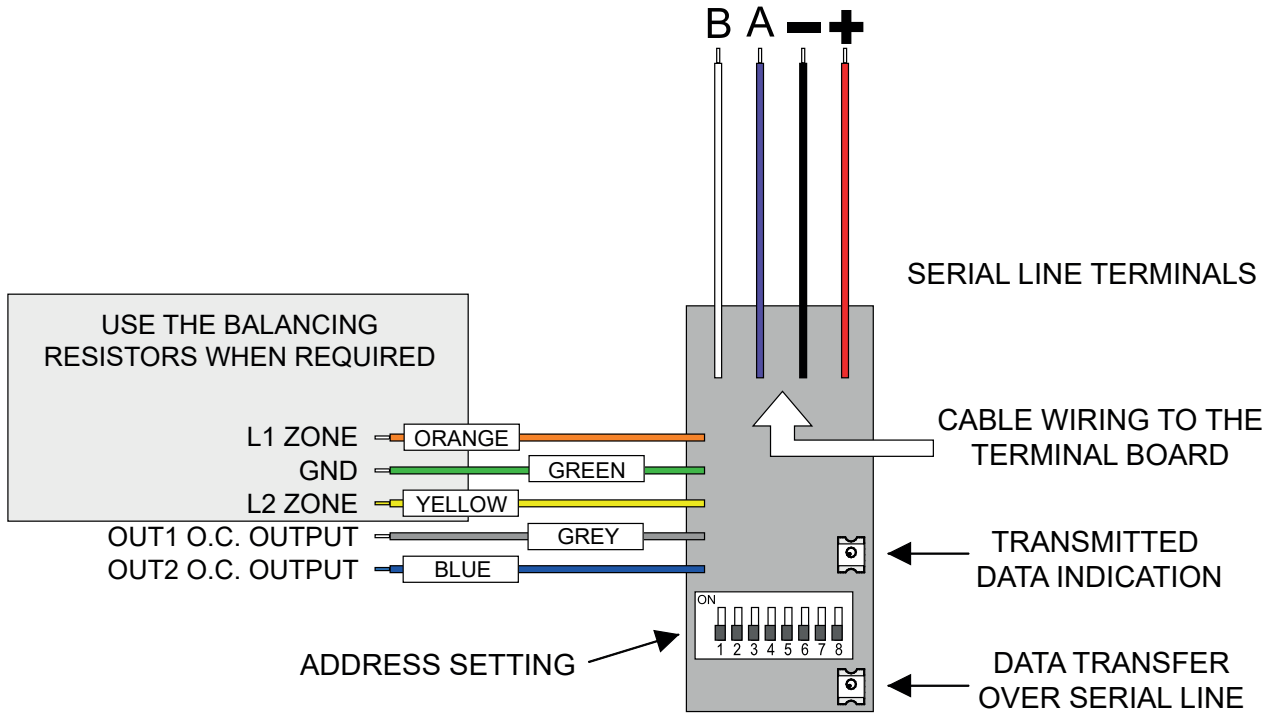


The RIVERNANO2 concentrator is provided as electronic board only, therefore it must be properly insulated before insertion inside the device housing or in a 503-type junction box. The installer shall provide the junction box with tamper protection against opening.



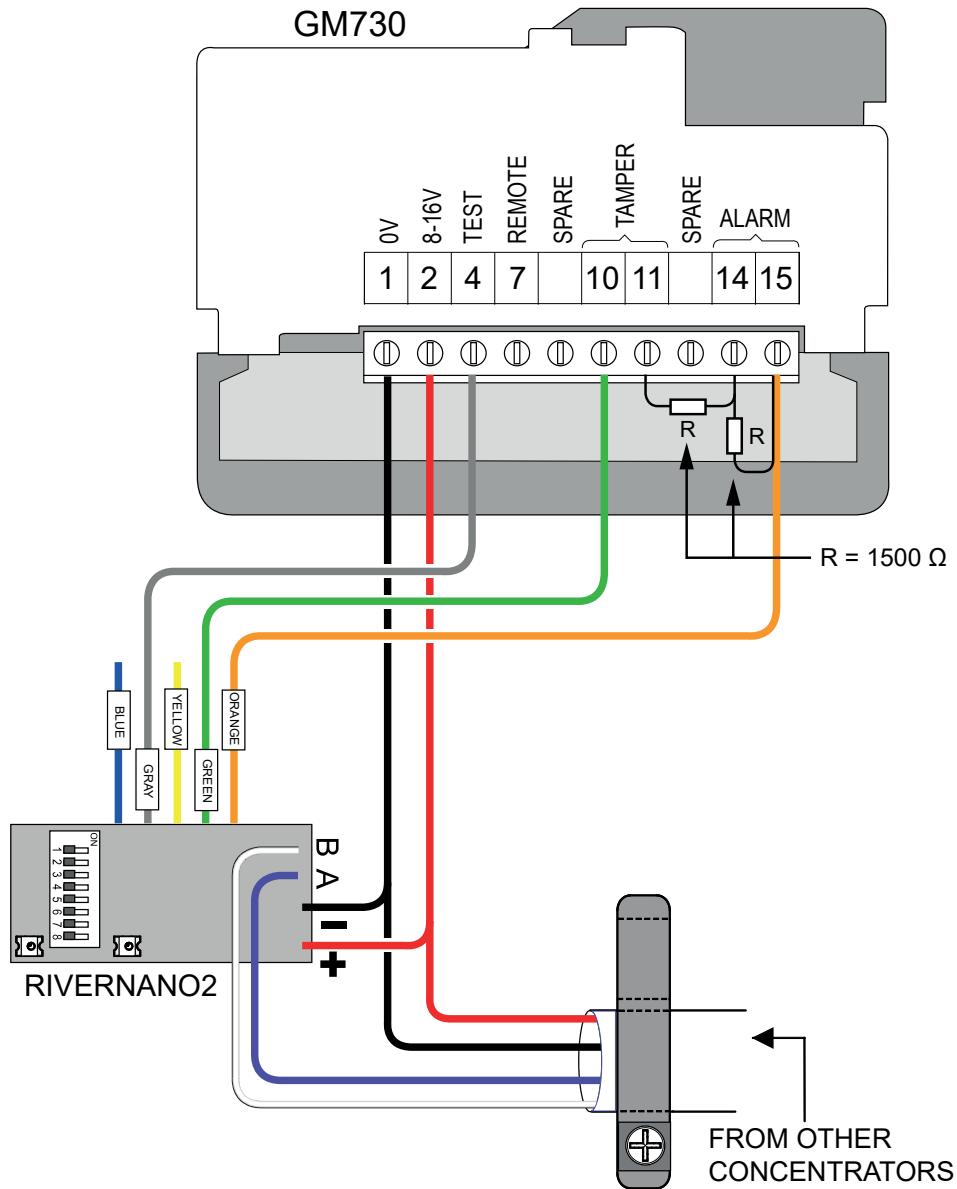
The electronic board can be damaged by electrostatic discharge. The installer shall free himself from ksm412 electrostatic charges before opening the housing and he shall keep free from electrostatic charges during the whole installation or maintenance process.

#### 3.1 Board description

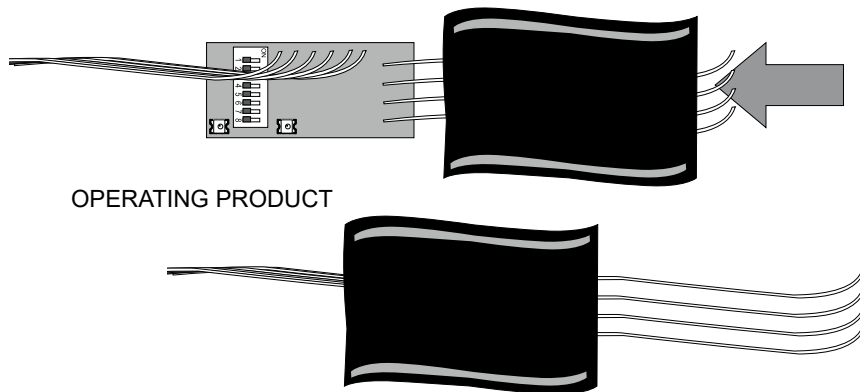




Example of use with a GM730 seismic detector.



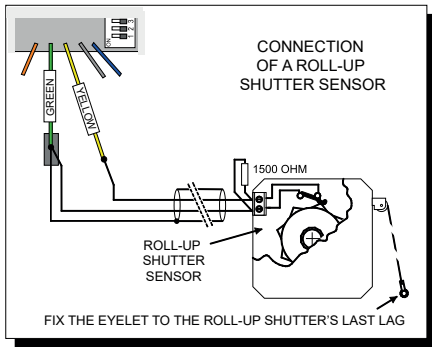
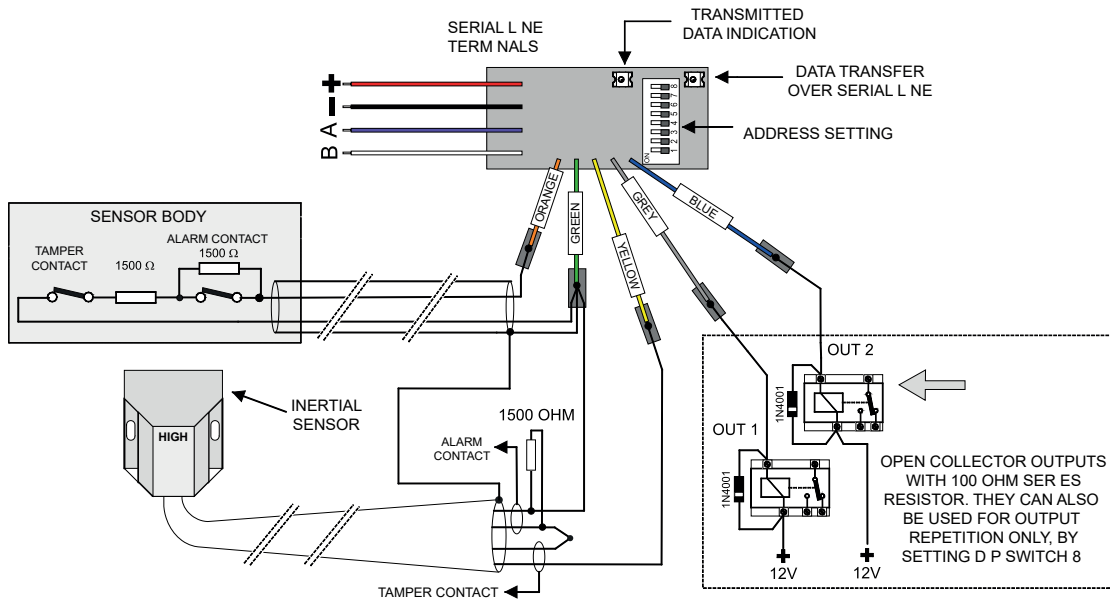
HOW TO INSULATE THE CONCENTRATOR, ONCE THE WIRING HAS BEEN PERFORMED  
 BEND THE WIRES TOWARD THE INNER PART OF THE BOARD,  
 THEN INSERT IT INSIDE THE INSULATING SLEEVE





### 4. ELECTRICAL WIRING

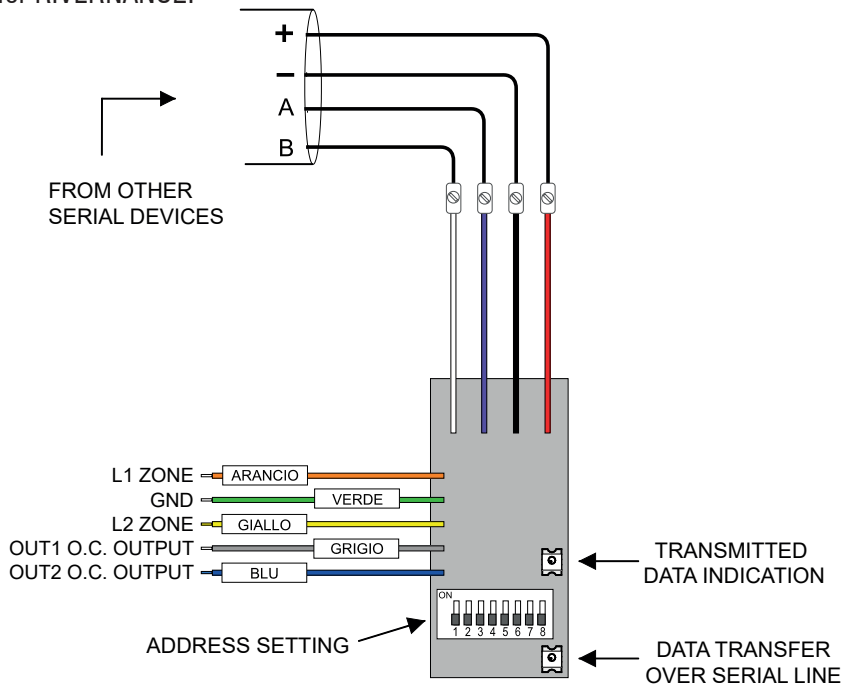
Connection of inputs and outputs for RIVERNANO2.



**WARNING:**  
 THE DIAGRAM REFERS TO THE DEFAULT CONFIGURATION:  
 L1 DOUBLE BALANCED, L2 SINGLE BALANCED FOR CONNECTION TO "FAST" SENSORS.  
 IF THE CONCENTRATOR IS CONNECTED TO A CONTROL UNIT EQUIPPED WITH COMPATIBLE FIRMWARE, YOU CAN RE-CONFIGURE THE INPUT TYPE AS REQUIRED: UP TO 2 DOUBLE BALANCED INPUTS OR UP TO 2 INPUTS FOR FAST SENSORS, OR UP TO 2 NC INPUTS.

To adjust the sensitivity and the integration, see note in chapter "5. SENSITIVITY AND INTEGRATION".

Serial line connection for RIVERNANO2.





## 5. SENSITIVITY AND INTEGRATION

Example of fast inputs connection.

### Explanatory notes on fast input programming and functionality, for concentrators equipped with firmware version v1.1 or higher.

The configuration of an input as “fast” makes it possible to manage signals originating from inertial or roll-up shutter sensors. Since these sensors generate voltage pulses on the line through which they are wired to the control unit zone, they require special management.

The features of the signals originating from inertial and roll-up shutter sensors vary according to the sensor model and to the installation conditions; therefore, fast inputs can be configured using the sensitivity and integration parameters.

**The default value (10 for both parameters)** is suitable for use in ordinary situations and with most of the commercially available roll-up shutter sensors. In case of inertial sensor connection or peculiar installing situations, it is advisable to adjust the sensitivity and integration parameters in order to get the best response from the input.

**Sensitivity:** main parameter, it defines the alarm condition detection. A lower sensitivity requires that the contact is activated for a longer time: the generation of a higher number of pulses is needed to trigger an alarm signal. Conversely, a higher sensitivity allows faster alarm generation with a lower number of pulses.

**Integration:** the alarm condition must be detected within the set integration time in order to be valid. A low integration makes the detection time longer; an high integration makes the detection time shorter. In most of the installing situations, adjusting only the sensitivity is enough to improve the system performances (the integration can be kept to the default value: 10, corresponding to 15-30 second detection).

### Use with roll-up shutter sensors

Increase the sensitivity in steps of 10 (20, 30, 40, ...), in order to achieve a faster response; it is not advisable to increase the sensitivity above 40 in order to prevent false alarms due to unwanted sensor switching.

Set the integration to 5 to achieve the best detection in case of very slow shutter movements.

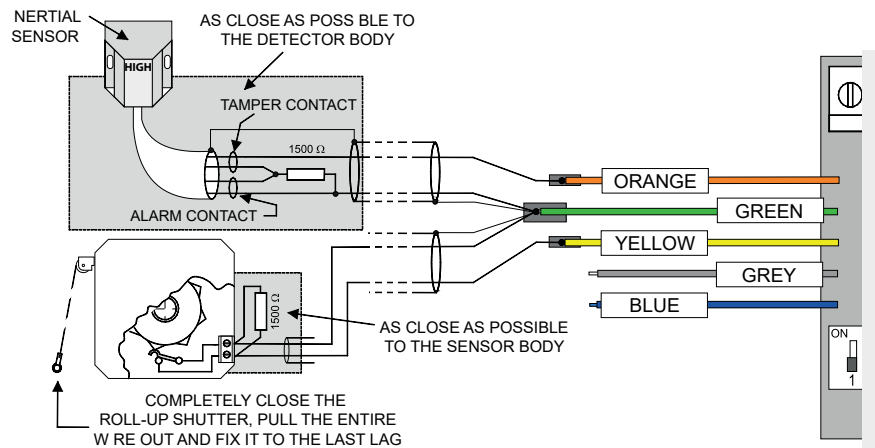
In case of false alarms, set a sensitivity value lower than 20; in some cases, it may be useful to increase the integration up to 15 to reduce the detection time window.

**WARNING:** setting a low sensitivity and a high integration makes the input less sensitive to slow shutter movements.

### Use with inertial sensors

We recommend setting a sensitivity value of 40 or higher (it generally corresponds to 2 hits). Increase the sensitivity in steps of 10 (50, 60, ...) in order to achieve a faster response. Set a sensitivity value of 50 or higher to get the alarm signal after one single bump.

Set the integration to 5 to detect hits separated in time. In case of false alarms, set a sensitivity value lower than 40; in some cases, it may be useful to increase the integration in steps of 5 (15, 20, ...) to reduce the detection time window.



**6. SETTING THE RIVERNANO2 IDENTIFICATION CODE****NET832 control units:**

Addresses	ON switches	Addresses	ON switches	Addresses	ON switches
9-10	1 2 3 4 5 6 7 -	17-18	1 2 - 4 5 6 7 -	25-26	1 2 3 - 5 6 7 -
11-12	- 2 3 4 5 6 7 -	19-20	- 2 - 4 5 6 7 -	27-28	- 2 3 - 5 6 7 -
13-14	1 - 3 4 5 6 7 -	21-22	1 - - 4 5 6 7 -	29-30	1 - 3 - 5 6 7 -
15-16	- - 3 4 5 6 7 -	23-24	- - - 4 5 6 7 -	31-32	- - 3 - 5 6 7 -

**Note:** the position of selector 8 is reserved for the repetition function (OFF = disabled, ON = enabled).

**NET9 control units:**

Addresses	ON switches	Addresses	ON switches	Addresses	ON switches	Addresses	ON switches
9-10	1 2 3 4 5 6 7 -	33-34	1 2 - - 5 6 7 -	57-58	1 2 3 - - 6 7 -	81-82	1 2 - 4 5 - 7 -
11-12	- 2 3 4 5 6 7 -	35-36	- 2 - - - 5 6 7 -	59-60	- 2 3 - - 6 7 -	83-84	- 2 - 4 5 - 7 -
13-14	1 - 3 4 5 6 7 -	37-38	1 - - - - 5 6 7 -	61-62	1 - 3 - - 6 7 -	85-86	1 - - 4 5 - 7 -
15-16	- - 3 4 5 6 7 -	39-40	- - - - - 5 6 7 -	63-64	- - 3 - - 6 7 -	87-88	- - - 4 5 - 7 -
17-18	1 2 - 4 5 6 7 -	41-42	1 2 3 4 - 6 7 -	65-66	1 2 - - - 6 7 -	89-90	1 2 3 - 5 - 7 -
19-20	- 2 - 4 5 6 7 -	43-44	- 2 3 4 - 6 7 -	67-68	- 2 - - - 6 7 -	91-92	- 2 3 - 5 - 7 -
21-22	1 - - 4 5 6 7 -	45-46	1 - 3 4 - 6 7 -	69-70	1 - - - - 6 7 -	93-94	1 - 3 - 5 - 7 -
23-24	- - - 4 5 6 7 -	47-48	- - 3 4 - 6 7 -	71-72	- - - - - 6 7 -	95-96	- - 3 - 5 - 7 -
25-26	1 2 3 - 5 6 7 -	49-50	1 2 - 4 - 6 7 -	73-74	1 2 3 4 5 - 7 -	97-98	1 2 - - 5 - 7 -
27-28	- 2 3 - 5 6 7 -	51-52	- 2 - 4 - 6 7 -	75-76	- 2 3 4 5 - 7 -	99-100	- 2 - - 5 - 7 -
29-30	1 - 3 - 5 6 7 -	53-54	1 - - 4 - 6 7 -	77-78	1 - 3 4 5 - 7 -	101-102	1 - - - 5 - 7 -
31-32	- - 3 - 5 6 7 -	55-56	- - - 4 - 6 7 -	79-80	- - 3 4 5 - 7 -	103-104	- - - - 5 - 7 -

**Note:** the position of selector 8 is reserved for the repetition function (OFF = disabled, ON = enabled).

**ETR100 control units:**

Addresses	ON switches	Addresses	ON switches	Addresses	ON switches	Addresses	ON switches
9-10	1 2 3 4 5 6 7 -	33-34	1 2 - - 5 6 7 -	57-58	1 2 3 - - 6 7 -	81-82	1 2 - 4 5 - 7 -
11-12	- 2 3 4 5 6 7 -	35-36	- 2 - - - 5 6 7 -	59-60	- 2 3 - - 6 7 -	83-84	- 2 - 4 5 - 7 -
13-14	1 - 3 4 5 6 7 -	37-38	1 - - - - 5 6 7 -	61-62	1 - 3 - - 6 7 -	85-86	1 - - 4 5 - 7 -
15-16	- - 3 4 5 6 7 -	39-40	- - - - - 5 6 7 -	63-64	- - 3 - - 6 7 -	87-88	- - - 4 5 - 7 -
17-18	1 2 - 4 5 6 7 -	41-42	1 2 3 4 - 6 7 -	65-66	1 2 - - - 6 7 -	89-90	1 2 3 - 5 - 7 -
19-20	- 2 - 4 5 6 7 -	43-44	- 2 3 4 - 6 7 -	67-68	- 2 - - - 6 7 -	91-92	- 2 3 - 5 - 7 -
21-22	1 - - 4 5 6 7 -	45-46	1 - 3 4 - 6 7 -	69-70	1 - - - - 6 7 -	93-94	1 - 3 - 5 - 7 -
23-24	- - - 4 5 6 7 -	47-48	- - 3 4 - 6 7 -	71-72	- - - - - 6 7 -	95-96	- - 3 - 5 - 7 -
25-26	1 2 3 - 5 6 7 -	49-50	1 2 - 4 - 6 7 -	73-74	1 2 3 4 5 - 7 -	97-98	1 2 - - 5 - 7 -
27-28	- 2 3 - 5 6 7 -	51-52	- 2 - 4 - 6 7 -	75-76	- 2 3 4 5 - 7 -	99-100	- 2 - - 5 - 7 -
29-30	1 - 3 - 5 6 7 -	53-54	1 - - 4 - 6 7 -	77-78	1 - 3 4 5 - 7 -	101-102	1 - - - 5 - 7 -
31-32	- - 3 - 5 6 7 -	55-56	- - - 4 - 6 7 -	79-80	- - 3 4 5 - 7 -	103-104	- - - - 5 - 7 -

**Note:** the position of selector 8 is reserved for the repetition function (OFF = disabled, ON = enabled).





## ETR48, ETR128 - 256 - 512, TITANIA control units:

Addresses	ON switches
17-18	1 2 3 4 5 6 7 -
19-20	- 2 3 4 5 6 7 -
21-22	1 - 3 4 5 6 7 -
23-24	-- 3 4 5 6 7 -
25-26	1 2 - 4 5 6 7 -
27-28	- 2 - 4 5 6 7 -
29-30	1 -- 4 5 6 7 -
31-32	--- 4 5 6 7 -
33-34	1 2 3 - 5 6 7 -
35-36	- 2 3 - 5 6 7 -
37-38	1 - 3 - 5 6 7 -
39-40	-- 3 - 5 6 7 -
41-42	1 2 -- 5 6 7 -
43-44	- 2 -- 5 6 7 -
45-46	1 --- 5 6 7 -
47-48 <sup>(1)</sup>	---- 5 6 7 -
49-50	1 2 3 4 - 6 7 -
51-52	- 2 3 4 - 6 7 -
53-54	1 - 3 4 - 6 7 -
55-56	-- 3 4 - 6 7 -
57-58	1 2 - 4 - 6 7 -
59-60	- 2 - 4 - 6 7 -
61-62	1 -- 4 - 6 7 -
63-64	--- 4 - 6 7 -
65-66	1 2 3 -- 6 7 -
67-68	- 2 3 -- 6 7 -
69-70	1 - 3 -- 6 7 -
71-72	-- 3 -- 6 7 -
73-74	1 2 --- 6 7 -
75-76	- 2 --- 6 7 -
77-78	1 ---- 6 7 -
79-80	----- 6 7 -

Addresses	ON switches
81-82	1 2 3 4 5 - 7 -
83-84	- 2 3 4 5 - 7 -
85-86	1 - 3 4 5 - 7 -
87-88	-- 3 4 5 - 7 -
89-90	1 2 - 4 5 - 7 -
91-92	- 2 - 4 5 - 7 -
93-94	1 -- 4 5 - 7 -
95-96	--- 4 5 - 7 -
97-98	1 2 3 - 5 - 7 -
99-100	- 2 3 - 5 - 7 -
101-102	1 - 3 - 5 - 7 -
103-104	-- 3 - 5 - 7 -
105-106	1 2 -- 5 - 7 -
107-108	- 2 -- 5 - 7 -
109-110	1 --- 5 - 7 -
111-112	---- 5 - 7 -
113-114	1 2 3 4 -- 7 -
115-116	- 2 3 4 -- 7 -
117-118	1 - 3 4 -- 7 -
119-120	-- 3 4 -- 7 -
121-122	1 2 - 4 -- 7 -
123-124	- 2 - 4 -- 7 -
125-126	1 -- 4 -- 7 -
127-128 <sup>(2)</sup>	--- 4 -- 7 -
129-130	1 2 3 --- 7 -
131-132	- 2 3 --- 7 -
133-134	1 - 3 --- 7 -
135-136	-- 3 --- 7 -
137-138	1 2 ---- 7 -
139-140	- 2 ---- 7 -
141-142	1 ---- 7 -
143-144	----- 7 -

Addresses	ON switches
145-146	1 2 3 4 5 6 --
147-148	- 2 3 4 5 6 --
149-150	1 - 3 4 5 6 --
151-152	-- 3 4 5 6 --
153-154	1 2 - 4 5 6 --
155-156	- 2 - 4 5 6 --
157-158	1 -- 4 5 6 --
159-160	--- 4 5 6 --
161-162	1 2 3 - 5 6 --
163-164	- 2 3 - 5 6 --
165-166	1 - 3 - 5 6 --
167-168	-- 3 - 5 6 --
169-170	1 2 -- 5 6 --
171-172	- 2 -- 5 6 --
173-174	1 --- 5 6 --
175-176	---- 5 6 --
177-178	1 2 3 4 - 6 --
179-180	- 2 3 4 - 6 --
181-182	1 - 3 4 - 6 --
183-184	-- 3 4 - 6 --
185-186	1 2 - 4 - 6 --
187-188	- 2 - 4 - 6 --
189-190	1 -- 4 - 6 --
191-192	--- 4 - 6 --
193-194	1 2 3 -- 6 --
195-196	- 2 3 -- 6 --
197-198	1 - 3 -- 6 --
199-200	-- 3 -- 6 --
201-202	1 2 --- 6 --
203-204	- 2 --- 6 --
205-206	1 ---- 6 --
207-208	----- 6 --

Addresses	ON switches
209-210	1 2 3 4 5 ---
211-212	- 2 3 4 5 ---
213-214	1 - 3 4 5 ---
215-216	-- 3 4 5 ---
217-218	1 2 - 4 5 ---
219-220	- 2 - 4 5 ---
221-222	1 -- 4 5 ---
223-224	--- 4 5 ---
225-226	1 2 3 - 5 ---
227-228	- 2 3 - 5 ---
229-230	1 - 3 - 5 ---
231-232	-- 3 - 5 ---
233-234	1 2 -- 5 ---
235-236	- 2 -- 5 ---
237-238	1 --- 5 ---
239-240	---- 5 ---
241-242	1 2 3 4 ----
243-244	- 2 3 4 ----
245-246	1 - 3 4 ----
247-248	-- 3 4 ----
249-250	1 2 - 4 ----
251-252	- 2 - 4 ----
253-254	1 -- 4 ----
255-256 <sup>(3)</sup>	--- 4 ----
257-258	1 2 3 -----
259-260	- 2 3 -----
261-262	1 - 3 -----
263-264	-- 3 -----
265-266	1 2 -----
267-268	- 2 -----
269-270	1 -----
271-272	-----

<sup>(1)</sup> end of the available addresses for ETR48

<sup>(2)</sup> end of the available addresses for ETR128

<sup>(3)</sup> end of the available addresses for ETR256

**Note:** the position of selector 8 is reserved for the repetition function (OFF = disabled, ON = enabled).

**Note:** the output repetition function does not allow to manage the concentrator inputs.

**PREGIO, VIDOMO2K, PROXIMA control units:**

Addresses	ON switches	Addresses	ON switches	Addresses	ON switches	Addresses	ON switches
1-2	1234567-	65-66	12345-7-	129-130	123456--	193-194	12345---
3-4	-234567-	67-68	-2345-7-	131-132	-23456--	195-196	-2345---
5-6	1-34567-	69-70	1-345-7-	133-134	1-3456--	197-198	1-345---
7-8	--34567-	71-72	--345-7-	135-136	--3456--	199-200	--345---
9-10	12-4567-	73-74	12-45-7-	137-138	12-456--	201-202	12-45---
11-12	-2-4567-	75-76	-2-45-7-	139-140	-2-456--	203-204	-2-45---
13-14	1--4567-	77-78	1--45-7-	141-142	1--456--	205-206	1--45---
15-16	---4567-	79-80	---45-7-	143-144	---456--	207-208	---45---
17-18	123-567-	81-82	123-5-7-	145-146	123-56--	209-210	123-5---
19-20	-23-567-	83-84	-23-5-7-	147-148	-23-56--	211-212	-23-5---
21-22	1-3-567-	85-86	1-3-5-7-	149-150	1-3-56--	213-214	1-3-5---
23-24 <sup>(1)</sup>	--3-567-	87-88	--3-5-7-	151-152	--3-56--	215-216	--3-5---
25-26	12--567-	89-90	12--5-7-	153-154	12--56--	217-218	12--5---
27-28	-2--567-	91-92	-2--5-7-	155-156	-2--56--	219-220	-2--5---
29-30	1---567-	93-94	1---5-7-	157-158	1---56--	221-222	1---5---
31-32	----567-	95-96	----5-7-	159-160	----56--	223-224	----5---
33-34	1234-67-	97-98	1234--7-	161-162	1234-6--	225-226	1234----
35-36	-234-67-	99-100	-234--7-	163-164	-234-6--	227-228	-234----
37-38	1-34-67-	101-102	1-34--7-	165-166	1-34-6--	229-230	1-34----
39-40	--34-67-	103-104 <sup>(4)</sup>	--34--7-	167-168	--34-6--	231-232	--34----
41-42	12-4-67-	105-106	12-4--7-	169-170	12-4-6--	233-234	12-4----
43-44	-2-4-67-	107-108	-2-4--7-	171-172	-2-4-6--	235-236	-2-4----
45-46	1--4-67-	109-110	1--4--7-	173-174	1--4-6--	237-238	1--4----
47-48 <sup>(2)</sup>	---4-67-	111-112	---4--7-	175-176	---4-6--	239-240	---4----
49-50	123--67-	113-114	123---7-	177-178	123--6--	241-242	123-----
51-52	-23--67-	115-116	-23---7-	179-180	-23--6--	243-244	-23-----
53-54	1-3--67-	117-118	1-3---7-	181-182	1-3--6--	245-246	1-3-----
55-56	--3--67-	119-120	--3---7-	183-184	--3--6--	247-248	--3-----
57-58	12---67-	121-122	12----7-	185-186	12---6--	249-250	12-----
59-60	-2---67-	123-124	-2----7-	187-188	-2---6--	251-252	-2-----
61-62	1----67-	125-126	1-----7-	189-190	1----6--	253-254	1-----
63-64 <sup>(3)</sup>	-----67-	127-128 <sup>(5)</sup>	-----7-	191-192	-----6--	255-256 <sup>(6)</sup>	-----

<sup>(1)</sup> end of the available addresses for PREGIO500

<sup>(2)</sup> end of the available addresses for PREGIO1000

<sup>(3)</sup> end of the available addresses for VIDOMO2K

<sup>(4)</sup> end of the available addresses for PREGIO2000

<sup>(5)</sup> end of the available addresses for PRX128

<sup>(6)</sup> end of the available addresses for PRX256, PRX1024

**Note:** the position of selector 8 is reserved for the repetition function (OFF = disabled, ON = enabled).



## 7. PROGRAMMING

The RIVERNANO2 concentrator can be programmed using BrowserOne. The following picture shows, as an example, the main screen of a browser that is compatible with an ETR G2 control unit, and a detail of the settings for a 2-input concentrator like RIVERNANO2.

Zones	Areas	Outputs	Users	MFT	Devices	Settings	Guard Round	Timer	Dialer	Events History					
	Name	Connected	8 inputs dev.	4 inputs dev.	2 inputs dev.	1 input dev.	Virtual concentrator	Real outputs	Virtual outputs	Fast	Sensitivity	Integration			
016	Ingresso n.016	<input checked="" type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0			
017	Ingresso n.017	<input checked="" type="checkbox"/>			X			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0			
018	Ingresso n.018	<input type="checkbox"/>				X		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10	10			
019	Ingresso n.019	<input type="checkbox"/>		X				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0			

Zone: Assign Areas/Partitions Concentrators

**2 inputs concentrator N° 1** ← Device type identification.

Zone assigned to:

8 inputs device

4 inputs device

2 inputs device

1 input device

Virtual concentrator

RiverTH - Ingresso n.017

Upper threshold (mA)

Lower threshold (mA)

Histeresys (mA)

Upper threshold (°C)

Lower threshold (°C)

Histeresys (°C)

Concentrator setup

Address setting.

Ingresso n.017

Fast

Sensitivity  ← Sensitivity adjustment.

Integration  ← Integration adjustment.

Output

Real  Virtual

Advanced devices configuration

No devices supported for zone 17.

**IMPORTANT:** remember that four RIVERNANO2 can be connected in place of one RIVER device. It will not be possible, for example, to install a RIVER concentrator after a RIVERNANO2 concentrator because, in this case, some addresses would be left unused. Refer to the browser of the specific compatible control unit for further information on programming via browser.

## 8. TABLE OF CONTENT

---

1. GENERALS .....	3
2. FEATURES .....	3
3. INSTALLATION .....	4
3.1 Board description .....	4
4. ELECTRICAL WIRING .....	6
5. SENSITIVITY AND INTEGRATION .....	7
6. SETTING THE RIVERNANO2 IDENTIFICATION CODE .....	8
7. PROGRAMMING .....	11
8. TABLE OF CONTENT .....	12

Miniaturized serial line concentrator with 2 programmable inputs mod. RIVERNANO2  
TECHNICAL MANUAL - August 2021 edition

090011225

Product specifications as described above do not bind the manufacturer and may be altered without prior notice.

**EL.MO. SpA** Via Pontarola, 70 - 35011 Campodarsego (PD) - Italy  
Tel. +390499203333 - Fax +390499200306 - Technical Ass. +390499200426 - [www.elmospa.com](http://www.elmospa.com) - [international@elmospa.com](mailto:international@elmospa.com)