This product enables the user to set and read parameters stored in the devices for the analogue-intelligent and the enhanced conventional series.

Connection to the devices is made through the adaptor base of the programming unit for the detectors or through one of the two plug-in cables (supplied with the product) for all other devices (analogue-intelligent series only).

The user can interact with the programming unit by using its in-built keypad and display; through this interface they can navigate through a menu-based set of options and commands, and program certain parameters on the devices or read data from them.

Features

- Read and set an analogue address on a device
- Change a conventional or analogue temperature sensor from Rate Of Rise to High Temperature 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 analogue base sounder or its audio-visual variant

Specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply battery specifications</td>
<td>6LR61 type, 9 V</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>from -30°C to +70°C</td>
</tr>
<tr>
<td>Maximum tolerated relative humidity</td>
<td>95% RH (no condensation)</td>
</tr>
<tr>
<td>Weight</td>
<td>200 grams</td>
</tr>
</tbody>
</table>

Order Codes and Options

20-VPU1000-ADV: 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.

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:

- Detector devices must be installed on the programming unit’s adaptor base.
- Analogue 32 tones base sounders (and their audio-visual variants) must be connected to the programming unit with the supplied jack to jack cable: insert one jack plug into the programmer’s socket and the other jack into the sounder’s lateral socket.
- All other devices (only analogue-intelligent) must be connected to the programming unit with the jack to female plug-in terminal block cable: 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 (check the product’s specific installation manual).

Important note: avoid having a detector installed onto the programming unit and another device connected through the cable as this may cause the programming unit to give you false information.

The “jack to terminal block” cable is composed of two wires: one is positive (red) and the other one is negative (black). 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; in order to perform this operation you need to look at the polarity label on the device itself and its installation instructions manual.

**Activating the Programming Unit**

After connecting the programming unit to a device, press READ once; the display will indicate the programming unit’s firmware version. This can only be assessed in this activation phase. After this initial phase, the display will automatically show the address menu.

**Address Menu**

This menu is used to read and set the address of the connected analogue-intelligent device and it will only work on this type of 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, and under it a three digit number (indicating the actual address of the device) or a No Addr (no address, if the device hasn’t got an address).

When in this menu, click READ to read the address of the connected device.

By using the UP and DOWN keys, it is possible to increase or decrease the indicated number. After you have selected a number, press the WRITE key to memorize it on the connected analogue device (address storing will fail if an enhanced conventional detector is connected!).

**Storing Warning**

WHEN STORING A PARAMETER, DO NOT DISCONNECT THE DEVICE AS 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:

- **Aurora**: this option must be selected if an enhanced conventional detector is connected to the programmer; if selected, an enter test is made: if successful the main menu is visualized and if not, an error is visualized.
- **Vega**: this option must be selected if an analogue-intelligent device is connected to the programmer; no enter test is performed, but the main menu will not work for a conventional sensor.

The main menu permits to view the data of the connected device and to perform certain setting operations on it. Visualized data and available commands are not the same for all the devices, but the most of them are common.

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, followed by an analogue address number, indicates, under it, the device type associated to such address; is used only for multiple channel module devices and multi-modules, where, for each channel, its address and “sub-device” type needs to be visualized on the programming unit.
- **Stdval**: “standard value”: depending on the device type connected, it indicates:
- If an analogue-intelligent device is connected, it indicates its “analogue standard value”: this is a common internal index for the analogue series devices; 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 analogue-intelligent device.

- If an enhanced conventional detector is connected, it indicates the “photo value”: this is a non standardized internal index and it is visualized only for conventional detectors having a smoke sensing feature.

**ThrTyp**: “thermal type”: indicates whether the thermal sensor, installed on the programming unit, is a a standard ROR (Rate Of Rise) or an high temperature one. 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 enhanced conventional and analogue-intelligent detectors having a thermal sensing feature.

**Dirty**: indicates the pollution percentage present in the optical chamber of analogue-intelligent and enhanced conventional smoke and smoke-thermal detectors.

**FrmVer**: “firmware version”: indicates the version release number of the firmware loaded into the connected enhanced conventional or analogue-intelligent device. This datum is common to all enhanced conventional and analogue-intelligent devices.

**PrdDate**: “production date”: indicates the date (year and week) of firmware’s programming into the connected device. Production date firmware datum is common for every enhanced conventional and analogue-intelligent device.

**TstDate**: “test date”: indicates the date (year and week) of the connected device’s functional test in the producer’s factory. Test date datum is common for every enhanced conventional and analogue-intelligent device.

**Op Mode**: “operating mode”: indicates a decimal value that, if programmed into certain analogue-intelligent devices, sets its functional operating characteristics. Operating mode datum is visualized and used only for analogue multi-modules, conventional zone modules and analogue 32 tone base sounders and their audio-visual variants.

**Set Mod / Set Op**: “set (operating) mode”: when this caption appears, the pressing of the WRITE key permits to access the operating mode value selection sub-menu (with the Sel Op caption on the display). Operating mode datum is visualized and used only for analogue multi-modules, conventional zone modules and analogue 32 tone base sounders and their audio-visual variants.

**Customer**: indicates the customer code security value programmed into the connected analogue-intelligent device. Customer code value datum is visualized for all analogue-intelligent 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 analogue-intelligent device.

### Identifying the Device

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

<table>
<thead>
<tr>
<th>Device's type indication</th>
<th>Refers to...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photo</td>
<td>Analogue and enhanced conventional smoke detector</td>
</tr>
<tr>
<td>PhtTherm</td>
<td>Analogue and enhanced conventional smoke and thermal detector</td>
</tr>
<tr>
<td>Thermal</td>
<td>Analogue and enhanced conventional thermal detector</td>
</tr>
<tr>
<td>I Module</td>
<td>Analogue input module or channel</td>
</tr>
<tr>
<td>O Module</td>
<td>Analogue relay output module or channel</td>
</tr>
<tr>
<td>OModSup</td>
<td>Analogue supervised output module or channel</td>
</tr>
<tr>
<td>Multiple</td>
<td>Analogue multiple input / output channels device or analogue multi-module</td>
</tr>
<tr>
<td>CallPnt</td>
<td>Analogue call point</td>
</tr>
<tr>
<td>Sounder</td>
<td>Analogue sounder (wall or base)</td>
</tr>
<tr>
<td>Beacon</td>
<td>Analogue beacon</td>
</tr>
<tr>
<td>Sound B</td>
<td>Analogue sounder beacon</td>
</tr>
<tr>
<td>Conv Zon</td>
<td>Conventional zone module</td>
</tr>
<tr>
<td>Remote I</td>
<td>Analogue remote indicator lamp</td>
</tr>
<tr>
<td>Special</td>
<td>An analogue device that is not in this list</td>
</tr>
</tbody>
</table>