

KEY 01

TECNOLOGIC INSTRUMENTS PROGRAMMING DEVICE



OPERATING INSTRUCTIONS Vr. 01 (ENG) - cod.: ISTR 06032

TECNOLOGIC S.p.A.

Distributed by:

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PREVIOUS STATEMENT

In this manual are contained all the necessary information for a correct installation and the instructions for the use and the maintenance of the product; we recommend, therefore, to read carefully the following instructions.

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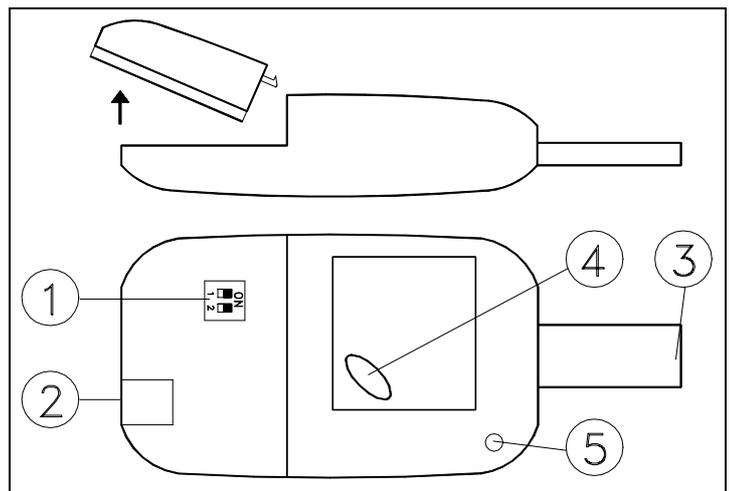
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1 - DESCRIPTION

KEY 01 it's a device which allows the memorisation and the transfer of the software configuration of the TECNOLOGIC instruments expressly predisposed.

The device it's mainly useable for the serial programming of the instruments which need to have the same parameters configuration or to keep a copy of the programming of an instrument and allow its rapid retransmission.



1 - Dip Switch Reading/Writing: It permits to select the device functioning mode as UPLOAD (OFF) or DOWNLOAD (ON).

2 - Supply connector: Coaxial connector to supply the device

3 - Instrument connector: Connector which has to be plugged into the proper location of the instrument to be programmed.

4 - Command key: Command key used to transfer the configuration data.

5 - Indication led : It indicates the programming conditions or eventual errors.

2 - OPERATING MODE

Depending on the type of TECNOLOGIC instrument to be used with the device, two versions are available: with 3 pole connector and with 5 pole connector.

To use the device with instruments equipped with a 3 pole connector, it's necessary that both device and instrument are being supplied.

To use the device with instruments equipped with a 5 pole connector, it's possible, depending on the type of instrument, to supply just the device or just the instrument.

For additional info, please have a look at the instrument's instruction manual.

Remarks : For the TECNOLOGIC instruments equipped with RS485 serial communication, it's indispensable that the parameter relative to the programming access through serial port is programmed in order to allow the remote programming.

2.1 - COPYING THE CONFIGURATION FROM AN INSTRUMENT TO THE DEVICE (UPLOAD)

To transfer the configuration of an instrument into the device it is necessary to proceed in the following way:

- 1) open the inferior door of the device (see figure in Description paragraph) and position both dip switch in the **OFF** mode.
- 2) connect the device to the instrument plugging the special connector.
- 3) verify that the instrument or the device are supplied (version with 5 pole connector) or that both are supplied (version with 3 pole connector).
- 4) observe the indication led on the device: if it results green this means that a configuration is already loaded on the device while if it results green blinking or red blinking this means that it has not been loaded any valid configuration on the device .
- 5) press the button placed on the device.
- 6) observe the indication led : after having pressed the button, the led becomes red and therefore, at the end of the data transfer, it becomes green.
- 7) now it is possible to disconnect the device.

It can happen that the device is extracted before the upload is completed.

In this case, after approx. 10 sec., the indication led becomes red blinking to point out that an error of data transfer is occurred.

The key doesn't result therefore programmed with valid data and it is necessary to repeat the operation.

2.2 - COPYING THE CONFIGURATION FROM THE DEVICE TO AN INSTRUMENT (DOWNLOAD)

To transfer the configuration loaded on the device onto an instrument of the same family, it is necessary to proceed in the following way:

- 1) open the inferior door of the device (see figure in Description paragraph) and position both dip switch in the **ON** mode.
- 2) connect the device to an instrument having the same features of the one from which has been downloaded the desired configuration, plugging the special connector.
- 3) verify that the instrument or the device are supplied (version with 5 pole connector) or that both are supplied (version with 3 pole connector).
- 4) observe the indication led on the device: it has to result green, because if the led results green blinking or red blinking, this means that on the device it has not been downloaded any valid configuration and therefore it's useless to continue.
- 5) if the led results green, press the button placed on the device.
- 6) observe the indication led : after having pressed the button, the led becomes red and therefore, at the end of the data transfer, it becomes green.
- 7) now it is possible to disconnect the device.

If the configuration contained into the device should not be compatible with the instrument, the led will become red fast blinking and the data won't be transferred.

If instead the device is extracted before the upload is completed, after approx. 10 sec., the indication led becomes red slowly blinking to point out that an error of data transfer is occurred.

The instrument doesn't result therefore programmed with the same data of the device and it is necessary to repeat the operation.

3 - INSTALLATION AND USE ADVICES



3.1 - USE ALLOWED

The device has been conceived for being exclusively used with TECNOLOGIC instruments compatible with the same, therefore it cannot be used with other instruments.

Do avoid to place the instrument in ambient with very high humidity or dirt which can provoke condensation or introduction into the device of parts or conductive substances.

Do use the device with instruments not yet installed and as much distant as possible from sources that may produce electromagnetic noises as motors, remote control switches, relays, electrovalves etc.

The device can contain the programming relative to just one instrument which can be read only by a TECNOLOGIC instrument of the same type; we recommend therefore to stick a label on the device and to annotate a programming description in order to be able to univocally recognise it.

3.2 - CONNECTIONS

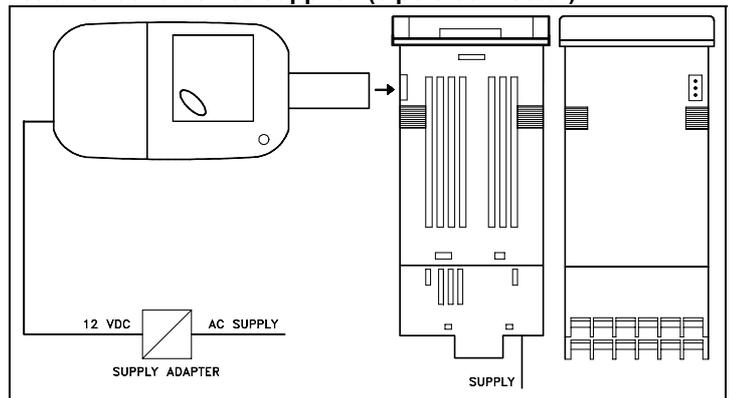
The device is conceived to be temporary connected to TECNOLOGIC instruments equipped with special connector 3 or 5 pole type.

To supply the instrument we recommend to use the proper power adaptor with double insulation (Tecnologic code : VAR 1048 or with similar features).

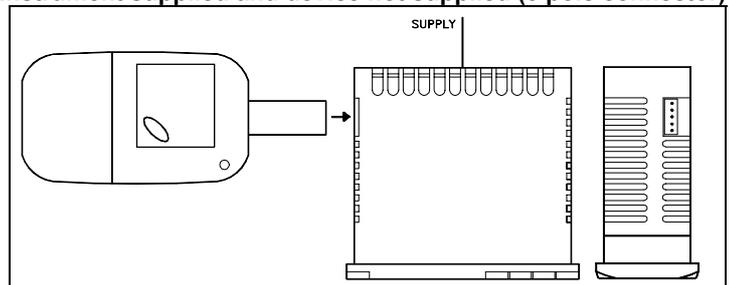
Tecnologic S.p.A. and its legal representatives are not responsible for any eventual damages to people, things or animals deriving from the instrument violation, not proper or wrong use or in any case not in accordance with the instrument features.

3.3 - CONNECTION DRAWING

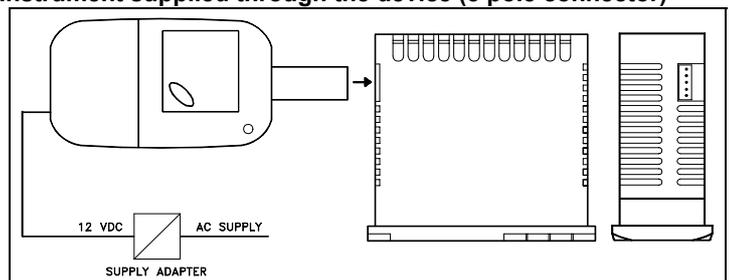
Instrument and device supplied (3 pole connector)



Instrument supplied and device not supplied (5 pole connector)



Instrument supplied through the device (5 pole connector)



4 - PROBLEMS, MAINTENANCE AND WARRANTY

4.1 - ERROR SIGNALLING

Operat.	LED	Cause	Action
UP LOAD	Red blinking	Into the device has not been uploaded any valid configuration because the transfer has been interrupted	Verify the correct connection between device and instrument and then repeat the operation
DOWNL OAD	Red slowly blinking	The download operation has been interrupted and therefore onto the instrument have not been transferred all the parameters	
DOWN LOAD	Green blinking	The device does not contain a configuration	It's necessary to upload a configuration on the device before its transmission
DOWN LOAD	Red fast blinking	The configuration contained into the device it's not compatible with the instrument	Verify the compatibility of the configuration contained into the device with the instrument.

4.2 – CLEANING

It's recommended to clean the instrument only with a cloth wetted with water or with a detergent neither abrasive nor containing solvents.

4.3 – WARRANTY AND REPAIRS

The instrument is under warranty against construction vices or defected material, noticed within 24 months from delivery date.

The warranty is limited to the repairs or to the substitution of the instrument.

The eventual opening of the housing, the violation of the instrument or the wrong use and installation of the product means the automatic decay of the warranty.

In case of defected instrument, noticed in warranty period or out of warranty, do contact our sales department to obtain the shipment authorisation.

The defected product must be shipped to TECNOLOGIC with the detailed description of the failures found and without any fees or charge for Tecnologic, safe different agreements.

5 - TECHNICAL DATA

5.1 - ELECTRICAL DATA

Supply: 12 VDC +/- 10% by means of a double isolation power adaptor

Power consumption: depending on the type of functioning from approx. 0,5 VA to approx. 4 VA.

Installation category: I

Protection class against electric shock: class III

5.2 - MECHANICAL DATA

Housing: plastic

Dimensions: 98 x 43 mm, depth 18 mm

Weight: 30 g approx.

Supply connection: coaxial connector int. Ø 1,3 mm (positive in the middle)

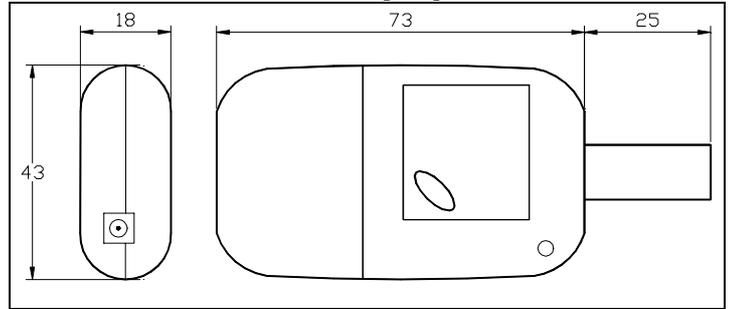
Pollution degree: 2

Operating temperature: 0 ... 55 °C

Operating humidity: 30 ... 95 RH% without condensation

Storage temperature: -10 ... +60 °C

5.3 - MECHANICAL DIMENSIONS [mm]



5.4 - FUNCTIONAL DATA

Compliance: ECC directive EMC 89/336 (EN 61326) , ECC directive LV 73/23 and 93/68 (Instrument operating under 50 VAC and 75 VDC)

5.5 - ORDERING CODE

KEY 01 a b cc

a: INSTRUMENT CONNECTOR

3 = 3 poles

5 = 5 poles

b : POWER SUPPLY

E = Supplied with power adaptor 230VAC/12VDC

- = Supplied without power adaptor

cc : SPECIAL CODES