



EXPANSION CARD RELÈ-IO

Rel. 02.01.0001
(Product code: RELÈ-IO(-SEL))



Information provided in this manual is property of IPSES S.r.l. and must be considered and treated as confidential.

This publication can only be reproduced, transmitted, transcribed or translated into any human or computer language with the written consent of IPSES S.r.l.

Information in this documentation has been carefully checked and is believed to be accurate as of the date of publication; however, no responsibility is assumed of inaccuracies. IPSES will not be liable for any consequential or incidental damages arising from reliance on the accuracy of this documentation.

Information contained in this manual is subject to change without notice and does not represent a commitment on the part of IPSES. The design of this instrument is subject to continue development and improvement. Consequently, the equipment associated to this document may incorporate minor changes in detail from the information hereafter provided.

All brand or product names are trademarks or registered trademarks of their respective holders.

This manual in English is the original version.

Printed in Italy

Copyright © 2013-2016 IPSES S.r.l. – IPSES is a trade mark.

All rights reserved.

GUARANTEE

IPSES warrants to the end-user in accordance with the following provisions that its branded hardware products, purchased by the end-user from IPSES company or an authorized IPSES distributor will be free from defects in materials, workmanship and design affecting normal use, for a period of one year as of the original purchase date. Products for which proper claims are made will, at IPSES's option, be repaired or replaced at IPSES's expense¹.

Exclusions

This Guarantee does not apply to defects resulting from: improper or inadequate installation, use or maintenance; actions or modifications by unauthorized third parties or the end-user; accidental or wilful damage or normal wear and tear.

Making a claim:

Claims must be made by contacting IPSES office within the guarantee period.
Please, contact:

IPSES S.r.l. - Via Suor Lazzarotto, 10 - 20020 Cesate (MI) Italy
Tel. (+39) 02 39449519 Fax (+39) 02 700403170
<http://www.ipses.com> - e-mail: support@ipses.com

Limitation and Statutory Rights

IPSES makes no other warranty, guarantee or like statement other than as explicitly stated above and this Guarantee is given in place of all other guarantees whatsoever, to the fullest extent permitted by law. In the absence of applicable legislation, this Guarantee will be the end user's sole and exclusive remedy against IPSES.

General Provisions

IPSES makes no express warranties or conditions beyond those stated in this warranty statement. IPSES disclaims all other warranties and conditions, express or implied, including without limitation implied warranties and conditions of merchantability and fitness for a particular purpose.

IPSES's responsibility for malfunctions and defects in hardware is limited to repair and replacement as set forth in this warranty statement.

IPSES does not accept liability beyond the remedies set forth in this warranty statement or liability for incidental or consequential damages, including without limitation any liability for products not being available for use or for lost data or software.

¹With the exclusion of shipping costs for and from IPSES's development office.

WARNING!**ELECTRICAL DEVICES COULD DAMAGE EQUIPMENT OR PROPERTY OR CAUSE PERSONAL INJURY**

This guide contains instructions and technical features of the **RELAY-IO expansion card**.

Read with attention before attempting to install.

It is the responsibility of the technician to undertake all the safety rules provided by the law during the installation and the use of this device.

For any information that is not contained in this guide, please contact:

IPSES S.r.l. - Via Suor Lazzarotto, 10 - 20020 Cesate (MI) Italy
Tel. (+39) 02 39449519 Fax (+39) 02 700403170
<http://www.ipses.com> - e-mail: support@ipses.com

TABLE OF CONTENTS

GENERAL FEATURES	7
DESCRIPTION OF THE CARD	8
POWER SUPPLY.....	17
WIRING AND CONNECTION OF THE SYSTEM WITH I/O CARDS	18
TECHNICAL FEATURES	20
PRODUCT CODE	21
IPSES I/O CARD SERIES	22
CONTACTS	25
ENGINEERING PROBLEM REPORT	27

REVISION HISTORY

Manual revision history

Revision/ Date	Change description	Author
01.00.0000 July, 2013	First version Released	Mancuso C.
02.00.0000 August, 2014	Added RELÈ-IO-SEL model description. Update power supply technical characteristics. Modified product codes.	Rivolta A. Mancuso C.
02.01.0000 March, 2016	Input voltage modified. Product codes modified. Minor changes.	Bottaccioli M.
02.01.0001 August, 2016	Added ISO 9001:20015 logo	Bottaccioli M.

GENERAL FEATURES

The RELÉ-IO(-SEL) family boards are interface modules with 16 digital inputs which can control 16 relay outputs SPDT 5A @ 250V_{AC} or 5A @ 24V_{DC} each.

These modules can be used as an expansion for any I/O card, transforming the TTL or contact freedmen open-collector type outputs (up to a maximum of 16 ones) in 16 relay outputs with double throw.

In RELÉ-IO version the sixteen outputs are divided in two groups of eight. Each output is provided with NC and NO contacts. The COM contact is in common to all the outputs of each group.

In RELÉ-IO-SEL board, outputs are configurable as NO or NC by setting their jumper. In this board each output has the own COM contact.

To operate the cards require an external power supply. Two versions are available: RELÉ-IO(-SEL)-5 which requires an external power supply of 5V_{DC} or RELÉ-IO(-SEL)-24 which requires an external power supply included from 7V_{DC} up to 24V_{DC}.

The card is in standard Eurocad format (100 x 160 x20 mm – 3.94 x 6.30 x 0.79inches) and can be supplied mounted on opened DIN rail.



DESCRIPTION OF THE CARD

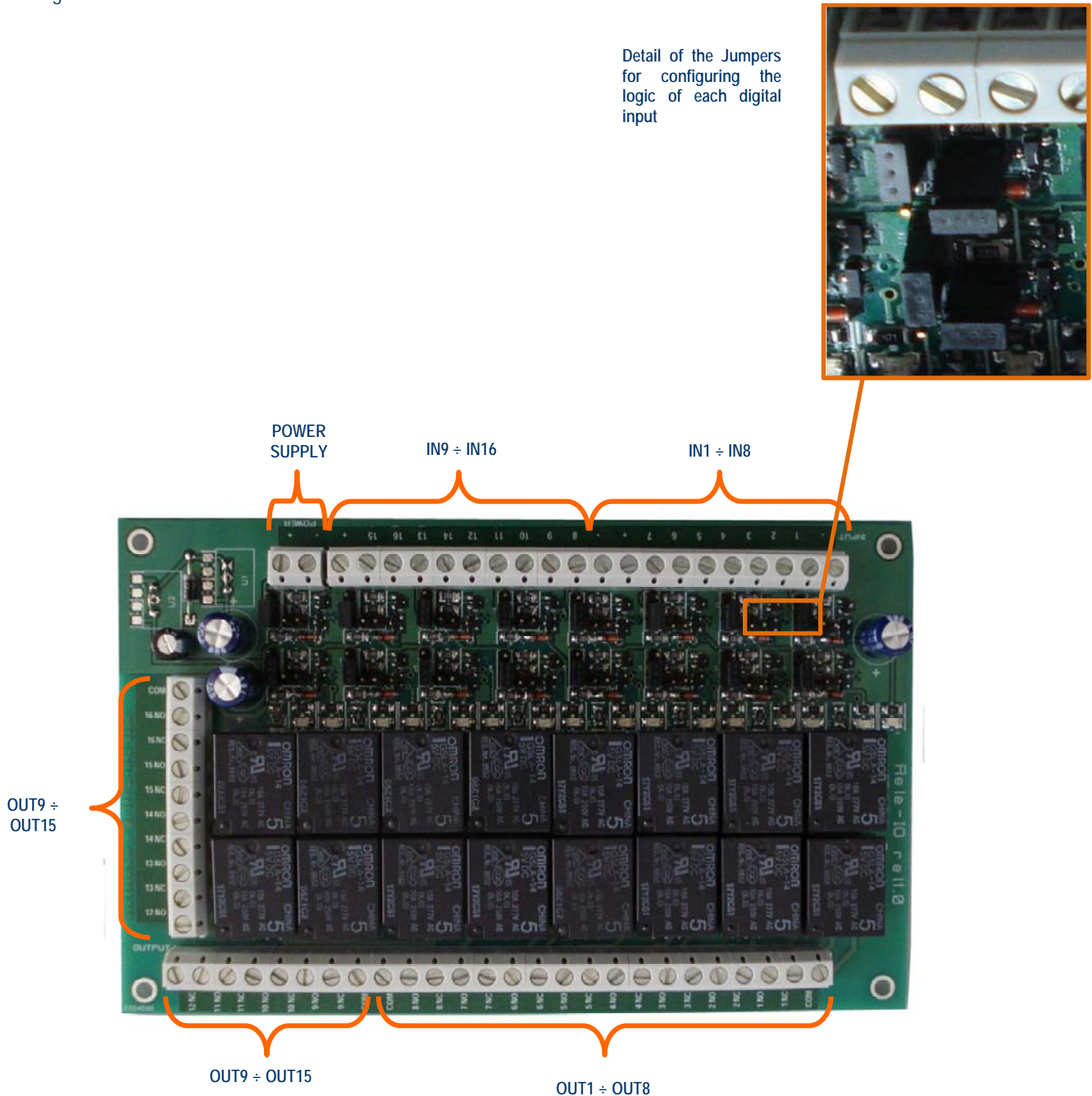
RELÈ-IO is shown in Picture 1a: in the lower part COM, NC and/or NO relay contacts are grouped, in the upper part there are the digital inputs contacts and the board power supply, as highlighted in the relevant picture.

Each digital input can be configured in an independent manner, using the appropriate jumper, to manage a high active logic control (1) or a low active one (0).

RELÈ-IO-SEL card is shown in Picture 1b: the upper part is the same in both boards, in the lower part there are the outputs and their configuration jumper.

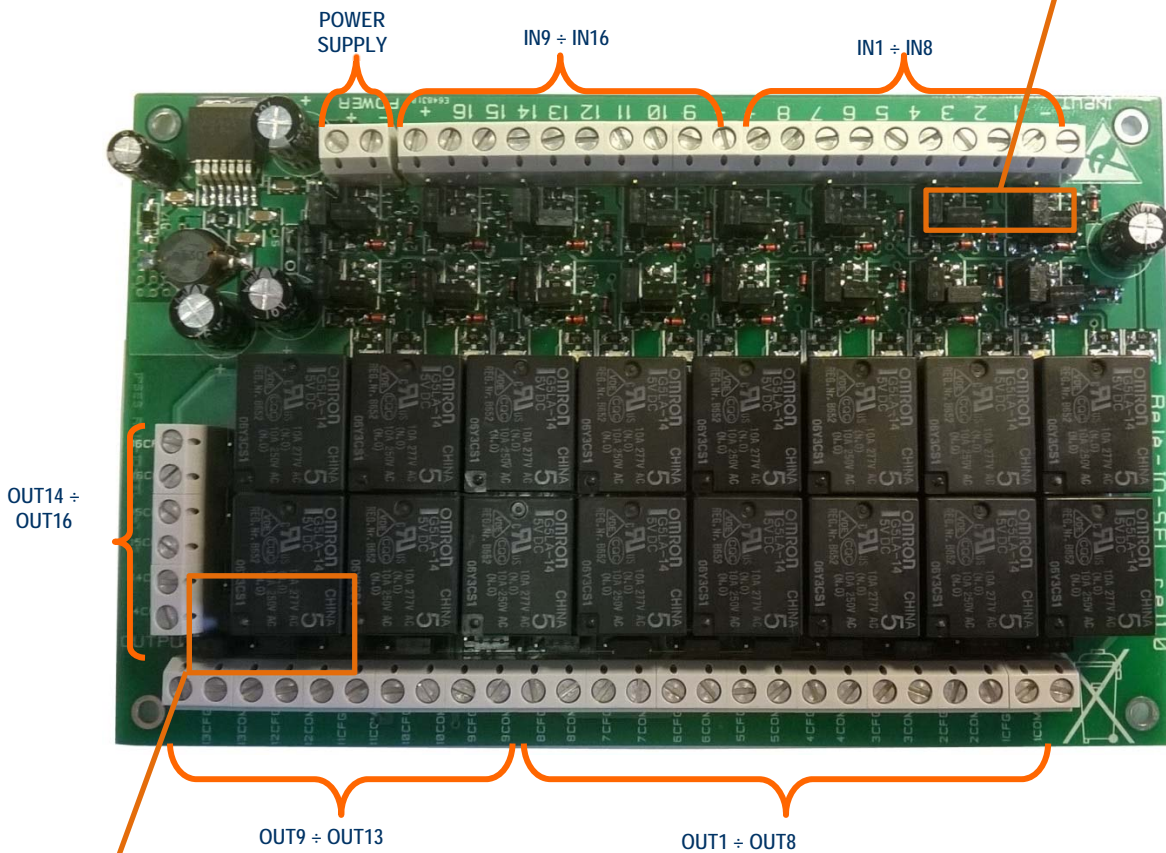
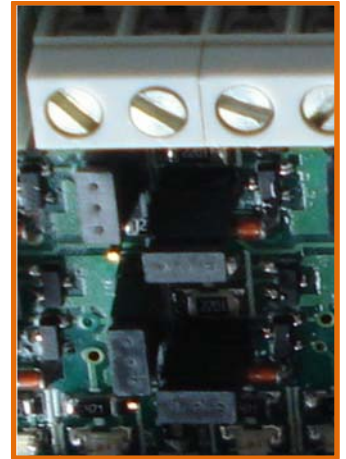
In the RELÈ-IO model the 16 relays are divided in two groups of 8, each of which shares the COM signal of the central exchange contact. Moreover, the NC and NO contacts are available on the output connectors for each relay.

In RELÈ-IO-SEL model, the relays are independent and each of them provides COM contact and one between NC and NO contacts, based on selector configuration.



Picture 1a: RELÈ-IO board. Inputs with related jumpers and output are highlighted

Detail of the Jumpers for configuring the logic of each digital input

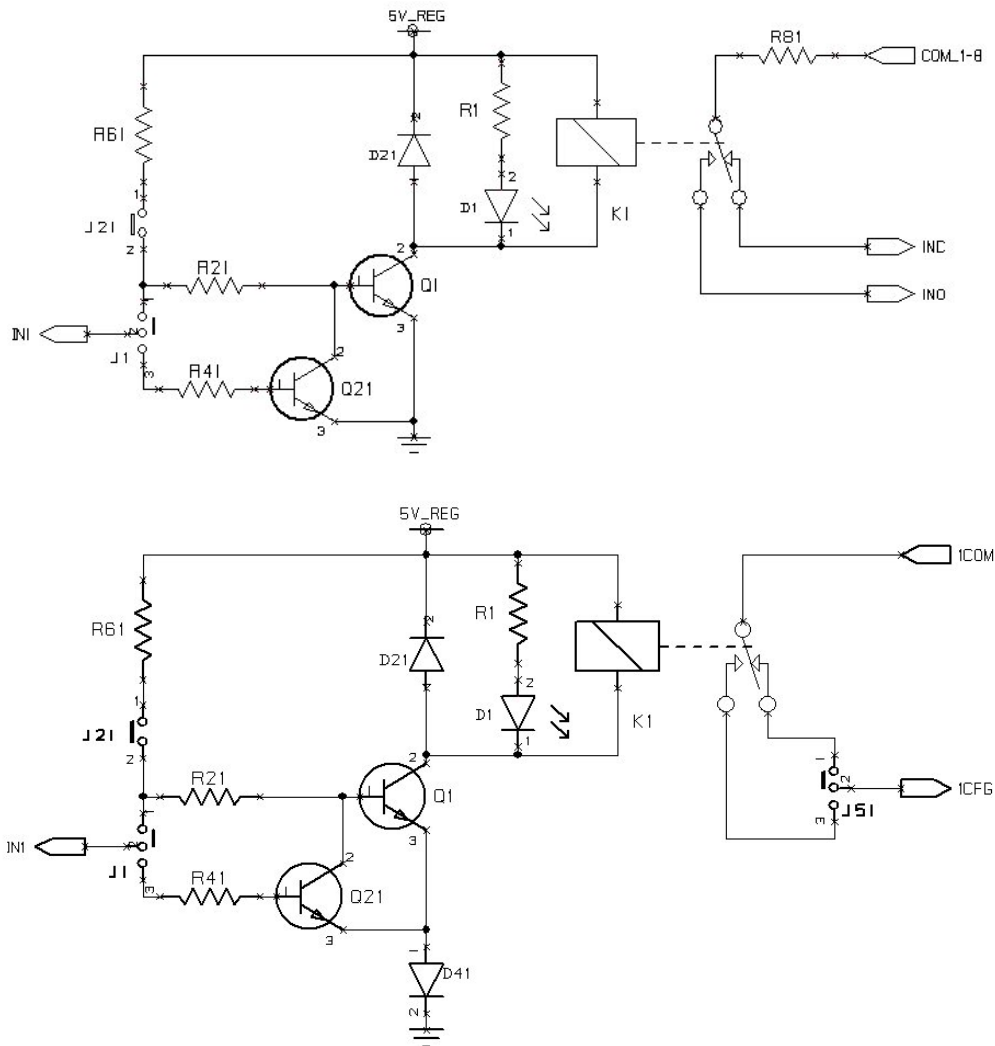


Detail of the Jumpers for configuring each output



Picture 1a: RELÈ-IO-SEL board. Inputs with related jumpers and output with related jumpers are highlighted

Picture 2 shows the electric wiring diagram related to relay 1 as an example of equivalent schema for each relay, for both models.



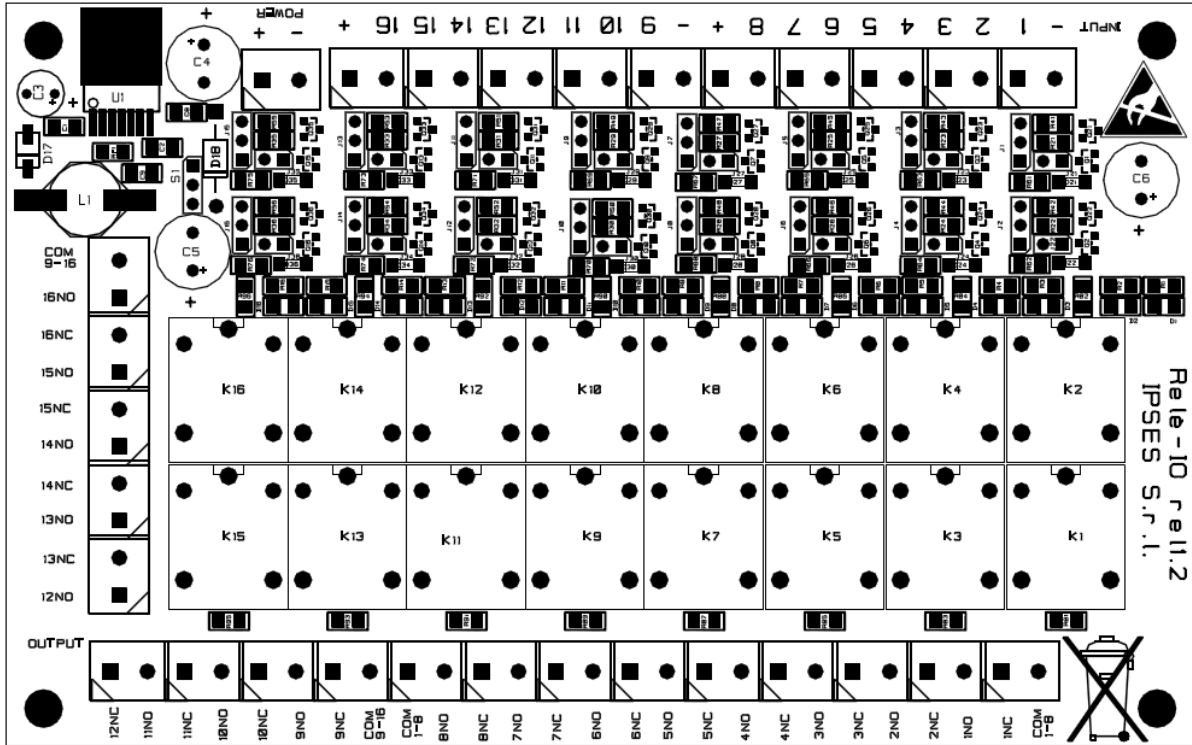
Picture 2: electric wiring diagram of a relay: a) RELÈ-IO model, b) RELÈ-IO-SEL model

Each input has two jumpers: one is a selector of the control mode – high or low logic control - (J1..J16), while the other one is a jumper for enabling / disabling the pull-up (J21..J36).

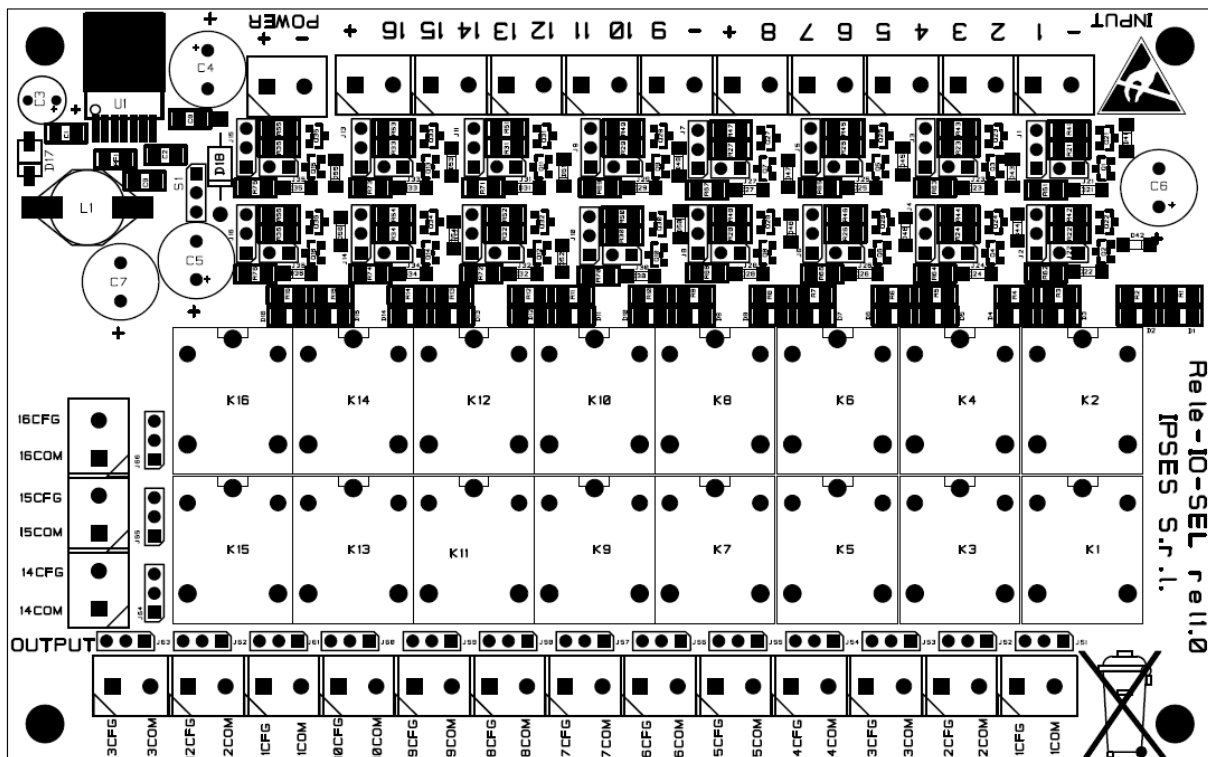
Each relay is equipped with a protection diode and a LED (D1..D16) to show the status of the coil.

The output configuration depend on selected model: for **RELÈ-IO** board the COM contact is common to 8 relay and the NC and NO contacts are both available, for **RELÈ-IO-SEL** model the COM contact is related to specific relay and the CFG output can be NC or NO contact based on J51..J66 selectors.

Pictures below show the layout of each version of the board.



Picture3a: RELAY-IO layout



Picture3b: RELAY-IO-SEL layout

OUTPUTS

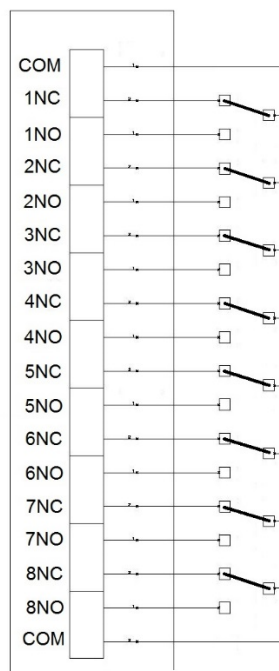
The output relays are of the double throw kind (SPDT - *single pole double throw*) and support up to 5A @ 250V_{AC} or 5A @ 24V_{DC}.

In **RELÈ-IO** model boards the relay outputs are labeled with the following nomenclature: xNC and xNO, where x is the relay to which they relate to [1..16].

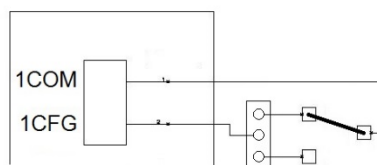
The 16 relays are also divided into two groups of 8, each of which shares the COM signal: on the terminal blocks of the outputs two COM contacts for both groups (1..8 and 9..16) are physically present, located respectively at the end of each group, as shown in Picture 4a.

In **RELÈ-IO-SEL** model boards the relay outputs are labeled with the following nomenclature: xCOM and xCFG, where x is the relay to which it relates to [1..16]. The CFG output can be NC or NO contact based on proper selector configuration, as shown in Picture 4b. The jumpers positioned on the outputs allow to configure the relay to NO or NC, as shown in Picture 5

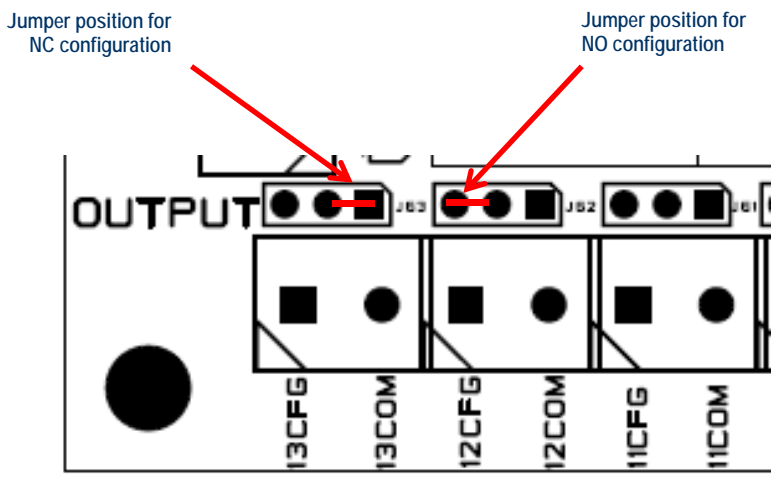
Each relay has an indicator LED [D1 .. D16]: If the LED is lit, the central pole of the relay is switched to NO, otherwise to NC.



Picture 4a: connection of the 1-8 outputs on the RELÈ-IO board



Picture 4b: connection of the output 1 on the RELÈ-IO-SEL board



Picture 5: RELÈ-IO-SEL board: position of the jumpers to obtain NC and NO relay

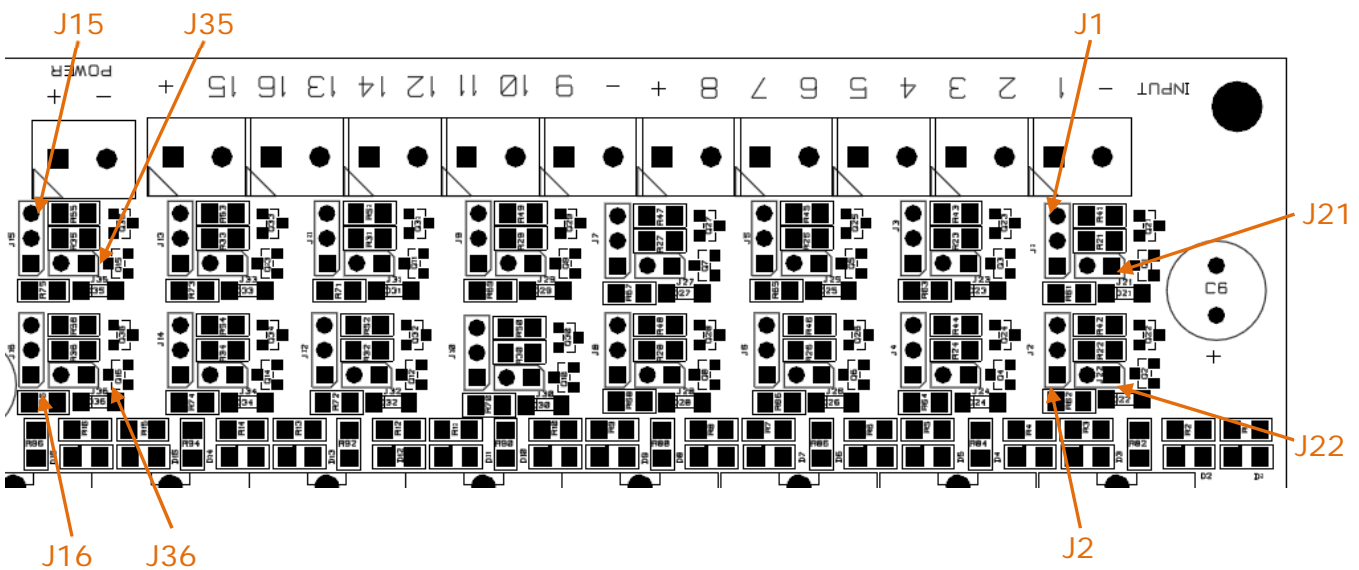
INPUTS

The proper J1..J16 e J21..J36 jumper configuration allows to select the activation logic of the relevant relay, as it is shown in the following table:

Driving logic (INPUT)	J1..J16 jumper position	J21..J36 Jumpers
Direct logic Voltage (Vin=0 → Relay off, Vin=1 → Relay on)	1-2 position	No present
Reverse logic voltage (Vin=0 → NO, Vin=1 → Relay off)	2-3 position	Present
Free contact toward +V (open → Relay off, close → NO)	1-2 position	No present
Free contact toward +V (open → NO, close → Relay off)	2-3 position	Present
Free contact toward GND (close → NO, open → Relay off)	1-2 position	Present

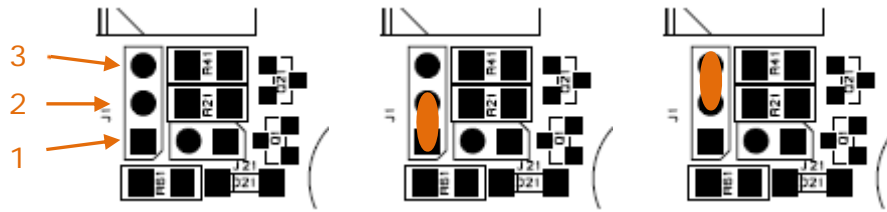
The input terminal block also has two "+" connectors and two "-" connectors. These connectors provide a voltage to +5 V generated by the board itself, this voltage does not depends on the power supply value: so the same value is available for both models/versions RELÈ-IO(-SEL)-5 and RELÈ-IO(-SEL)-24. This voltage can be used to supply the logic of the outputs of a connected IO card or a possible control circuit. The "-" connector is also the voltage reference (GND) for all the inputs.

Picture 5 shows the *jumper* position on the board: in the top row, from left to right, there are the jumper of the odd inputs (1, 3, ...), while in the bottom row, always from right to left there are the jumper of the even inputs (2, 4, ...).



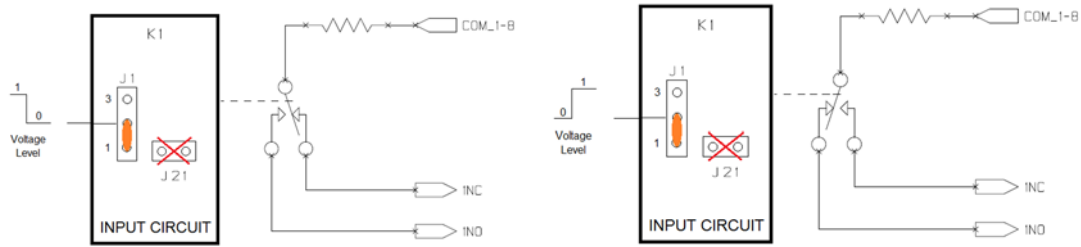
Picture 6: *jumper* position on RELAY-IO board

Picture 6 shows the *pin-out* related to the input selector J1 and the relevant configuration to be used to drive the relay with direct or reverse logic. The exemplum is valid for all the selector from J1 up to J16.

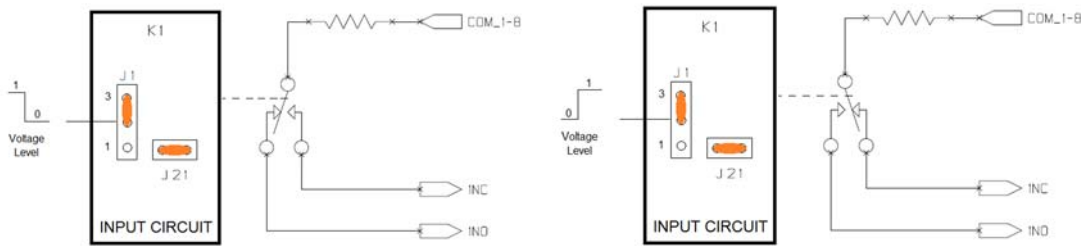


Picture 7: a) pin-out of J1 jumper; b) direct logic driving; c) reverse logic driving

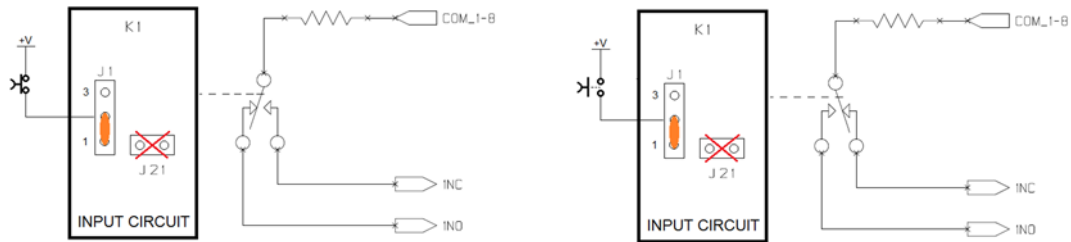
Diagram of the possible input connections; these examples are valid for both models.



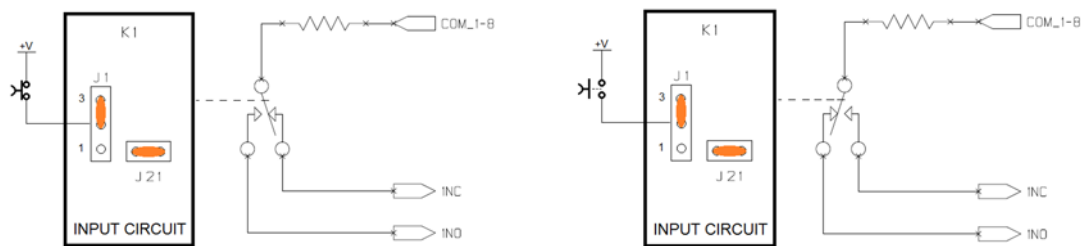
Picture 8: Direct voltage driving (J1:1-2, J21: no present) - a) 0 level; b) 1level



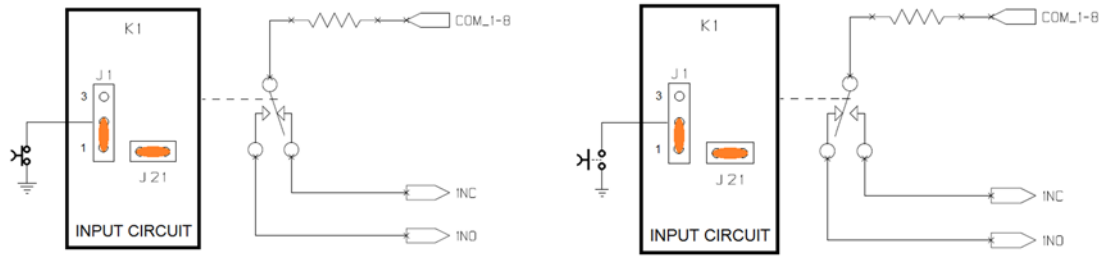
Picture9: Reverse voltage driving (J1:2-3, J21: present) - a) 0 level; b) 1level



Picture 10: Driving with contact on +V (J1:1-2, J21: no present) - a) close contact; b) open contact



Picture 11: Driving with contact on +V (J1:2-3, J21: present) - a) close contact; b) open contact



Picture 12: Driving with contact on GND (J1:1-2, J21: present) - a) close contact; b) open contact

POWER SUPPLY

On the board there is a connector for the supply of the card (see Picture 1: the connector is labeled "POWER"); through this one is possible to supply the board with voltage values of $+5V_{DC}$ or with voltage values include from $7V_{DC}$ up to $24V_{DC}$, depending on the selected version of the card (RELÈ-IO(-SEL)-5 or RELÈ-IO(-SEL)-24). The board generates a supply of $5V_{DC}$ (for both models) that is available from "+" and "-" connectors on the terminal block of the inputs (see pag. 14 of the present manual for further details about).



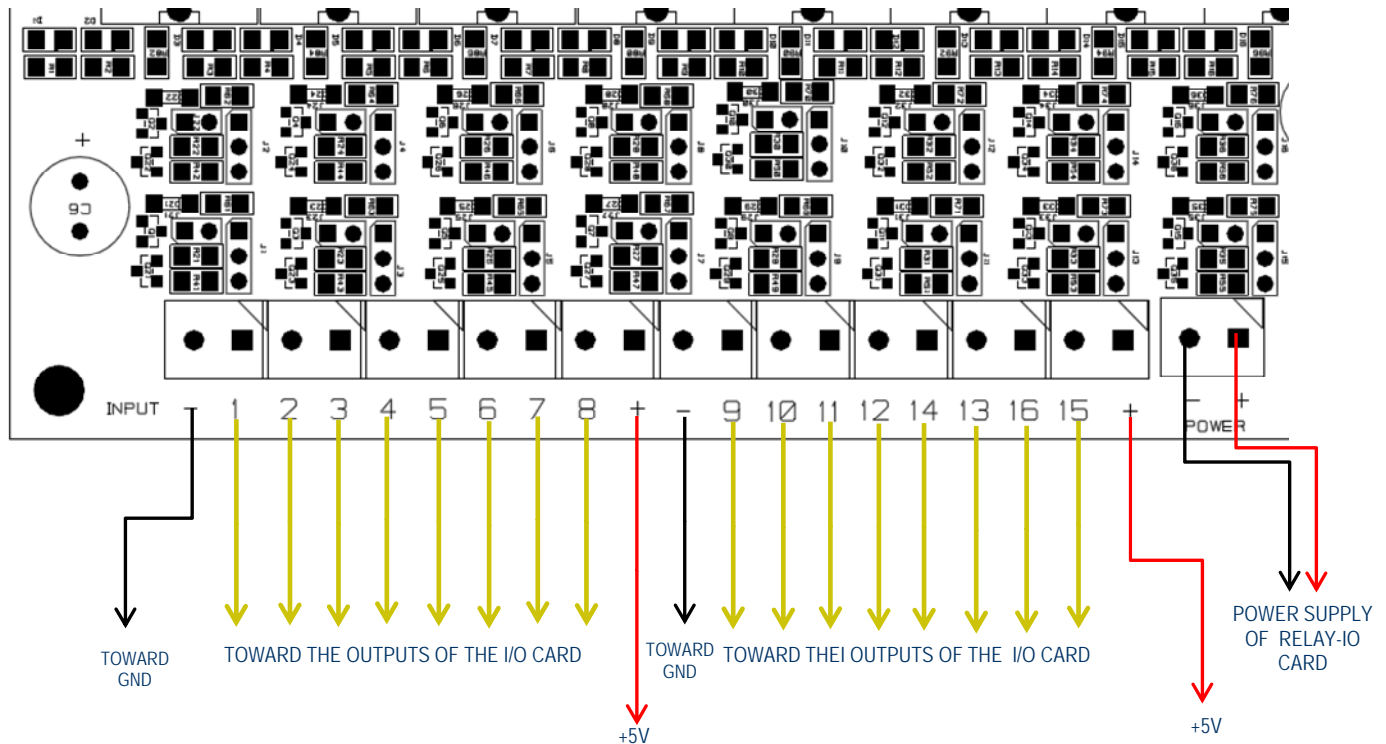
WARNING!

For RELÈ-IO(-SEL)-5 version the maximum supply voltage must never exceed $+6V_{DC}$: higher voltage may cause irreparable damage to the components on the board.

For RELÈ-IO(-SEL)-24 version the maximum supply voltage must never exceed $+24V_{DC}$: higher voltage may cause irreparable damage to the components on the board. A voltage lower than $7V_{DC}$ may cause a malfunction of the card.

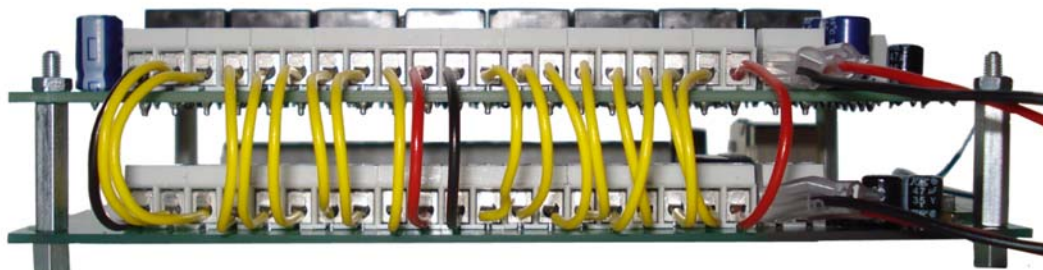
WIRING AND CONNECTION OF THE SYSTEM WITH I/O CARDS

The expansion card RELÈ-IO(-SEL) can be connected to any I/O card that has up to 16 digital outputs. To wire the board, it is enough to connect the outputs of the IO card to the inputs of the relay board, linking the terminals of the output to the relevant inputs using a cable. The two connectors labeled as "-" must be connected to the voltage reference (GND) of the outputs of the I/O card, while the two connectors labeled as "+" lead a voltage of +5V, which can be connected to the I/O card if it should be necessary to supply the output section, as shown schematically in Picture 13.



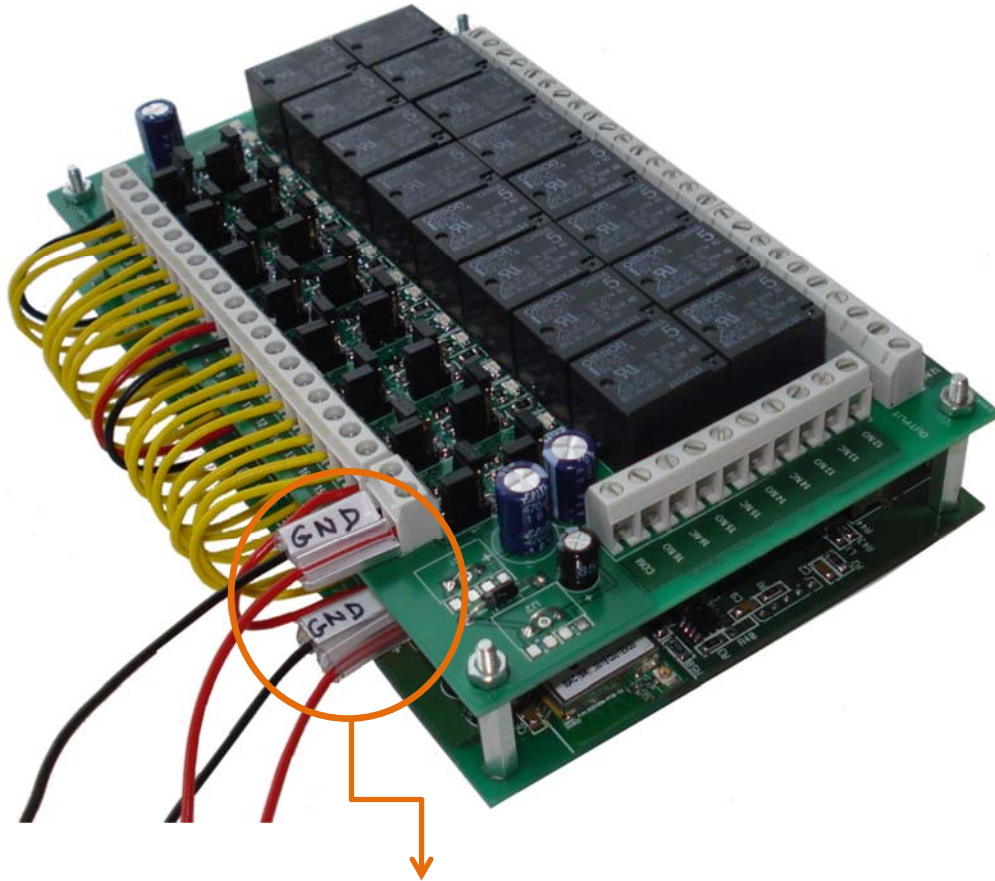
Picture 13: Wiring of the card: schematic of the connection of RELÈ-IO(-SEL) card toward an I/O board

The RELÈ-IO(-SEL) boards have been designed for an optimal use in association with IPSES I/O cards: indeed, the size and overall dimensions are similar to allow the mounting of the expansion relay card above the I/O card using spacers placed into the 4 holes in the corners of both cards, as shown in picture 13. The position of the outputs of the I/O card, GND and power stage will be in perfect correspondence with the input connectors of the RELAY card, so to make the wiring extremely simple and minimal. The maximum height of the stacked boards is 40mm (with 20mm spacers).



Picture 14: RELÈ-IO(-SEL) card wired on an IPSES I/O card

In case of connection with an IPSES I/O card, also the power stage of the two boards will overlap, as shown in Picture 14, so as to allow the power supply with a single power supply.



POWER SUPPLY OF RELAY CARD AND I/O CARD

Picture 15: RELÈ-IO(-SEL) card wired on an IPSES I/O card. Position of the power supply of both cards

TECHNICAL FEATURES

Power supply: external 5V_{DC} (for RELÈ-IO(-SEL)- 5 version) or external 7 – 24 V_{DC} (for RELÈ-IO(-SEL)-24 version)

Maximum current consumption: 1,5A @ 5V_{DC}

Working temperature: from 0°C up to +60°C

Storage temperature: from -40°C up to +85°C

Dimension of the board: 160 x 95 x 20 mm (6.30 x 3.74 x 0.79 inches)

Inputs: sixteen digital inputs

Maximum operative voltage:

5 V_{DC}

Power consumption:

from 0,20mA @3,3V up to 0,506 mA @3,3V according to jumper configuration

Input impedance:

from 3 kohm (direct driving logic) to 100 kohm (reverse driving logic)

LOW logical level:

< 0.5V_{DC}

HIGH logical level:

> 1.5V_{DC}

Outputs: sixteen SPDT (single pole double throw) relay outputs

Maximum switching current:

AC – 250V_{AC}

DC – 24V_{DC}

Maximum carrying current:

AC – 5A @ 250V_{AC}

DC – 5A @ 24V_{DC}

Maximum switching power on each output:

AC – 625VA

DC – 120W

Maximum contact resistance:

100 mohm max.

Activation time delay:

10 ms max.

Release time delay:

5 ms max.

Insulation resistance:

Minimum 1000 Mohm (@500V_{DC})

Protection: diode to protect against short circuit and reverse polarity supply.

PRODUCT CODE

Code	Description
RELÉ-IO-5	Relay expansion board for I/O cards with power supply of 5V _{DC}
RELÉ-IO-24	Relay expansion board for I/O cards with power supply from 7V _{DC} up to 24V _{DC}
RELÉ-IO-SEL-5	Relay expansion board for I/O cards with configurable output (NC/NO) and power supply of 5V _{DC}
RELÉ-IO-SEL-24	Relay expansion board for I/O cards with configurable output (NC/NO) and power supply from 7V _{DC} up to 24V _{DC}
RELÉ-IO-DIN	Relay expansion board mounted on open DIN rail

Notes: the RELÉ-IO(-SEL)-24 version substitute the previous RELÉ-IO-12 versions.

IPSES I/O CARD SERIES

IO-69: Input/output Card with 6 inputs and 9 relay outputs and USB interface



IO-69-USB is a self-powered card to manage six optocoupled inputs and nine relay outputs with USB interface.

A timeout control allows to protect the connecting devices, turning off all the outputs if it does not receive commands from the host within a time configurable through software.

Furthermore, there is the possibility to program all the outputs so that each one will activate only when inputs reach assigned conditions: in this case, IO-69 acts like a programmable logic controller (PLC).

The card is produced in two versions: with single pole double throw relay (SPDT) and with single pole single throw relay (SPST).

IO-1616: Input/output Card with 16 inputs and 16 outputs and USB interface

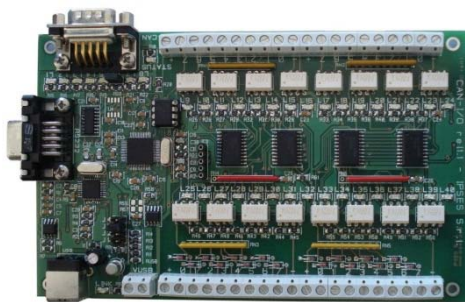


IO1616 is a self-powered card to manage sixteen optoisolated inputs and sixteen optoisolated outputs with USB interface or RS232 Interface.

IO1616 can be directly connected to PLC, to input devices from operator and to other I/O systems.

On request, an integrated temperature sensor allows to know in real time the temperature of the system IO1616 is placed in..

CAN-IO: Input/output Card with 16 inputs and 16 outputs with CAN, USB and RS232 interface



CAN-IO is a control unit equipped with CAN, USB and RS232 interfaces to manage sixteen optocoupled inputs and outputs. The card can work as standalone device on CAN BUS. Its configuration is achieved either through USB (in this case the board is self powered) or through RS232 interface. Easy to use and to configure, thanks to the provided software, CAN-IO is the right answer to the need to acquire and to drive digital signals through already existing CAN bus. CAN-IO can be directly connected to PLC, to input devices by operator and to other I/O systems.

Each input and output status can be read by a field bus at any moment. Besides, thanks to LEDs fixed on, the status is shown directly on the board. An integrated temperature sensor allows to know in real time the temperature of the system CAN-IO is placed in.

WEB-IO: Input/output Card with 16 inputs and 16 outputs, Ethernet interface, integrated web, telnet and SNMP servers and SMTP client.



WEB-IO is a card to manage sixteen optocoupled inputs and sixteen optocoupled outputs with Ethernet interface, equipped with a web, a telnet and an SNMP servers, and an SMTP client. The web server allows to connect and to manage the card using any web browser (i. e. Internet Explorer or Firefox), with no needs to install a software on your PC. Besides, the card can be connected directly to a switch or to a router with no need to use a PC. It is also possible to develop a customized software managed by telnet service or SNMP client. The SMTP client allows to send alert email based on inputs status change events.

WEB-IO can be directly connected to PLC, to input devices from operator and to other I/O systems. Each input and output status can be read by a web browser or a telnet client at any moment, besides it is shown directly on the board thanks to LEDs fixed on. On request, the card can be equipped with an integrated temperature sensor which allows to monitor in real time the temperature around the regulator voltage module. Through expansion connectors the card can be interfaced to a RTCLOG (Real Time Clock and Logger) optional module: by this way, it can perform a log of the I/O states on a dedicated memory.

WEB-IO is available also in box version, it is provided with a demo software for Windows environment, based on telnet service.

WEB-IO-WiFi: Input/output Card with 16 inputs and 16 outputs, Ethernet and WiFi interfaces, integrated web, telnet and SNMP servers



WEB-IO-WiFi is a card to manage sixteen optocoupled inputs and sixteen optocoupled outputs with Ethernet and WiFi interfaces, equipped with a web, a telnet and an SNMP servers. The web server allows to connect and to manage the card using any web browser (i. e. Internet Explorer or Firefox), with no needs to install a software on your PC. Besides, the card can be connected directly to a switch or to a router, by this way it can be accessed by any PC connected to Internet. It is also possible to develop a customized software managed by telnet service or SNMP protocol. The board is available with built-in antenna or with ultra-miniature coaxial (U.FL) connector for external antenna connection.

WEB-IO-WiFi can be directly connected to PLC, to input devices from operator and to other I/O systems. Each input and output status can be read by a web browser or a telnet client at any moment, besides it is shown directly on the board thanks to LEDs fixed on. On request, the card can be equipped with an integrated temperature sensor which allows to monitor in real time the temperature around the regulator voltage module.

WEB-ADIO: Input/output Card with 8 analogical inputs, 8 digital inputs, 8 analogical outputs and 8 digital outputs, Ethernet interface, integrated web, telnet and SNMP servers

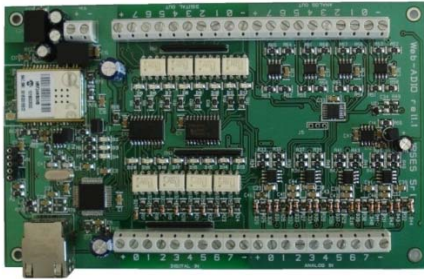


WEB-ADIO is a card to manage 8 optocoupled digital inputs, 8 analogical inputs, 8 optocoupled digital outputs and 8 analogical outputs with Ethernet interface, equipped with a web, a telnet and an SNMP servers. The WEB server allows to connect and to manage the card using any web browser (i. e. Internet Explorer and Firefox), with no needs to install a software on your PC. Besides, the card can be connected directly to a switch or to a router with no need to use a PC.

It is also possible to develop a customized software managed by telnet service. WEB-ADIO can be directly connected to PLC or to analogical transducer, to input devices from operator and to other I/O systems.

The analogical inputs and outputs have an operative voltage from 0V to 10V, with a resolution of 10mV and are calibrated one by one. Each input and output status can be read by a web browser or a telnet client at any moment, besides, the status of digital inputs and outputs it is shown directly on the board thanks to LEDs fixed on.

WEB-ADIO-WiFi: Input/output Card with 8 analogical inputs, 8 digital inputs, 8 analogical outputs and 8 digital outputs, Ethernet and WiFi interfaces, integrated web, telnet and SNMP servers



WEB-ADIO-WiFi is a card to manage 8 optocoupled digital inputs, 8 analogical inputs, 8 optocoupled digital outputs and 8 analogical outputs with Ethernet and WiFi interfaces, equipped with a web, a telnet and an SNMP servers. The web server allows to connect and to manage the card using any web browser (i. e. Internet Explorer and Firefox), with no needs to install a software on your PC. Besides, the card can be connected directly to a switch or to a router with no need to use a PC. The board is available with built-in antenna or with ultra-miniature coaxial (U.FL) connector for external antenna connection.

It is also possible to develop a customized software managed by telnet service. The analogical inputs and outputs have an operative voltage from 0V to 10V, with a resolution of 10mV and are calibrated one by one.

WEB-ADIO-WiFi can be directly connected to PLC or to analogical transducer, to input devices from operator and to other I/O systems. Each input and output status can be read by a WEB browser or a telnet client at any moment, besides, the status of digital inputs and outputs it is shown directly on the board thanks to LEDs fixed on.

IN8-USB: Input Card with 8 inputs and USB interface



IN8 is a low size auto powered control unit equipped with USB interface. IN8 can check eight galvanic isolated inputs: on each input it is possible to apply voltages regardless from the USB ground, with a maximum voltage of 30V.

Easy to use, thanks to the driver provided with and to the LabVIEW library available on demand, IN8 also reduce installation costs.

The board low size to be easily integrated in several systems. Besides, IN8 has its inputs galvanically isolated to protect from electromagnetic disturbances and ground loops, improving its reliability and quality.

IN8 is the right answer to the need to acquire digital signals from a PC in an industrial environment.

LabVIEW Library for I/O cards



A complete library for LabVIEW, giving the feasibility of I/O devices remote control, is available on request. The Library allows to implement a LabVIEW application without knowing the details of the communication protocol, making the development quick and easy.

Each library is provided with a help file which explains deeper each function included with.

CONTACTS

IPSES S.r.l. conceives, projects and markets electronic and scientific instruments. The customized planning of our devices allows us to answer specific necessities for customers asking for embedded systems. IPSES clients enjoy access to a dedicated project engineering team, available as needed.

Our pool consists of highly competent professionals whose experience in this field is extremely strong. Thanks to constant updating and technical development, IPSES is a leading company, combining the dynamism of a young group into the competence and reliability of a qualified staff.

IPSES S.r.l.

Registered office:

Piazzale Giulio Cesare, 9
20145 Milano
Italy

Research, development and technical support office:

via Suor Lazzarotto, 10
20020 Cesate (MI)
Italy

tel. +39 02 39449519
+39 02 320629547
fax +39 02 700403170
e-mail: info@ipses.com
<http://www.ipses.com>



SUPPORT INFORMATION

The customer is at liberty to contact the relevant engineer at IPSES S.r.l. directly.

A call can be logged in a variety of ways:

Telephone	:	++39 02 99068453
		++39 02 39449519
		++39 02 320629547
Fax	:	++39 02 700403170
Email	:	support@ipses.com

PROBLEM REPORT

The next page is a standard template used for reporting system problems. It can be copied and send as a fax. Alternative bugs may be reported by emails, in this case please insure that the mail contains similar information as the Engineering Problem Report form.

ENGINEERING PROBLEM REPORT

Problem describer

Name		IPSES S.r.l. Via Suor Lazzarotto, 10 Cesate (MI) Italy Fax ++39 02/700403170 e-mail support@ipses.com
Company		
Date	Tel.	

Product

Name	Version	Serial No.
------	---------	------------

Report Type (bug, change request or technical problem)

Major bug	<input type="checkbox"/>	Urgency:	
Minor bug	<input type="checkbox"/>	High	<input type="checkbox"/>
Change request	<input type="checkbox"/>	Medium	<input type="checkbox"/>
Technical problem	<input type="checkbox"/>	Low	<input type="checkbox"/>

Problem Description

--

Reproduction of Problem

--

IPSES S.r.l. Action notes

Received by	Date	Report No.	Action
-------------	------	------------	--------

(Product code RELÈ-IO(-SEL) Rel. 02.01.0001)

IPSES S.r.l.

Via Suor Lazzarotto, 10
20020 Cesate (MI) - ITALY
Tel. (+39) 02 39449519
(+39) 02 320629547
Fax (+39) 02 700403170
e-mail: info@ipses.com
support@ipses.com