eurotech® fire systems limited

100-8003V
EURV-AD2 PROGRAMMER UNIT

CE UKCA

GENERAL DESCRIPTION

This product permits to set and read various parameters stored in intelligent devices. The programming unit is equipped with an intelligent detector's adaptor base used for sensors' programming. For the other devices it is possible to use two interface plug-in cables (supplied together with the product).
The user can interact with the programming unit by using its in-built keypad and display; through this interface the user navigates through a menu-based set of options and commands, permitting him to program certain parameters on the devices or read data from them.
The programming unit can be used, for example, to:
- read and set an analogue address on a device,
- change a temperature sensor from Rate Of Rise to High Temperature mode or vice versa,
- read the firmware version of a device and other data,
- activate or deactivate input or output channels on a multi-module device,
- programming a conventional zone module,
- program the operating mode on a 32 tones sounder base.

Picture 1 - Overview of the programming unit

POWER SUPPLY

The programming unit needs to be power supplied: for this purpose a 9 V battery (supplied with the product) is needed; to install the battery into the programming unit follow these steps:
1) Slide-off the battery lodgment cover from the programming unit.
2) Connect the device's snap connector to the power supply battery.
3) Insert the battery into its lodgment.
4) Slide in the battery lodgment cover onto the programming unit.

Picture 2 - The adaptor base for intelligent detectors on the programming unit

CONNECTING DEVICES TO THE PROGRAMMING UNIT

Only one device can be connected to the programming unit at a time; depending on the device type, one of the three following ways of connection must be selected:
- Intelligent detectors must be installed on the programming unit's adaptor base.
- Analogue 32 tones base sounders must be connected to the programming unit with the supplied jack-to-jack cable (see picture 5A): insert one jack plug into the programmer's socket and the other jack into the sounder's lateral socket (see picture 6).
- All other devices must be connected to the programming unit with the jack-to-female-plug-in terminal block cable (picture 5B): insert the cable's jack pin into the programmer's socket and the cable's female plug-in terminal block into the device's analogue loop male socket (see picture 7 as an example and check the product's specific installation manual).
Important note: avoid having a detector installed onto to the programming unit and another device connected through the cable: if so is done, the programming unit will give you false information.
You can notice that the "jack to terminal block" cable is composed of two wires: one is positive (red color) and the other one is negative (black color). When inserting the plug-in female terminal block, check the corresponding polarity on the device's analogue loop male socket: positive polarity coincides with positive polarity and negative polarity coincides with negative polarity (see picture 8); in order to perform this operation you need to look at the polarity label on the device itself and its installation instructions manual.

Picture 3 - The programming unit, the power supply battery and its cover
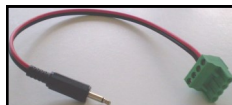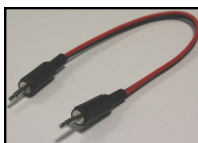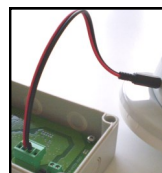
Picture 4 - The programmer's socket
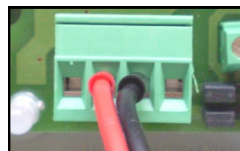
Picture 5A - The jack- to-jack cable

Picture 5B - The jack-to-female -plug-in terminal block cable

Picture 6 - An example of cable connection to the 32 tones analogue base sounder

Picture 7 - An example of cable connection between the programmer and a conventional zone module

Picture 8 - the cable's plug-in female terminal block in detail

PROGRAMMING UNIT'S KEYS - THE READ KEY

The **READ** key has two purposes:
- Enter into the main menu
- Enter into the address menu.
- "Refresh" the address reading.
- Cancel a programming action that has not been yet executed.

PROGRAMMING UNIT'S KEYS - THE WRITE KEY

The **WRITE** key has two purposes:
- Enter into a sub-menu.
- Confirm and program a selected parameter into the connected device.

PROGRAMMING UNIT'S KEYS - THE 'UP' AND 'DOWN' KEYS

The **UP** and **DOWN** keys have the following functions:
- Increase (**UP**) or decrease (**DOWN**) the address that can be assigned to an analogue device.
- Increase (**UP**) or decrease (**DOWN**) the "operating mode" setup number to be assigned to a device. The "operating mode" feature, that is applied only to certain devices, will be explained later.
- Navigate through the device's menus or sub-menus.

ACTIVATING THE PROGRAMMING UNIT

After having connected the programming unit to a device, press **READ** once; on the display will appear the indication of the programming unit's firmware version. Programming unit's firmware version can be assessed only in this activation phase.
After this initial phase the display will visualize automatically the address menu.

ADDRESS MENU

This menu is used to read and set the address of the connected device. This menu is accessible automatically at start up or from the main menu by pressing the **READ** key.
The **Address** caption will be visualized on the display together with a three digit number (indicating the actual address of the device) or a **No Addr** (no address, if the device hasn't got one).
When in this menu, by just clicking **READ** once, it is possible to read again the address of the connected device, "refreshing", in this way, the reading.
By using the **UP** and **DOWN** keys it is possible to increment or decrement the indicated number, and, after it is chosen, to press the **WRITE** key to memorize it on the connected device.

STORING WARNING

WHEN STORING A PARAMETER DO NOT DISCONNECT THE DEVICE: THIS CAN DAMAGE IT IRREPARABLY.

THE MAIN MENU

From the address menu press the **READ** key for some seconds: **Family** caption will appear giving the user the following options, scrollable with the **UP** and **DOWN** keys:
- **Conv**: don't select this option!
- **Analog**: this option must be selected for intelligent devices.
The main menu permits to view the data of the connected device and to perform setting operations.
Visualized data and available commands are not the same for all devices.
A description of the possible menu options and visualized data will be given:
- **DevType**: "device type": under this caption the programming unit will visualize the short name of the connected device type.
Device type datum is visualized for every device.
- **Addr**: "address": this caption is visualized in the upper section of the display and is followed by an analogue address number; in the section below it is visualized the device type associated to the address itself.
This information is displayed only for multiple-channel module devices and multi-modules, where, for each channel, the address and "sub-device" type need to be visualized on the programming unit.
- **Stdval**: "standard value": indicates the "analogue standard value"; this value ranges from 0 to 255, but in normal condition is stable around 32; when the device is alarmed or activated, this value is set to 192.
Standard value datum is visualized for every intelligent device.
- **ThrTyp**: "thermal type": indicates whether the thermal sensor is in ROR (Rate Of Rise) or in high temperature mode.
By pressing the **WRITE** key it is possible to access the sub-menu that permits to program the thermal operating mode (ROR or high temperature).
Thermal type datum is visualized for detectors having a thermal sensing feature.
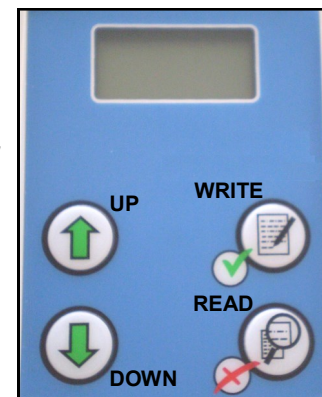
Picture 9 - the key-display interface in detail

UP WRITE READ DOWN

- Dirty: indicates the pollution percentage present in the optical chamber of smoke sensing detectors.
- FrmVer: "firmware version": indicates the firmware's version release number loaded into the connected device.
This datum is common to all intelligent devices.
- PrdDate: "production date": indicates the firmware's programming date (year and week) of the connected device.
Visualization of this datum is common to all devices.
- TstDate: "test date": indicates the functional test date (year and week) performed in the producer's factory.
Visualization of this datum is common to all devices.
- Op Mode: "operating mode": indicates a decimal value that, if programmed into certain devices, sets its functional operating charac-
teristics.
- Set Mod / Set Op: "set (operating) mode": when this caption appears, the pressing of the **WRITE** key permits to access the operat-
ing mode value selection sub-menu (with the **Sel Op** caption on the display).
Not all devices use the operating mode parameter.
- Customer: indicates the customer code security value programmed into the device.
Customer code value datum is visualized for all devices.
- Battery: indicates the remaining battery's power supply percentage of the programming unit.
Battery datum is always visualized even if the programmer is not connected to any device.

IDENTIFIYNG THE DEVICE

Under the **DevType** and **Addr** captions on the programming unit's display, the connected devices are visualized as per the following
table:

Device's type indication	Refers to...
Photo	Smoke detector
PhtTherm	Smoke and thermal detector
Thermal	Thermal detector
I Module	Input module
O Module	Output module
OModSup	Supervised output module
Multiple	Multiple input / output channels device Multi-module
CallPnt	Call point
Sounder	Wall sounder Base sounder
Beacon	Beacon
Sound B	Sounder-beacon
Conv Zon	Conventional zone module
Remote I	Remote indicator lamp (addressable and on loop)
Special	An analogue device that is not in this list

SETTING THE THERMAL MODE

Connect a temperature sensing detector to the programming unit; when **ThrTyp** is visualized on the main menu press the **WRITE**
key.
SelTyp (select type) caption is displayed and under it either **Std** (standard ROR mode) or **High°C** (high temperature mode) is dis-
played, depending on the actual thermal operating mode of the detector.
If you want to change the thermal mode just press **UP** or **DOWN** to select the desired one, then press the **WRITE** key.
You can return to the main menu, without making changes, by pressing on the **READ** key.

SETTING THE OPERATING MODE

While in **Set Mod / Set Op** press the **WRITE** key.
The **Sel Op** caption appears on display and, beneath it, three digits indicating the actual programmed operating mode value.
Change this value by pressing the **UP** or **DOWN** keys.
Chosen the value just press **WRITE** to memorize it on the connected device.
You can return to the main menu, without making changes, by pressing on the **READ** key.

MESSAGES

The following table illustrates the most common messages given by the programming unit and their meaning:

Programming unit message	Meaning
Fatal Error!	An irreversible error; if this occurs, the detector is compromised, must not be used and needs to be substituted
Storing	Indicates that the device is being programmed with the selected parameter
Stored	Indicates that the device has been successfully programmed with the selected parameter
Reading	Indicates that the device is being queried for a parameter value
Read	Indicates that the device has been successfully queried for a parameter value
Failed	The performed reading or storing operation just failed
Miss Dev	No device is connected to the programming unit
BlankDev	The connected device has no firmware programmed
No Addr	The connected device has no analogue address
Low batt	Programming unit battery needs to be changed
Unspec	Customer security code is not specified

POWER OFF

The programming unit switches off by itself after 30 seconds of inactivity.

TECHNICAL SPECIFICATIONS

Power supply battery specifications	6LR61 type, 9 V
Operating temperature range	from -30°C to +70°C
Maximum tolerated relative humidity	95% RH (no condensation)
Weight	200 grams

WARNINGS AND LIMITATIONS

Our devices use high quality electronic components and plastic materials that are highly resistant to environmental deterioration.
However, after 10 years of continuous operation, it is advisable to replace the devices in order to minimize the risk of reduced perfor-
mance caused by external factors. Ensure that this device is only used with compatible control panels. Detection systems must be
checked, serviced and maintained on a regular basis to confirm correct operation.

Smoke sensors may respond differently to various kinds of smoke particles, thus application advice should be sought for special
risks. Sensors cannot respond correctly if barriers exist between them and the fire location and may be affected by special environ-
mental conditions.

Refer to and follow national codes of practice and other internationally recognized fire engineering standards.
Appropriate risk assessment should be carried out initially to determine correct design criteria and updated periodically.

WARRANTY

All devices are supplied with the benefit of a limited 3 year warranty relating to faulty materials or manufacturing defects, effective
from the production date indicated on each product.

This warranty is invalidated by mechanical or electrical damage caused in the field by incorrect handling or usage.
Product must be returned via your authorized supplier for repair or replacement together with full information on any problem identi-
fied.

Full details on our warranty and product return policy can be obtained upon request.

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