BROOKS
Fire Products & Solutions

Panasonic

Operation Manual

Firefocus

Rev 1.1

For Software V3.6.x

firefocus

Firefocus

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1 Introduction

1.1 Overview

Firefocus is a microprocessor based intelligent Fire Detection Control and Indicating Equipment (FDCIE) and provides the full functional control and displays required for the provision of a Fire Detection and Alarm System (FDAS) Within a building. The Firefocus is principally intended for analogue addressable detectors but also supports conventional detectors. Manual call points, visual Alarm devices, audible alarm devices, specialised programmable input and output control devices, fire fan/damper control modules and remote displays.

Firefocus is a single loop FDCIE which through its loop expansion options can connect to four SUB loops for connecting to addressable units.

Up to 253 addresses can be connected to each Firefocus. Figure 1, below presents an overview of the Firefocus system.

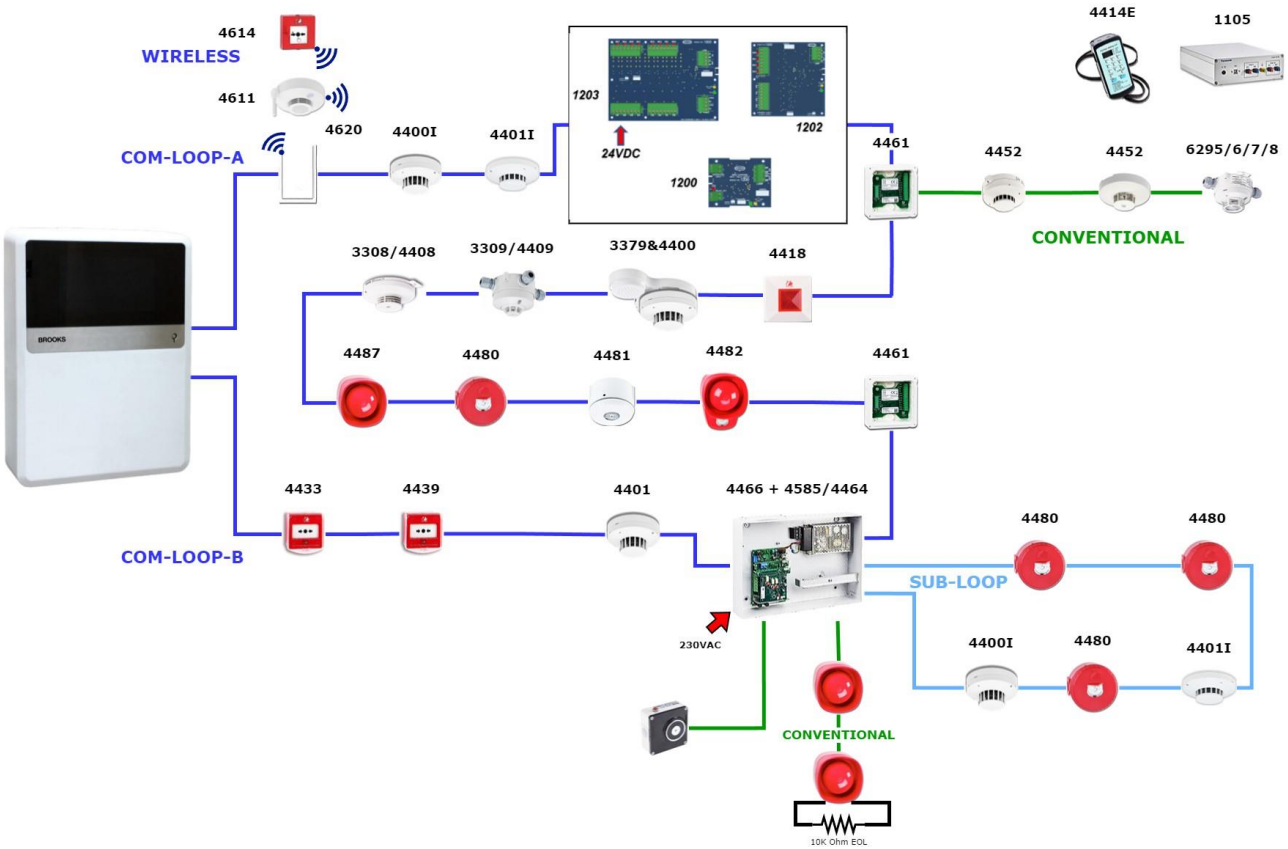


Figure 1: Connection diagram of Firefocus

Note: Some units are not available for the Australian market e.g. Exit emergency light MX140, aspirating unit AE2010G-P.

Firefocus is designed and assessed as conforming to the Australian Standard AS7240.2 and AS7240.4. The Fire Brigade Panel (FBP), conforming to AS4428.3, is integrated into the Firefocus, If the Firefocus enters the fire alarm condition, touch screen display is automatically re-configured to provide the FBP controls and indicators.

1.2 Definitions / Explanations

Device or function	Description
Firefocus	Brooks Single loop microprocessor based intelligent FDCIE in plastic box.
Alarm points	Units, which can generate a fire alarm in Firefocus, i.e. analogue detectors (sensors), manual call points, conventional detectors, etc.
Smoke detector	Analogue or conventional photoelectric smoke detector
Sensor	That part of a detector that respinds to the products of combustion or changes in temperature
Analogue Detector	Contains an A/D-converter. The Firefocus picks up the digital values (”sensor values”) for each detector individually. All evaluations and ”decisions” are then taken by alarm algrorithms in the Firefocus. The detector generation (440x) can be used in ”Advanced mode”, i.e. the alarm algorithms are in the detector instead. Analogue detectors are addressable, an address setting tool 4414 is used for the detector’s COM loop address and mode settings. An analogue detector has to be plugged in an Analogue Sensor Base (ASB)
Analogue Sensor Base (ASB)	An analogue detector is plugged in an ASB, which is connected to the COM loop (see below).
Conventional detector	A detector with only two statuses, i.e. normal or fire alarm. The detector has a ”Closing contact” and a series alarm resistor (560 Ohm). Normally plugged in a conventional detector base CDB (see below), which is connected to a conventional zone line input. Some types are water proof types and connot be plugged in the standard base, it is connected directly to a zone line. An end-of-line device has to be connected in the last unit on the conventional zone line.
Conventional Detector Base (CDB)	A convetional detector is plugged in a CDB, connected to a conventional zone line input.
Addressable	A unit with a built-in address device. Each unit is individually identified, handled and indicated in the Firefocus. The Unit can be an I/O unit with a zone line input, to which one or more conventional ”alarm points” can be connected.)
Conventional Zone Line Input	Input intended for one or more conventional alarm points. End-of-line device in the last alarm point on the zone must be fitted.
Output Unit	Addressable unit with programmable control outputs. Connected to COM loop (see below).
Output / Control Output	Defined or programmable function. Relay output or voltage output (supervised or non-supervised), in the Firefocus or an output unit connected to the COM loop.
Short Circuit Isolator (ISO)	Addressable unit for automatic disconnection of a COM loop segment (see below) in case of short circuit on the loop.
COM Loop	Loop = twisted pair cable, to which all the addressable units can be connected. Starts in the Firefocus and returns back to the Firefocus. Cable size and properties must meet the requirements of AS1670.1 Brooks includes recommendations for cables in §3.4.2
Control Unit / C.U. / FDCIE/Firefocus	Control unit = **F**ire **D**etection **C**ontrol and **I**ndicating **E**quipment (FDCIE) = Firefocus, unit to which the alarm points are connected (via e.g. the COM loop). Indicates on the front fire alarm, fault conditions, etc.

	Note: the programming software for the FTOne refers to ”Control Unit” this term for the purpose of programming is interchangeable with the FTOne model designation
Fire Brigade Panel (FBP)	The fire brigade panel is integrated into the Firefocus. The touch screen display of Firefocus automatically reverts to the FBP display in the fire alarm condition.
Nuisance Alarms	unwanted fire alarms caused by environmental or other conditions that simulate products of combustion.
LED	LED (Light Emitting Diode) = Yellow, green or red optical indicator (”lamp”).
External Indicator / RIL	A unit with a red LED connected to a base (ASB / CDB) or a detector with an output for an ext. LED.
Touch screen / LCD	LCD (liquid Crystal Display) = touch screen for presentation of fire alarms, fault messages, etc. In Firefocus it is a 7”graphical LCD (1024 x 600 px), RGB.
Door open (Key Switch)	Within the Firefocus there is a 003 key door switch, utilised to gain access to the touch screen menu.
Site Specific Data (SSD)	The SSD is unique data bprogrammed into the Firefocus to reflect the specific control and functional requirements for each installation. All alarm points, presentation numbers, user definable alarm tests, programmable outputs, etc. are created in the PC program EBLWin and also downloaded in Firefocus unit(s) with EBLWin.
Software (S/W) / Firmware / System program	The software (S/W) – also called Firmware and System program – makes the Firefocus (the microprocessor) work. It is factory downloaded but another / new version can be downloaded into a Firefocus on site using the PC program EBLWin
EBLWin	PC program used to create and download the SSD in Firefocus unit(s). Also used to download another / new software version. Can be used during commissioning / maintenace of the Firefocus system (auto address, check loop, acknowledge faults etc.)
EBL Firmware Manager	PC program used to download another / new software version.
Gateway	The Gateway is used to transfer Firefocus information as well as remote control via a PC (browser) and an intranet / internet. The Gateway is configured via the PC tool EBLWin.

2 General Description

2.1 The Firefocus

Firefocus Operation Manual is a document intended to be used by the end user and the fire brigade personnel as well as service / commissioning engineers.

The operation manual details how to use the Firefocus system, this manual is to be used in conjunction with Planning Instructions which can be found in help tab of EBLWin software.

Due to continual development and improvement, different S/W versions are to be found. This document is valid for software (firmware) **version 3.6.x.**

The system software version is the firmware downloaded in the Firefocus via PC windows-based software e.g. eblone V3.6.x. The latest system software is factory downloaded in the Firefocus before delivery is eblone V3.6.x. However, new software may be upgraded to a newer revision on site.

The software version is dependent on the country where the Firefocus to be installed that is due to the variations in the standard in each country. The Firefocus software version is factory set to the Australian protocol and must not be changed.

The PC software is Windows based software EBLWin which must be installed in your PC and must have the first two digits of the version number identical to the system software (firmware) version number i.e. version V3.6.x. The EBLWin is used to download Site-Specific Data (SSD) into the Firefocus.

Only the first two digits **must be** identical in the software and the EBLWin version number i.e. 3.6.x (x = patches for minor modifications)

2.2 Technical Address

The technical number, NNN, is used when programming all units connected to the COM loops. Technical number is also used to identify which unit has generated a fault.

2.3 Presentation Number

Each fire alarm point / input / zone has a presentation number, NNN-NN. The presentation number is shown in the Firefocus display to identify the point / zone activating fire alarm.

2.4 Com Loop Units

Addressable COM Loop units are connected directly to a COM loop.

2.5 Address and Mode

The addressable units must have both the address and mode set. This is accomplished in various ways depending on the unit. For example, it can be done using the address setting tool 4414E, DIP switches, jumpers, or via the Firefocus display. For more information, please refer to the Technical Description of each unit, respectively.

2.6 Software (S/W) Versions

Due to continual development and improvement, different S/W version may be found.

2.7 EBLWin

The PC program EBLWin is used for programming and commissioning, i.e. to:

- Auto-generate, i.e. to identify the units connected on the COM loop and create default settings, which can be edited saved and used as a Site-Specific Data (SSD)
- Create / download / upload (backup) the Site-Specific Data (SSD)
- Create and download the Gateway configuration.

EBLWin must have the same version no. as the system software Firefocus S/W version, e.g. 3.6.x. (x indicates only a small correction and is not required to be the same, at the time of release X=6). Old SSD files can be opened in a newer (higher) version of EBLWin, then edited, saved and thereafter downloaded to Firefocus. If a backup is required, use the same EBLWin version as the Firefocus S/W version.

EBLWin Key 5094 is a USB dongle that must be plugged in the PC to log on to the Firefocus.

2.8 Applications

The Firefocus system is intended for small installations. The intelligent Firefocus system offer the system designer and end user a technically sophisticated range of facilities and functions.

Programming with the PC programs EBLWin and commissioning of the Firefocus / system is an easy process.

3 Firefocus -Fire Detection Control & Indicating Equipment (FDCIE)

3.1 Specifications

Table 1: Firefocus specifications

Item	Specifications
Mains 230VAC	195V / 253V AC, 1.1A
Systems Voltage	$24V_{dc}$ @ 1.7A
Current Consumption	Quiescent / alarm current is dependent on other equipment connected to Firefocus, , connected external equipment, etc. Main Board (Sleep): 110mA | Main Board (LCD Active): 240mA Loop and total current are calculated by EBLWin during configuration
Battery Backup	1 x 12V SLA Batteries 17Ah 2 x 12V Batteries 17AH can be used (if required)
Battery supply, by loss of 230V Rlmax 0.5Ω / battery	10.2 / 14.5V
Ambient temperature: Operating Storage	 -5 to +40 ºC (Indoor use only) -30 to +80 ºC
Ambient Humidity (%RH)	Maximum 90, non condensing
Altitude	< 2000m above sea level
Enclosure size	422 x 3100 x 122 (H x W x D)
Weight	15kg, (including batteries)
Enclosure Material & colour	White plastic Standard Inputs / Outputs
Ingress protection rating	IP 30
Acceptable pollution degree	Degree 1 and 2, None or dry, non-conducting pollution.
Approvals	Conforms to AS7240.2-2018, AS7240.4-2018, and AS4428.3-2020
Standard Inputs / Outputs	Single COM loop, up to 253 devices, up to four SUB loops can connect.
	Two programable inputs, I_1 & I_2
	One supervised programmable voltage output, S_1 (250mA)
	One +24V DC outputs (250mA)
	One +24V DC output (150mA), used for Gateway
	One General Fire alarm Output
	One General Fault Output

3.2 Firefocus Limitations

The limitations in V3.6 are controlled by EBLWin, the following table lists the limitations.

Table 2 Firefocus Limitations

Item	Maximum Number
General fire alarm via programmable input	100
External fault via programmable input	50
Programmable Inputs	128
Programmable Outputs (control experssions)	200
Techanical Warnings	100
Interlocking Combinations	100
Presentation numbers / alarm points that can be presented in the display(s) in case of fire alarm	256
Presentation numbers that can be programmed	256
Zones that can be programmed	128
Faults	300
Disabled Zones	256
Disabled Alarm points (zone/address) + Disable COM-loop	200
Disabled Outputs	200
Disabled Interlocking Outputs	100
Sensors activating SERVICE signal	200
Control groups	100

Note: The addresses 254 and 255 in the COM loop are reserved for auto addressing purposes and cannot be used. If these addresses are used there will be a fault in the "Validity check".

3.3 Display

The display is a colour touch screen display, includes 12 status LED indicators as shown in Figure 2: Firefocus Status LEDs.

Display data:

- Display size: 7”
- Touch Screen type

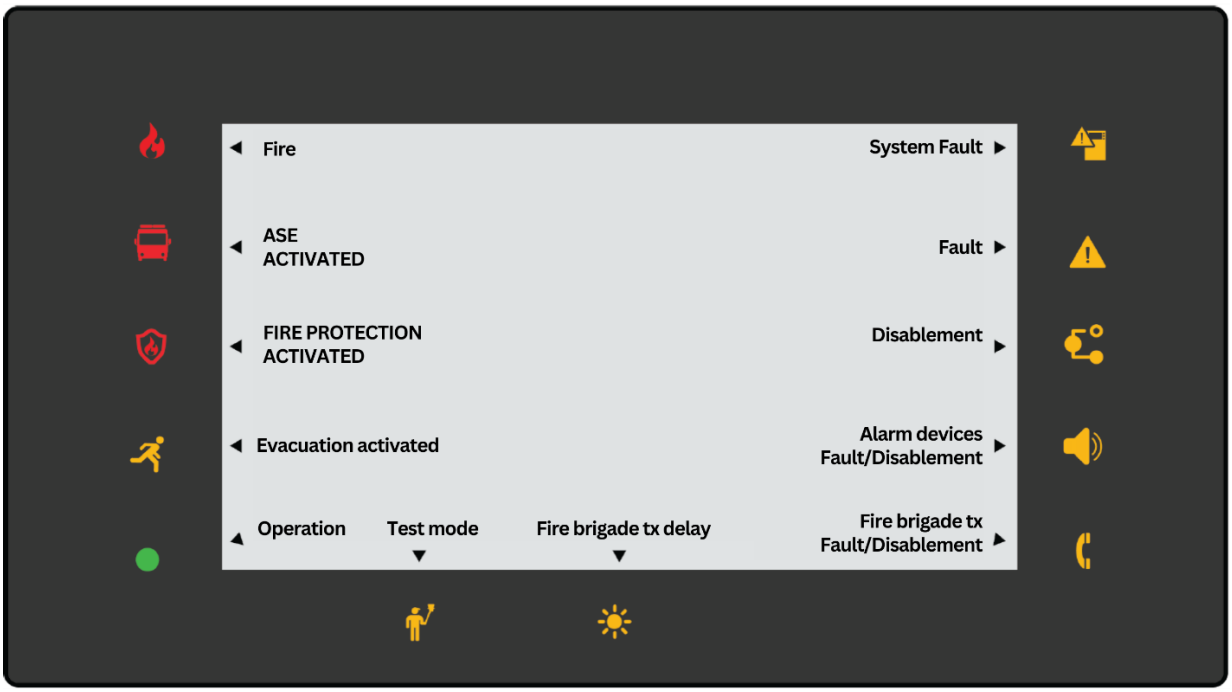


Figure 2: Firefocus Status LEDs.

Note: In case of no fire alarms, faults, disablements or test condition, the touch screen will go into sleep mode after 2 minutes.

When the 003 key switch is enabled, the description of the LEDs in the icons display area will be shown as in Figure 2 above (non-alarm condition).

The touch screen is used for system commissioning, routine servicing, access the menus, etc. Access code for different access levels is required. To obtain access to the system a username and password is required. Up to ten usernames can be used for three different user level types. A Password (six digits) for each username is required to logon to the panel and Gateway. When the Firefocus enters the fire alarm condition the touch screen display automatically converts to that of the Fire Brigade Panel (See 3.4.3).

Table 3: Explanation of the Integrated Status LEDs

	Fire	Fire alarms. Refer to Table 6, page 19
	ASE activated	ASE is activated. Refer to Table 6, page 19
	Fire protection activated	Extinguishing equipment is activated. Refer to Table 6, page 19
	Evacuate activated	A programmable input type “Evacuate” is activated
	Operation	Steady light: Firefocus is powered via the PSU and/or the battery. Flashing light: Firefocus start up, and if the loop is disconnected at start up, until the loop is re-connected.
	Test mode	One or more zones are in "test mode" (see Zone test menu).
	Fire brigade tx delay	The Alert Annunciation function is enabled.
	Fire brigade tx Fault/Disablement	**Steady light**: Output(s) for "ASE" disabled via Output type menu. **Flashing light**: ASE power supply outputs or supervised outputs of type "Routing equipment" have generated fault(s) or the Firefocus has lost contact with a unit with such an output, for example 4461. **Note**: Routing equipment is the ISO term for alarm signaling equipment (ASE)
	Alarm devices Fault/Disablement	**Steady light**: Output(s) type "Alarm device" are disabled. **Flashing light**: Output(s) type "Alarm device" have generated fault(s). This is also valid when the Firefocus has no "contact" with a unit with such an output, e.g., 4487, 4479.
	Disablements	Disablement(s) in the system. Or the system is in service mode.
	Fault	General fault(s) in the system. Or test of routing equipment (ASE) in progress, see menu 15.3.1 Perform Monthly Test on page 102. Or sensitive fault detection mode is on. See menu 15.5.5 Sensitive Fault Detection Mode on page 114.
	System fault	Firefocus is not running because of S/W fault, CPU fault, or Memory fault. Firefocus restart (fault code ≠ 00 / 03 /25).

3.3.1 Controls

Table 4: Explanation of the controls in the control unit.

	Fire	Used to access the alarm page.
	More	Used to access the event tabs page.
	Up / down keys	Used to scroll between items in lists.
	Top / bottom keys	Used for fast scrolling to the top or the bottom of the lists.
	Acknowledge faults / technical warning / service signal	Used to acknowledge faults. Press  to acknowledge a fault or press  to acknowledge all.
	Re-enable	Used to re-enable functions. Press  to re-enable a function in one unit or press  to re-enable the function in all units
	Silence buzzer	Used to silence the integrated buzzer in the Firefocus when it is sounding.
	Log in	Used to log in to the Firefocus.
	Log out	Used to log out from the Firefocus.

There is audible feedback, a click sounds, when you press a control or a key.

3.3.2 Symbols

Table 5: Explanation of the symbols in the Firefocus.

	Indicates one or more events		Incorrect value in edit field
	One zone		Interlocking area
	Zone in range		Interlocking point
	Detector address		Technical address
	Automatic re-enablement for zones and alarm point		Output
	"Automatic re-enablement". Will be automatically re-enabled at hh:mm		

3.3.3 Fire Brigade Panel

The Fire Brigade Panel (FBP) display is framed by a red boarder and will only be displayed when a valid fire alarm condition is generated within the Firefocus. FBP is normally used by fire services personnel to respond to a fire event. The FBP provides a common status indication for the FDAS when in the alarm condition enabling a common operational sequence for the responding fire services to take control of the FDAS. Fire brigade personnel only utilise the controls and indicators within the FBP red boarder. The information displayed in the upper part of the display provides information on how many alarm points / zones are in alarm, a user definable alarm text (if programmed), the cause of the alarm and the location of the alarm.

Note: the FBP controls are interlocked and must be operated in the correct sequence.

Operation of the FBP

1. Press “SILENCE BUZZER” to stop the integrated Firefocus buzzer.
2. Press “SILENCE ALARM” to stop sounding the warning devices (OWS).
3. Press “RESET” control to reset active alarms.

If after reset the Firefocus clears from the alarm condition, then the system has returned to normal. If, however, the Firefocus re-enters the alarm condition

1. Press “SILENCE BUZZER” to stop the panel buzzer.
2. Press “SILENCE ALARM” to stop sounding the warning devices (OWS).
3. Press “DISABLE” A single operation of the “DISABLE” will initiate the following:
   Disablement of all zones in alarm and/or addressable devices in alarm.
   Illuminate the “Disablement” LED in the normal view.
   The “General Disablements” LED turns ON.
4. Press “RESET” to revert to normal condition

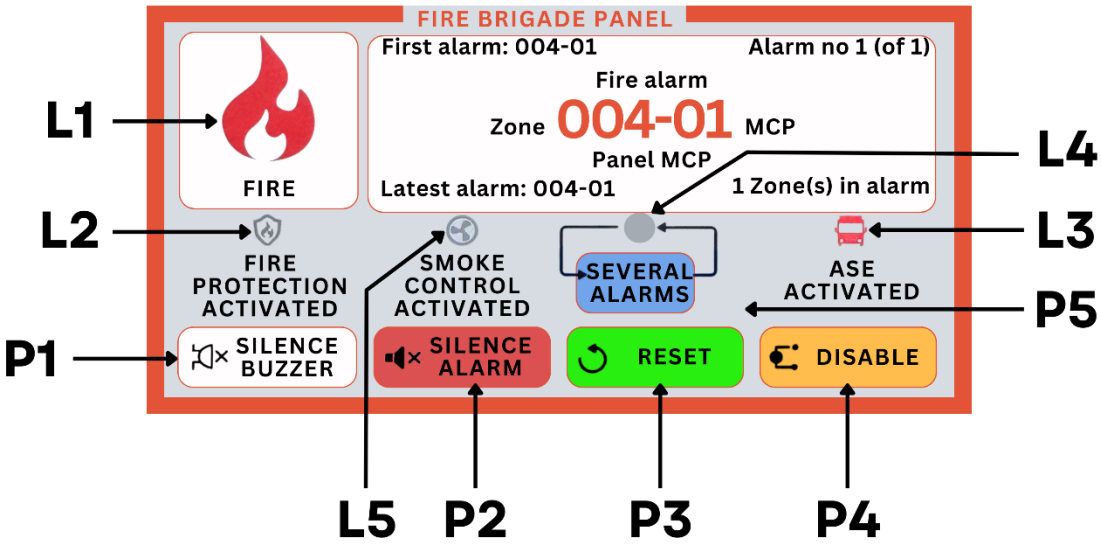


Figure 3: Firefocus touch screen display during fire alarm condition.

Table 6 Fire Brigade Panel in Firefocus

No	Label	Colour	Indicating / Action
L1	Fire	Red	Fire alarms. See chapter "Alarm types" Page 38
L2	Fire Protection Activated	Red	Output(s) for extinguishing (suppression) equipment activated. (Or a programmable input type "Extinguishing" is activated.)
L3	ASE Activated (Alarm Routing)	Red	Output "Fire alarm" for Fire Brigade TX and/or corresponding programmable output(s) of type "FireBrigadeTx") is/are activated (or a programmable input type "Activated routing equipment" is activated).
L4	Several Alarms	Red	Multiple units / zones have activated fire alarm. Use control "Several Alarms" (P5) to scroll amongst the alarm points (zone-address)
L5	Smoke Control Activated	Yellow	Output(s) for smoke control ventilation equipment (AS1668) activated (fan / damper). Or a programmable input type "Ventilation" is activated.
P1	Silence Buzzer	White	Used to silence the integrated buzzer in the Firefocus when it is sounding
P2	Silence Alarm	Red	Used to silence alarm devices e.g. OWS / sounders in the building when they sound.
P3	Reset	Green	Used to reset fire alarms, only after all fire alarms have been silenced, see "Fire alarm reset", page 45 **Note:** P3 must be pressed for > 0.5 sec.
P4	Disable	Yellow	Used to disable active alarm(s), all outputs of the device or zone in alarm will be disabled and reset after fire alarm devices have been silenced.
P5	Several Alarms	Light Blue	Used when LED "Several Alarms" (L4) is lit, scroll through the queued alarm points or zone-addresses. For more details, see chapter "Fire alarm" page 39 **Note:** To scroll/browse through the queued zones, use the touch key "Several alarms" (P5).

3.3.4 Welcome Page

Firefocus “Welcome” page is shown in logged out mode, when there are no alarms or other events activated. Date and time are displayed.

Figure 4: Firefocus Welcome page.

dd-mm-yyyy = (Date) Day-Month-Year
hh:mm = (Time) hour: minute

3.3.5 User definable system / installation information

User definable system / installation information (created and downloaded via EBLWin) can be displayed in the middle of the touch screen. Two rows are available, in total 38 characters.

3.3.6 Information Priority Order

When the Firefocus / system is in normal operation (quiescent state), which means no alarms, no faults, no disablements, no service signals, no zones in test mode, no activated interlocking in / outputs, and/or Alert Annunciation function not enabled, only the LED “Operation” should be lit, and “Welcome page” is shown. However, the “Welcome page” has the lowest priority, and more important information suppresses less important.

Table 7: Information Priority Order.

Priority	Shown in window	Event
1	Fire alarm page	Fire alarms: • Fire alarm • Heavy smoke/heat alarm • Alert Annunciation (AA) alarm
2	Fire alarm page	Quiet Alarm
3	Fire alarm page	Co-incidence alarm
4	Fire alarm page	Delayed alarm
5	Fire alarm page	Pre-warning
6	Fire alarm page	Test mode alarm
8	Event tab page	Evacuate information
9	Event tab page	Fault
10	Event tab page	Disablement
11	Event tab page	Zones in “Test mode”
12	Event tab page	Interlocking input / output device
13	Event tab page	Technical warning
14	Event tab page	Service signal activated
15	Event tab page	Service mode activated
16	Event tab page	Sensitive fault detection
17	Welcome page	System information

Note: Priority no. 7 to 16 can be shown on the even tab page at the same time.

3.4 2010 Main Board

The Firefocus is equipped with a USB interface (Type C), used for PC connection. The PC program EBLWin is used for creating the Site-Specific Data (SSD) and to download it to the Firefocus main board. A separate EBL Firmware Manager program also can be installed to PC to download a new software (system program) version to the main board.

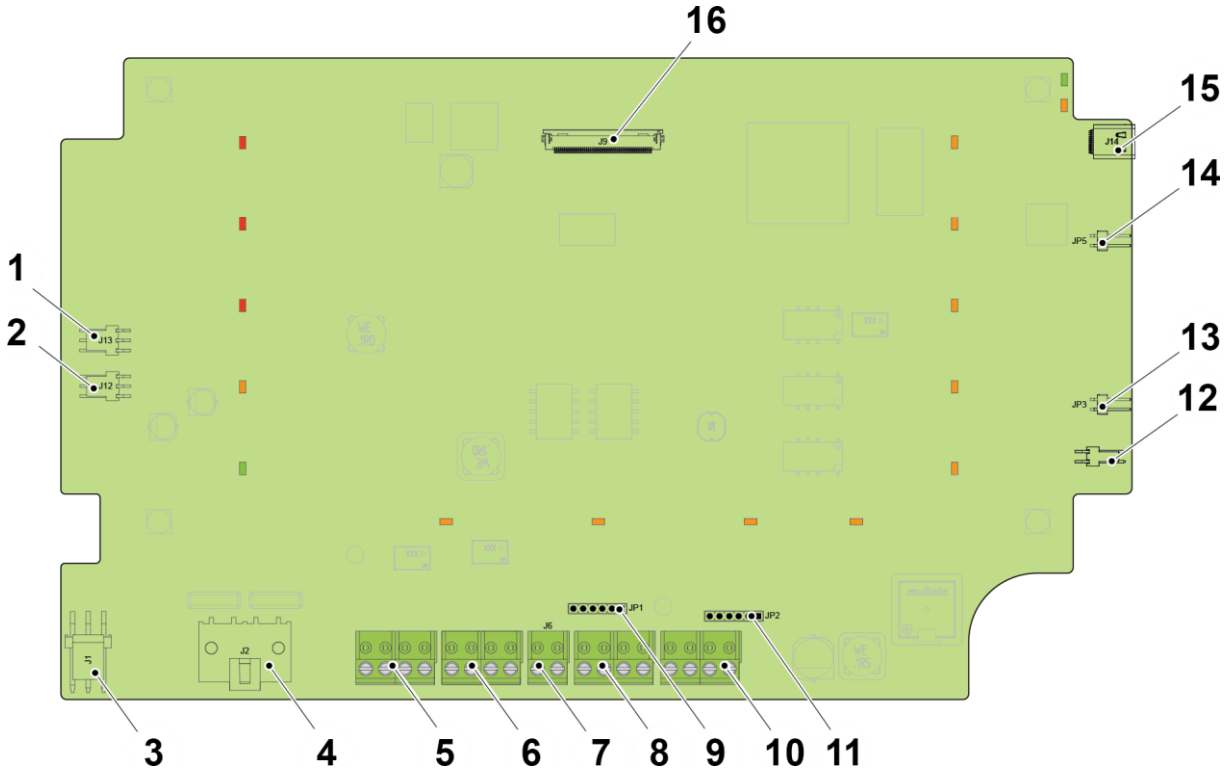


Figure 5: Firefocus Main Board 2010

1. J13, RS232 for Gateway
2. J12, 24V for Gateway
3. J1, 24V from power supply
4. J2, batteries
5. J4, COM Loop
6. J5, 24V for external units
7. J6, S1
8. J7, I1 and ATX
9. JP1
10. J8, I2 and FTX
11. JP2
12. J11, Optional Key
13. JP3, Buzzer enabled (jumper must be fitted)
14. JP5, Boot mode
15. J14, USB port (USB 3.1 type C)
16. J9, Connector for LCD

3.4.1 Main Board Termination Power Ratings

Termination	Voltage (Vdc)	Current (mA)	Power (W)
5. J4, COM Loop	24	350	8.4
7. J6, S1	24	250	6
6. J5, Vout1	24	250	6
6. J5, Vout2	24	150	3.6
1. J13, Gateway 24V	24	150	3.6

3.4.2 Field Termination Cables

A fire alarm installation is a safety installation, and it is important that the cables used within the installation comply with AS1670.1. Fire alarm cables should, when possible, be installed away from other cables to avoid disturbances from these.

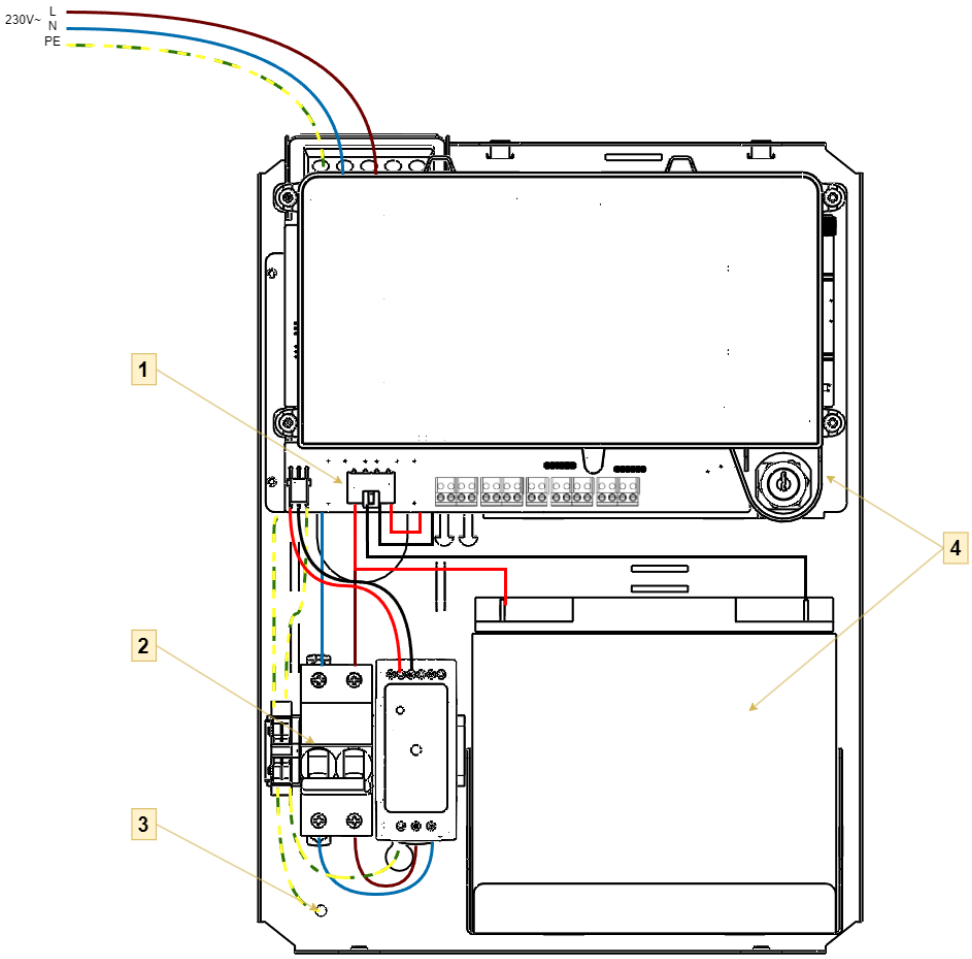
The maximum cable length is depending on the cable type and the current consumption.

Brooks recommends the use of fire rated cables with properties:

- Pair capacitance 70nF/km AT 800Hz
- Conductor resistance 24.5 ohm/km
- Attenuation 0.6dB/km AT 800Hz
- COM Loop Wiring: 1.5mm^2 Twisted pair (BROOKS BAC0898)

If shielded cable is used, the shield shall be connected in each loop device. The shielded cable shall also be terminated at both ends to the Firefocus earth point.

3.5 Electrical Safeguards



Item	Description	Marking/Instructions
1	Battery disconnects. Make sure to disconnect the equipment from power before servicing.	
2	Mains power disconnects. Make sure to disconnect the equipment from the power before servicing.	
3	Protective earth (ground). Make sure to connect the protective earth conductor when installing the Firefocus	
4	Risk of explosion if batteries are replaced by incorrect type. See §17 Battery Maintenance.	

3.6 Firefocus Cabinet Overview

Firefocus fixed LV wiring must be installed and connected by a licenced electrician.

Firefocus Cabinet to be installed in accordance with Australian Installation requirements as detailed in AS 1670.1 §3.6

Brooks Firefocus Cabinet is factory assembled and fully tested prior to delivery. Upon receipt, the system should be carefully checked for any damage during transit before commencing installation. The dimensions and measurements of Firefocus are shown below.

The Firefocus consists of two parts, a metal equipment mounting frame designed to be wall mounted and a plastic outer cover. This design allows easy access to all components and field terminations, thereby simplifying the installation process. The cabinet shall be mounted vertically, less than 900mm & not more than 1850mm above the floor.

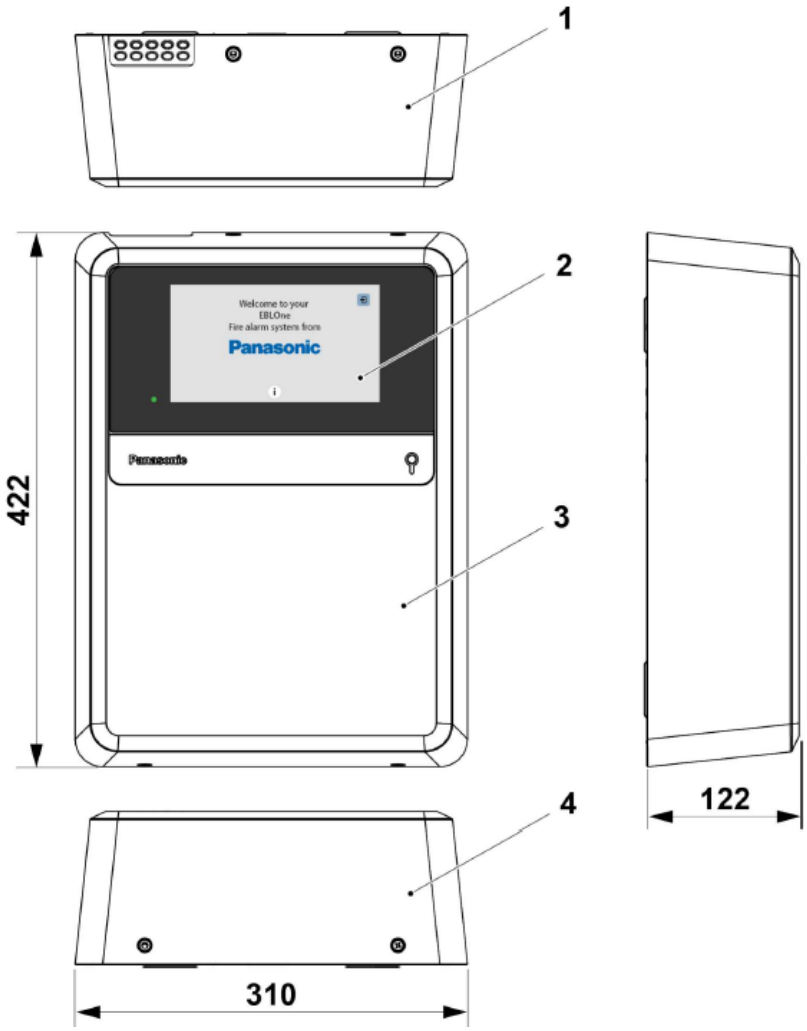


Figure 6 Firefocus cabinet measurements

1. Firefocus top cover
2. Touch screen
3. Firefocus front
4. Firefocus bottom cover

4 User Data & Access

4.1 User Data

Firefocus supports different levels for different users. To log on to an Firefocus, a Username and Password are required. Ten different Usernames with individual passwords can be used.

Via EBLWin (menu “System”), the usernames with individual passwords can be defined in the “User data” dialog box. One of three different levels / types can be selected for each username. A username must be used to log on to an Firefocus and/or Gateway to gain access.

Figure 7 below details the default usernames and passwords when opening the User data configuration in EBLWin.

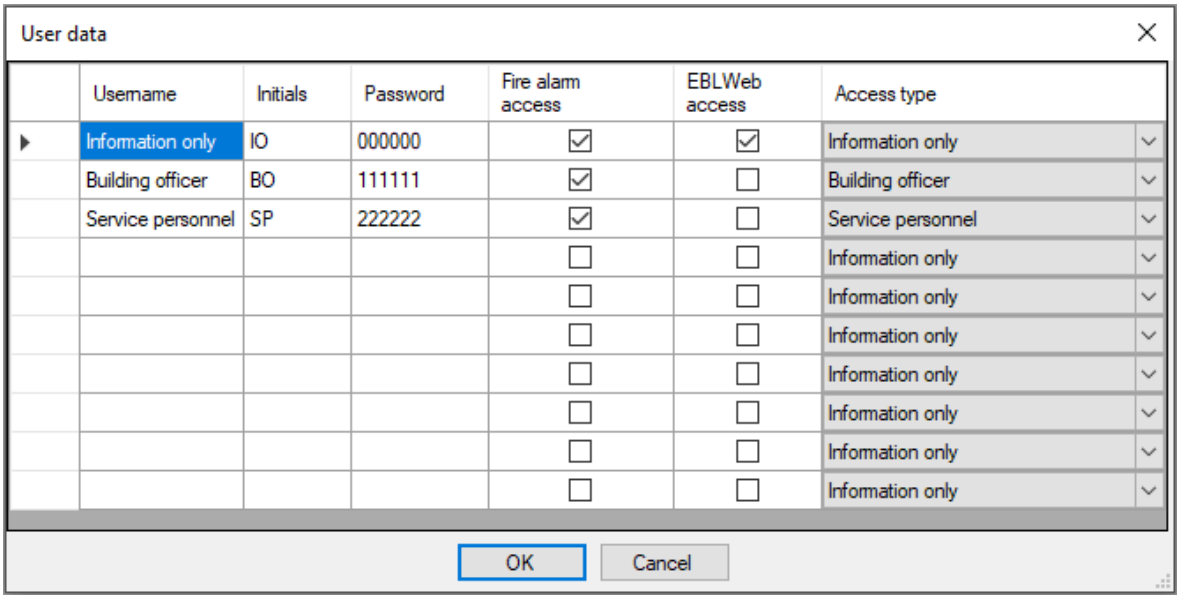


Figure 7: EBLWin User Data Configuration

Note 1: The default usernames and passwords can be changed in EBLWin. Also, the Fire alarm access and Gateway access columns must be filled in (Check boxes), depending on how the usernames and passwords should be used.

Note 2: In a new Firefocus. (i.e. before downloading any Site-Specific Data), only user “0” is available. No password is required, and you have access to all menus. After download of SSD the downloaded usernames and passwords will be valid.

4.1.1 Username

Up to ten users, 0 to 9, may be programmed. By default, three users are available.

- 0 = Information only
- 1 = Building officer
- 2 = Service personnel

4.1.2 Password

Each user has a password for an access level e.g. “Information only”, “Building Officer” or Service personnel”. Refer to section 4.4 page 31.

If the valid password(s) are unknown, another EBLWin download must be performed to change the password(s).

Normally the usernames and passwords are downloaded / changed via EBLWin and SSD download. A logged-on person (user name) can also change the password, refer to section 15.4.3 page 108.

4.1.3 Password for Gateway Access only

Normally a password consists of 6 digits, this allows the same user to get access to the Firefocus as well as to the Gateway if both are selected.

If a user should have access to the Gateway only, it is possible to choose a stronger password. It consists of 6 to 10 characters and digits as well as letters and alphanumeric characters.

Notes: The letters are case sensitive.

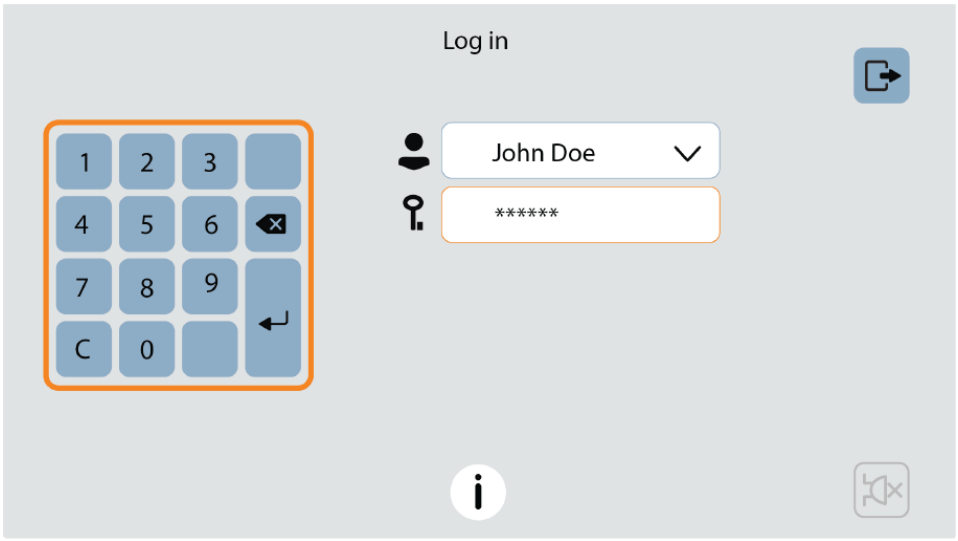
Brooks recommend a copy of the SSD to be given to the building manager. If the password has changed, it can’t be restored. Therefore, a new SSD must be downloaded into the Firefocus.

4.2 Access

To enable “Access Level 2” insert the 003 key into the key switch and turn. At access level 2 access to the menus is provided, it is necessary to log in with a username and a password for level 2B, 2C or 3A. See Chapter 4 page 26

4.2.1 How to Log On

1. Press  to log in.
2. Select a user in the drop-down list.
3. Type the password for that user. (Six digits. * * * * * *)

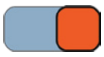


After type a correct password, the main menu list with the available menus will be displayed. For “0”, Information only, no password is required.

The cross  will be shown if the password is not correct. Try again.

Note: After three wrong passwords, the log in function will be blocked for one hour for this username.

4.3 Navigation / General Procedures

- Scroll in the lists with  and  .
- Tap on the input field, a numpad will pop up to enter data.
- Use the switch  to toggle between different functions.
- Press the control  to re-enable a function on one unit or press  to re-enable the function on all units.
- To acknowledge, press  or press  to acknowledge all.
- A successful operation is indicated by a  . It will also be shown in the list.
- A not successful operation is indicated by a  .
- The symbols are greyed out when not active.
- To return to the main menu press  .
- To leave the menu system and log out, press log out  .

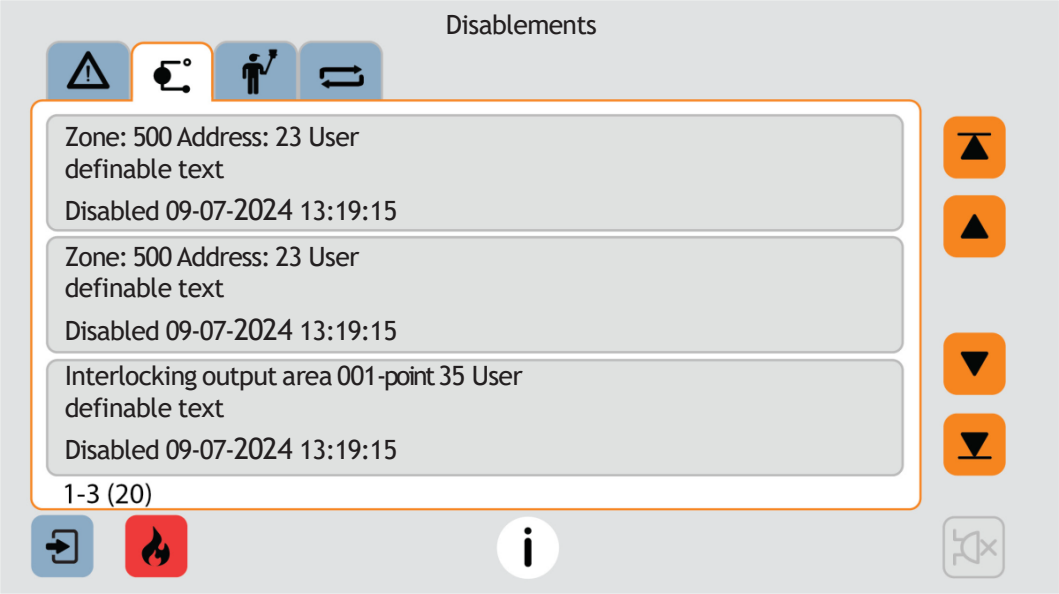
Quick jump can be used within each menu, press the icons in the top left corner  for a quick jump to previous menu.

You will be automatically logged out 15 minutes after the last action, and after 5 seconds when you press log out  . A new login is then required.

4.3.1 Navigation in the Event Tab page

- The event tab page is only shown when logged out.
-
- if logged in, press log out  to access the event tab page.
- If logged out, the event tab page will be shown if there are any events in the system.
- A tab will be shown on the event tab page if there are any faults, disablements etc. in the system.
- To switch between the tabs, press the tab icon.
- If the system is in fire alarm state, the fire brigade screen will be automatically displayed.
- To access the menu system when the event tab page is shown, press  to log in.

Note: When the even tab page is shown, the screen backlight will go down to 10% after 5 minutes. It will never turn off.



4.3.2 Navigation in Alarm State

The fire brigade panel as per ASA4428.3:2020 is shown in Figure 8 below

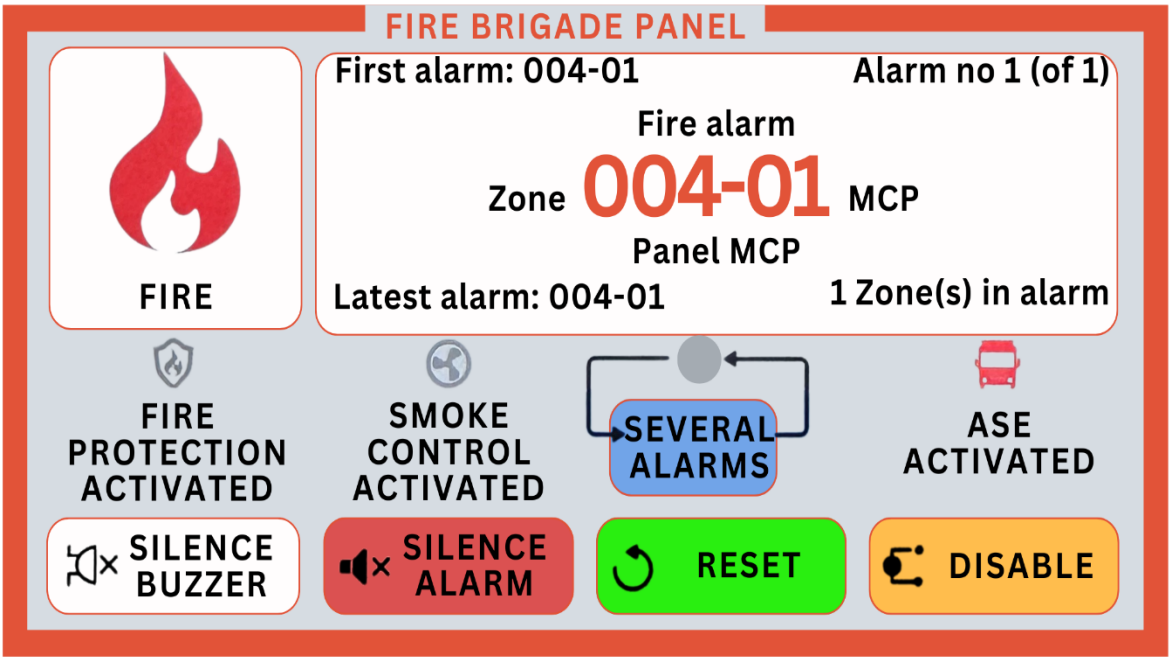


Figure 8: Alarm State Menu.

If the Firefocus enters the fire alarm condition, the FBP screen will automatically be displayed as shown in Figure 8 above. The fire alarm display has priority over all other displays. A fire alarm condition at the Firefocus may result from a real fire event or it may be because of service/commissioning technicians carrying out works on the Firefocus System.

When the FBP is displayed because of a fire event, fire brigade personnel have access to the four controls inside the red boarder to control the response to the fire alarm event. Fire brigade personnel do not use any controls outside the RED boarder.

When the FBP is displayed because of service/commissioning activities it may be necessary to view other events in the Firefocus/system. To view other status events hidden in the background, the more control  can be used to go to the event tab page. From here faults and disablements can be viewed.

When the more control  is selected the display a 30 second period is provided to view other status events, after which the display will automatically revert to the FBP.

The functions and description of each the controls and indicators in the fire brigade screen are shown in Table 6 page 19.

4.4 User Level

Each user level type has access to specific menus according to Table 8 below.

Table 8: Firefocus software menu access levels.

Information Only		Building officer		Service personnel	
	Fault Technical Warning Sensor value Service signal Event log Activated interlocking Control unit information Current consumption Communication		Fault Technical Warning Sensor value Service signal Event log Activated interlocking Control unit information Current consumption Communication		Fault Technical Warning Sensor value Service signal Event log Activated interlocking Control unit information Current consumption Communication
			Set clock and date Display settings Change password Change language		Set clock and date Display settings Change password Change language
			Zone Address Outputs Output types Time channels Interlocking Alert annunciation Routing equipment		Zone Address Outputs Output types Time channels Interlocking Alert annunciation Routing equipment
			Monthly test Zone test		Monthly test Zone test Test alarm devices
			Activate interlocking output		Disconnect Acknowledge service signal Clear weekly average Safe shut down Activate alarm point Activate output Activate interlocking output
					Set up wireless system Calibrate outputs Service mode for loop Sensitive fault detection mode SSD information

4.4.1 User Levels

The usernames and type of access permitted are shown in Table 9 below.

Table 9: Firefocus AS7240.2 defined Access levels.

User Level	User level name / type	Required action / equipment	Access to
1	None	None (003 key switch is in OFF position)	View only indications and controls on the touch screen.
2A	Fire response personnel	Turn door key switch ON (003 key required).	Enables access to controls - Fire alarm response via fire brigade panel screen.
2B	Information only	003 key ON + log on as “information only”	Same as 1 + Menu access as detailed in Table 8 – “Information only”.
2C	Building officer	003 key ON + log on as “Building officer”.	Same as 2A + Menu access as detailed in Table 8 – “Building officer”.
3A	Service personnel	003 key ON + log on as “Service personnel”	Same as 2B + Menu access as detailed in Table 8 – “Service personnel”.
3B	Trained and authorised service personnel	003 key ON + Unscrew plastic cover mounting screws + PC + 5094 key + EBLWin	Reconfigure SSD and download
4	System Engineer	003 Key ON + PC + EBLWin + special password	SSD & F/W download + reset of alarm counter

4.4.1.1 User level 1

The 003 key switch is OFF, only to view indicators and controls on the touch screen as shown in level 1, Table 9 above.

The access is available by general public, or persons having a general responsibility for safety supervision, who might be expected to investigate and initially respond to a fire alarm or a fault warning.

4.4.1.2 User level 2A

When the 003 key switch is turned access level 2, the designated fire response personnel will have access to fire brigade panel.

4.4.1.3 User level 2B

When the 003 key switch is turned access level 2, and you log on as “information only” (level 2B) the following menus are accessible:


Status

- Fault
- Technical warning
- Sensor values

- Service signal
- Event leg
- Activated interlocking
- Control unit information
- Current consumption
- Communication

4.4.1.4 User level 2C

When the 003 key switch is turned access level 2 and you log on as “Building officer” (level 2C), the following menus are accessible:


Status

- Fault
- Technical warning
- Sensor values
- Service signal
- Event log
- Activated interlocking
- Control unit information
- Current consumption
- Communication


Test

- Monthly test
- Zone test


Disable

- Zone
- Address
- Outputs
- Output type
- Time channel
- Interlocking
- Alert annunciation
- Routing equipment


Maintenance

- Activate interlocking output

4.4.1.5 User level 3A

When the 003 key switch is turned access level 2, and you log on as “Service personnel” (level 3A) the following menus are accessible:


Status

- Fault
- Technical warning
- Sensor values
- Service signal
- Event log
- Activated interlocking
- Control unit information
- Current consumption

- Communication

 Test

- Test of alarm devices
- Monthly test
- Zone test

 Disable

- Zone
- Address
- Outputs
- Output type
- Time channel
- Interlocking
- Alert annunciation
- Routing equipment

 Maintenance

- Activate interlocking output
- Disconnect loop/ zone line input
- Acknowledge service signal
- Clear weekly average
- Safe shut down
- Activate alarm point
- Activate output

 Installation

- Setup wireless system
- Calibrate outputs
- Service mode for loop
- Sensitive fault detection mode
- SSD information

 Settings

- Change password for the logged in user

4.4.1.6 User level 3B

Remove the outer cover to gain access to the main board and other internal components. Used by service / maintenance / commissioning engineers when a PC (i.e. EBLWin) is to be connected to Firefocus for backup (upload), download of Site-Specific Data (SSD) and / or download of software.

EBLWin required an EBLWin key 5094 to be plugged in the PC.

4.4.1.7 User level 4

Remove the outer cover to gain access to the main board and other internal components. Used by manufacturer or by personnel authorised by the manufacturer for re-initialisation (reset) of the alarm counter, change software configurations, on-line status checking, etc. An EBLWin key (5094) is required to be plugged in the PC.

5 Technical Address / Presentation Number

5.1 Technical Address

The technical address “NNN” is used when programming any unit connected to the COM loop. The addressing tool 4414 / 4414E is used to write the address in a loop unit.

Technical address is also used to identify which unit has generated a fault.

- The addresses don’t have to be in sequence.
- The connections on the COM loop don’t have to be in sequence.
- The technical address can be set to 001-253.
- With the programming tool 4414E, the units can also be set to 000 (factory setting).

If the auto-addressing function is used, the units on the loop must have technical address 000. See the technical Manual for the system.

Note: A brand-new detector is factory set to COM loop (technical) address 000. Connected on the COM loop, the detector LEDs will start blinking every second, indicating that an address (001 – 253) must be set before the detector will work.

Totally 253 COM loop (technical) addresses can be used for the control unit, of which up to 253 addresses can be used for alarm points.

5.2 Presentation Number

For each fire alarm point / input / zone, a presentation number **NNN-NN** must be programmed. The presentation number is shown in the Firefocus display and the external display units, to identify the point / zone activating fire.

It is also used to disable / re-enable fire alarm points / zones and as trigger conditions in the control expressions to activate programmable outputs.

Together with the presentation number, a user definable 40 characters text message (alarm text) can be displayed (if programmed).

Table 10: Firefocus Presentation Numbers.

NNN	NN
001 - 999	00 - 99
Zone Number	01 – 99 = The address within the zone. 00 = only the zone number will be display, e.g. used for the conventional zone line inputs.

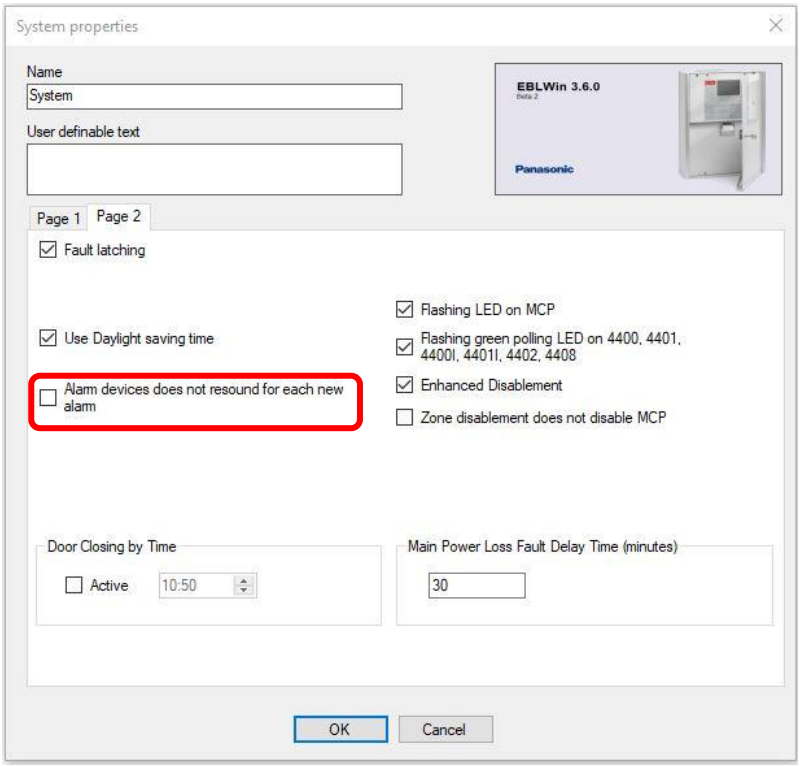
Zone numbers 001 – 999 can be used, but not more than 128 different zones can be used in Firefocus.

6 Silence Alarm Devices

In fire alarm state, the control "**SILENCE ALARM**" is used to silence the active warning devices (OWS & sounders). Any activated outputs programmed as type "Alarm devices", will be turned OFF (de-activated). This includes Addressable sounder base 3379 / 4479, Light indicator 4383, Wireless smoke detector 4611, and all alarm devices or VADs type 448X.

If the control "**SILENCE ALARM**" is pressed again, or a new fire alarm event occurs the warning devices will automatically re-sound.

The Firefocus has an option to program the OWS or sounders (alarm devices) with type "Alarm devices for evacuation". Any device programmed this way will not be silenced by the "**SILENCE ALARM**" control or resound for a new fire alarm event. This is a violation of conformity to AS4428.3 and therefore this option must not be used.



6.1 Silence Buzzer

The integrated buzzer in the Firefocus will sound for:

- Fire alarm (0.4 / 0.4 sec.)
- Co-incidence alarm (2-zone or 2-unit dependent fire alarm): When only one zone or one zone / address (alarm point) is in alarm status (0.8 / 5 sec.)
- Pre-warning (0.8 / 5 sec.)
- Quiet alarm (0.8 / 5 sec.)
- Fault (continuous)
- Activated interlocking input (0.8 / 0.8 sec.), if this option is selected via EBLWin.
- Activated technical warning (0.5 / 10 sec.), if this option is selected via EBLWin.

Press “Silence buzzer” control to silence the buzzer. In case of a new alarm (pre-warning, co-incidence alarm, and so on), the buzzer will automatically sound again.

6.2 Disable or Re-Enable Alarm Devices

Outputs programmed for alarm devices can be collectively disabled. This is performed via Disable Output types menu > > .

The disablement is indicated by LED “Disablement” and LED “Alarm devices”, which are steady ON.

In case of a fire, the warning devices will remain disabled, which means the alarm devices will not sound until they are re-enabled again. Refer to section 15.3.3 Test of Alarm Devices page 106

Outputs of type “Alarm devices” cannot be individually disabled, not even via Output types menu > > . All outputs of type "Alarm device" can be activated for an alarm device test.

6.3 Disable or Re-Enable Output

All control outputs (except outputs of type “Alarm devices”) can be individually disabled via Outputs menu > >

- Loop unit xxx output x
- Control unit Sx

This is indicated by LED Disablement .

They will remain disabled until they are re-enabled.

See also section 15.2.4 “Disable / Re-enable Output Type”

See also section 15.6.6 “Activate Output”

An output can be activated for an output test, even if it is disabled.

6.4 Disable or Re-Enable Control Outputs

All control outputs programmed as type:

- Control (general)
- Ventilation (Fan / Damper)
- Extinguishing
- Interlocking

… can via disable menu > > be collectively disabled for the control unit. This is indicated by LED “Disablement”.

They will remain disabled until they are re-enabled.

See also section 15.6.7 “Activate Interlocking”

See also section 15.6.7 Activate Output

7 Alarm

Analogue detectors (sensors), conventional smoke and/or heat detectors, manual call points and programmable inputs can initiate a fire alarm condition.

7.1 Alarm Types

There are a number of alarm types

1) Alert Annunciation alarm, i.e. the activation of the ASE (fire brigade tx) is delayed during an acknowledgement time and an investigation time respectively.
2) Analogue detectors initiated: Pre-warning, Heavy smoke alarm and Heavy heat alarm
3) A Co-incidence alarm initiated by a “Two unit dependent” addressable alarm points (normally only smoke detectors) and “2-zone dependent” zones, can activate
4) Quiet alarm - used to activate outputs, based on smoke detected by a smoke detector, without activating a real fire alarm in the system. This alarm type is used in AS1668 fan control and other applications that require a non-latching / non-brigade call alarm.

7.1.1 Pre-Warning

Activation of Pre-warning is an option that must be enabled (via EBLWin) for the control unit.

Note: Pre-warnings activated in the Firefocus will always be presented in the Firefocus and all programmable outputs in the system (with trigger condition pre-warning) will be activated (if not disabled).

An analogue detector will generate a pre-warning for a lower alarm threshold level than the fire alarm level. Pre-warning can be used when an early warning and/or early action is required, such as a 'soft' computer shutdown. Normal alarm devices (output type 'Alarm devices'), routing equipment, and so on, will not be activated

Any programmable input can also be used to activate a pre-warning alarm e.g. aspirating system. Refer to the (EBLOne) planning instructions in EBLWin.

When a pre-warning alarm is activated, see Figure 9 below, the following happens:

- The integrated buzzer in the Firefocus sounds 0.8 sec. every five sec. (0.8 / 5 sec.).
- Outputs programmed for pre-warning are activated.
- On the touch screen, a presentation number (zone/address) is shown (for the first pre-warning).
- On the touch screen, a user definable text message (the alarm text for fire alarm) is shown (if programmed).

Figure 9: Pre-warning Alarm Display (pre-warning zone 003, address 04).

“SMOKE” after the presentation number is automatically added depending on the type of alarm point (SMOKE, HEAT, MULTI or MCP).

If more than one pre-warning is activated, the arrows on the control “Several Alarms” will turn red and the pre-warnings will be automatically scrolled (every five seconds).

Pre-warnings are automatically reset, see Chapter 8 “Alarm Reset” Page 45

7.1.2 Fire Alarm

When a fire alarm is activated, the following happens

- The touch screen displays the fire brigade page.
- The integrated buzzer in the Firefocus sounds for 0.4 seconds each 0.4th second (0.4 / 04 sec.)
- LED on the FBP is blinking (0.4 / 0.4 sec.).
- LEDs “Several Alarms” blinking (0.4 / 0.4 sec.)
- Output for ASE (Fire brigade tx) is activated.
- Outputs for fire alarm are activated. Outputs programmed for General fire alarm and outputs programmed for the activated fire alarm(s).
- On the touch screen FBP, a presentation number (zone/address) is shown (for the first fire alarm).
- On the touch screen FBP, a user definable text message (alarm text) is shown (if programmed).
- On the touch screen FBP, is also some additional information presented.

Figure 10: One Alarm Point Activating Fire Alarm (fire alarm zone 002, address 03).

Figure 11: More than One Alarm Point Activating Fire Alarm.

7.1.2.1 Alarm Source

An alarm point can activate a fire alarm based on detection of smoke, heat or multi. A Manual call point can be used to manually activate a fire alarm.

After the presentation number is automatically added SMOKE, HEAT, MULTI or MCP depending on type of alarm source.

The alarm source "Smoke", “Heat”, “Multi”, or “MCP” will be added to the normal fire alarm information.

Alarm sources can be used to trigger control expressions,

7.1.2.2 Additional Information

First alarm, Latest alarm, Alarm number and number of zones in alarm.

User definable alarm text for each alarm point and zone line input can an individual alarm text be shown (if programmed). Up to 40 characters can be used.

When the arrows on the “Several Alarms” LED turns red, it indicates that more than one fire alarm is activated. To scroll through the alarm points, press the control “Several Alarms”.

Reset of the fire alarms, see section 8 “Alarm Reset” page 45.

7.1.3 Test Mode Alarm

Regarding Test mode, see section 15.3.1 “Perform Monthly Test” page 102 and section 15.3.2 “Perform Zone Test” page 104.

When an alarm point in a zone set in test mode is tested, it is shown on the touch screen as a fire alarm but will add “Test mode” to the information.

The test mode is indicated by LED “Test mode”.

No outputs will be activated except the fire door outputs. The test mode alarm will be automatically reset after approximately 10 seconds.

7.1.4 Heavy Smoke Alarm / Heavy Heat Alarm

An analogue detector can activate a heavy smoke / heat alarm for a higher alarm level than the normal fire alarm level, i.e. a normal fire alarm is already activated by a detector activating a heavy smoke / heat alarm.

Heavy smoke / heat alarm is to confirm heavy or increasing smoke / heat and can be used for special actions.

The following occurs in case of a heavy smoke / heat alarm:

- Outputs programmed for heavy smoke / heat alarm are activated.
- Each heavy smoke / heat alarm is presented with a “title”, which means “Heavy smoke”, or “Heavy heat” will be added to the normal fire alarm information:

Figure 12: Heavy Smoke / Heat Alarm Display.

Heavy smoke / heat alarm will be reset when the fire alarm respectively is reset.

7.1.5 Alert Annunciation Alarm (AA Alarm)

When the AA function is enabled, indicated by the LED “Fire brigade tx delay”, the indications, actions, and so on are the same as for a normal fire alarm (see above) except for the Firefocus output routing equipment (fire brigade tx), which will not be activated directly.

There will also be a “title”. “Alert annunciation” or “Alert annunciation acknowledged” will be added to the normal fire alarm information. The AA alarm must be acknowledged within an acknowledge time and reset with an investigation time, otherwise the output(s) for routing equipment (fire brigade tx) will be activated.

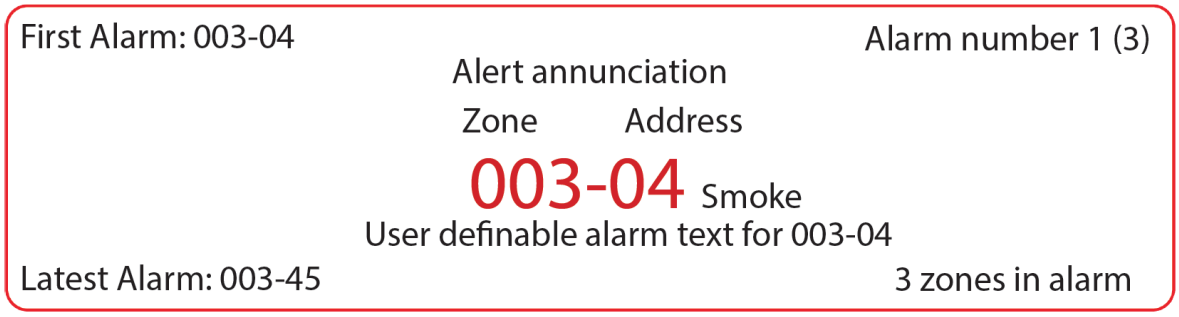


Figure 13: Alert Annunciation Display.

Note: The control “Acknowledge” is only visible if an AA alarm is activated.

7.1.6 CO-Incidence Alarm (2-Address / -Zone Dependence)

The co-incidence alarm function is programmed via EBLWin for specific alarm points / zones. When only one zone or one zone / address (alarm point) is in alarm state, the Firefocus buzzer (0.8 / 5 sec.) and there is a con-incidence alarm presentation on the touch screen.

The Co-Incidence alarm will be automatically reset after 5 minutes or via the “Reset” control.

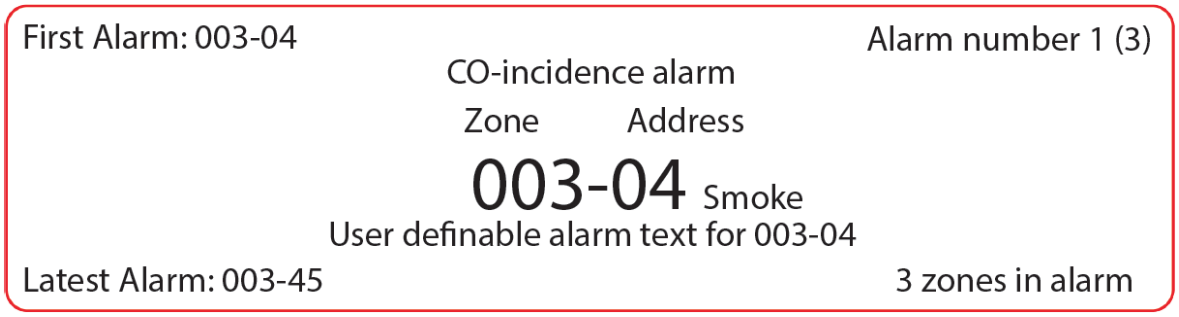


Figure 14: Co-Incidence Alarm Display (zone 003, address 04).

If more than one co-incidence alarm not dependent on each other are activated, the arrows on the control “Several Alarms” will turn red and the co-incidence alarms will be automatically scrolled (every five seconds).

If two or more zones or alarm points (zone / addresses) dependent on each other are in alarm state at the same time, normal fire alarm (see above) will be activated in the system. The co-incidence alarm function can be turned on / off via a time channel.

7.1.7 Delayed Alarm

Delayed Alarm is an option that can be enabled via EBLWin for a specific alarm point. Two applications for delayed alarm are shown below.

7.1.7.1 Standard Alarm Delay Applications

In some premises, delayed fire alarm activation from analogue smoke detectors can be used to avoid nuisance alarms. The delay time will be added at the end of the alarm algorithm when a fire alarm normally

would have been activated in the Firefocus. This function may require the consent of the relevant fire service.

Note: The delayed alarm function for a conventional Zone Line Input e.g. 4461 Input 0 (Z) is different. The "Delayed alarm" check box in the Zone Line Input properties is called "AVF", the general delayed alarm function will not be used and will be replaced by the alarm verification function (AVF).

7.1.7.2 Alarm Delay Facility (ADF)

The alarm delay function in the system properties must be set in normal conditions to the default value if ADF feature is not used.

The Alarm Delay Facility ADF is a defined function specified in AS1670.1:2024 (clause 3.2.3). It is typically used in residential applications to reduce the impact of consistent nuisance alarms. A smoke detector is used in conjunction with a sounder, when the detector enters the alarm condition only the associated sounder sounds providing a local only warning to the occupant. At this point a delay timer has started a preprogrammed countdown delay period, If the smoke is cleared from the detector before the end of time delay, the smoke detector will automatically reset, and the system remains in the normal condition. If the detector is not reset within the delay period, then the Firefocus is initiate a full general alarm condition.

In addition to the smoke detector a heat detector is located in the area of the smoke detector. This heat detector provides a redundancy for the delay period. If during the delay period, the heat detector enters the alarm state the delay time is overridden and the Firefocus will initiate a full general alarm condition

This facility is typically used to control nuisance alarms from smoke detection activation within SOUs in class 2, 3 and 4 buildings due to cooking or other normal occupant activities. The function can be utilised to replace the requirement for the wall mounted acknowledgement module (LAAF or AAM).

The ADF feature has been added to 4400I and 4400 in EBLWin **software V3.6** or higher. The sounder base (3379/4479) is activated in case of a smoke detection for adjustable period of 0 - 300 second to provide local warning.

Application Example:

A typical application for the ADF would be a residential accommodation where nuisance alarms may cause a fire brigade callout. A sounder base(s) 3379/4479 is used as a local audible warning, inside the accommodation e.g. apartment, unit, etc. In case of an alarm from a smoke or multi detector inside the unit, 3379 sounder operates and continues to operate for the time delay configured in the system properties (0-300 sec). The occupant can fan the smoke detector to clear the sensor.

If the smoke has not been cleared from the smoke sensor by the end of the delay time, the Firefocus will generate a general fire alarm condition. If the smoke is cleared from the smoke sensor within the delay time, the alarm will automatically reset, 3379/4479 will be silenced and the system restores to the normal condition.

In application where multi detectors (4400 or 4400I), are used "*Abort delay on heat* "check box must be selected in detectors properties, so that the control panel will override the time delay and generate general fire alarm upon heat activation.

Several control expressions are available to cover any possible configuration:

- DelayedAlarmZoneAddress (Zone, Address), true when a specific zone / address is in delayed alarm state.
- DelayedAlarmZone (Zone), true when a specific zone or any detector in a specific zone is in delayed alarm state.
- GeneralDelayedAlarm, true when any zone or zone/address is in delayed alarm state.

Note: Detail procedures of EBLWin configuration for ADF feature can be found in Analogue Multi Detector with isolator 4400I Technical Datasheet (TDS074).

Figure 15: Delayed Alarm Display.

7.1.8 Quiet Alarm

Quiet alarm is an alarm type that can be programmed via EBLWin for analogue smoke detectors. The quiet alarm is self-resetting alarm (non-latching), it is only displayed on the touch screen and cannot generate general alarm functions.

The EBLWin is used to configure the type of alarm in the smoke detector properties. When a detector is selected to be type “Quiet alarm” for supply air fan applications, the associated duct detector will be non-latching and resets automatically after the post timing is completed, post time can be configured in EBLWin using a specific time signal period. In this application, the I/O module 4461 must be selected as “4461 for fan”. Quiet alarm is also used for the smoke detector associated with the alarm delay facility

The EBLWin is used to configure the type of alarm in the smoke detector properties. Quiet alarm controls AS1668 fan e.g. supply air fan applications. When a detector is selected to be type “Quiet alarm”, the duct detector will be non-latching and resets automatically after the post timing[1] is completed, post time can be configured in EBLWin using a specific time signal period. In this application, the I/O module 4461 must be selected as “4461 for fan”.

Quiet alarm Indications and actions:

- Detector LEDs are turned on (also a connected RIL if used).
- LEDs "Fire" is blinking (0.4 / 0.4 sec.).
- The buzzer sounds (0.8 / 5 sec.),
- A Quiet alarm presentation (incl. a title "Quiet alarm") in the display.

Programmable outputs for quiet alarm are required e.g. 4461 outputs controlling fan operation i.e. any output with a control expression containing the trigger conditions "Quiet Alarm Zone" or "Quiet Alarm Zone Address" will display as shown below:

[1] When the smoke clears up from the smoke chamber, the detector resets after predetermined time (normally 60 sec.)

Figure 16: Quiet Alarm Display.

Quiet Alarms are automatically reset, non-brigade call alarm and do not activate general alarm output, see “Quiet Alarm Reset” page 46.

8 Alarm Reset

8.1 Pre-Warning Reset

Pre-warnings are non-latching alarms i.e. automatically reset when the alarm point / zone is no longer above pre-warning level. Outputs activated by pre-warning will be de- activated.

8.2 Fire Alarm Reset

All activated fire alarms (alarm points / zones) can be reset by pressing “Reset” within the FBP. Refer clause 3.3.3.

When all fire alarms are reset, LED “Fire” is extinguished. All outputs (for fire alarm) are reset, i.e. deactivated.

Note: The detectors having activated fire alarm should, after reset, be inspected, tested and replaced when required.

8.3 Test Mode Alarm

Test mode alarm is automatically reset after approximately 10 seconds.

8.4 Heavy Smoke / Heat Alarm Reset

If a heavy smoke / heat alarm has been activated, it will be reset at the same time as the corresponding fire alarm is reset. Also, the output(s) will be reset, i.e. de-activated.

8.5 Alert Annunciation Alarm Reset

Regarding the function, see section 8.5 Alert Annunciation Alarm Reset and the planning instructions in EBLWin “Help”.

Reset of the AA alarm(s) can be done via the alarm page.

Note: Reset via an AA unit is possible only during the investigation time and of AA alarm(s) only (not normal fire alarms). If more than one AA alarm is activated, they will be reset all at a time.

8.6 Co-Incidence Alarm Reset

A Co-Incidence alarm can be manually reset with the “Reset” control or automatically reset after 5 minutes (i.e. if the alarm point / zone is no longer in alarm state).

See also chapter 7.1.6 CO-Incidence Alarm (2-Address / -Zone Dependence)

8.7 Delayed Alarm Reset

The Delayed alarm will be automatically reset if the alarm point during the delay time countdown no longer is in alarm state or when a normal fire alarm is activated (when the delay time has run out).

8.8 Quiet Alarm Reset

Quiet alarms are non-latching, i.e. they will be automatically reset when the alarm point / zone is no longer above alarm level. Outputs activated by quiet alarm will be de-activated. (In some cases, after a programmable delay time.)

9 Fault

All faults are delayed in order not to generate any unnecessarily faults, for example. For COM loop and zone interface inputs faults, the delay time is approximately 45 seconds. Some units may also have an internal delay time, which makes the delay time even longer, for example the Multipurpose I/O unit 4461 has an internal delay time of 30 seconds, which results in 45 + 30 = 75 seconds delay time in total.

In case of fault condition, the following will happen in Firefocus:

- The buzzer in the Firefocus will sound continuously (steady).
- The fault condition output for routing equipment (Fault tx) will be activated.
- Programmable output(s) for general fault will be activated and output(s) for general charge fault might be activated.
- LED  "Fault" will be turned on.
- LEDs  "Alarm devices" flashing,  "System fault" and/or  "Fire brigade tx Fault/Disablement" might be turned on as well.

The following will be shown on the touch screen:

- A fault message including date, time and status will be shown on the touch screen. If it is an alarm point or zone, the User definable alarm text will also be shown. If there is no zone/address, the logical name programmed in EBLWin of the 'object' will be shown instead.
- On the touch screen, up to three fault messages can be shown simultaneously. On the touch screen, down to the left, the number of faults is shown.
- If a fault has been corrected (serviced) before it has been acknowledged, the status information is "Serviced".
- Fire alarm presentation has higher priority than the fault messages, however during fire alarm presentation the faults can be shown via the menu system

Faults must be acknowledged, which is done via Fault menu  > >

This menu is a list of all faults in the system:

- Not corrected / serviced and not acknowledged fault.
- Not corrected / serviced but acknowledged fault.
- Corrected / serviced but not acknowledged fault.

If a fault cannot be corrected, it is important to contact service provider immediately.

The faults are normally latched but can via EBLWin be set to be "not latched". This will make the fault disappear from the list when serviced but not acknowledged.

The fault list shown on the event tab page, displays all faults, even acknowledged faults.

9.1 Fault messages

Below follows a list of all fault messages:

FAULT: Downloading failed Restarting….
A fault in the downloaded Site-Specific Data (SSD). After the restart a new fault will be generated: FAULT: Site Specific Data (SSD) A new SSD download will probably solve the problem.

FAULT: 24V for external equipment (auto resettable)
The auto-resettable fuse PTC7 (max 250mA) has been activated. Check for overload or damage on the external equipment. To reset the PTC, disconnect the external equipment and wait 5 min to let the PTC cool down before re-connecting the external equipment.

FAULT: 24V for routing equipment (auto resettable)
The auto-resettable fuse PTC6 (max 150mA) has been activated. Check for overload or damage on the ASE. To reset the PTC, disconnect the routing equipment and wait 5 min to let the PTC cool down before re-connecting the routing equipment.

FAULT: 24V for Gateway (auto resettable)
The auto-resettable fuse PTC5 (max 150mA) has been activated. Check for overload or damage on the Gateway. To reset the PTC, disconnect the Gateway and wait 5 min to let the PTC cool down before re-connecting the Gateway.

FAULT: Alarm routing equipment
The fault is to be found in the ASE. The ASE fault output is connected to a programmable supervised input in the Firefocus system. Check the input connections as well.

FAULT: Battery, technical address xxx
The charging function in the external power supply 4466 connected on the COM loop is not function correctly. • Batteries (2 x 12 V) are missing or not connected correctly. • The PCB is faulty and must be replaced.

FAULT: Battery zone xx address x, technical address xxx
Valid for the wireless units 4611. The battery voltage is < 2.8V. The batteries must be replaced.

FAULT: Cables mixed [sub-loop x], loop x
The two wires L (SA) and C (SB) for COM-loop no. x (0) have been mixed (alternated). Check / correct the wire connections.

FAULT: Charger
The battery Charging function is not functioning. The main board may have to be replaced.

FAULT: Charging external power supply
The fault is to be found in the external power supply equipment, which has a charging fault output connected to a programmable input.

FAULT: Charging, output unit xxx
The fault is to be found in the external power supply unit 4466. Charging is stopped due to too high output current.

FAULT: Checksum system program
A fault in the main board software. LED  "System fault" is turned on. This is a very serious fault. Call for service personnel / engineer immediately.

FAULT: Cut-off tech addr nnn <-> nnn [sub-loop x]
This fault is indicating a cut-off (break) on COM loop x or the COM loop voltage is too low at the end of the loop. Tech addr nn <-> nn describes between which short circuit isolators the cut-off is located. nn = Technical address of the unit with short circuit isolator. A & B is the built-in isolator in the Firefocus A-direction and the B-direction respectively. If the break (cut-off) is a single break on the loop there will be no other fault messages. If there are several breaks on the loop, the message shows the last isolator before the break in the A-direction (incl. the following isolator). There will also be a "FAULT: No replay …. "message for each unit that Firefocus cannot find and "FAULT: Multiple faults ….". ***Note:*** *Each 10th minute a new attempt is made to communicate in one direction only. When all breaks are repaired (corrected), the communications automatically return to communicate in one direction only.*

FAULT: Detector removed zone xxx address xx
A wireless smoke detector 4611 has been removed from its base.

FAULT: Earth fault (minus) FAULT: Earth fault (plus)
Earth fault is detected in control unit no. xx +24V to earth is normally 11.5V. 0V to earth is normally 12.5V. • Voltage to earth < 3.0 V = Earth fault (minus) • Voltage to earth > 21.9 V = Earth fault (plus) Check all cables, the function of Firefocus cannot be guaranteed. Call for service personnel / engineer. ***Note:*** *When the earth is located on the COM loop it can be difficult to measure with a multi meter because SA and SB changes polarity during COM loop communication. However, the Firefocus makes measurements at specific timings when the polarity of SA and SB are known. In case of an earth fault on the COM loop it will be displayed as follows:* • *Earth fault on the SA line will be displayed as Earth fault (minus)* • *Earth fault on the SB line will be displayed as Earth fault (plus)*

FAULT: Earth fault, technical address xxx
Check all cables (for damage, etc.) connected to the unit.

FAULT: External fuses, control unit xx
The fault is to be found in the external power supply equipment, which has a fuse fault output connected to a programmable input in the control unit no. xx.

FAULT: External power supply
The fault is to be found in the external power supply equipment, which has a fault output connected to a programmable input.

FAULT: Extinguishing system
The fault is to be found in the extinguishing system, which has a fault output connected to a programmable supervised input in the Firefocus system. Also check the input connections. There will also be an additional information text on the touch screen: Extinguishing fault.

FAULT: Factory settings
The factory settings have been "changed", e.g. due to some external disturbance. The main board must be replaced.

FAULT: Fan, technical address xxx
The LED “Fault” is lit on a fan control module connected to Firefocus. Fan no. xx has been activated but the corresponding I/O unit 4461 input has not been activated within the programmed time. Check the fan and the cables / connections. Check CT or pressure switch in MSSB and the cables/connections. The fan phase fault input is activated. Check cables / connections. ***Note:*** *This fault is "non-latching" irrespective of all other faults are being "latched".*

FAULT: Fuse output x, technical address xxx
Blown fuse 0, 1 or 2 on the 4464 board or in power supply 4466. Replace the fuse.

FAULT: Fuse, supervised output 1 (auto resettable)
The auto-resettable fuse PTC2 (for output 1) (max 250mA) has been activated. Check for overload on the equipment connected to the output. To reset the PTC, disconnect the connected equipment and wait 5 min to let the PTC cool down before re-connecting the equipment.

FAULT: High current [sub-loop x] loop x
When starting up the control unit or when the COM-loop is reconnected, the loop current in normal condition is measured and stored. Main board 2010 and a SUB-loop connected to 4585:

This fault will be generated for a measured current higher than the stored value plus 50mA. (One example 75mA (stored) + 50mA = 125mA = fault limit.)

Note: *This fault is not checked in alarm condition. The reason could be not "full" short circuit on the COM loop but very close to short circuit, e.g. due to moisture / corrosion / bad contact. Check connections etc.*

FAULT: High current consumption
The Firefocus current consumption is > 0.6 A (or > 1.5 A in alarm state) and because of this, the battery charging is turned off and will be so until the current consumption has decreased to < 0.6 A (< 1.5 A) again.

FAULT: High resistance [sub-loop x] loop x
The loop resistance measured by the control unit / 4585 board is too high for the current consumptions. Check cables / connections etc. The measured value can be seen in Current consumption menu.

FAULT: Interlocking input AAA-PP
An interlocking input is not activated within the time set for fault activation (5 – 255 seconds). The time is counted from the activation of the output in the interlocking combination, area AAA / point PP.

FAULT: Loop unit, technical address xxx
The Brooks customized 1200 series unit is not functioning i.e. the unit is faulty. The 1200 series module must be replaced.

FAULT: High resistance, primary battery circuit FAULT: High resistance, secondary battery circuit
Battery internal resistance > 0.5 Ω. The "Resistance in battery circuit." Value shown in Current consumption menu is > 500 m Ω. • The battery might be too old. • Check / adjust the power supply voltage ($24V_{DC}$). • Check the charging voltage over the battery respectively (13.5 – 13.8 depending on the actual charging step). • Check the voltage over a disconnected battery (fully charged > 13 V). The battery should normally be replaced. ***Note****: the battery check is performed every 15 minutes, i.e. it can take up to 15 minutes until the fault status will be "corrected".*

FAULT: Low battery capacity, technical address xxx
Battery in external power supply 4466 unit no. xxxxxx, internal resistance > 0.7 Ω • The battery might be too old. • Cables, fuses etc. for externally placed batteries might cause a voltage drop. • Check / adjust the power supply voltage ($24V_{DC}$). • Check the charging voltage over the battery respectively (13.5 = 13.8 depending on the actual charging step). • Check the voltage over a disconnected battery (fully charged > 13 V).

The battery should normally be replaced.

***Note**: the battery check is performed every 15 minutes, i.e. it can take up to 15 minutes until the fault status will be "corrected".*

FAULT: Low voltage
System voltage < 21.0V DC. Check the power supply MeanWell MDR-40-24 output voltage, which should be $24V_{DC}$. Replace the power supply if required. ***Note:** A control unit powered by the back-up battery only, will shut down at a battery voltage of 20.6V, in order not to damage the battery. When this fault is detected, the log is saved to flash memory automatically, to keep the log intact after a power failure.*

FAULT: Low voltage, technical address xxx
System voltage < $21V_{DC}$ in the external power supply unit 4466. Check the power supply output voltage, which should be $24V_{DC}$. Replace power supply unit if required.

FAULT: Mains
The fault is activated 1 - 300 minutes after: • Loss of mains, i.e. no 230 Vac • Blown mains fuse. When this fault is detected, the log is saved to flash memory automatically, to keep the log intact after a power failure.

FAULT: Mains, external power supply
This is valid for external power supply equipment, which has a fault output connected to a programmable input in the Firefocus system. The fault is activated 1 – 300 minutes after the input is activated. • Loss of mains, i.e. no 230 Vac to the external power supply equipment. • Blown mains fuse. • Check the programmable input connections.

FAULT: Mains, technical address xxx
This is valid for the external power supply unit 4466 connected on the COM loop. The fault is activated after 1 – 300 minutes after: • Loss of mains, i.e. no 230 Vac to the 4466 unit. • Blown mains fuse. • Fuse F1 blown on the 4466 unit's charger board (Fuse T5AH 250 V, 5x20mm). The time delay of this fault activation is programmable via EBLWin

FAULT: Multiple faults, [sub-loop x], loop x
Break (cut-off) / short-circuit in more than one segment on the COM loop.

FAULT: No reply Loop unit xxx
The unit is one of Brooks COM loop modules, the unit cannot be found by the control unit.

- Check the unit's COM loop address (with the programming tool 4414).
- Check the downloaded Site-Specific Data (SSD).
- The unit might be faulty or might be removed from the COM loop.
- There might be a double break or short-circuit on the COM loop.

FAULT: No reply zone: xxx address: xx, technical address xxx
The unit cannot be found by the control unit. • Check the unit's COM loop address (with the programming tool 4414). • Check the downloaded Site-Specific Data (SSD). • The unit might be faulty. • The detector might be removed from its base or faulty. • There might be a double break or short-circuit on the COM loop. • Valid for 4611 Battery voltage of 4611 < 2.3V or the Base station 4620 does not receive any detector data.

FAULT: Primary battery
• Battery voltage is below 9.5 V • Batteries (2 x 12V) are missing or not connected correctly. • PTC8 (max 2.6A) auto resettable. This check is done every 1 minute the fault is generated within 60 sec. Fuse: PTC8 (max 2.6A) auto resettable.

FAULT: Read/write site data (SSW)
SSW = the updated data operation, i.e. week average sensor values, access codes, calibration values and event logs. • If the Firefocus power is dead (i.e. mains and battery disconnected) without first doing a Safe shut down of the control unit via Safe shut down menu, this fault might be generated when the CU is powered again. After fault acknowledge the SSW will get default values and the fault will be corrected (serviced). Supervised outputs must be re-calibrated via Calibrate outputs menu. • Some external influence may cause a fault in the SSW, Call for service personnel/engineer.

FAULT: Restart control unit, code xx, address yyyyyyyyyy
A restart has occurred in the control unit. SSD and S/W download will automatically be followed by a restart. Also, you can manually do a restart. Regarding the restart codes 00, 03, 13 & 25. Refer to Table 12: Firefocus Restart Codes page 75 The following restart codes are due to some external disturbance and are not normal, i.e. call for service personnel / engineer.

FAULT: Secondary battery
• Battery voltage is below 9.5 V • Batteries (2 x 12V or 1 x 12V) are missing or not connected correctly • PTC10 (max 2.6A) auto-resettable fuse This battery condition is checked every 1 minute, the fault is generated within 60 sec. Fuse: PTC10 (max 2.6A) auto resettable.

FAULT: Sensor zone: xxx address: xx, technical address xxx
The analogue smoke, heat or multi detector is faulty. The detectors built-in self-verification function has reported a fault. The detector must be replaced.

FAULT: Short circ. tech addr nnn <-> nnn, [sub-loop x], loop x
Tech addr nnn <-> nnn describes between which Short Circuit isolators the short-circuit is located. nnn = Technical address for short circuit isolator. A & B are the built-in isolators in the Firefocus. A-direction and B-direction respectively. ***Note:*** *Each 10th minute a check is performed if all short-circuits are corrected (repaired). If so, the communication automatically returns to communicate in one direction only. The fault must be acknowledged, and it can last up to 10 minutes after the acknowledgement before the communication returns to communicate in one direction only.* ***Note:*** *This fault might be incorrectly shown if the SA – SB cables are missed. If no short circuit can be found, run "Check loop" from EBLWin to get correct information*.

FAULT: Site Specific Data (SSD)
The Site-Specific Data (SSD) is not downloaded correctly (a checksum fault, etc.). A new SSD download (via EBLWin) is required.

FAULT: Supervised input x, technical address xxx
• A fault on the supervised input x in 4461 • A fault on the supervised input x on the board 4464. (Mounted in power supply 4466) Check the cables / connections (cut-off or short-circuit).

FAULT: Supervised output x
If the output is programmed for sounders (type "Alarm devices"), it is also indicated by LED "Alarm devices" blinking. If the output is programmed for fire brigade tx (type "Routing equipment"), it is also indicated by LED "Fire brigade tx Fault/Disablement" blinking. Supervised (1-50 kΩ): X = 1 (S1): Short circuit/break on the connected cable / equipment, cable might have high resistance Fuse auto-resettable PTC2 (max 250mA) • Calibration not performed via Calibrate outputs menu. • Connected equipment might be removed • Resistor(s) missing or not correct value. (1-5 resistors 33kΩ). ***Note:*** *The calibrated value must be in the range 1 kΩ – 50 kΩ.*

FAULT: Supervised output x, technical address xxx
This fault message is valid for a COM loop output unit 4464 board output. If the output is programmed for sounders or OWS (type Alarm devices), it is also indicated by LED "Alarm devices" blinking.

If the output is programmed for fire brigade tx (type Routing equipment), it is also indicated by LED “Fire brigade tx Fault/Disablement” blinking.

- Short-circuit / break on the connected cable / equipment.
- Connected equipment might be removed.
- End-of-line resistor, is missing.

FAULT: Temperature sensor
The sensor is faulty.

FAULT: Wrong type of unit xxxxxx
Check the type of unit, which should be the same as programmed via EBLWin e.g. unit is heat but in EBLWin programmed as smoke.

FAULT: Wrong type of unit zone: xxx, address: xx, technical address xxx
Check the type of unit, which should be the same as programmed via EBLWin.

FAULT: Zone line input, zone: xxx address: xx technical address xxx
Valid for Multipurpose I/O unit 4461 supervised zone line input Z. Break on the zone interface or wrong / no end-of-line capacitor (10 µF) or short-circuit (if not programmed for fire alarm at short-circuit).

External fault; User programmable text
Programmable input is connected to any external equipment’s fault output. User definable fault message (< 40 characters) must be programmed via EBLWin. ***Note:*** *The prefix “FAULT:” will not be automatically added.*

10 Fault Acknowledge

When a fault is generated in Firefocus, the following may occur:

- The LED “Fault is turned on. LEDs “Alarm devices” and/or “System fault” might be turned on as well.
- Output for routing equipment (Fault tx) is activated (ASE).
- Output for general fault is activated.
- Output for general charge fault might be activated.
- One or more fault message include date and time are shown on the Firefocus touch screen.

If Fault latching is selected in EBLWin, once the fault is corrected, the "Serviced" message will be shown on the touch screen i.e. the fault is already serviced / corrected. When the “Fault latching” check box is not selected in EBLWin, the “Serviced” fault will automatically disappear from the list.

Fault message example is shown in Figure 17 below.

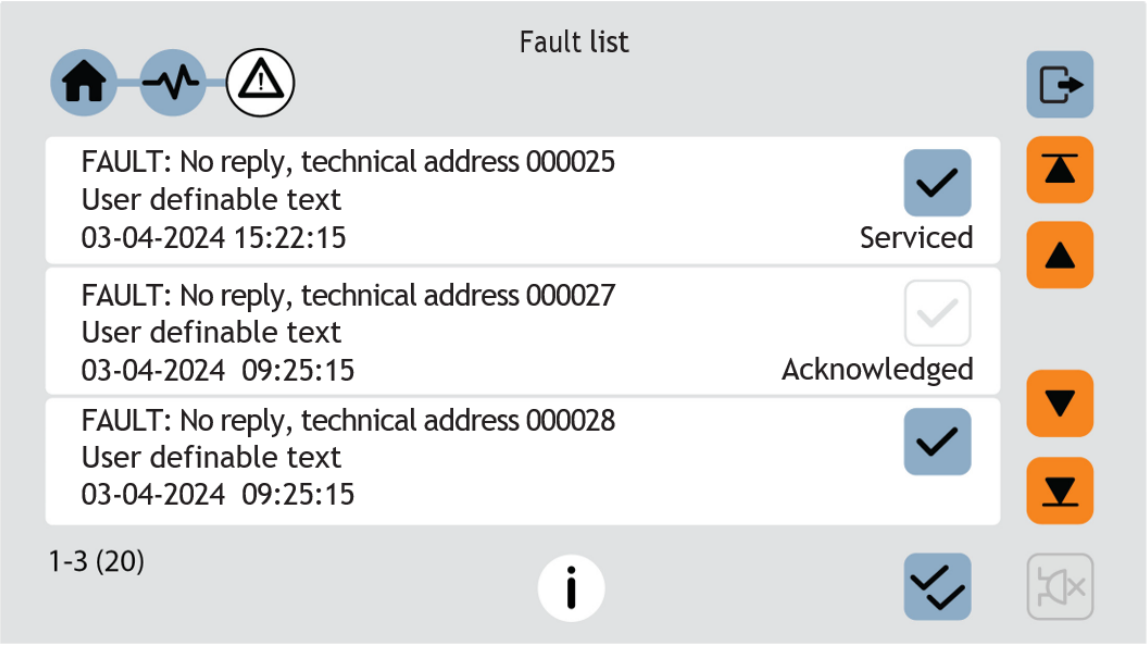


Figure 17: Fault Messages Shown on the Display.

Fault menu is a list showing a maximum 300 faults. This includes not acknowledged faults and/or acknowledged but not serviced / correct faults.

- All faults must be individually acknowledged, one by one or press to acknowledge all at the same time.
- When a fault is corrected before it has been acknowledged, the text "Serviced" is added after the time stamp, still must be acknowledged to remove from the display.
- When a fault is corrected / serviced and acknowledged, it will disappear from the list.
- When all faults have been acknowledged, output for routing equipment (Fault tx) is reset.
- Whilst there are faults (i.e. not acknowledged faults and/or acknowledged but not corrected faults), the LED “Fault” will be lit, and general fault (and maybe general charge fault) output(s) are activated.
- Faults, corrected faults and acknowledged faults are shown in the Event log > > .

11 Commissioning

11.1 General

Note: Ensure to keep the following, in the allocated document space in the cabinet:

1. Hardcopy of the SSD print out report.
2. Building layout drawing showing detectors and module's location in the building.
3. Operation Manual.
4. Logbook.

No connection, other than the mains power supply should be made, prior to checking the operation of the Firefocus.

Mains power should be turned on and charger voltage levels checked / set to 24VDC. If these levels are correct, batteries can then be connected. Follow the procedures shown in section 11.2 below.

Basic operation of the Firefocus should be confirmed as supplied without any external connections, ensure no earth fault shown on the touch screen.

Before connecting any field wiring, the battery supply and mains power must be turned off.

Cable resistance readings and field connections must then be checked to ensure they are correct prior to their connection to the Firefocus.

Tip! Measure the resistance of each loop wire (L & C respectively) before turning on the power. Check that the SA wire that goes out on terminal TB1-A and back on TB1-B and so on.

If the loop has short circuit isolators, only the SB wire can be measured.

11.2 Initial power up of Firefocus

Once the cabinet is mounted and secured in place, the following power up procedures must be followed:

1. Connect the incoming mains power feed to the mains isolating switch, ensure the switch is "OFF".
2. Turn "ON" the mains power from isolator switch inside the cabinet.
3. Connect the batteries to the battery leads provided.
4. LED "POWER" indicates that the 24 V_{DC} power supply is okay (PSU and/or battery). Confirm the "Power" LED is the only illuminating LED on the front display.
5. Once the basic operation of the panel is confirmed, remove the battery connections and disconnect the mains power via the isolate switch.
6. Terminate the COM loop and any field wiring into the connectors.
7. Turn ON the mains power and re-connect the battery connector, a restart will now take place see section 14.3 During Restart
8. The Site-Specific Data (SSD) – created in EBLWin can now be downloaded, see section 12.5 page 70.

Note: A "Safe shutdown" must be performed once Firefocus is cleared of all faults and the system becomes in normal operational mode. This is to avoid re-calibrating the supervised output should the panel is turned off.

12 Software Installation and SSD Download

12.1 EBLWin Software Requirements

To install EBLWin software in your PC, the instructions in this chapter must be followed, the instructions apply only to software versions ≥ V3.6.x.

Required files:

The following files must be copied in your PC:

1. Windows .Net Framework V4.7 or above (if Windows did not install it as part of its updates), normally it will be available in your PC.
2. USB driver for Firefocus V3.06
3. Sentinel_LDK_Run-time_setup file named HSPUserSetup.exe, this required for the EBLWin key 5094. **If not working**, download the latest sentinel LDK Run-time software (free) from
   https://cpl.thalesgroup.com/software-monetization/sentinel-drivers
4. EBLWin V3.6.0 file named EBLWin.msi and setup.exe
5. eblone_360.bin.
6. Firmware Manager V1.3.4

Hardware required:

1. EBLWin key 5094
2. USB Type C cable
3. Laptop with Win10 or Win11

The order of prerequisite software and drivers installed before EBLWin is important and must be followed as explained in this section 12.2 below.

12.2 EBLWin Installation procedure in a PC First Time

12.2.1 .NET Framework

.NET framework may already be installed as part of its system to ensure that, turn on .NET.

Click on windows start and type the keyword “Windows Features” and ensure that .NET Framework are turned on as shown below:

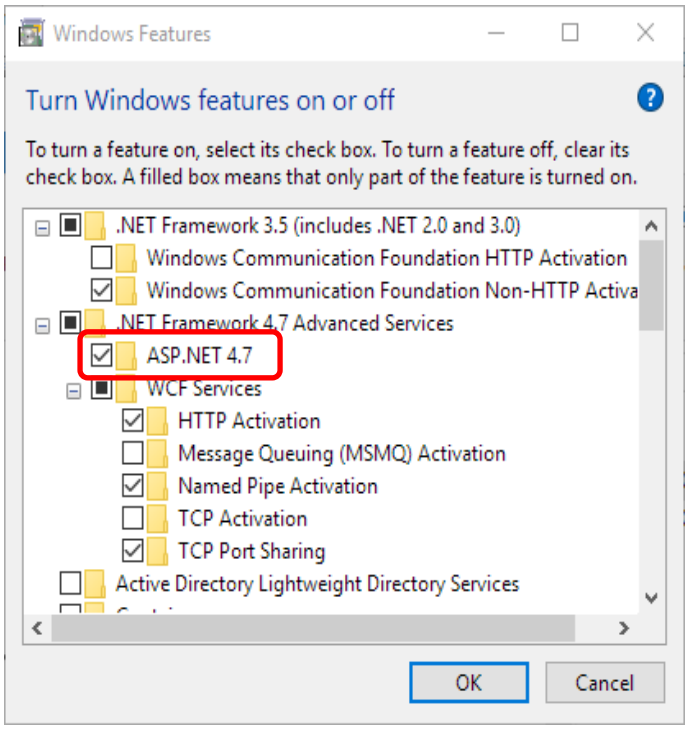


Figure 18: .NET Framework check.

12.2.2 HASP Driver Installation (For 5094 Key)

Install the HASP driver for key "**Sentinel_LDK_Run-time_setup**":

Win7: Right click on HASPUserSetup.exe and choose "Run as Administrator"

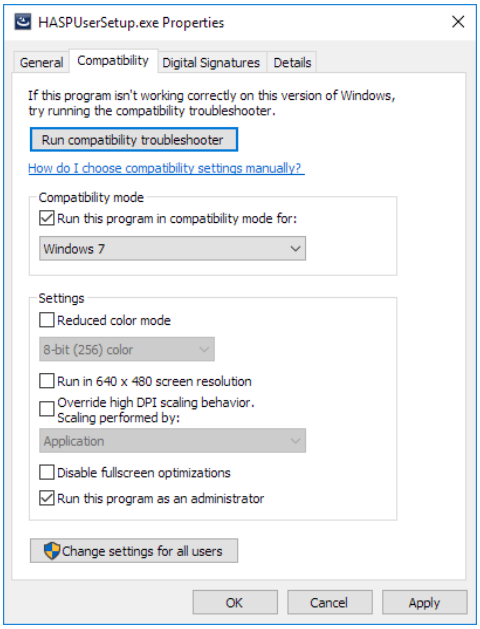


Figure 19: HASP User Setup Dialog box.

Win10: Right click on "**HASPUserSetup.exe**" and choose properties then go into the compatibility tab. Set as shown in Figure 19 above and click "**OK**".

Note: If the HASP driver cannot be installed, you may need to download a recent version of Sentinel_LDK_Run-time software, it is free downloaded from ThalesGroup website.

12.2.3 USB Driver Installation

EBLWin communicates with Firefocus via USB. Since the control unit is unknown to Windows, drivers must be installed. The **driver** is available in Brooks website.

The procedures below describe the driver's installation procedures for Win10 or Win11:

1. Connect a USB cable from your PC to Firefocus (Driver software should be saved in a new folder in your PC).
2. Windows displays two messages "We are setting up a new device" and a few seconds later "Your device is set up and ready to go". Ignore these messages.
3. Open the device manager and locate "STM32 BOOTLOADER" under other devices as shown below.

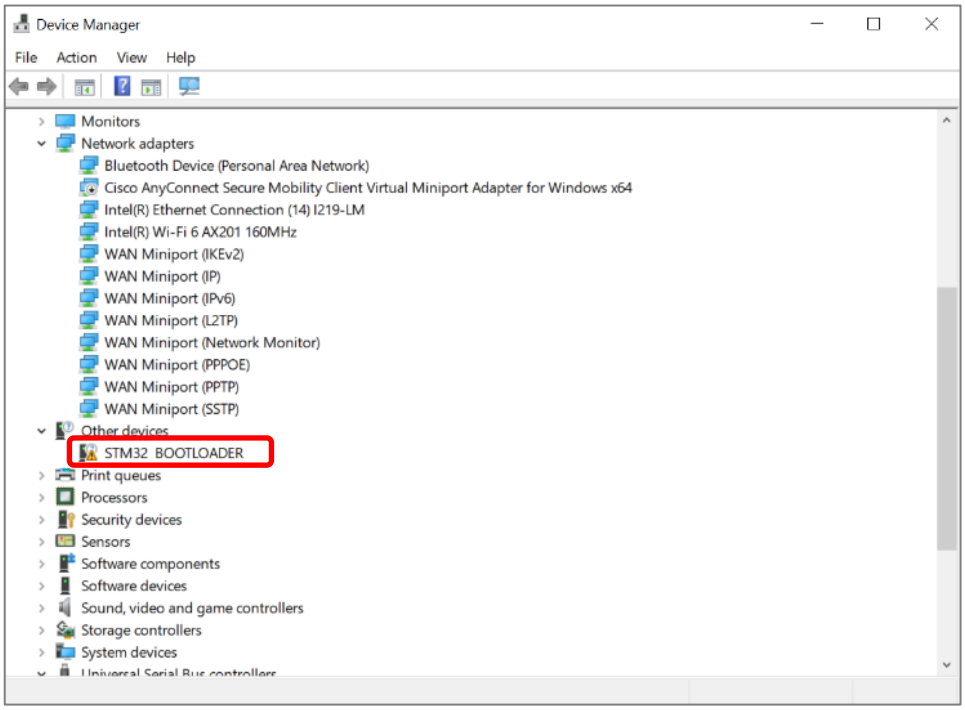


Figure 20: Firefocus Device in Device Manager

4. Right click on “STM32 BOOTLOADER” and select “Update Driver”, browse to the folder where the driver software is saved in your PC and click “Next”.
5. Windows will now install the drivers; you should see the following dialog:

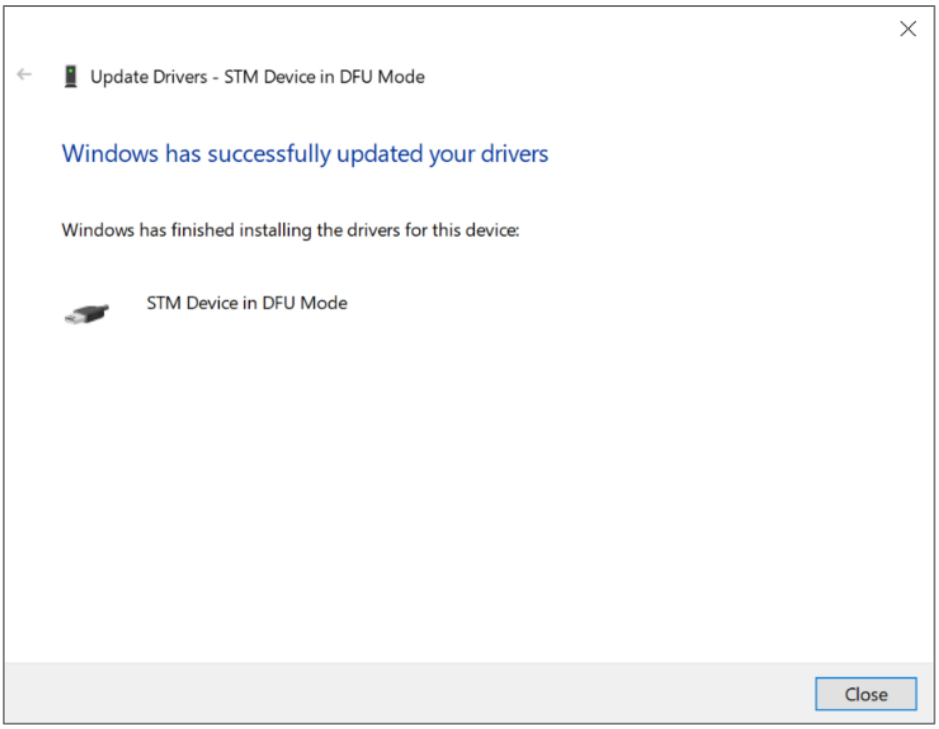


Figure 21: USB Driver Installation Completed

6. Click” Close”, the installation is now completed.

12.2.4 EBLWin Software Installation

1. Unzip EBLWin V3.6.x zip file and double click on the file named EBLWin.msi, the following dialog display

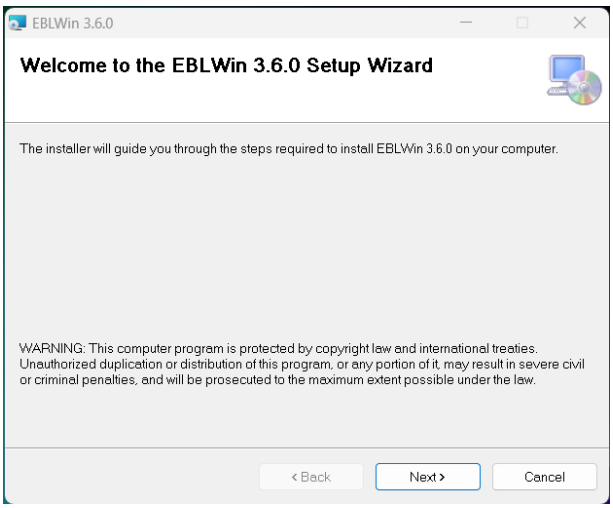


Figure 22: EBLWin 3.6.x Setup Wizard Form.

2. Click "**Next**", the following dialog will be shown:

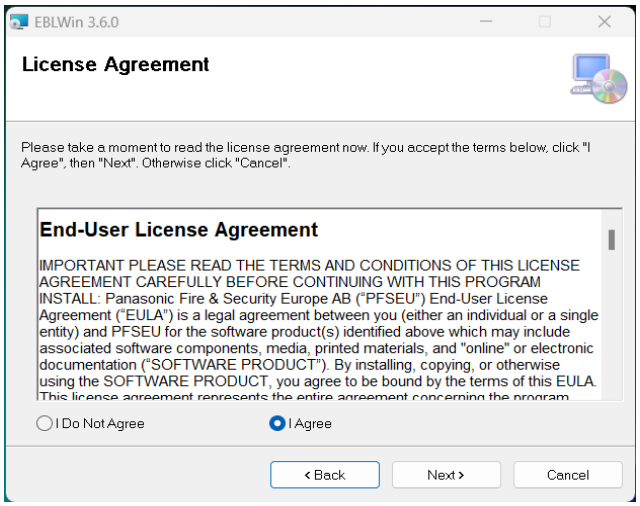


Figure 23: EBLWin 3.6.x License Agreement Form.

3. Click "**Agree**" then "**Next**", the following dialog will be shown

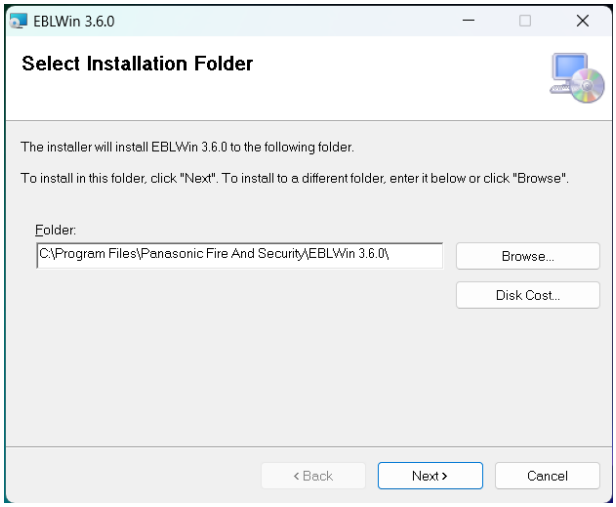


Figure 24: EBLWin 3.6.x Installation Folder Form.

4. Browse to the unzipped EBLWin V3.6.x folder saved in your PC and click "**Next**", the following will be shown:

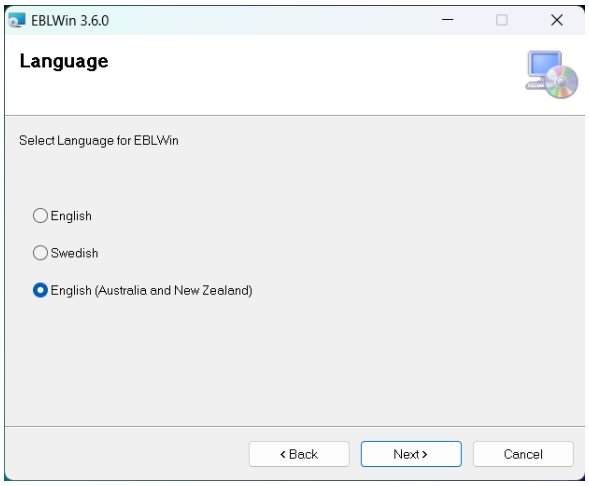


Figure 25: EBLWin 3.6.x Language Form.

5. Select "English (Australian and New Zealand)" and click "Next", when the confirmation Installation" window appeared, click "**Next".** The "Installation Complete" dialog will show click "Close" to exit the installation.
6. Launch EBLWin, the following will show:

Figure 26: EBLWin 3.6.x Default convention selection.

7. Select “Australia” for the Australian convention or “New Zealand” for NZ convention (only for systems used in NZ).
8. Plug in EBLWin key 5094 into another available USB port
9. Go to Tools > Log on control unit, the COM port number should be displayed.

Note: First time to launch EBLWin, ensure to select “Australia and New Zealand”, If any other convention is selected, the Brooks 1200 series modules (externally connected) will not be shown and can’t be programmed.

12.2.5 Installation of EBL Firmware Manager

1. Unzip “**EBL Firmware Manager V1.3.4**” zip file and double click on the file named “**EBL Firmware Manager.msi**”, the following dialog display:

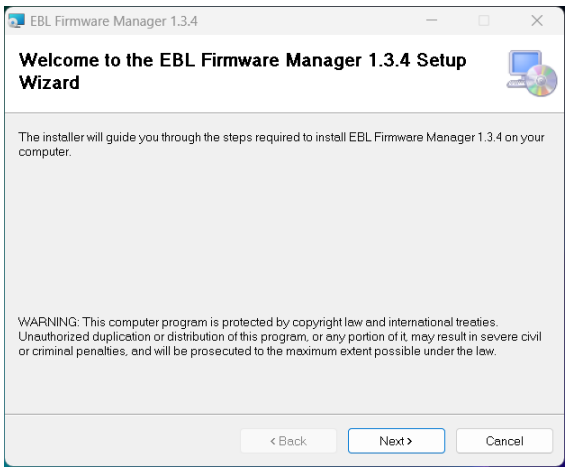


Figure 27: EBL Firmware Manager 1.3.4 Setup Form

2. Click “**Next**”, the following dialog displays:

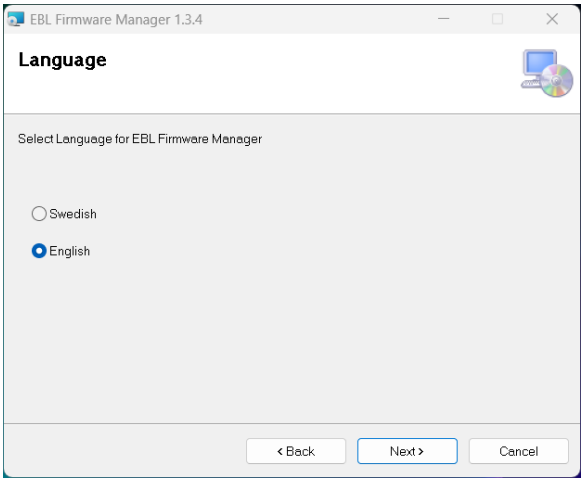


Figure 28: EBL Firmware Manager 1.3.4 Language Form.

3. Select "**English**" then "**Next**", The dialog below shows where the EBL Firmware Manager will be installed. Click next.

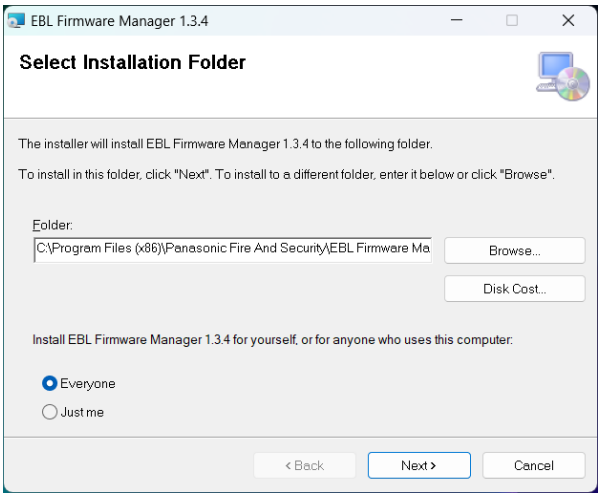


Figure 29: EBL Firmware Manager 1.3.4 Installation Folder.

4. The "**Confirm installation**" window will display, click "Next" and the installation will be completed as shown below:

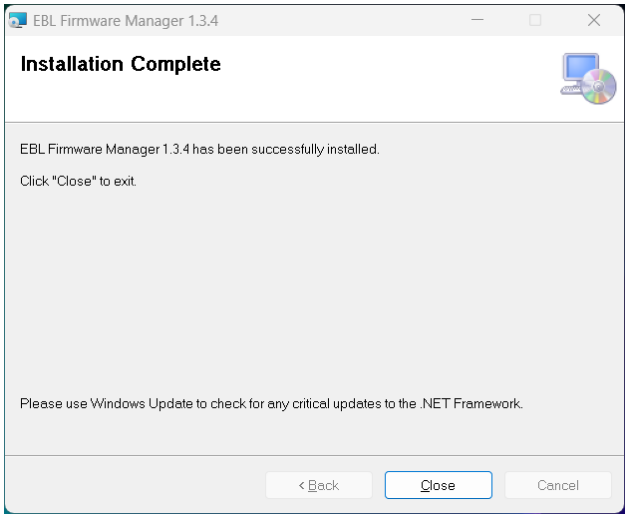


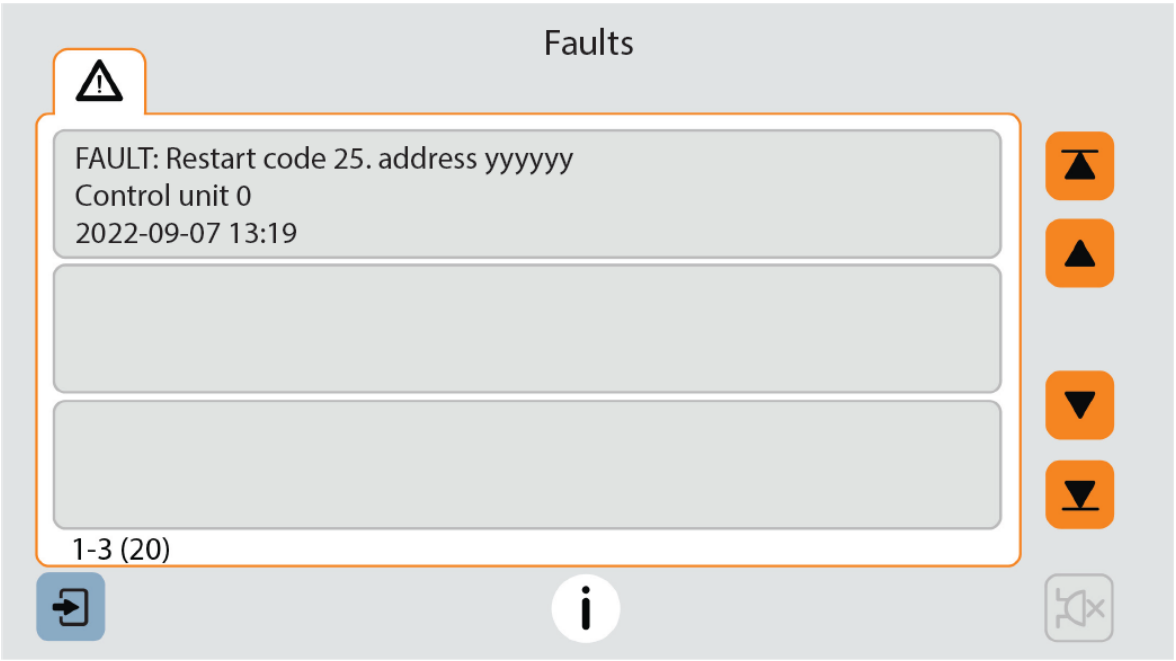
Figure 30: EBL Firmware Manager 1.3.4 Installation Complete.

5. Click "**Close**" to finish installation.

Note: If EBL Firmware Manager is not installed in your PC, you may not be able to download the firmware to the Firefocus.

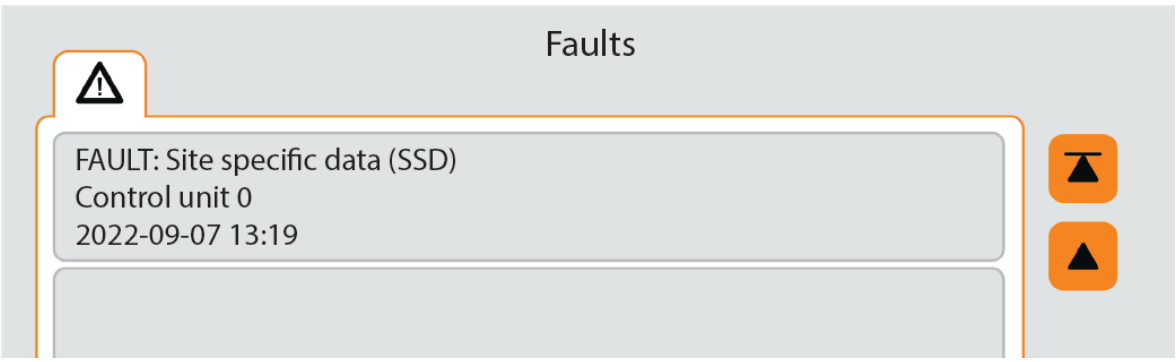
12.2.6 Download SSD to Control Unit

Start the SSD Download from EBLWin. A text message will be shown in the control unit display: "SSD Downloading". When the download is completed and the control unit restart, a fault message will be shown on the event tab page as shown below:



Code 25 Indicates a normal restart after the SSD download.

Acknowledge the restart fault. If the download was not ok another fault will be generated.



This text message means that the SSD have not been downloaded properly. Then a new download must be performed.

Note: Each Alarm point, zone and zone line input can have a unique user definable alarm text programmed via EBLWin. All alarm texts are included in the SSD and downloaded via EBLWin. See also section 7.1.2.2

12.3 Download Software (S/W)

The latest software (S/W) version of the Firefocus system program is factory downloaded before the delivery. Due to continual development and improvement, different S/W versions can be found.

The valid S/W version for the main board 2010, can be read in the Control unit information menu > > , or via EBLWin. On site, new S/W can be downloaded via EBLWin.

Spare parts for 2010 board are normally delivered without S/W. Manual boot mode is required the first-time software is downloaded to the board.

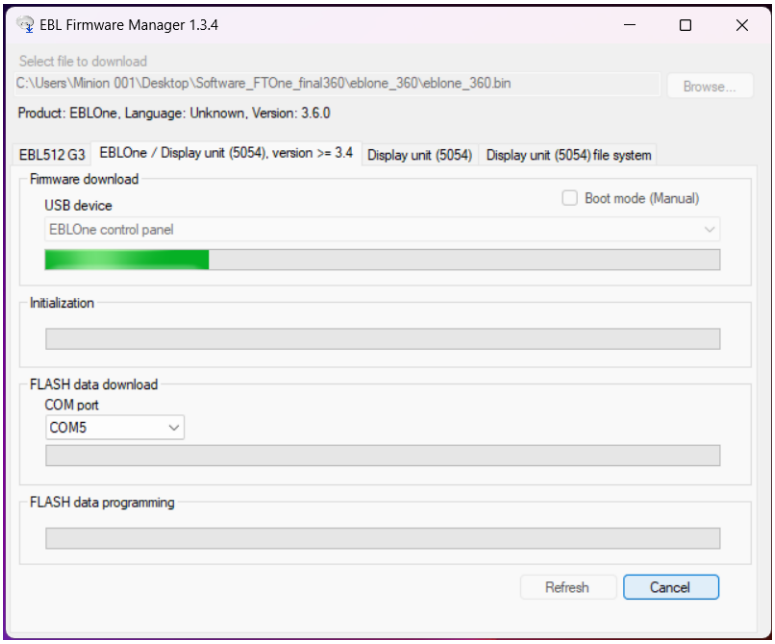
12.3.1 Firmware Manager

To download a new software (firmware) version, a PC, EBLWin and EBL Firmware Manager are used. The .bin file that shall be downloaded contains software for the main board 2010 and text file.

EBL Firmware Manager program is installed separately and is available in different versions, the procedure below describes download with the latest EBL Firmware manager version 1.3.4 or newer.

The USB driver for EBLOne must be installed on your computer before using the EBL Firmware manager. The driver can be downloaded from Brooks website.

1. Connect the PC to the USB connector in the Firefocus (2010) and start EBLWin. Do not logon.
2. Check that the EBLWin key is plugged in.
3. Select Tools menu / Download software… to open the EBL Firmware Manager.
4. Select the EBLOne / Display unit (5054) V ≥ 3.6 tab.
5. Click Browse and select the path and the software file name, for example eblone_360.bin i.e. firmware V3.6.0
6. Select the COM port to be used on your PC. – *Check in the control Panel / Device Manager / Ports (COM & LPT).*
7. Click Download to start the download. The progress bars will indicate for each step of the download as shown below.



The SW (system firmware) download procedure to be carried out as per the following five steps:

1. Set the CPU in boot mode

   - Boot mode (Manual) unchecked: Automatic boot mode by command from EBL Firmware Manager

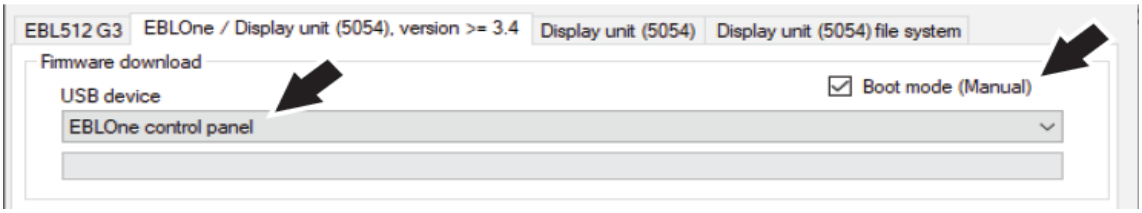
   - Boot mode (Manual) checked: Automatic boot mode shall normally be used but it requires a running software in the unit. If that is not the case, then manual boot mode must be used, see section 12.3.2
2. Download of the actual software to the CPU:s internal flash memory. This download is performed using the CPU as a USB DFU device. During this time the display is black because the CPU cannot communicate with the display when it is in boot mode.
3. The CPU is restarted, and the downloaded software starts up. The display turns on with a grey background but since the data in the external flash memory is inconsistent with the software nothing can be shown on the display.
4. Download of texts, images and other data to the external flash memory. This download is performed using the normal COM-port.
5. Waiting for the external flash memory to finish its programming sequence.

When the download is completed, “Download completed successfully” dialog box is shown, and the display unit will restart.

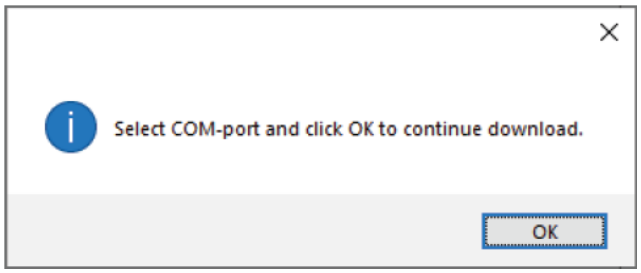
12.3.2 Download Firmware with Manual Boot Mode

If something unforeseen happens and the software cannot be download, with the procedures above, it is possible to download the software by setting the unit in boot mode manually.

1. Set the main board in boot mode, see section 12.3.2.1 “Set the Main Board in Boot Mode” next page
2. Check the checkbox ‘Boot mode (Manual)’ and click Refresh.
3. Select the unit in the USB device drop down.
4. Click Download to start the download.



5. When the download of the internal memory is finished, and the unit has started up the following dialog is shown:

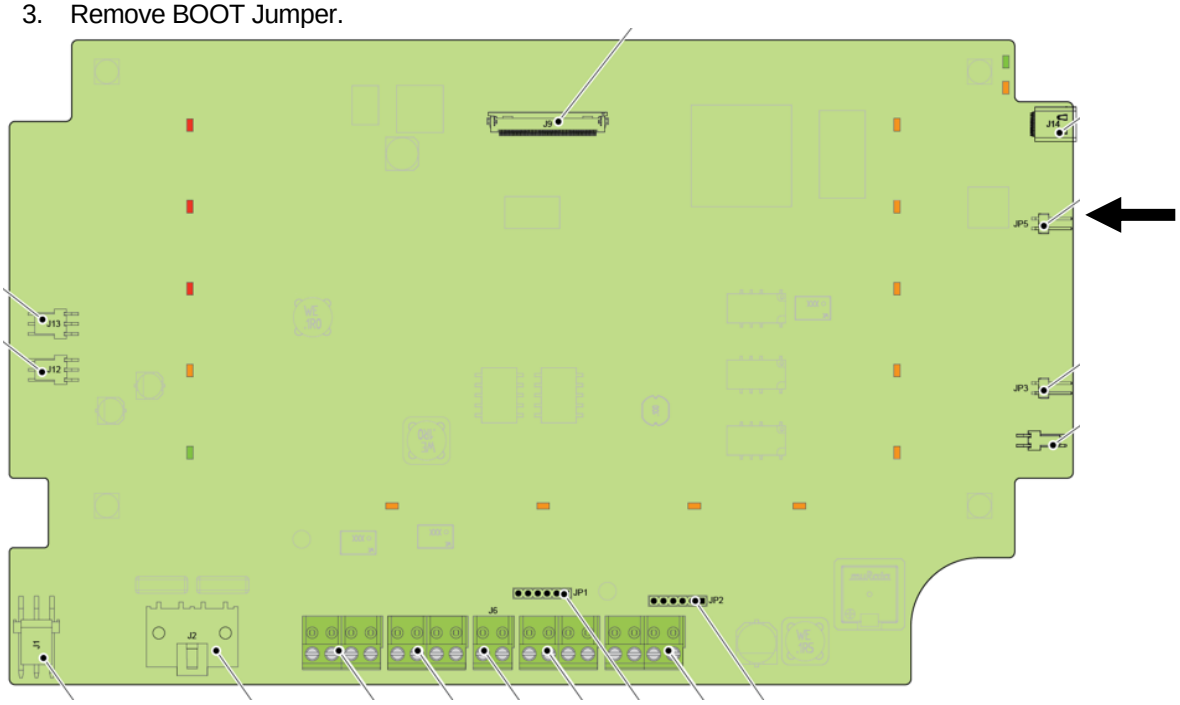


8. Select the COM-port and click OK. The download will now continue. – *Check in the control Panel / Device Manager / Ports (COM & LPT).*

12.3.2.1 Set the Main Board in Boot Mode

The main board may need to be manually set in boot mode.

1. Shunt the jumper JP5, See arrow for location in Figure 31 below.
2. Make a restart by switching a power off / power on restart.
3. Remove BOOT Jumper.



4.

Figure 31: Manual Boot mode Jumper Location.

12.4 Software Versions

Due to continual development and improvement, different S/W versions can be found.

The S/W versions are listed in Table 11 below

Table 11: EBL System Software/Firmware versions.

Software version for:	Latest version	Required version
Firefocus	3.6.0	3.6.0
EBLWin	3.6.0	3.6.0
5088 Gateway	3.6.0	3.6.0

Note: The EBLWin version and the EBL system software and Gateway software version must be the same, at least the first two digits, 3.6.x – 3.6.x

12.5 Download SSD

Note: The EBLWin USB key (5094) must be used to communicate with Firefocus i.e. download the SSD and software using EBLWin ≥ V3.6.x

The PC program EBLWin is used for creating the Site-Specific Data (SSD) and to download it into the Firefocus Control Unit and the gateway.

The SSD will be saved in a file named xxxxx.EBL (xxxxx is the project name).

The EBLWin key 5094 is a protection USB device that must be connected to your PC to enable you to logon to the Control Unit, it has a unique number. The EBLWin key identification number will be registered in the control panel event log with the date and time stamp for every SSD download performed in Firefocus.

When the installation is ready, i.e. the unit connected and the power is turned on, the SSD download can be performed.

12.5.1 Version Control for SSD Download

When the Download SSD window is opened in EBLWin, EBLWin checks that the SSD file originates from the SSD in the control unit. The check is started automatically when the download SSD window is opened. It is not possible to start SSD download until the check is completed (or timeout occurs).

If the check shows that the SSD doesn't match, the SSD in the control unit, there will be a dialog window, asking if the download shall proceed anyway.

SSD Download procedures:

1. Connect the PC to the USB port (type "C") in one of the Control Unit.
2. Start EBLWin and open the required project.
3. Log on to the Control Unit via the PC (EBLWin).

Note: An EBLWin key 5094 is required to log on to the control unit. This key is plugged in a USB-port in your PC / Laptop. Make sure you have the EBLWin key HASP driver installed on your computer.

4. In EBLWin, go to **Tools** menu / **Download SSD**… Select Control Unit “0” to start the SSD download.
5. Click **Start** to start the download. The progress bar will indicate for each control unit the download progress as shown in Figure 32 below.
6. “Control unit download count" / "Document download count" numbers should match. See version control for SSD download above.

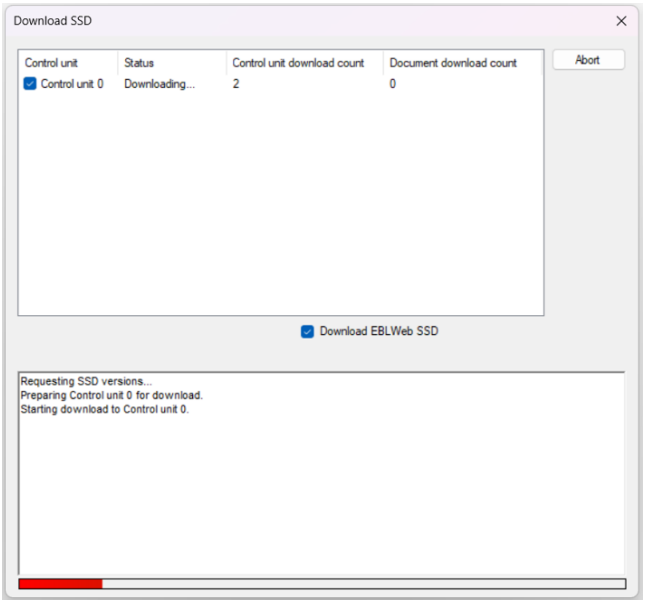


Figure 32 SSD download progress

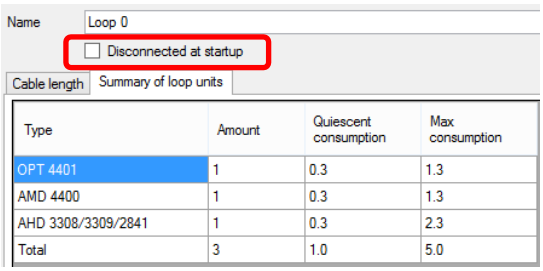
The download will not be completed until the following box is shown:

7. Click "**OK**"

After the SSD download, the Firefocus will restart. A number of faults may then be generated due to the loop units being not connected yet. This will cause "heavy traffic" on the loop, which might affect and delay the SSD download to the other units.

Disconnected at start up

In the COM loop properties dialog box, the "**Disconnected at start up**" check box can be selected. The COM loop will then be disabled directly after the download restarts and therefore no faults will be generated.



Note: A COM loop "Disconnected at start up" can be re-connected via maintenance menu but it will be disconnected again after next SSD download. Finally, the SSD for that Control Unit must be downloaded again with the option "Disconnected at start up" not selected.

For more details, refer to the planning instructions in EBLWin "Help".

13 Setup Wizard

When the control unit is started up for the first time after new firmware has been downloaded, the system needs to be configurated.

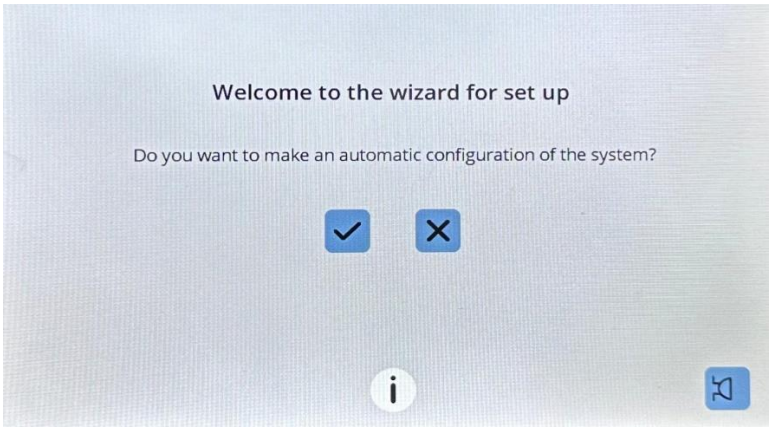


Figure 33 Welcome wizard

Select 'No' to download Site Specific Data (SSD) through EBLWin software from your PC. See section 12.5 Download SSD.

If an automatic configuration of the system is chosen, a wizard will guide the user through the configuration.

1. Log on.
2. Add users. Enter username, password, and access level for each user.
3. Press the next control ▶ when all users are added.

Figure 34: Setup Wizard: Enter Username & Passwords.

4. Press ✓ to run the auto address function. When the auto address function is done the keypad appears.

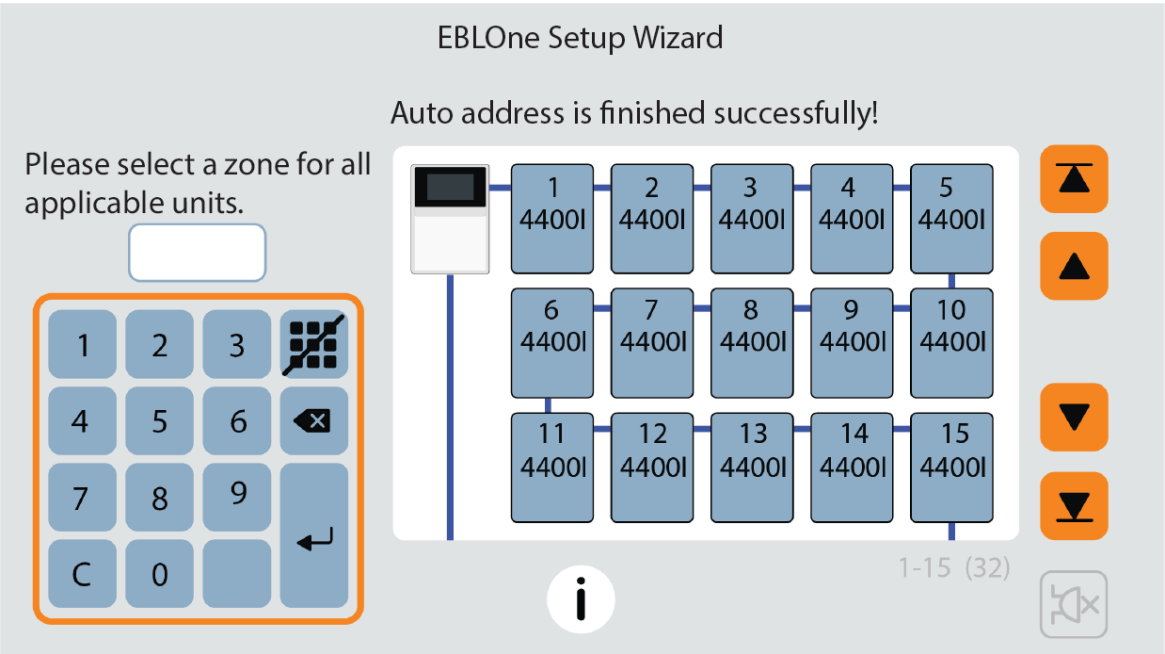


Figure 35: Setup Wizard: Auto Address.

5. Set up a zone for each unit. Tap on the unit / units to select (selected unit / units will change to turquoise).
6. Enter zone number for the selected unit/units, and press Enter. Units with a zone set has an orange frame. When all units are set the next control ▶ will appear.
7. A customized text can be added to the alarm point. Select a unit and enter the text for the alarm point. Press ✓ to save the changes or press ✕ to leave the unit unchanged.

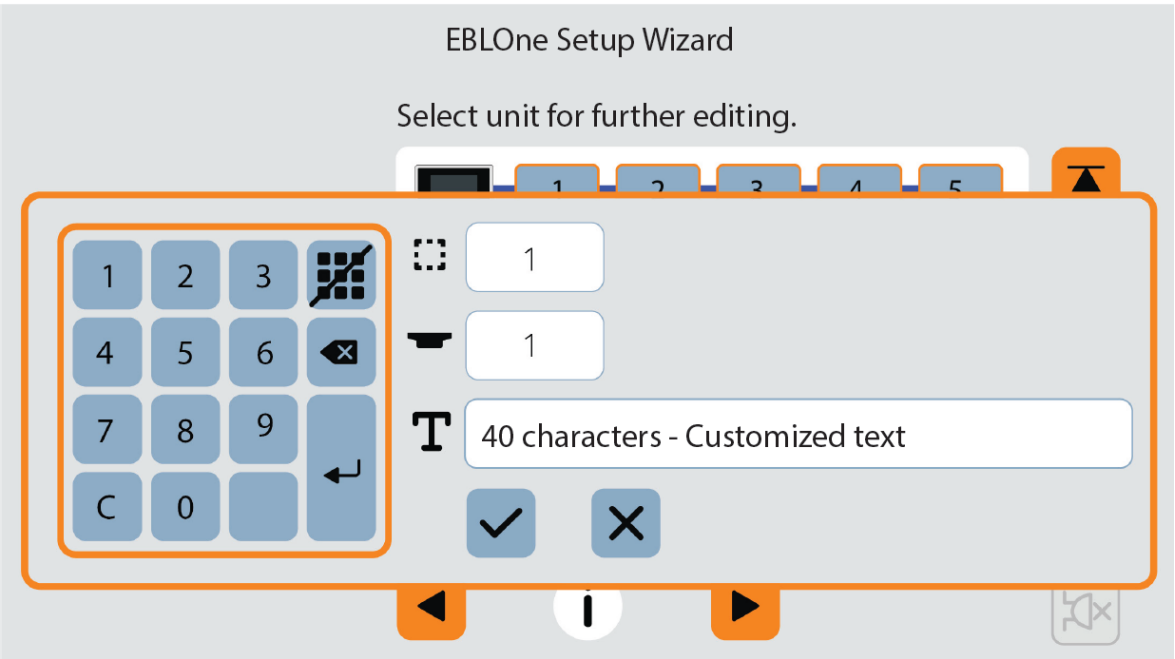


Figure 36: Setup Wizard: Customized Unit's Text.

8. Press the next control ▶ when all customized texts are added.
9. Press ✓ to create an SSD or press ✕ if you want to go back and change a unit.

Figure 37: Setup Wizard: Complete & Restart.

During the “restart”, the touch screen will be off.

When the unit has restarted, a restart fault will be generated. The fault message will be shown on the event tab page, and the buzzer will sound.

14 Restart

A restart may delete the data in Firefocus or may not delete it. Below follows an explanation of the different data, abbreviations and a table showing how the data respectively is affected, cold or warm restart.

Definitions:

FF = Fire alarms and Faults

D = Disablements

FFD = Fire alarms, Faults and Disablements

SSW = Sensor min. / max. values & performance factor, passwords, supervised output calibration values and events logs.

WASV = Week Average Sensor Values.

SSD = Site Specifier Data, i.e. all the installation programming created and downloaded via EBLWin.

S/W = Software, the Firefocus system program.

The date & time and alarm counter value is stored in memory of the real time clock, i.e. the value will be retained also after the Firefocus has been powered off.

Note: After any restart, a new week average sensor value will be calculated within two minutes, for all the analogue smoke detectors. During these two minutes, all fire alarms form analogue smoke detectors will be supressed. Thereafter a new average sensor value will be calculated each week.

14.1 Safe Shutdown

Safe shut down of control unit via menu  > > , will save the SSW data in a Flash memory. In Firefocus. Before the first “Safe shutdown” this memory is empty. After each “Safe shutdown” the latest data is saved. (Safe shutdown will not save the week average sensor values)

1. Activate safe shutdown via menu  > > .
2. Power off.

When Firefocus is powered up, after a restart, the RAM will read the SSW data saved in the Flash memory.

14.2 Restart Table

The description of different reset alternatives and how the data is affected are shown in Table 12 below

Table 12: Firefocus Restart Codes

Restart Code	Action	Data deleted	Data not deleted
00	Manual power off / on (both mains and battery disconnected). Address is always zero.	SSW, FFD, WASV	SSD, S/W, SSW[1]
01	Watchdog restart Address is always zero	FFD, WASV	SSD, S/W, SSW
03	Normal restart via Safe shutdown menu in the Firefocus or via reset command in EBLWin. Address is always zero.	FFD, WASV	SSD, S/W, SSW

[1] SSW previously saved with safe shutdown is not deleted.

03	Automatically after downloaded of S/W via EBLWin. (The old S/W will be deleted.)	FFD, WASV	SSD, S/W, SSW
13	Software monitoring restart, address points to the instruction that caused the fault	FFD, WASV	SSD, S/W, SSW
16	CPU low voltage restart Address is always zero	FFD, WASV	SSD, S/W, SSW
17	Low level error handler called, address points to the instruction that called the error handler.	FFD, WASV	SSD, S/W, SSW
25	Automatically after correct downloaded of SSD via EBLWin. Address is always zero.	FFD, WASV	SSD, S/W, SSW
30-47	Automatically due to some external disturbance. If this happens, call for service personnel / engineer. Depending on the restart reason, also the SSW might be deleted.	FFD, WASV	SSD, S/W, SSW

Note: During the restart, the fault output (relay) for the Fault tx will be “activated”, the supervised 24V DC outputs S1 will not be supervised and S1 programmed as normally high will be low for a few seconds.

14.3 During Restart

During the “restart”, no fire alarm can be activated, and the touch screen will be off.

Note: When the Firefocus is restarted for the first time, it will automatically show the Change language page. Press a flag to set the language in the control unit.

A fault will be generated. The following text message will be shown on the event tab page, and the buzzer will sound:

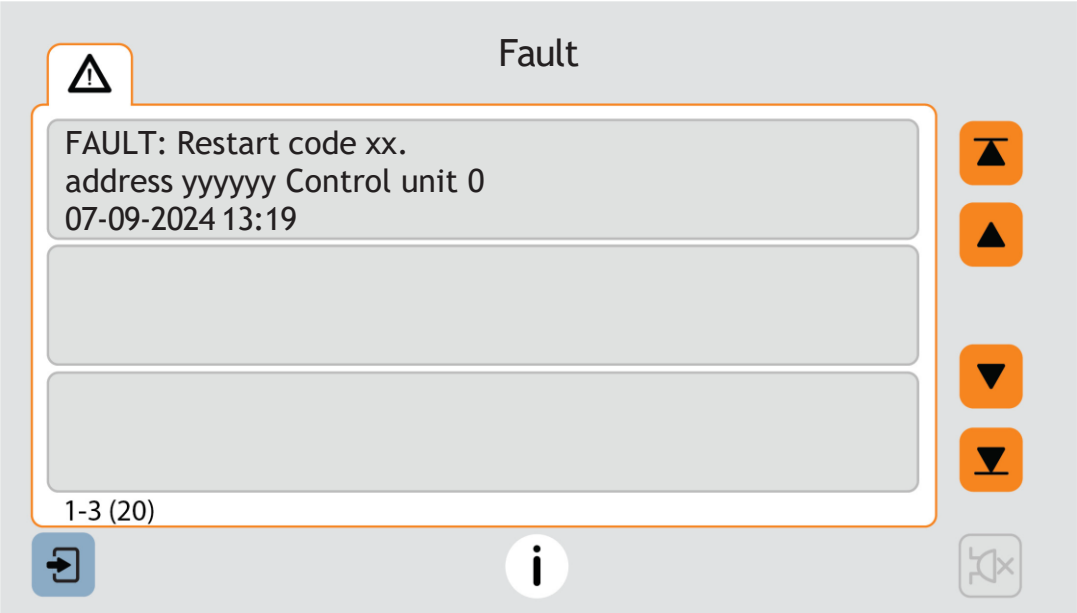


Figure 38: Restart Fault Code Display.

Regarding code xx and address yyyyyy, refer to Table 12: Firefocus Restart Codes. This fault it also indicated by the LED  "Fault".

After the fault is acknowledged (via menu ), the LED  "Fault" will be turned OFF if there are no other faults.

After any restart, required individual disablements must be done.

14.4 Access Code

In normal condition, when the 003-door key switch is enabled (ON), an access code is required to gain access to the menu system. Any password programmed for building officer or service personnel can be used.

In alarm condition with 003 key enabled, the fire brigade personnel will gain access (without password) to the controls within the red boarder to take control of fire incidents.

14.5 Event Tab Page

The Event tab page is visible when there are events to be shown in the system. The events that can be shown here are:

- LAA alarm
- Evacuate information
- Fault list
- Disablement
- Zones in "Test mode'
- Interlocking input / output active
- Technical warning
- Service signal activated
- Service mode activated
- Sensitive fault detection

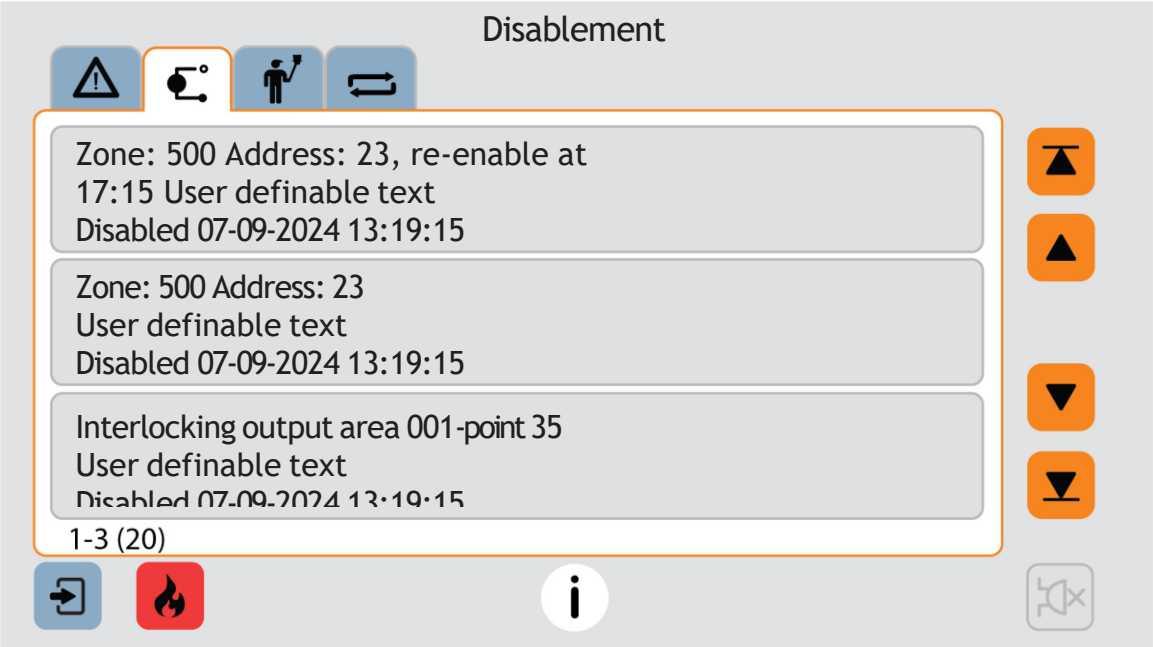


Figure 39: Events Tab Page Display.

15 Menus

The following chapters describe the menus in the Firefocus and the procedures to use them.

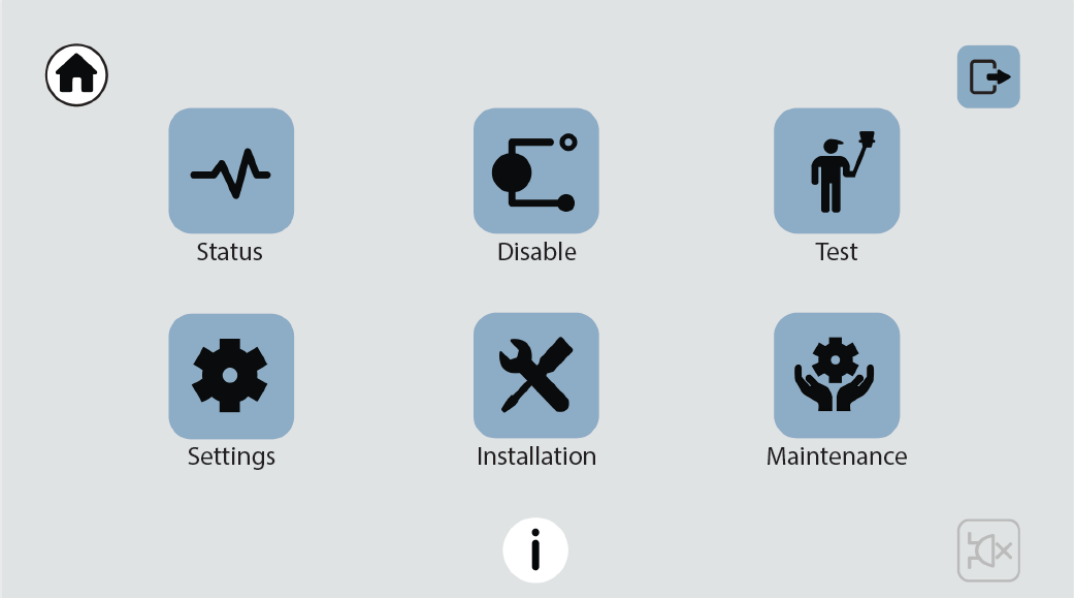


Figure 40: Home Menu.

There are different access levels for different menus. See section 4.4 on User levels and what each user level can and cannot access. The menus and controls are greyed out when disabled or inactive.

For general information on navigation in the menu system, see section 4.3 Navigation / General Procedures.

15.1 Status

1. Log in to the Firefocus.
2. Navigate to menu . A sub menu list will be displayed.

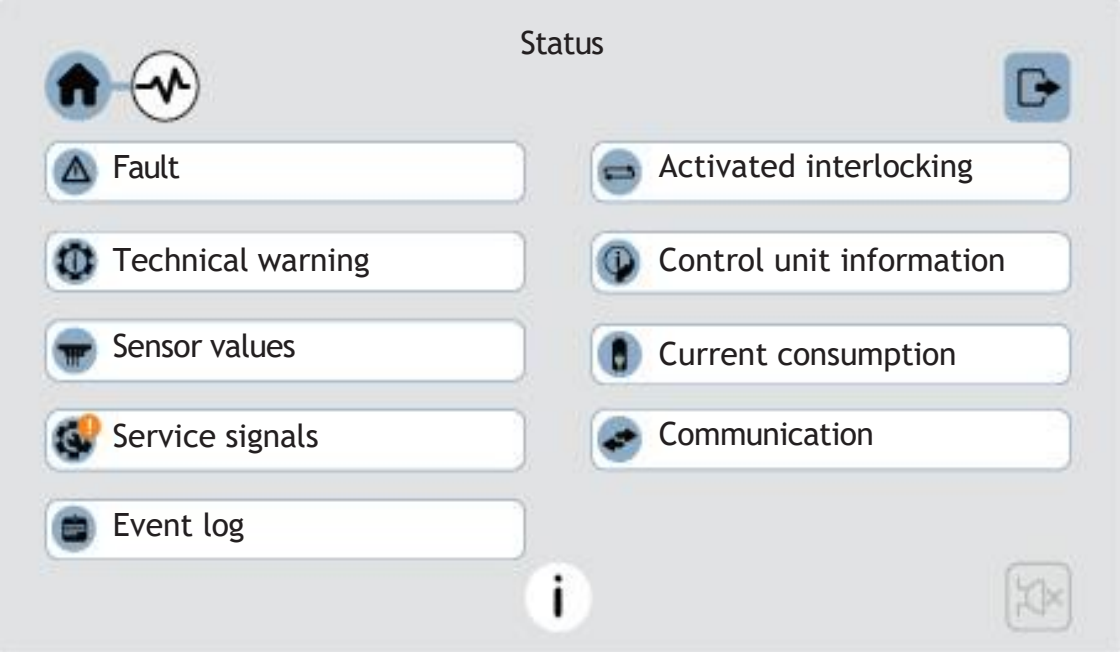


Figure 41: Status Menu.

The symbol is indicating one or more events in the underlying menu.

15.1.1 Fault

Refer to fault indications and messages in Chapter 9 page 47.

All faults and status / action are stored in the event log, up to 300 faults can be listed as follow:

- Not corrected (not serviced) and not acknowledged faults (no status information).
- Not corrected (not serviced) but acknowledged faults (/Acknowledged)
- Corrected (serviced) but not acknowledged faults (/Serviced)

1. Log in to the Firefocus
2. Navigated to menu > > .
3. Press or to scroll in the list. The most recent fault is on top of the list.
4. To acknowledge a fault, press or press to acknowledge all. A serviced fault that is acknowledge will disappear from this list.

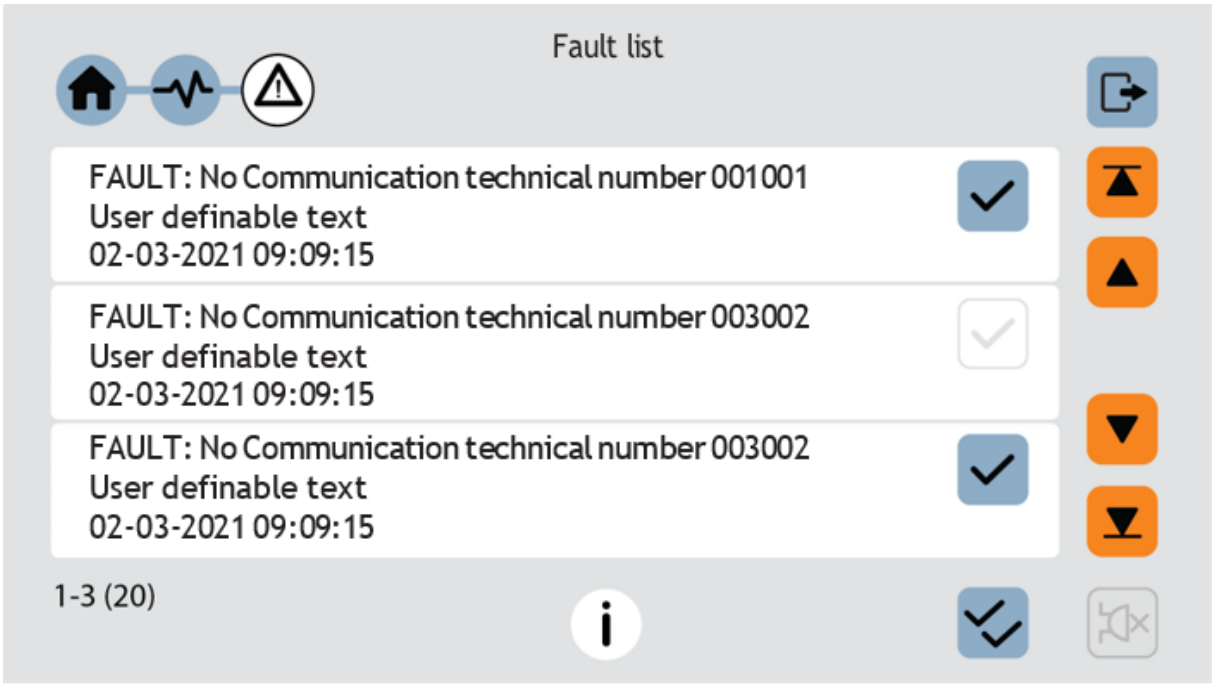


Figure 42: Fault List Menu.

5. To exit the menu press .

If there are no events, the list will be empty.

15.1.2 Technical Warning

A technical warning is an event that is neither a fire alarm nor a fault.

It is information that programmed to display an event and is generated via a programmable input. The text message, shown on the Firefocus touch screen, if user programmable (up to 40 characters).

If one or more technical warnings are activated in the system, the symbol is shown in the Status menu > . The activated technical warnings are also shown on the event tab page when logged out if programmed so in EBLWin.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Press or to scroll in the list.

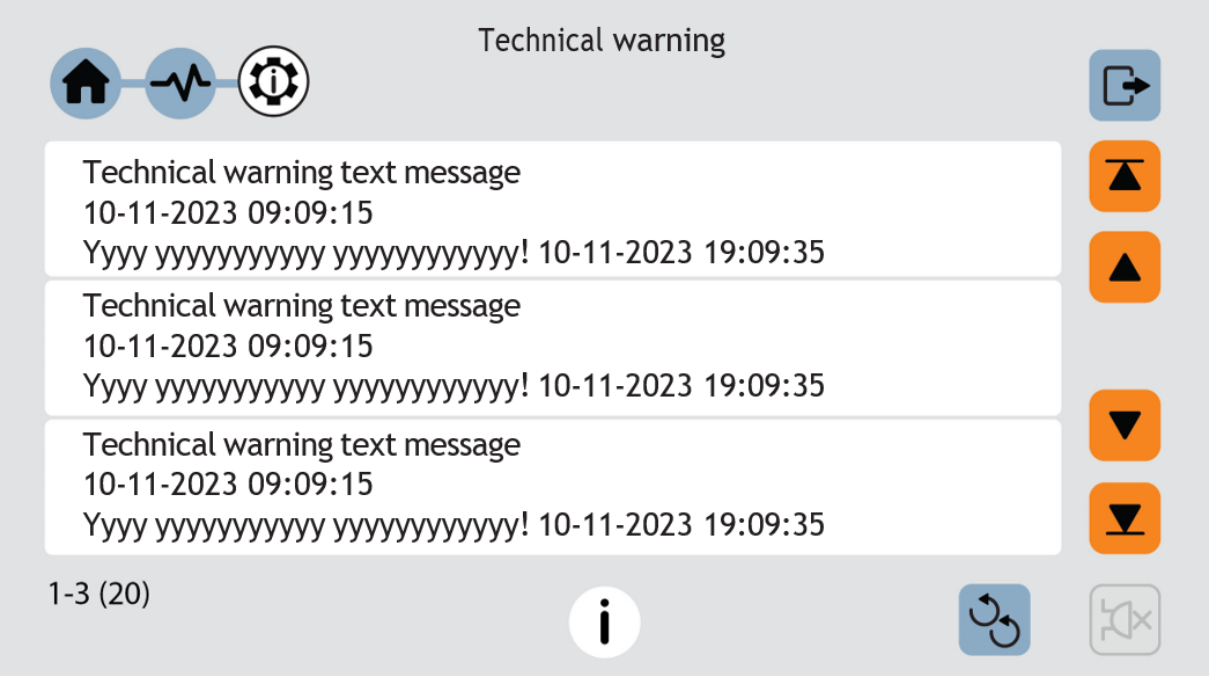


Figure 43: Technical Warning Menu.

4. Press to reset all technical warnings.
5. To exit the menu press .

If there are no technical warnings, the list will be empty.

The technical warnings are normally non-latching event but can be set via EBLWin to be “latched”. If a programmable input is activated with a latched technical warning, the technical warning must be reset via this menu.

15.1.3 Sensor Values

Information on heat, smoke or multi detector sensor values.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Enter zone and address for a specific sensor or press to start as from sensor 000001. If there are no sensors (analogue detectors) when is pressed, the list view will not open.
4. Press or to scroll in the list.

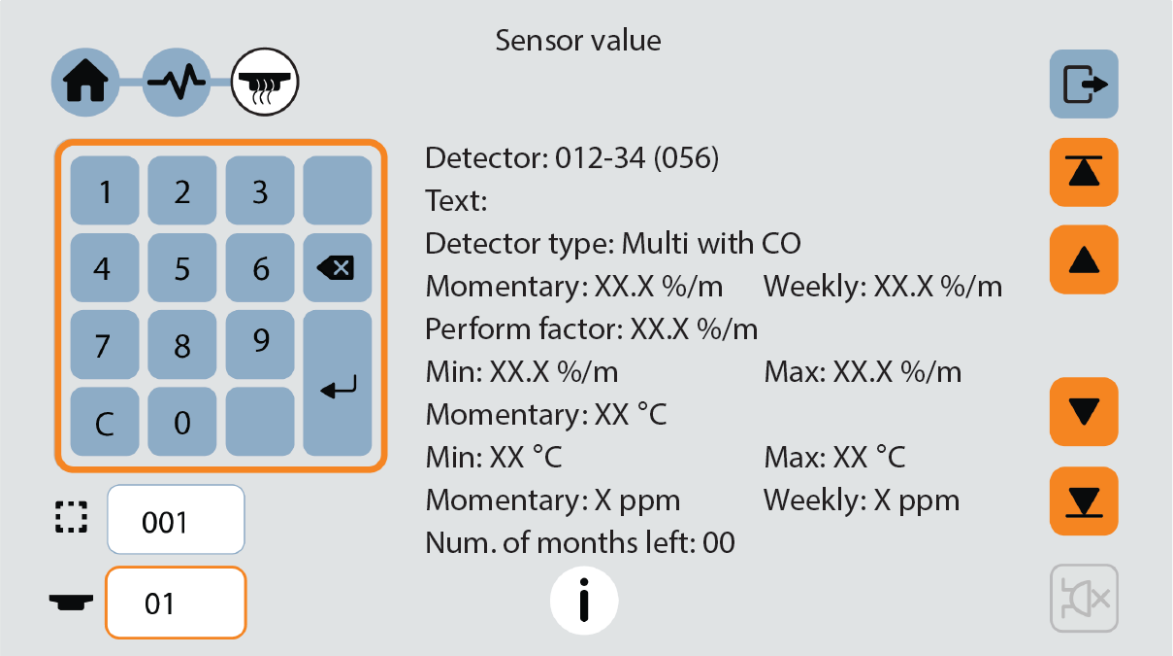


Figure 44: Sensor Value Menu.

5. To exit the menu press .

15.1.3.1 Explanation to the sensor values

Momentary: Momentary value in this menu will be updated after every detector polling, approx. every 7th second.

Weekly in NORMAL mode: The very first week average sensor value for the 2840 is calculated within 2½ minutes after SSD download & restart. During these 2½ minutes can no fire alarm be activated and "Weekly: 00.0%/m" will be shown. The "Weekly" value will thereafter be updated every week.

Weekly in Advanced mode: For the 440x detectors in Advanced mode the "Weekly" value is 00.0%/m by delivery. It will be updated the very first time after 13 minutes. It will thereafter be calculated every 13th minute but will then only be changed downwards if required. After 18 hours it can be changed downwards or upwards and after additional 18 hours (36 hours in all) it can be changed downwards or upwards and it is also saved in the detector's EEPROM, i.e. that value will be used after the detector has been powerless. The "Weekly" value for the 440x detectors in Advanced mode is also called the "Contamination Compensation Value (CCV).

Performance factor: The "performance factor" and "Min. / Max." values are updated at midnight (00:00), which means the values shown are from the previous day. For more information on performance factor, see the Planning instructions for the system.

Algorithm: Shows the algorithm that is currently in use.

Install date: The date is set in the detector when it's powered up by the loop for the first time.

Table 13: NORMAL Mode Algorithm's.

Algorithm	Abbreviations
Normal sensitivity (3%/m) & Normal detection (15 s)	N - 15
High sensitivity (2.4%/m) & Normal detection (15 s)	H – 15
Low sensitivity (3.6%/m) & Normal detection (15 s)	L – 15
Normal sensitivity (3%/m) & Slow detection (35 s)	N – 35
High sensitivity (2.4%/m) & Slow detection (35 s)	H – 35
Low sensitivity (3.6%/m) & Slow detection (35 s)	L – 35
Heat algorithm, Class A1	A1
Heat algorithm, Class A2 (S)	A2 (S)
Heat algorithm, Class B (S)	B (S)

Table 14: Advanced Mode Algorithm's.

Algorithm	Abbreviations
Normal area	Normal
Clean area	Clean
Smoke – Steam area	Smoke
Cooking – Welding area	Welding
Heater area	Heater

15.1.4 Service Signal 

This is a list of the sensor(s) having activated service signal.

Regarding the service signal levels, see Planning Instructions in EBLWin help, section “Service signal”.

Regarding Lifetime limit service signal, see Planning instructions. The Planning Instructions can be found in the “Help” tab of EBLWin PC Program.

Note: Service signal is only information that the sensor must be replaced with a new/clean sensor soon.

Some units are not available for the Australian market e.g. exit emergency light MX140, aspirating unit AE2010G-P.

After replacement of a detector, the service signal must be acknowledged for that detector, see section 15.6.2 Acknowledge Service Signal

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Press or to scroll in the list.
4. To exit the menu press .

If there are no sensors activating, the service signal list will be empty.

15.1.5 Event Log

Three event logs (3 x 999 events) are available:

- Alarm (alarm events, for example fire alarm, fire alarm reset, and so on)
- Interlocking (interlocking events only)
- Other (all other type of events)

The origin of the event, for example CU00 (see below), can be shown in EBLWin, EBLWeb or Ext# (External system no. # connected via Gateway).

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Select event log to show:
   - Alarm
   - Interlocking
   - Other
4. Press or to scroll in the list.

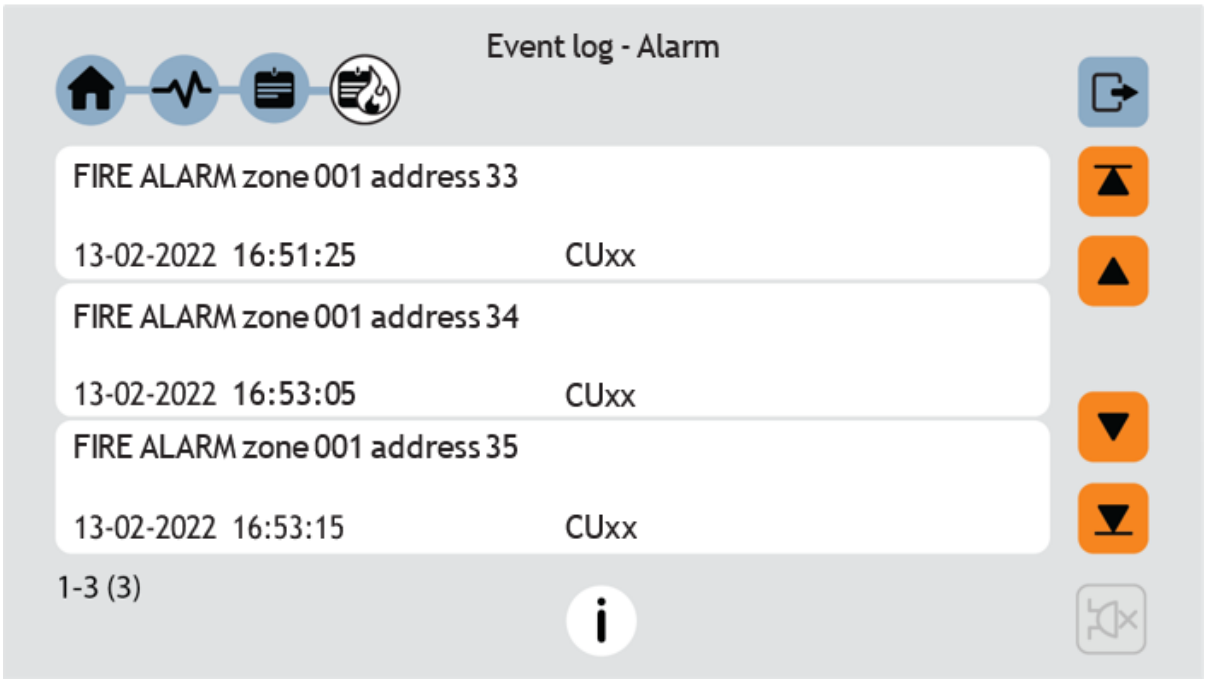


Figure 45: Event Log Menu.

5. To exit the menu press .

The most recent is on top of the list. If there are no events the list will be empty.

15.1.6 Activated Interlocking

This menu is read only.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Press or to scroll in the list.

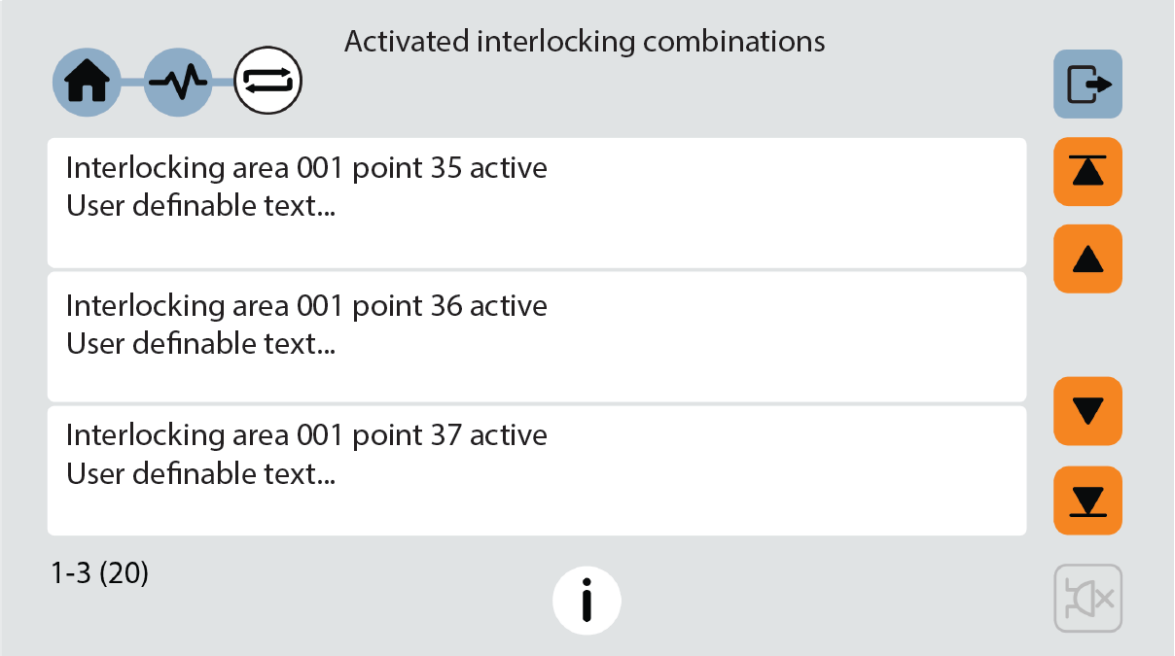


Figure 46: Activated Interlocking Menu.

4. Press to leave this menu.

15.1.7 Firefocus (Control Unit) Information

FW version: The S/W (software / firmware / system program) version downloaded to the Main board.

Serial Number: The manufacturer's serial number (year YY, week WW, number of the main board NNN).

Alarm counter: The alarm counter is increased with "1" every time the Firefocus enters a read "fire alarm condition" (i.e. fire alarm indication on the touch screen, LED "Fire" is lit and the Firefocus buzzer is sounding). Alarms from zones in test mode will not be counted. It starts on 000 and goes to 999. It can be reset to 000 via EBLWin (Control unit menu "Reset alarm counter…"). The value will be retained also after the Firefocus has been completely powerless.

1. Log in to the Firefocus.
2. Navigate to menu.

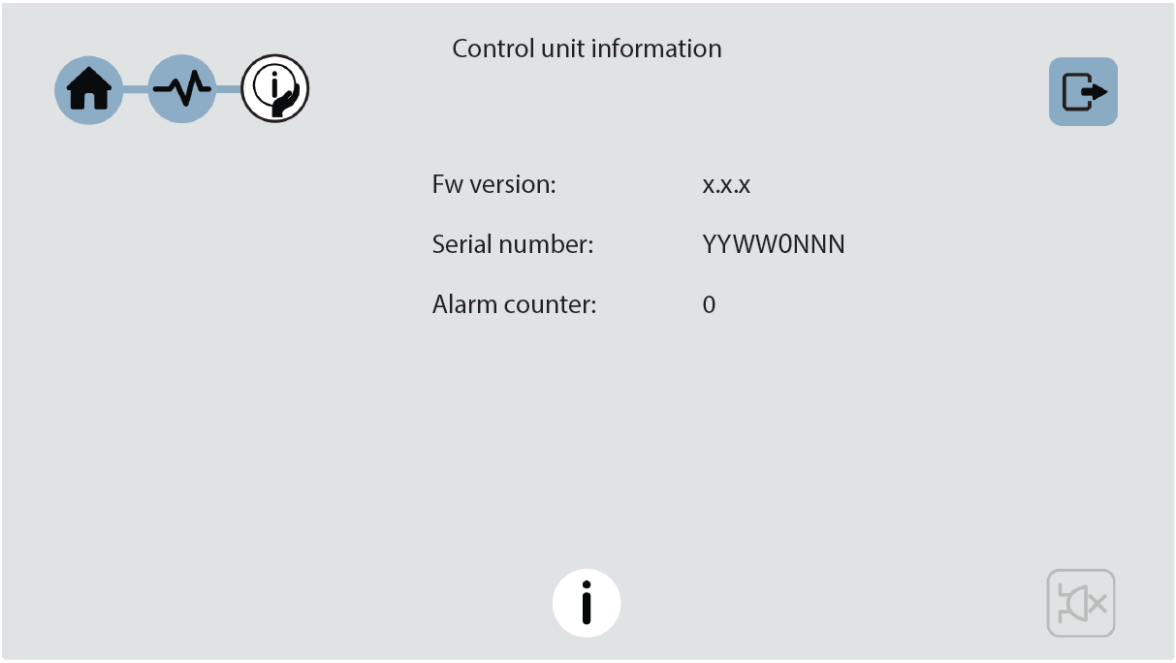


Figure 47: Control Unit Information Display.

3. To exit the menu press .

15.1.8 Current Consumption

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Use the controls to the left to show current consumption for Power supply, Battery, or Loop. The information is automatically updated every 5th second.

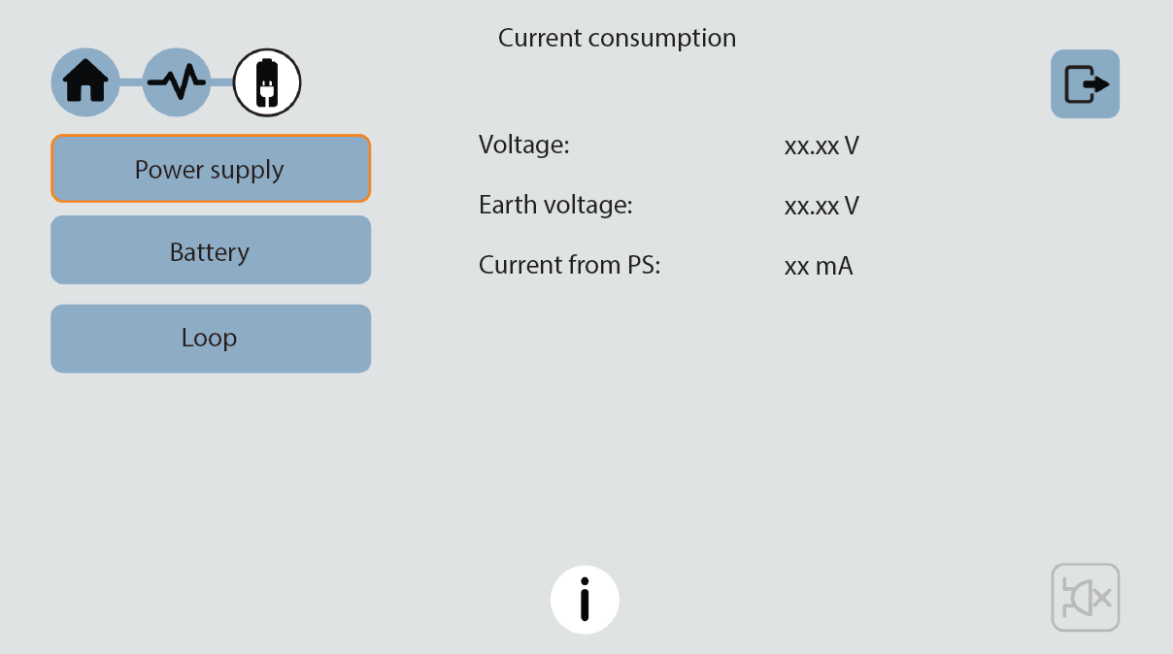


Figure 48: Current Consumption Menu.

4. To exit the menu press .

Power supply

Voltage: The 24V measured by the CPU on the main board. Corresponds to the output voltage at the power supply outputs on connector J5.

Earth voltage: Measured from 0V (connector J5) to earth.

Current consumption: The total current consumption (including the charging current at 24V) for the control unit when it is connected to the mains (230Vac), i.e. this function is not working by battery backup.

Battery

Voltage battery 1: The battery voltage at connector J2:1-2

Voltage battery 2: The battery voltage at connector J2:4-3

Charge voltage: The charge voltage on the P.C.B.

Charging Current: The battery charging current for both batteries.

Temperature: The temperature detected by the battery temperature sensor.

Resistance in battery circuit 1: During the battery capacity check the resistance in the battery circuit is measured. A resistance > 500mΩ will result in a “High resistance in battery circuit” fault.

Resistance in battery circuit 2: During the battery capacity check the resistance in the battery circuit is measured. A resistance > 500mΩ will result in a “High resistance in battery circuit” fault.

Loop

Loop current: Current consumption (an average value) for the COM loop

Loop resistance: The total resistance of the loop measured by the control unit.

Note: very small current / voltages cannot be presented precisely since the accuracy is 2%.

15.1.9 Communication

The statistics for communication can be used during commissioning, service, and so on.

Number of pollings is the number of pollings / “questions” sent out by the control unit to all the units connected on the COM loop.

Parity fault is the received number of parity faults and % (faults in relation to pollings).

Bit fault is the received number of parity faults and % (faults in relation to pollings).

Bit length fault is the received number of bit length faults and % bit length faults in relation to the pollings.

No answer is the received number of answer faults / no answers and % (faults in relation to pollings).

The number of Parity faults, Bit faults, Bit length faults and No answer should normally be “0” or as close to “0” as possible. If not, there are some communication problems that must be investigated. Check the COM loop, connections and the loop units.

All values are set to “0” after restart and/or after re-connection of COM loop via Disconnect menu .

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Use the drop-down to select between:
   - COM loop
   - SUB-loop

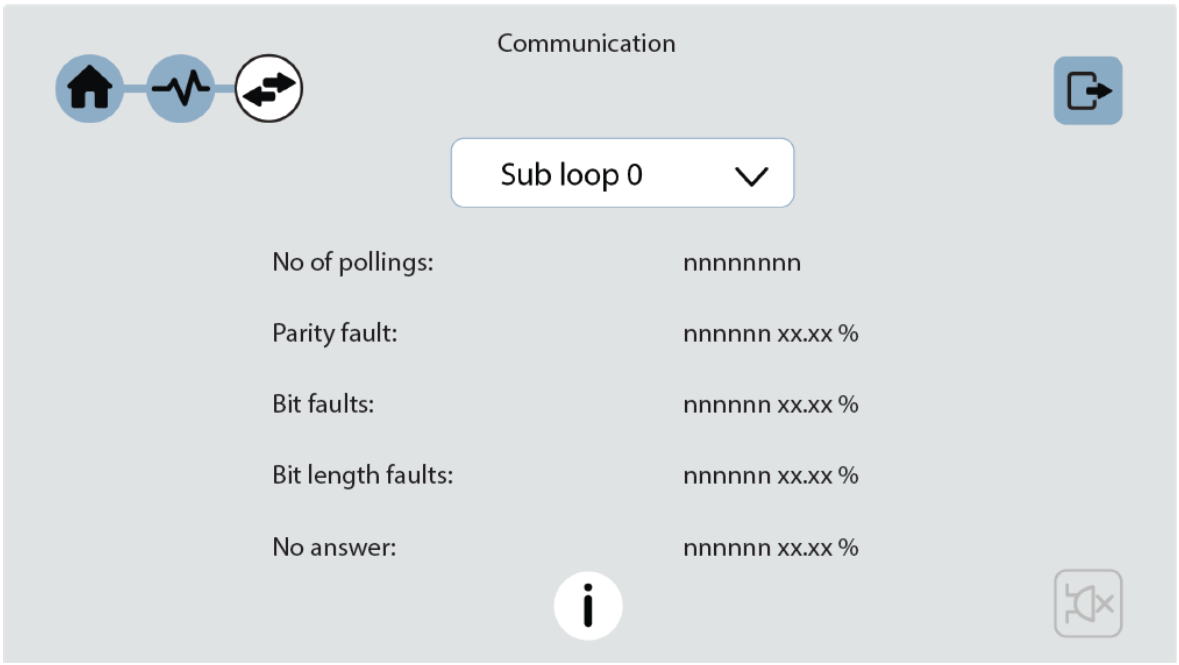


Figure 49: Communication Menu.

4. To exit the menu press .

The information is automatically updated every 5th second.

15.2 Disable

1. Log in to the Firefocus.
2. Navigate to menu . A sub menu

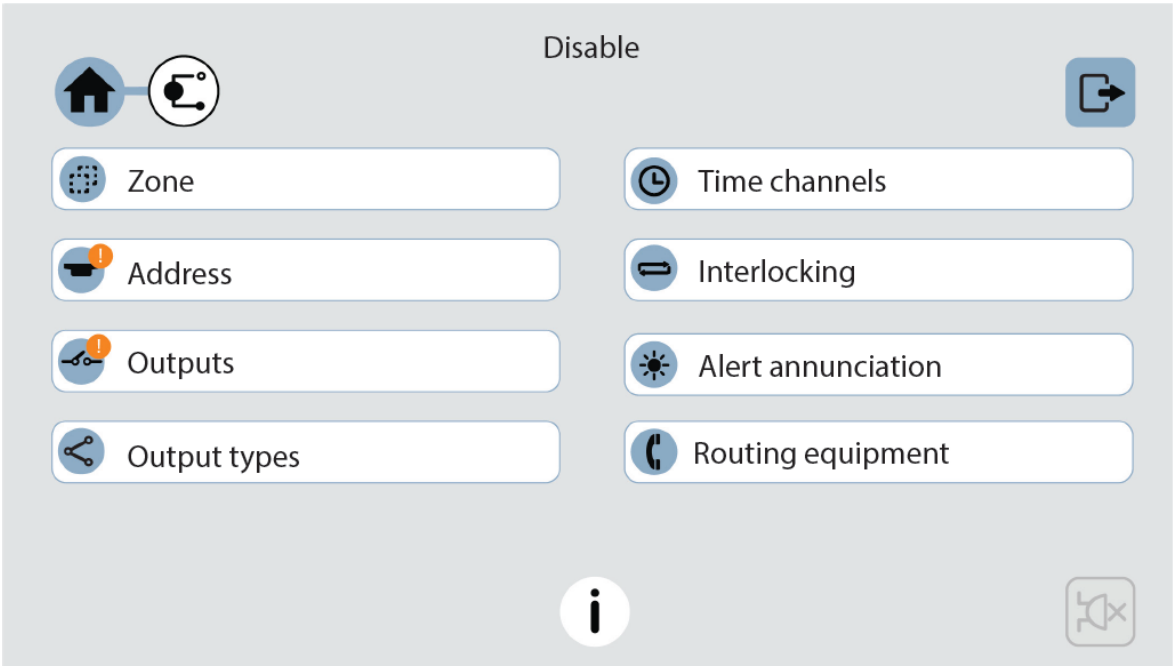


Figure 50: Disable Menu.

LED “Disablement” and the symbol is indicating one or more disablements in the system.

A whole zone, one or more alarm points within a zone and/or control outputs can be disabled. This function can be used as a temporary disablement (e.g. craftsmen working in the premises, etc.).

If the function Enhanced disablement is enabled (default), disabled alarm points cannot activate Pre-warning, fire alarm and fault.

If this function is not enabled (via EBLWin), disabled alarm points cannot activate Pre-warning and fire alarm, but fault can be generated.

An addressable manual call point can be disabled. When a whole zone is disabled, the addressable manual call points will also be disabled.

All zones can be disabled.

Up to 200 alarm points (zones / address) can be individually disabled. (Alarm points disabled via time channels are not limited and must not be counted!).

Up to 200 outputs can be individually disabled via -disable menu.

Disabled output will stay in (or return to) the normal condition for the output respectively. (Collectively disabled outputs are not limited and must not be counted!)

It is not possible to exceed the limits, A red cross indicating that the disablement was not performed will be shown.

Don’t forget to re-enable or use automatic re-enablement for zones and alarm points.

15.2.1 Disable / Re-enable Zone

When a whole zone is disabled, all alarm points within the zone will be disabled.

1. Log in to the Firefocus.
2. Navigate to menu > >
3. Enter the zone number, one by one or in range.
4. If “Automatically re-enablement” shall be used, enter time (hh:mm). Default is current time +3 hours. Automatic re-enablement is indicated with the time.
5. Press to disable the zone. The zone will appear in the list.

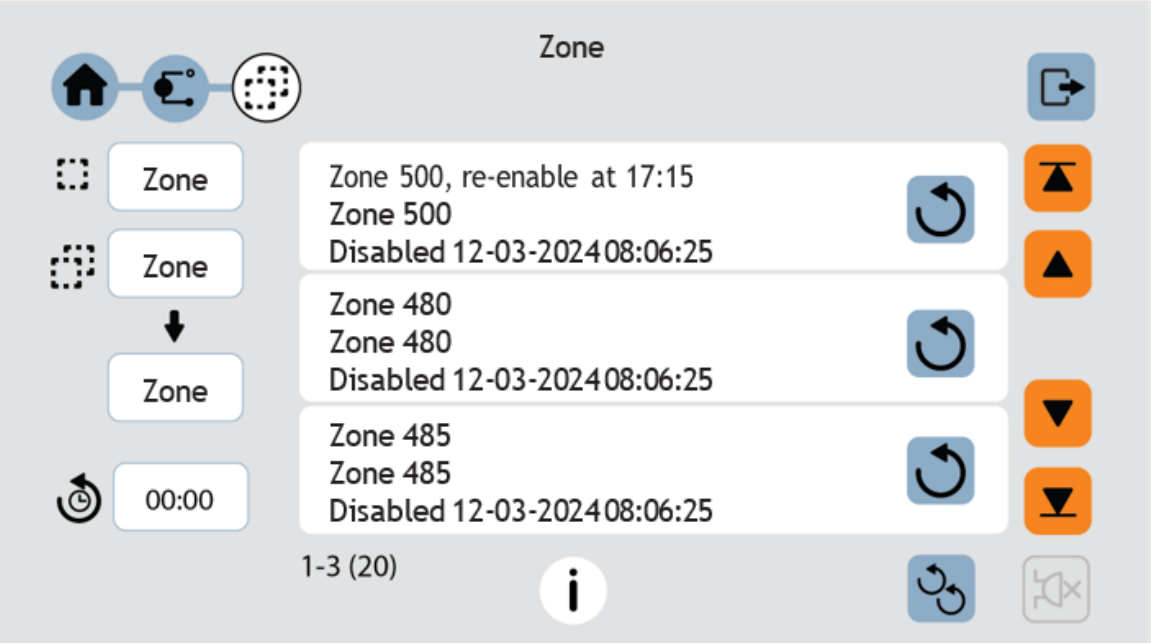


Figure 51: Disable Zone Menu.

Press the controls to re-enable a zone or to re-enable all zones. Re-enabled zone will disappear from the list.

15.2.2 Disable / re-enable Address

All alarm points connected to the COM loop can be individually disabled.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Enter the zone number and address .
4. If “Automatically re-enablement” shall be used, enter time (hh:mm). Default is current time + 3 hours. Automatic re-enablement is indicated with the time.
5. If the smoke part of the multidetector shall be disabled, check the check box “Smoke only”.
6. Press to disable the zone address. The zone address will appear in the list.

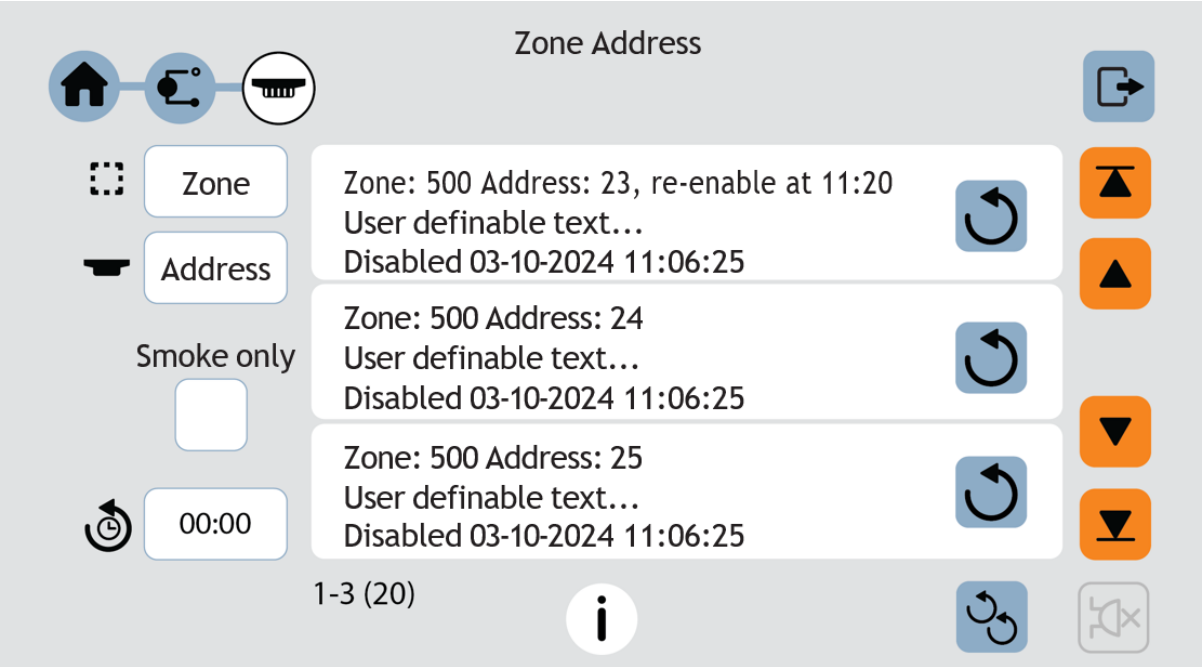


Figure 52: Disable Zone Address Menu.

Press the control to re-enable a zone address or to re-enable all zone addresses. Re-enabled zone address will disappear from the list.

15.2.3 Disable / Re-enable Output

The programmable output S1 in the Firefocus and outputs in units connected to the COM loop (except outputs of type “Alarm device”) can be individually disabled.

If you try to disable an output of type “Alarm device”, it will be treated as it does not exist.

Disabled output: Even if its control expression (trigger condition) is fulfilled (true), the output will not be activated.

Note: S1 is also used to activate the alarm relay in the Firefocus termination board SUB1048.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Press S1 to disable control unit output S1 (Disablement of output S1 will also disable relay 1/1 and relay 1/2 outputs at SUB1048 termination board.)
4. Enter the technical address and output number address and press to disable the loop unit output. The disabled output will directly be shown in the list.

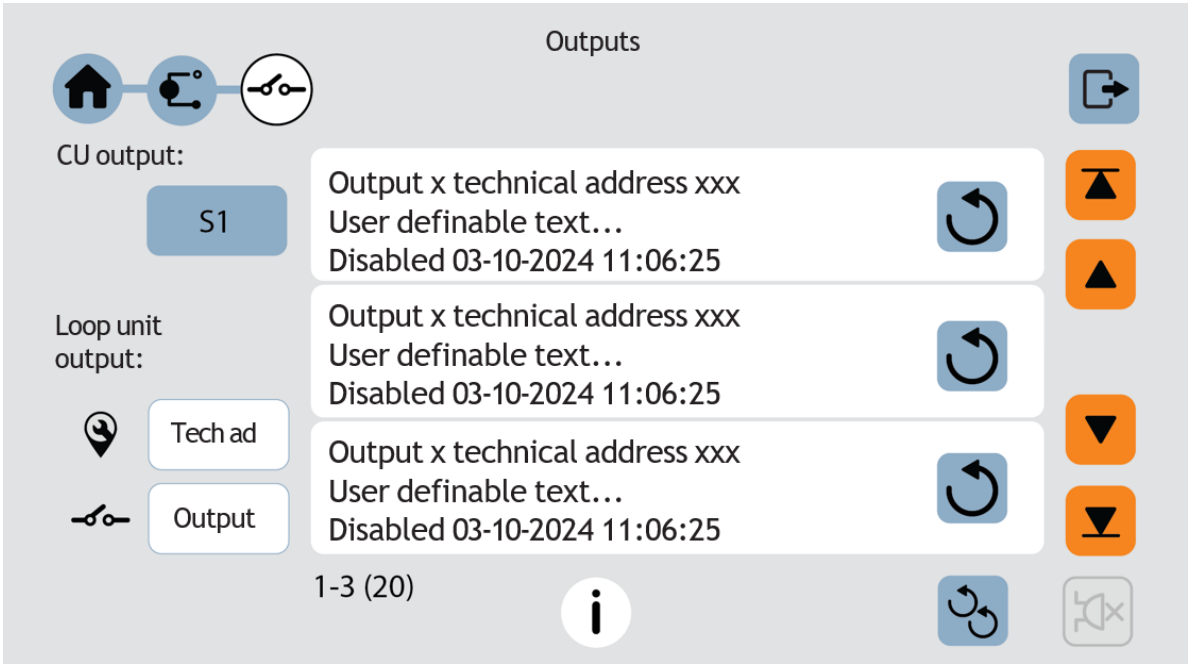


Figure 53: Disable Outputs Menu.

Press the control to re-enable an output or to re-enable all outputs. Re-enabled output will disappear from the list.

15.2.4 Disable / Re-enable Output Types

Outputs of the same type can be collectively disabled in the control unit.

Disabled output will stay in (or return to) the normal condition for the output respectively.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. The different output types are listed:
   - Control outputs
   - Ventilation outputs
   - Extinguishing outputs
   - Interlocking outputs
   - Alarm devices
4. Use the switches to toggle between:
   - Enabled
   - Disabled

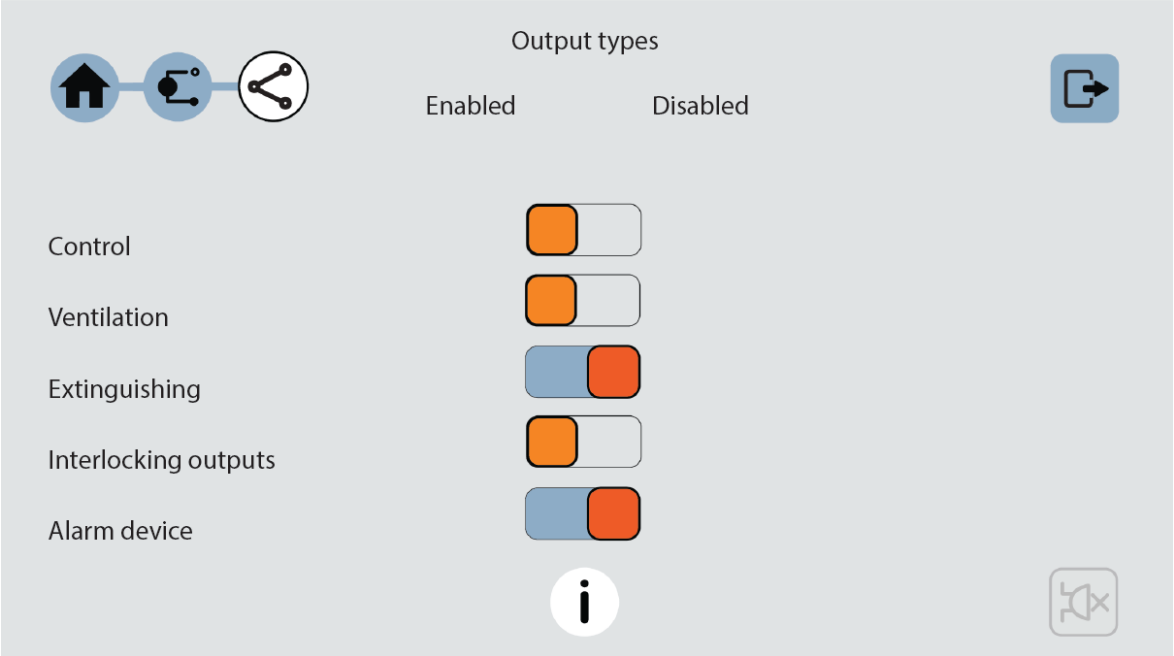


Figure 54: Disable Output Types Menu.

5. To exit the menu press .

15.2.5 Disablements by Time Channel

This is a static list of all disablement by time channels in the system. The list has up to three items per page. Indicated by LED "Disablement".

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Press or to scroll in the list.
4. To exit the menu press .

Note: All other disablements are shown on the event tab page when logged out.

15.2.6 Disable / Re-enable Interlocking Output

Interlocking outputs (Type = Interlocking) can be individually disabled via this menu (or collectively via the Output types menu > >). The “Interlocking Combination” (Area / Point) is to be entered to disable the output. Up to 100 interlocking outputs can be disabled in the whole system. The LED “Disablement” is also indicating one or more disabled interlocking outputs.

1. Log in to the Firefocus.
2. Navigating to menu > > .
3. Enter the area number and address.
4. Press to disable the output. The output will appear in the list.

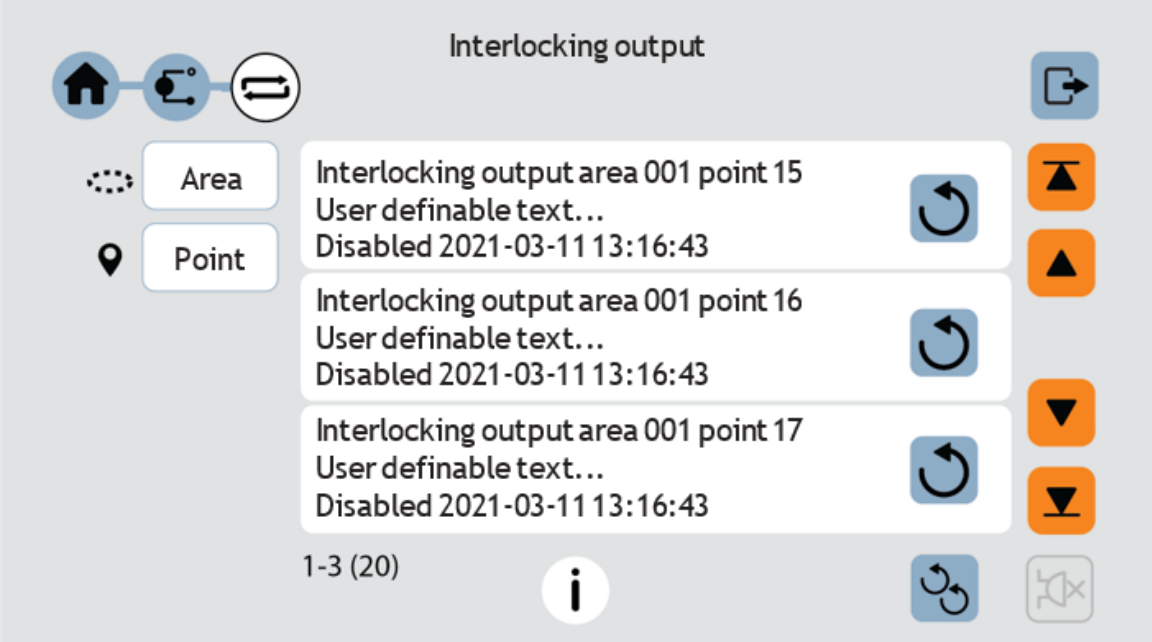
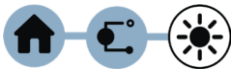


Figure 55: Disable Interlocking Output Menu.

Re-Enable

5. Press the control to re-enable an output or to re-enable all outputs. Re-enabled output will disappear from the list.
6. To exit the menu press .

15.2.7 Disable / Re-enable Alert Annunciation 

For alarm points / zones programmed for Alert Annunciation (via EBLWin), the AA function is normally enabled via a time channel, for example enabled daytime (during working hours) and disabled night time. As an alternative, the AA function can be continuously enabled (always on).

Via this menu, it is possible to disable the AA function, i.e. the AA function will be turned off for the alarm points / zones programmed for Alert Annunciation despite the time channel is “on” or if they are programmed to be continuously enabled. The AA function will be turned off until re-enabled via this menu.

1. Log in to Firefocus.
2. Navigate to menu  .
3. By default, “Alert annunciation” is selected. Use the switch to toggle between:
   - Enabled
   - Disabled

15.2.8 Disable / Re-enable Routing Equipment

Outputs for routing equipment (fire brigade tx and fault tx) can be disabled and re-enabled via this menu. Can be useful during commissioning and test period, when only local alarms are required.

Note: Disable or re-enable routing equipment (ASE) must not be used during normal operation of monitored Firefocus. The routing equipment can only be disabled via the ASE.

Disabled output will stay disabled until re-enabled again via this menu.

Disabled output for routing equipment is indicated by LEDs "Disablement" and "Fire brigade TX".

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. The different routing equipment are listed.
   - Fire
   - Fault
4. Use the switches to toggle between:
   - Enabled
   - Disabled

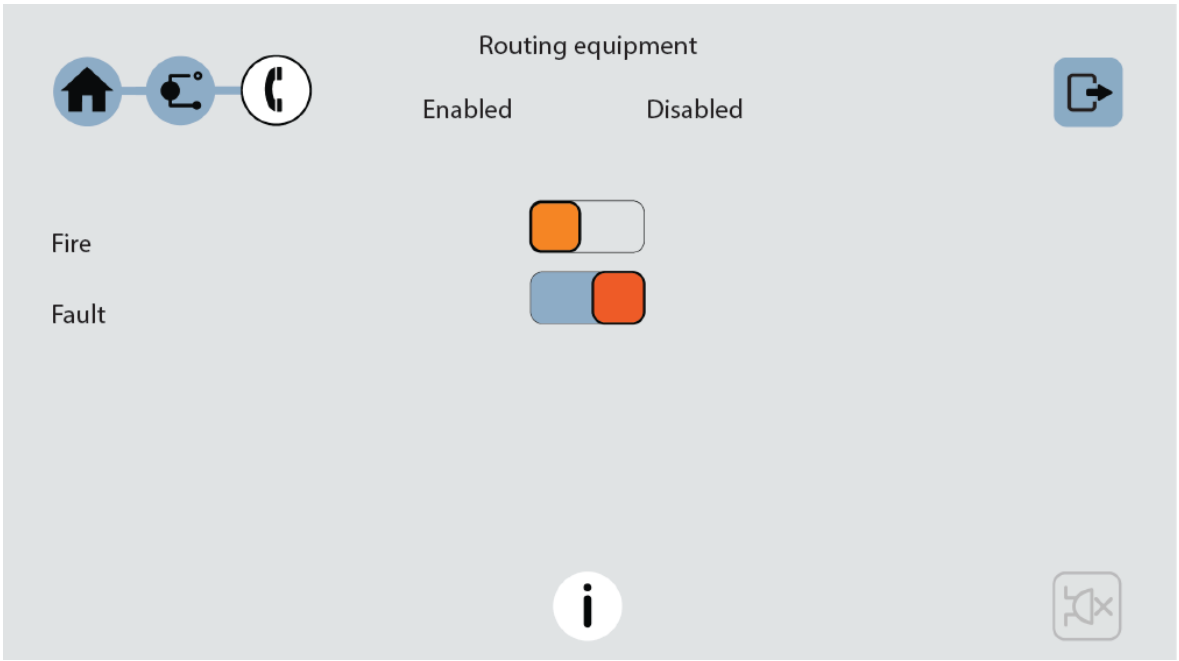


Figure 56: Disable Routing Equipment Menu.

5. To exit the menu press .

15.3 Test MENU

1. Log in to the Firefocus.
2. Navigate to menu . A sub menu list will be displayed.

Figure 57: Test Menu.

15.3.1 Perform Monthly Test

The Firefocus and associated equipment in the building must be tested on a regular basis. Refer to the Australian maintenance standard AS1851 for details regarding monthly, quarterly and annual test. In test mode, only the alarm points are set to test mode, and no outputs (sounders) will be activated during the test. (Alarm devices can be tested via Test alarm devices menu > >).

If a real fire alarm is activated, for example by an alarm point not in test mode, the normal fire alarm functions will be activated, which means fire alarm presentation, outputs (sounders) activated, fire brigade tx (ASE) activated, and so on. See section 3.3.6 Information Priority Order page 21.

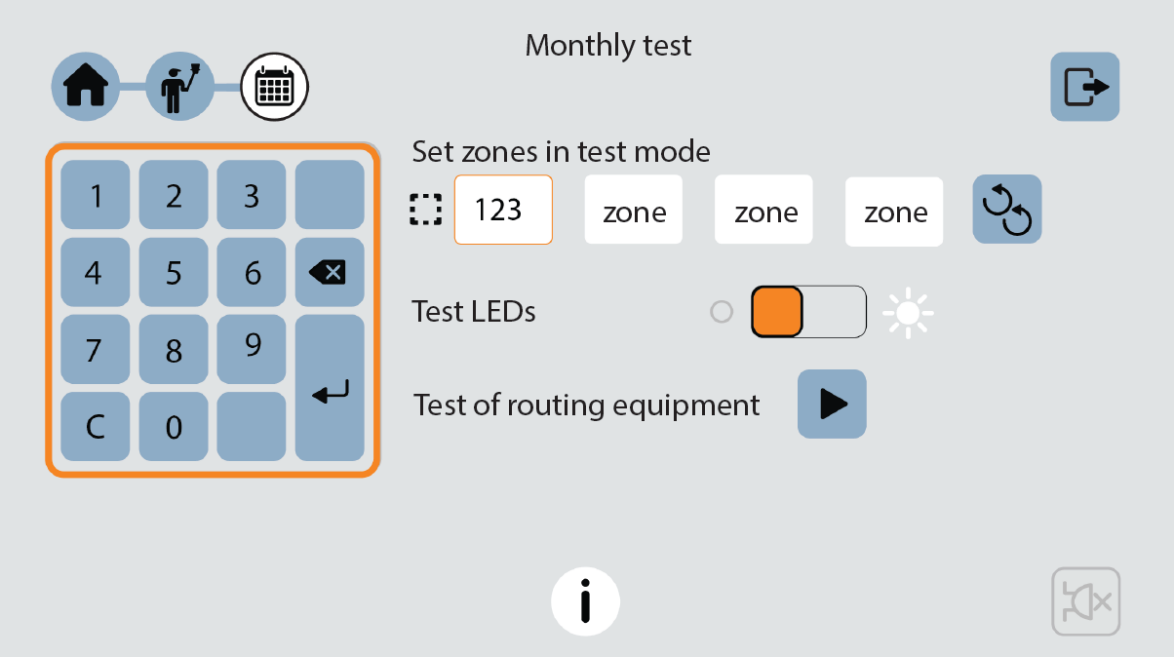


Figure 58: Monthly Test Menu.

1. Log in to the Firefocus.
2. Navigate to menu > > .

Set Zones in test mode

3. Up to four zones can be set in test mode. Use the numpad to enter the zone numbers and press to start the test.
4. Press to end the test for all zones.

The zone(s) will stay in test mode until the test mode is ended. The test mode is ended in this menu or automatically one hour after the latest test alarm. This is valid for each zone respectively.

You will be automatically logged out 15 minutes after the latest “action” (in the menu), but the zone(s) will stay in test mode until the test mode is ended.

Test LEDS

5. Use the Test LEDs switch to test the LEDs in the icon display area. The buzzer will also be turned on during this test.

In the Australian convention, the routing equipment must be tested separately via the ASE.

Perform the test as quickly as possible, since the outputs for routing equipment are disabled during the test mode. Also, the parts of the zones in test mode, not visible for the test personnel, are disabled.

To shorten the testing time, any time delay for the detectors / zone in test mode will be “disabled”, i.e. fire alarm will be detected faster than normally.

In the tested alarm point, the LED will light up approximately 10 seconds and then the alarm point will be automatically reset. There will be a test mode alarm indication on the Firefocus touch screen. A detector in test mode is not able to generate a fault.

Note: If an alarm point, for example a manual call point, is in an alarm state when the test mode is ended, a fire alarm will be activated.

When the “Fire door closing” function is used, the fire door will be closed when the detectors controlling the door are set in test mode.

15.3.2 Perform Zone Test

Normally, zones are tested during the monthly test or as required by AS1851. Via this menu it is also possible to perform the zone test. Up to 100 zones can be set in test mode, only the alarm points are test.

No outputs (sounders) will be activated during the test. (Alarm devices can be tested via menu > > , and any output via Activate output menu > > or via EBLWin when you are logged on.)

If a real fire alarm is activated by an alarm point not in test mode, the normal fire alarm functions will be activated, which means fire alarm presentation, outputs activated, routing equipment activated, and so on. See section 3.3.6 Information Priority Order.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Enter the zone number one by one or in range and press to start the test. The zone will appear in the list.

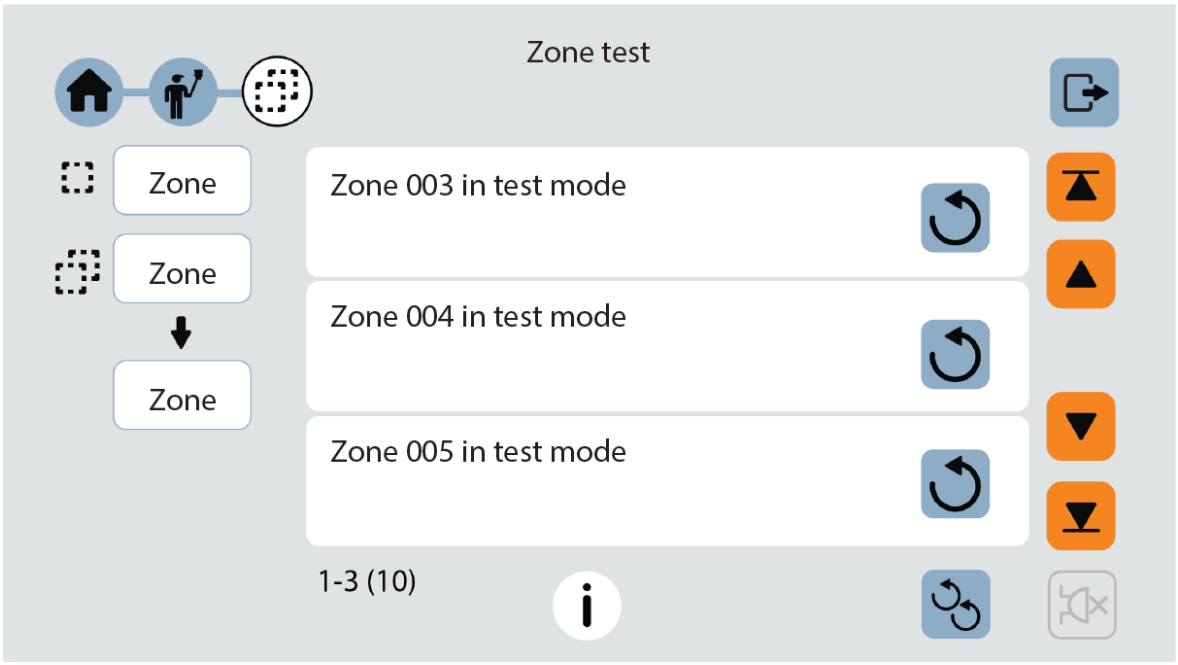


Figure 59: Zone Test Menu.

One or more zones in test mode are indicated by the LED "Test mode". The green polling LED in the 440x / 440xl detectors will be turned off in test mode.

4. Press the control to terminate the test mode of a zone or to terminate test mode of all zones. Zones with ended test mode will disappear from the list. The test mode must be ended for all zones.

During the Test

Perform the test as quickly as possible, since the output(s) for ASE (fire brigade tx) are disabled (also the parts of the zones in test mode, not visible for test personnel are disabled). To shorten the testing time, any time delay for the detectors / zones in test mode will be "disabled", i.e. fire alarm will be detected faster than normally.

In the tested alarm point, the LED will light up for approximately 10 seconds and then the alarm point will be automatically reset. There will be a test mode alarm indication in the Firefocus touch screen.

A detector in test mode is not able to generate a fault.

Note: When the “Fire door closing” function is used, the fire door will be closed also when the detectors controlling the door are tested in test mode.

After the Test

The zones(s) will stay in test mode until the test mode is ended. The test mode is ended in zone test menu  or automatically one hour after the latest test alarm. This is valid for each zone respectively.

You will be automatically logged out 15 minutes after the latest “action” (using of any key), but the zone(s) will stay in test mode until the test mode is ended, see above.

Note: If an alarm point (for example a manual call point) is in alarm state when the test mode is ended, there will be a fire alarm activated.

15.3.3 Test of Alarm Devices

All programmable outputs in the control unit, of type “Alarm device” or “Alarm device for evacuation”, can be collectively activated to test the alarm devices. This procedure includes addressable sounder base 4479 / 3379, wireless detector 4611 and all alarm devices 4480, 4481, 4482, 4487.

The test cannot be started if a fire alarm is already activated in the system.

When the test starts, the alarm devices will sound continuously (steady) for approximately 5 seconds, be silent for approximately 25 seconds, sound for approximately 5 seconds and so on. For the alarm devices 4479, 3379, 4611, 4480, 4482, and 4487, the tone with the highest priority level (and type “alarm device”) will be automatically selected.

The test will continue for one hour if not stopped via this menu or if a fire alarm is activated in the system.

After one hour, when the test mode is ended, a message is shown in the Event log .

Note: If wireless photoelectric smoke detector 4611 is tested for more than 45 minutes, the batteries in the detector must be replaced. When replacing the batteries, remove both batteries for 2 seconds to force a restart of the detector. (The battery fault is latched so a restart is necessary to clear the fault.)

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Use the switch to toggle between:
   - Start test
   - End test

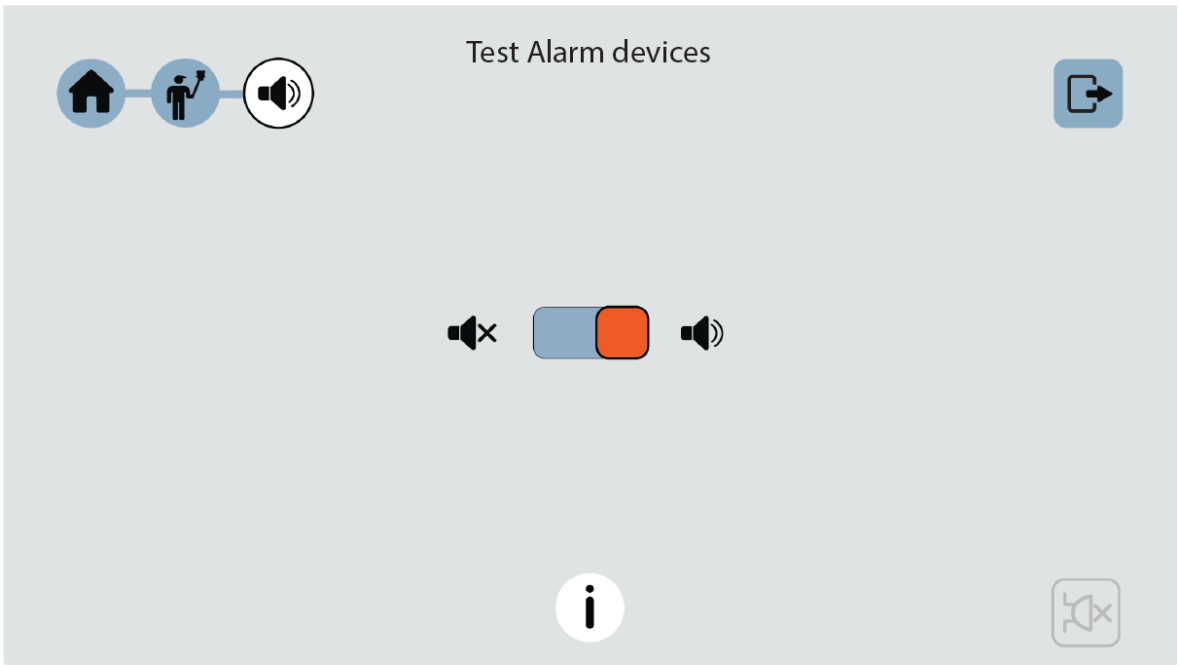


Figure 60: Test Alarm Devices Menu.

4. To exit the menu press .

15.4 Settings

1. Log in to the Firefocus.
2. Navigate to menu . A sub menu list will be displayed.

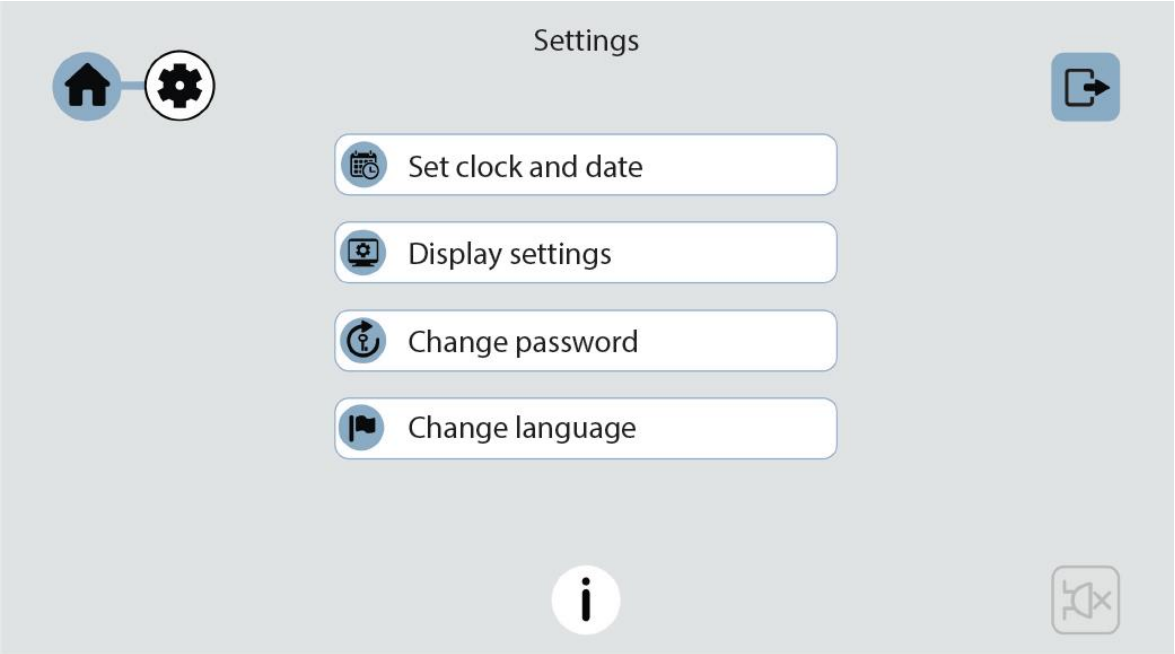


Figure 61: Settings Menu.

15.4.1 Set Clock and Date

The RTC component has a capacitor as a backup power supply. Normally, date, day of the week and time only must be set when the control unit powered up for the first time. If required, the clock might be corrected, so that the “time stamps” for fire alarms, faults, etc. will be correct.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Use the numpad to enter new values for date and / or time. Press to save the setting.
4. To exit the menu press .

Note: The capacitor can supply the RTC for a couple of days. When the power has been turned off, it is recommended to check / set the date and time.

15.4.2 Display Settings

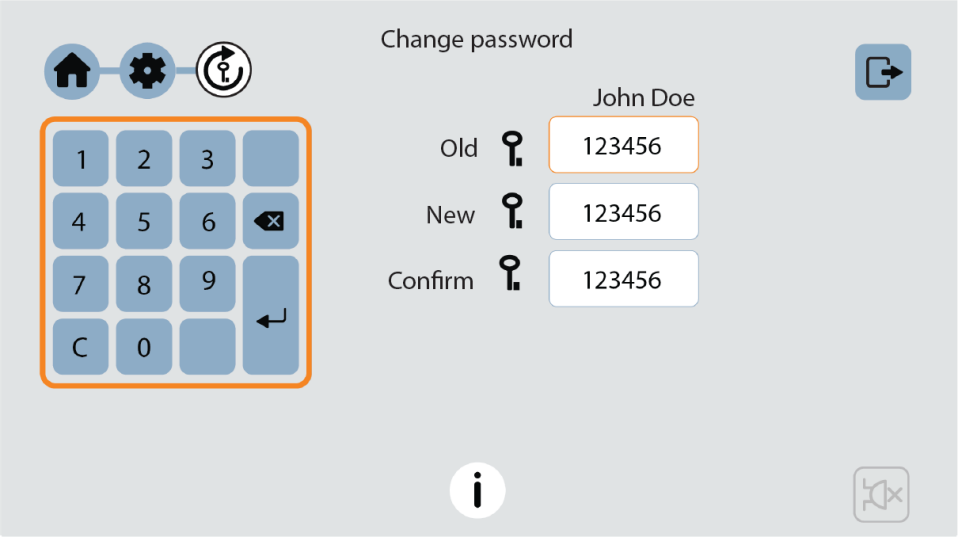
The touch screen brightness is set to 100% by default. The brightness may need to be changed due to the lighting conditions.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Drag the thumb to change the brightness level.
4. To exit the menu press .

15.4.3 Change Password

A password can be changed via this menu and will be valid until it is changed again or erased via EBLWin (menu Tools / Reset user passwords.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Enter the old password, the new password and the new password again. The is now changed to the new one.



4. To exit the menu press .

Note: Make a “Safe shutdown of control unit” if you want this password to be valid after power off. This will save the SSW data in a flash Memory. See Safe shutdown menu > > .
A copy of the latest password must be given to the building owner.

15.4.4 Change Language

Normally the language is selected when you install EBLWin and select the Australian convention however, via this menu, you can change the language used in the control unit.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Press a flag to change the language in the control unit.

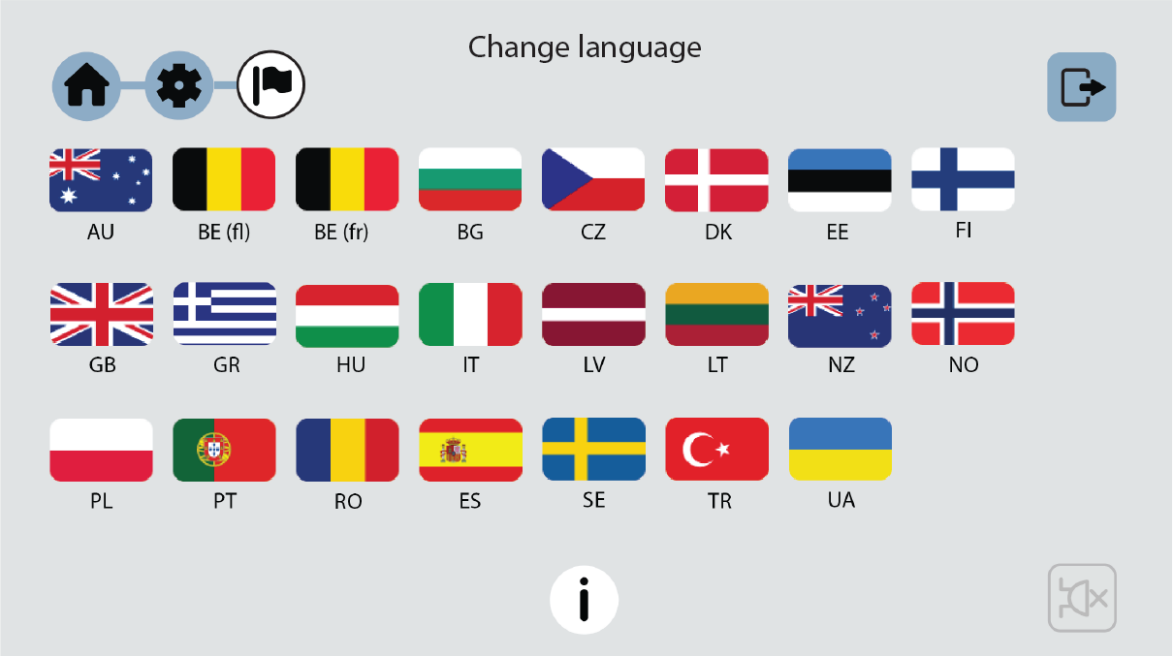


Figure 62: Change Language Menu.

4. To exit the menu press .

15.5 Installation

When commissioning and maintaining the system (for example when you power on and when you are programming a control unit / system), this menu can be used for certain actions, information and help.

Only authorized personnel have access to the installation menu and a password for level 2C (Service technician) is required.

1. Log in to the Firefocus.
2. Navigate to menu . A sub menu list will be displayed.

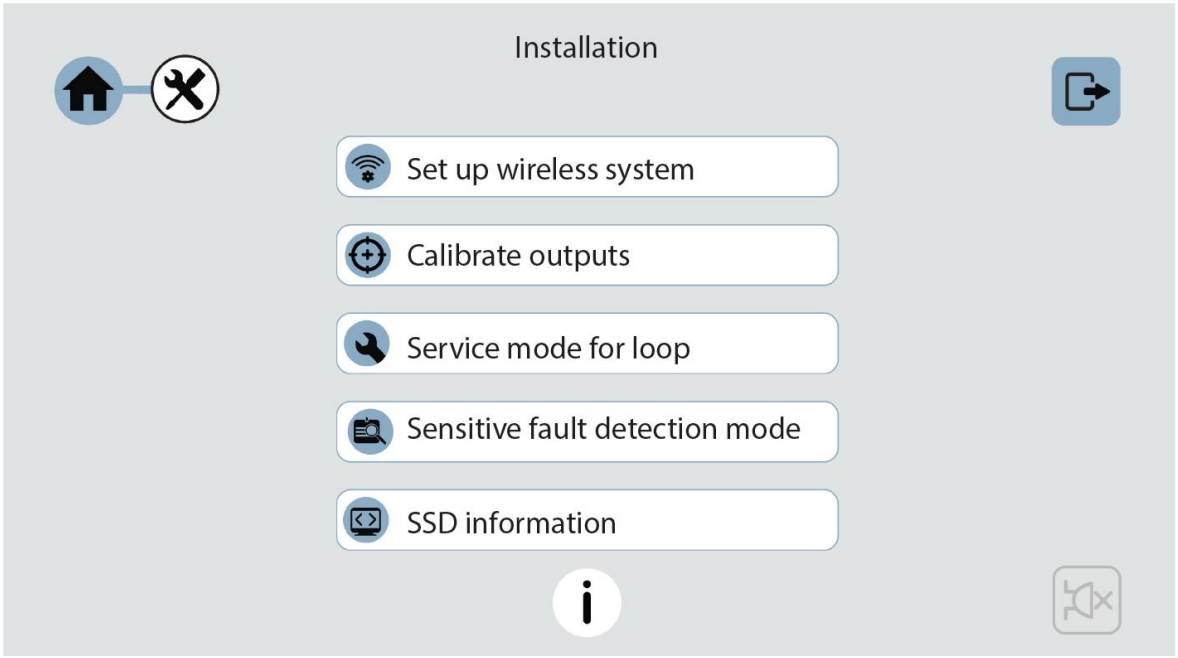


Figure 63: Installation Menu.

Some tasks for Service technicians are done via EBLWin. Via PC and EBLWin you can perform:

- Download / backup (upload) the Site-Specific Data (SSD)
- Create and download software (S/W), setting, configuration, control unit and system properties.
- Create and download the user definable text messages (alarm texts) shown on the touch.

Note: To be able to Log in to an Firefocus via a PC and EBLWin, the PC must be provided with an EBLWin key (5094). This USB device has a number (a key) required for the log in.

15.5.1 Setup Wireless System 

This function can be used by commissioning / service engineer to set a base station for wireless units (4620) to one of the following modes:

Register – In order to register one or more wireless units 4611 to the base station.

Unregister – In order to unregister one or more wireless units 4611 from the base station.

Install – In order to change the communication from normally every 2nd minute to every 5th second, to be used during commissioning, and so on.

Note: To set the base station to any of the modes above, the base station must be in “Normal state”, i.e. not set to any of the modes. For example, a base station set to e.g. “Register” mode must be set back to “Normal state” before it can be set to any other mode.

1. Log in to the Firefocus.
2. Navigate to menu  .
3. Write the technical number for the base station.
4. Press the controls to select between the states:
   - Register
   - Unregister
   - Install
5. Press the control  to end the mode for one base station or  to end mode of all base stations. The base station is now back in Normal state and will disappear from the list.
6. To exit the menu press  .

Note: The base station must be set back to the “Normal state” for the wireless detectors to function normally.

15.5.2 Calibrate of Supervised Outputs 

Only one 24VDC supervised voltage outputs (S1) available in the control unit.

When all alarm devices have been connected, including required end-of-line resistors and when the SSD is downloaded, a calibration must be performed.

Function

If the actual value at any time differs from the calibration value ± a small tolerance or if the calibrated value is outside the calibration range, a fault will be generated.

1. Log in to the Firefocus.
2. Navigate to menu  > > .
3. Press  to start calibration of supervised outputs.
4. Press  again when the calibration is ready.
5. To exit the menu press  .

Note: After the calibration, it is recommended to do a “Safe shutdown of the control unit”, This will save the SSW data (e.g. the calibration values) in a Flash memory.

15.5.3 End-Of-Line Devices

Control unit outputs S1, programmed as Supervised (1-50kΩ): One end-of-line resistor (33kΩ) in the last unit or one resistor (33kΩ) in up to five units.

15.5.4 Service Mode for COM loop

This mode can be used when commissioning a system and during the maintenance. The COM loop communication (polling) will be turned off but there is still voltage ($24V_{DC}$) on the loop in the A-direction only, in the B-direction only or in both directions at the same time.

A voltmeter can be used, e.g. to check the voltage / voltage drop on different segments on the loop or to find a single break on the loop. (Since there is voltage on the loop, short circuit isolators will work normally.)

The “Service mode for COM-loop” is indicated by LED “Disablement”. It is also shown on the event tab page when logged out.

Note: If short-circuit is detected when a COM loop is in service mode, the loop will be disabled, and a fault message will be displayed:

FAULT: Short circ. Tech addr A <-> B, [sub-loop x], loop x

… independent of where the short-circuit is situated on the loop.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Select between A Direction, B Direction, or both directions.
4. Press the control to end the service mode.
5. To exit the menu press .

When you leave this menu by pressing the service mode will be turned off, and the communication will be turned on in the normal way.

15.5.5 Sensitive Fault Detection Mode

To increase the possibilities to detect faults during commissioning, it is possible to use the “Sensitive fault detection mode”. The time delay for each fault will then be reduced, i.e. you might find some faults now instead of later. When the “Sensitive fault detection mode” is turned on, it is indicated by LED “Fault” and the “Fault” output for routing equipment is “activated”. It is also shown on the event tab page when logged out.

Note: Don’t forget to turn off this mode after the commissioning.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Use the switch to toggle between:
   - Activate
   - Deactivate
4. To exit the menu press .

15.5.6 SSD Information

SSD name: As written in the EBLWin dialog box “System Properties” (Name).

Downloaded: Date and time when the SSD was downloaded.

User: Username for the person who performed the SSD download.

EBLWin key: The unique number for EBLWin key.

Computer: Computer name (if programmed) for the PC that was used for the SSD download.

Domain: Domain (if programmed) for the PC that was used for the SSD download.

Convention: Country specific functions, default EBLWin settings, and so on, is set in conjunction with the installation of EBLWin.

Download count: Number of times the SSD has been downloaded.

1. Log in to the Firefocus.
2. Navigate to menu > > .

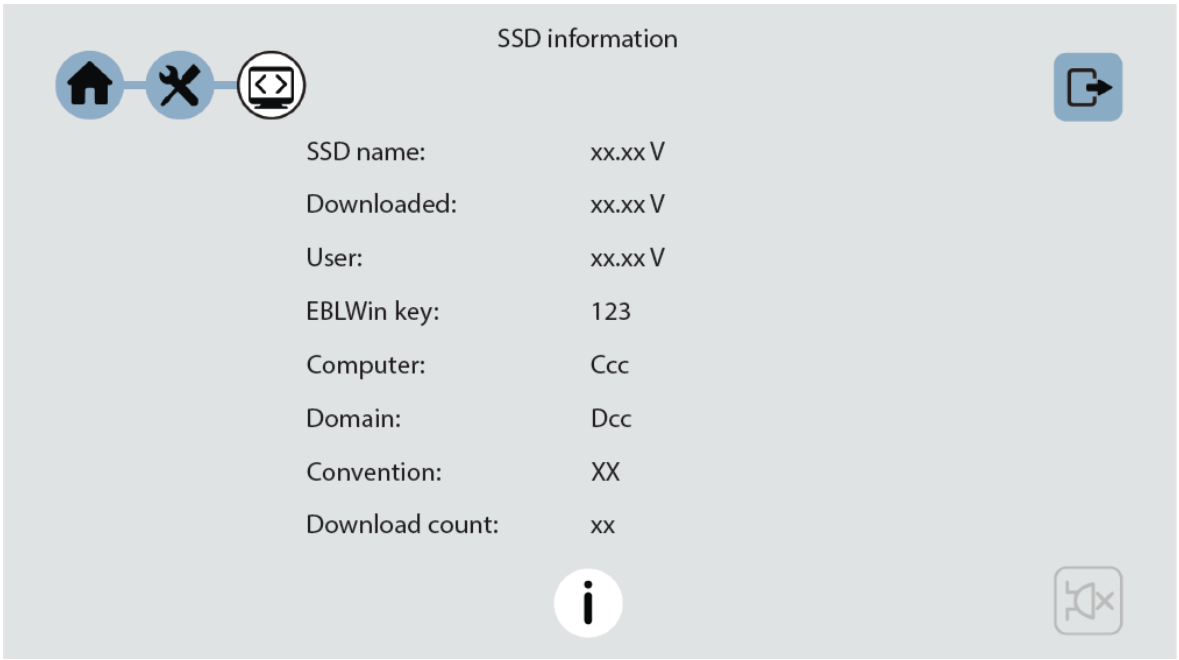


Figure 64: SSD Information Display.

3. To exit the menu press .

15.6 Maintenance

Only authorised personnel have access to maintenance menu and a password for level 2C (Service technician) is required.

1. Log in to the Firefocus.
2. Navigate to menu . A sub menu list will be displayed.

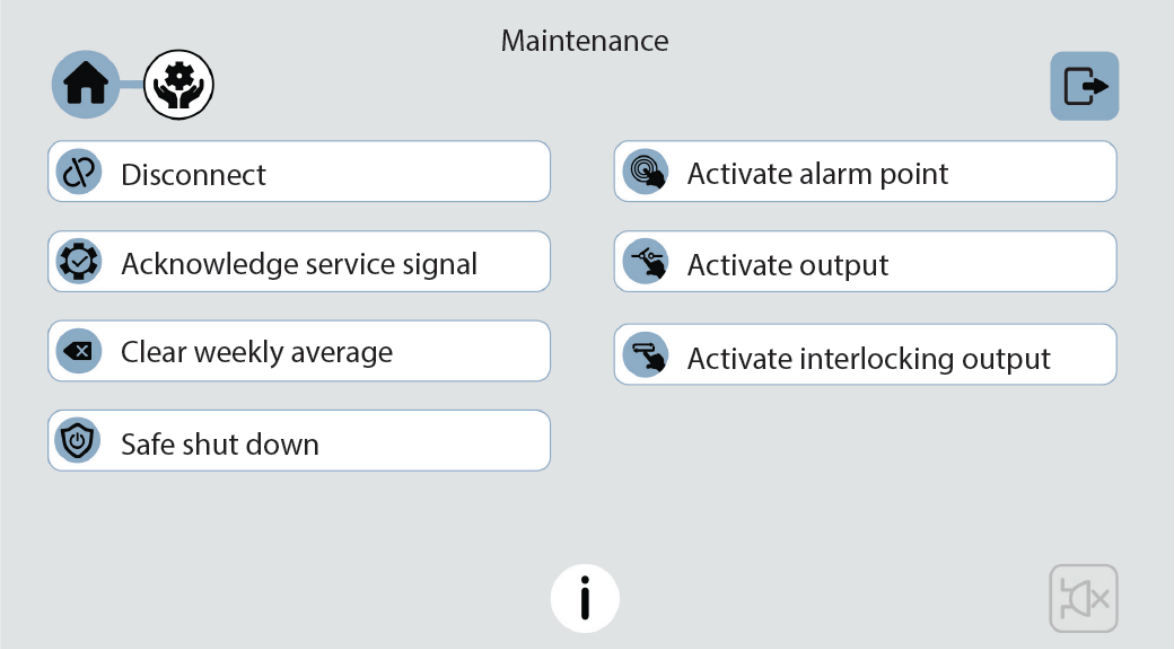


Figure 65: Maintenance Menu.

15.6.1 Disconnect

Before physical connection / disconnection of loop units, etc. the loop (or zone interface input) must be disconnected (voltage free) to avoid damage on the units and the Firefocus. Zone interface input requires an addressable multipurpose I/O unit 4461 connected on a COM loop.

One or more disconnected “loops” are indicated by LED “Disablement”. Disconnected loops are also shown on the event tab page when logged out.

Note: When you re-connect a COM loop all the statistics shown in communication menu > > will be erased and set to “0”

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Use the drop-down to select between COM loop or SUB-loop. The loop will directly be shown in the list.
4. If addressable multipurpose I/O unit 4461 is connected on the COM loop, enter the technical address for the zone interface input, and press .

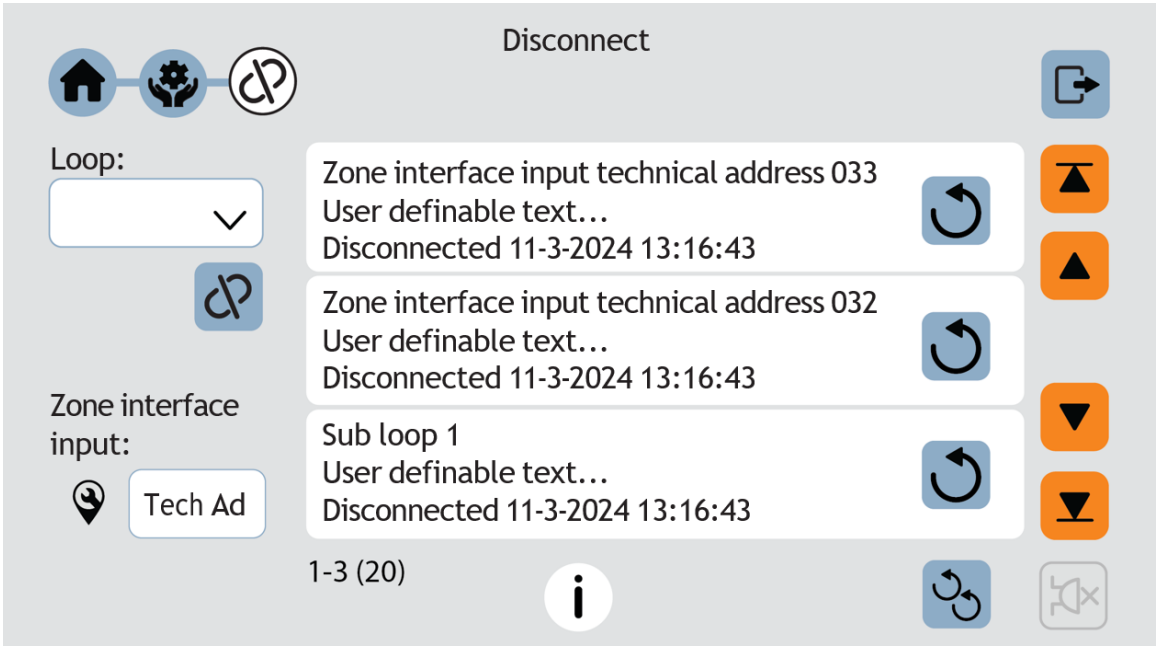


Figure 66: Maintenance Disconnect Menu.

5. Press the to re-connect a loop / zone interface or to re-connect all loops / zone interface. Re-connected loop / zone interface will disappear from the list.
6. To exit the menu press .

15.6.2 Acknowledge Service Signal

Sensor = analogue smoke detector.

Only intrinsically safe analogue smoke detector 2840 must be acknowledged: When service signal from a 2840 sensor is acknowledged, the sensor is given a default week average sensor value (same as for a new / clean sensor = 0.1 %/m). First replace the sensor and then acknowledge the service signal as soon as possible. The first week average sensor value after acknowledgement will be calculated within one hour, then each week.

Sensors 4400, 4401 set in advanced mode do not have to be acknowledged if they are replaced after generating service signal. They will be automatically reset.

Note: If a 2840 sensor is replaced without having generated service signal, it must be reset to the default week average sensor value via Clear Weekly Average menu > > section 15.6.3.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Press or to scroll in the list.
4. To acknowledge a sensor, press or press to acknowledge all sensors. The acknowledged sensor disappears from the list.

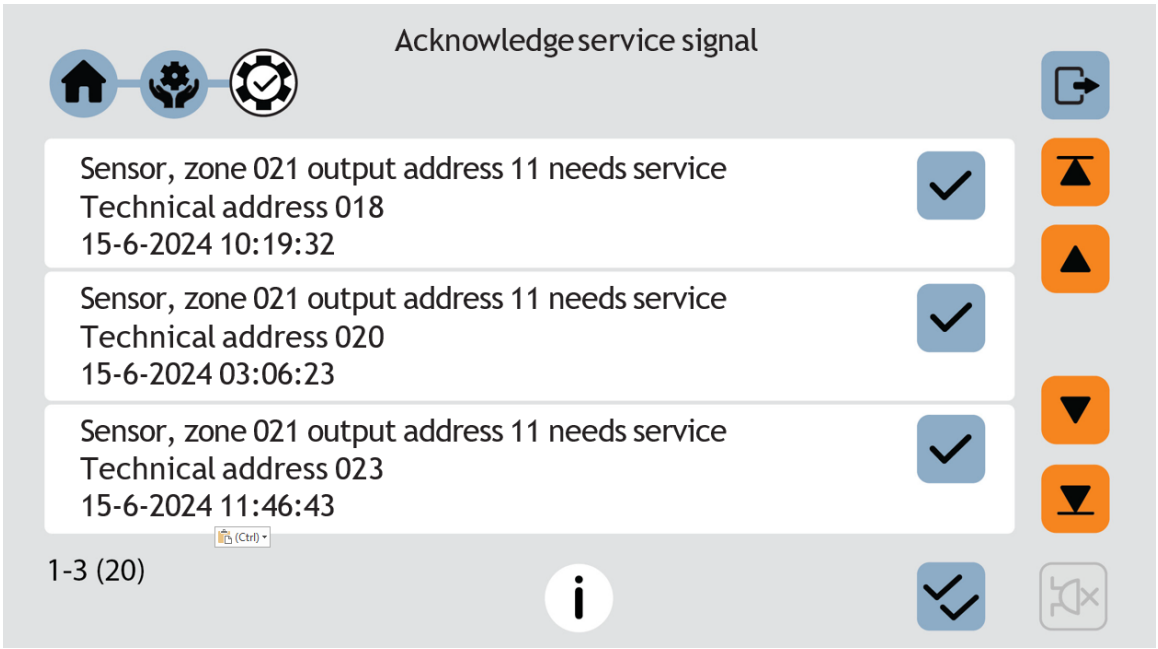


Figure 67: Maintenance Acknowledge Service Signal Menu.

5. To exit the menu press .

The most recent service signal is on top of the list. A service signal that is acknowledged will disappear from this list.

15.6.3 Clear Weekly Average

Valid only for 2840: If a sensor (analogue smoke detector) is replaced without having generated SERVICE signal, its week average sensor value must be cleared and set to the default value (i.e. “1” = 0.1 %/m), otherwise the new / clean sensor will inherit the old sensor’s value. It is possible to clear the week average sensor value for each sensor individually via this menu.

Note: First replace the sensor and then clear the week average value as soon as possible. Authorised service personnel only must do this. Used incorrectly it can cause nuisance fire alarms.

The first week average sensor value (after clearing) will be calculated within one hour, then each week.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Enter the required zone and address and press .

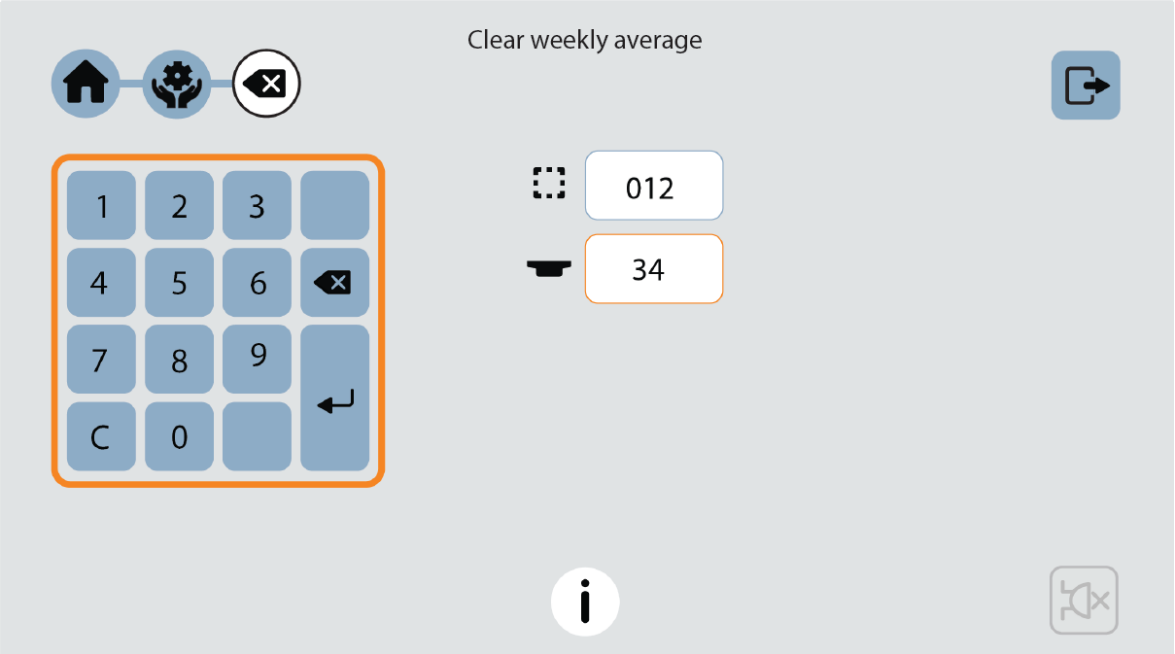


Figure 68: Maintenance Clear Weekly Average Menu.

4. To exit the menu press .

15.6.4 Safe Shutdown

It's recommended to perform a safe shutdown of control unit before you power off, which means disconnecting the mains 230Vac and battery. Safe shutdown will save the SSW in a Flash memory and put the CPUs at rest.

If safe shutdown is not done, it might also generate a fault when you power up the control unit again:

FAULT: Read/Write site data (SSW).

It's recommended to do a safe shutdown after commissioning the installation and after the calibration of supervised outputs, change of passwords and so on, to save the new valid values and codes.

Note: By restart and power off, the Fault tx output(s) will be "activated".

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Press to start the safe shutdown. The SSW is now saved, and the main board CPU are at rest.
4. Break the power of the control unit.

OR

5. If not, the control unit will restart automatically after 300 seconds (5 minutes).

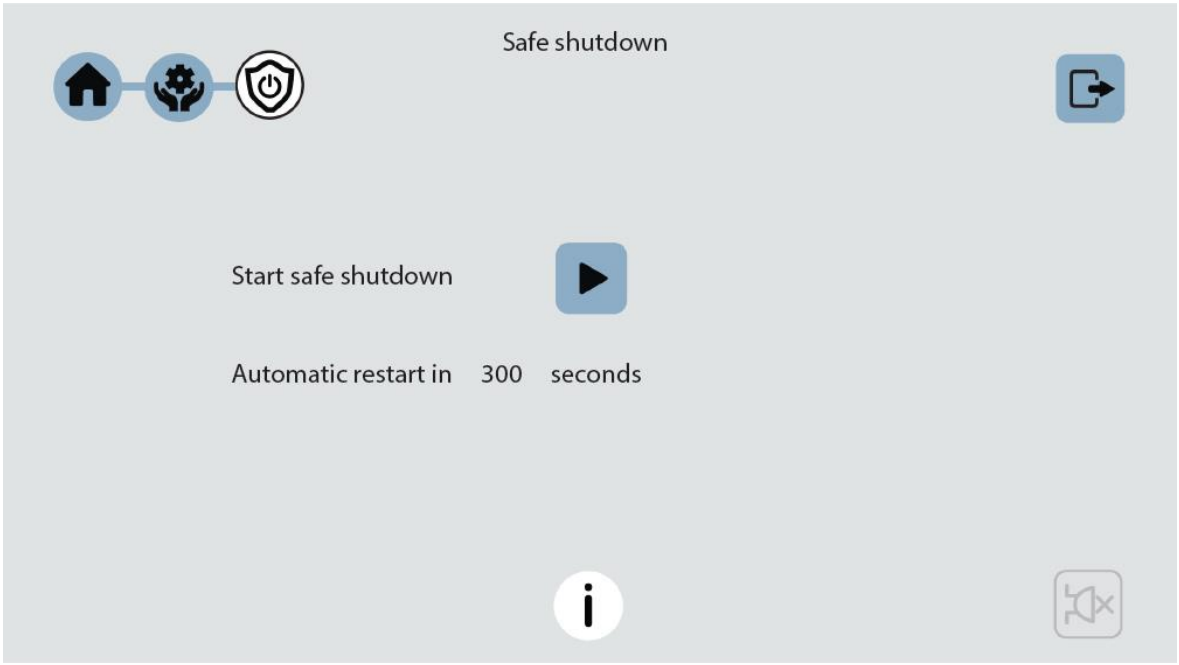


Figure 69: Maintenance Safe Shutdown Menu.

After Restart

After a restart, as shown in chapter 14 “Restart” Page 75. One restart fault will always be shown. The code will be 00 after Power off / Power on restart and 03 after a countdown restart. Address 0. This fault must be acknowledged, See chapter Fault Page 47

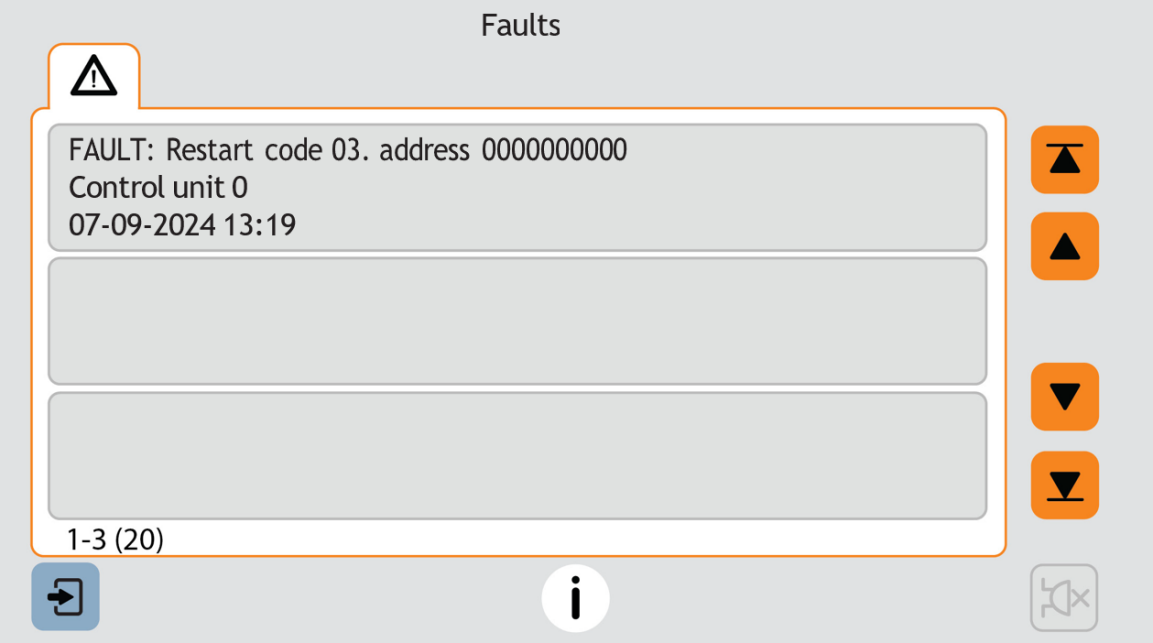


Figure 70: Restart Fault Code Display.

Note: Before the first safe shutdown, the flash memory is empty. Then every time safe shutdown is performed the valid data will be saved in the flash memory i.e. old data will be overwritten. When the Firefocus is powered up, the data stored in the flash memory will be used.

If safe shutdown is not performed just before you power off a control unit, then by power on, the flash memory might be empty which means the defaults settings will be used. Or the stored data might be old and not valid.

15.6.5 Activate Alarm Point

One alarm point (zone-address), not a whole zone, can be set in alarm. It will be presented as a fire alarm, the built in LED in the alarm point (for example a detector) will be turned on and all outputs, standard and programmable, which would have been activated by a normal fire alarm from the same alarm point will be activated.

Note: If a real fire alarm occurs, the "Test Mode Alarm" will be automatically reset by the actual fire alarm.

A detector programmed for "Quiet alarm" will activate a Quiet test alarm instead of a fire alarm.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Enter the required zone and address.
4. Press to start the alarm mode of this zone address.

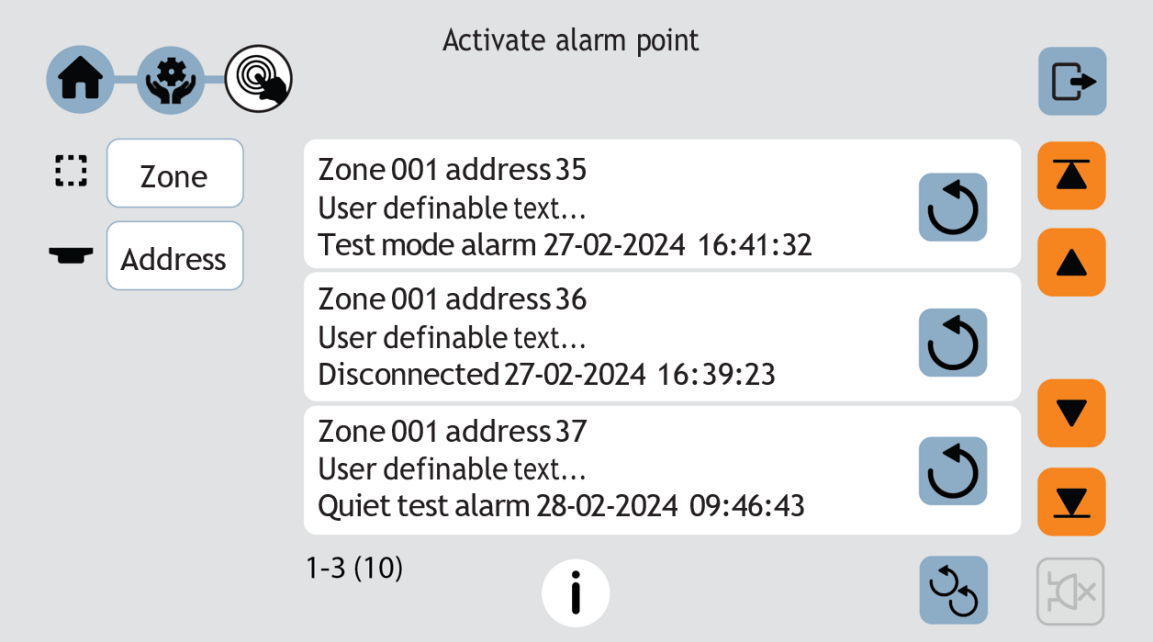


Figure 71: Maintenance Activate Alarm Point Menu.

5. Press the to reset the alarm point or to reset all alarm points. Reset alarm points will disappear from the list.
6. Press to leave this menu.

This manually activated fire alarm will be presented as "Test mode alarm" on the control unit touch screen and indicated by the LEDs "Fire" and "Fire brigade tx activated".

15.6.6 Activate Output

Via this menu, a loop unit output and control unit output can be activated and reset.

Any output can be activated, which means the function can be tested. (Can also be done via EBLWin.) This is including addressable sounder base 4479/3379, wireless detector 4611, light indicator 4383, and all alarm devices 4480, 4481, 4482, 4487.

The selected output will be activated no matter if the control expression is true or not. The selected output will be reset only if the control expression is false. If the control expression is true when you reset the output, the output will remain activated until the control expression is false again.

1. Log in to the Firefocus.
2. Navigate to menu > > .
3. Press S1 to activate control unit output S1.
4. Enter the technical address of the loop unit and press ↵ to activate. The activated output will directly be shown in the list.

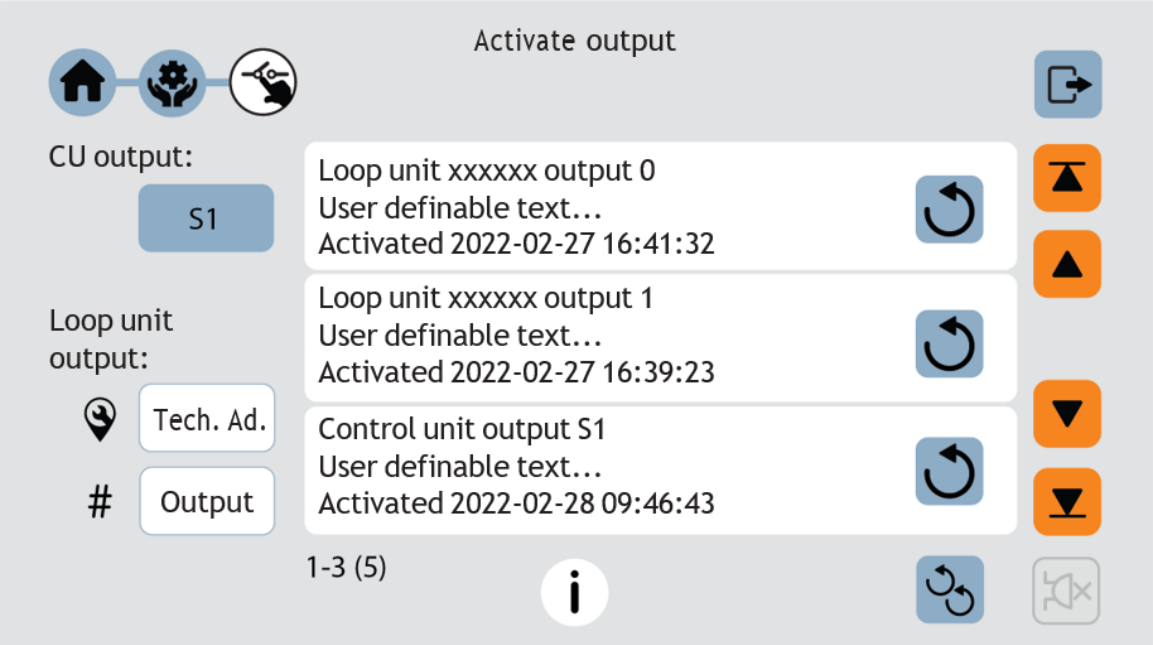


Figure 72: Maintenance Activate Output Menu.

5. Press the ↺ to reset an output or ↺↺ to reset all outputs. Reset outputs will disappear from the list.
6. To exit the menu press .

15.6.7 Activate Interlocking

The output in each interlocking combination (area / point) can be manually activated via this menu. The corresponding interlocking input will be “monitored” in the same way as if the output was activated by its control expression.

The output in each interlocking combination (area / point) can be manually deactivated via this menu.

Note: The output will be deactivated also if its control expression still true and cannot be activated again until after its control expression has been false again.

Also, a latched output will be deactivated, if an interlocking output is activated via its control expression and with latching output selected (in EBLWin), the output must be deactivated via this menu.

1. Log in to the Firefocus.
2. Navigated to menu > > .
3. Enter the area number and address and press to activate. The activated output will directly be shown in the list, indicated by a beep.

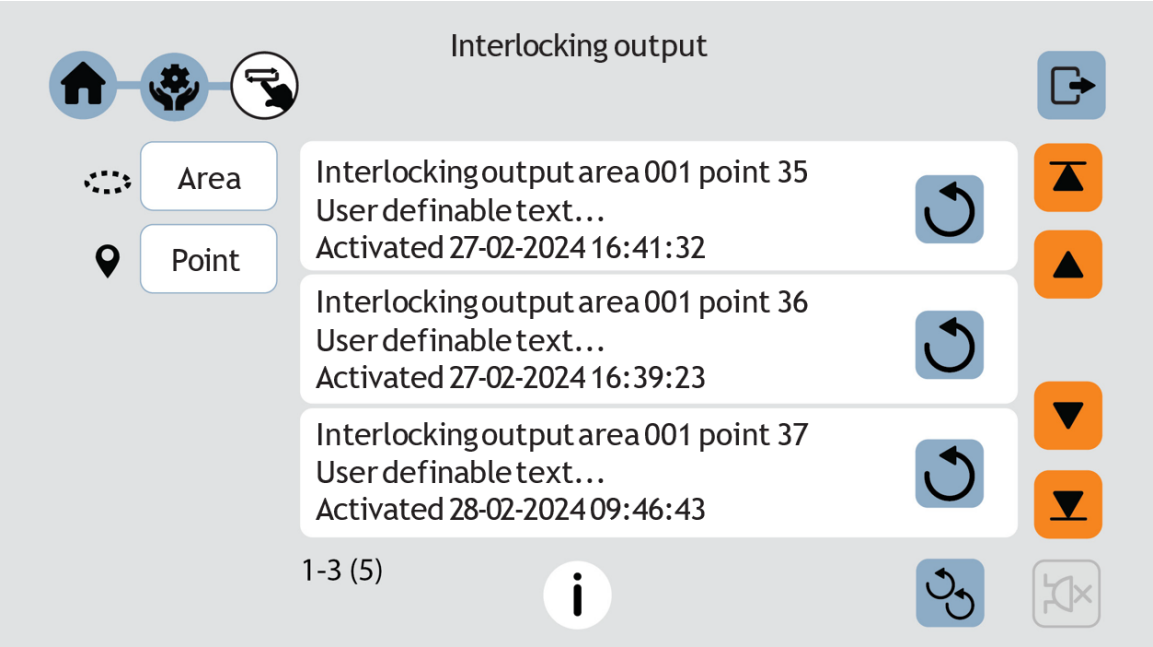


Figure 73: Maintenance Interlocking Output Menu.

4. Press the to deactivate an output or to deactivate all outputs. Deactivated outputs will disappear from the list.
5. To exit the menu press .

16 COM loop cable Length

Depending on the type of units and the number of units, the total current consumption will vary, and this will affect the cable length. The units should be distributed as even as possible on the COM loop.

In EBLWin it is possible to get an approximate calculation of the cable length. EBLWin will notify if the current consumption is too high.

Right click on the com loop in EBLWin. Select properties… the dialog window 'Properties for COM-loop' will open in the Cable length tab, it is possible to:

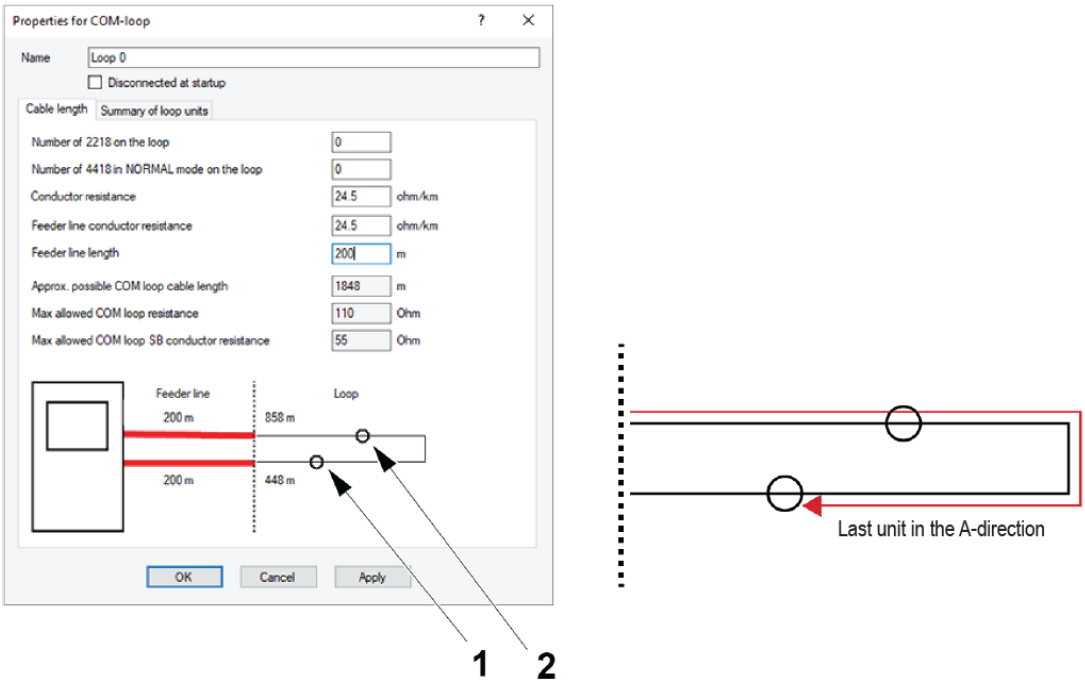
- Add the number of external LEDs on the loop.

(Maximum of 5 external LEDs on the loop will be lit at the same time)

- add input for conductor resistance.
- add input for feeder line conductor resistance
- add input for feeder line length
- Move the position of the last unit (1) in A-direction and the last unit (2) in B-direction on the loop by dragging the circles. The distance is altered.

Approx. possible COM loop cable length and max allowed COM loop resistance and max allowed COM loop SB conductor resistance is calculated automatically based on above input parameters. The COM loop SB conductor resistance is calculated with respect to the fact that all isolator resistance is located on the SA line.

By adding a SUB-loop to the COM loop, the cable length can be extended by up to 1100 m.



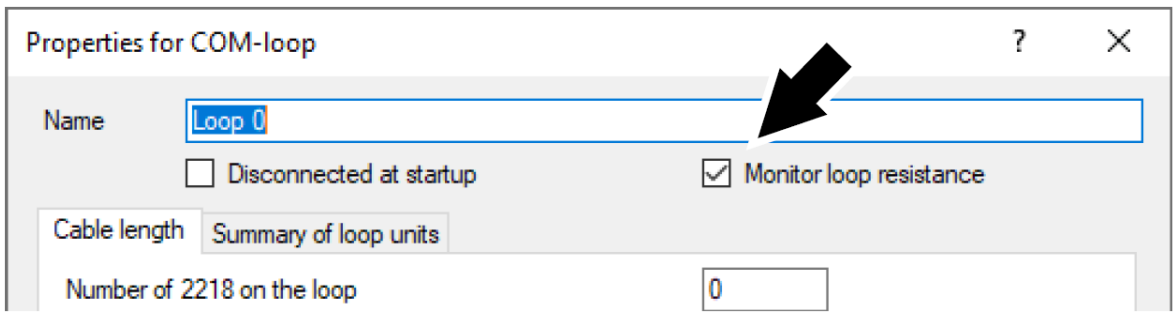
It is possible to switch the loop resistance monitoring on/off via a checkbox when level 1 is activated.

To disable the function "Monitor loop resistance':

a) Go to EBLWin menu Tools/Advanced functions / Level 1.

b) Activate level 1. The checkbox 'Monitor loop resistance' will appear in the properties for COM loop.

Checkbox not marked = This function is disabled, which means the loop resistance will not be monitored


Properties for COM-loop
Name
Loop 0
Disconnected at startup
Monitor loop resistance
Cable length
Summary of loop units
Number of 2218 on the loop
0

17 Battery Maintenance

The batteries – 1 or 2 x 12V, 17 Ah – are placed inside the control unit. **When only one battery is used, you must connect the leads (battery lugs) together in parallel.**

The Control Unit charges the batteries and continuously monitor its condition, a fault will be generated when the batteries are disconnected or outside the specified limits.

The batteries are rechargeable Sealed Lead-Acid batteries, it must be approved batteries by CSIRO. The batteries are normally maintenance-free, but the manufacturer's instructions should always be followed.

The ambient temperature affects the battery capacity, self-discharge and life span. The temperature should preferably not be higher than normal room temperature (approximately 20-22°C). For highest safety, the batteries used in a fire alarm system should not be more than four years old.

Note:

Risk of explosion may occur if the battery is replaced by incorrect type. Dispose used batteries according to the producer's instructions and national regulations.

Skilled personnel are required to replace batteries.

18 How to Avoid Nuisance Fire alarms

We all realise, when life, buildings, production facilities, etc. shall be saved, it is of utmost importance that an initial fire is detected as soon as possible. That's why more and more automatic fire alarm systems are installed.

In an automatic fire alarm installation, especially where smoke detectors (sensors) are used, everybody in the building needs to be informed how to avoid unnecessary (nuisance) fire alarms.

To avoid trouble and unnecessary expenses, there are some issues to bear in mind. The following are some advice and tips:

Tobacco Smoke

The detectors (sensors) cannot sense the difference between "smoke" and "smoke". They cannot separate tobacco smoke from smoke from a fire. Intensive tobacco in conjunction with bad ventilation can cause a fire alarm. Welding, grinding, cutting, sawing & drilling these kinds of jobs cause some.

Carpet Welding

Welding of plastic carpets causes a smoke that can be almost invisible, but it still influences the smoke detectors (sensors).

Cooking Fumes, Toasting & Candles

It is not only "normal smoke" that influences smoke detectors (sensors). It is all kinds of "combustion products", caused by cooking (frying/grilling), toasting, etc.

Note: Be careful when smoke detectors (sensors) are mounted near / close to such activities.

Special Environments

In certain premises a special environment can exist, which can influence smoke detectors (sensors) and cause alarm. It can be ions (from plastics), flour dust, oil haze, aerosols, strong perfumes, strong ventilation, insecticides, disinfecting sprays, etc. if many odd and unnecessary alarms occur, the environment must be examined, and perhaps other detector types must be chosen.

Steam / Hot Air

Smoke and heat detectors are influenced by steam and hot air, for example. From an oven, dry-blower, heater and so on.

Exhausts

Exhausts from cars / trucks, lift trucks, lawn mowers, etc. influences smoke detectors (sensors). If windows and doors are open, exhausts can "slip in" that way.

Lack of Maintenance

Smoke detectors (sensors) are influenced by their environment and become "dirty". In an analogue system (like Firefocus) a Service signal is given when it is time to exchange the smoke detectors (sensors) to new ones. The alternative is to exchange detectors at given periods, to be on the safe side.

Change in Activities or Wrong Choice of Detector

If the activities in the premises are altered, the detector choice might also need to be altered, Due to special environments, see above, an inappropriate detector type might have been chosen from the beginning and thus cause unnecessary alarms.

Actions Via EBLWin

Choosing another type of detector can solve certain problems. Bear also in mind, that the coverage area can be different for different types of detectors.

However, it is not always the best action is to change detector type. Here is a list of other actions, programmed via EBLWin, which can be used:

- Another alarm algorithm can be used (e.g. during working hours).
- ADF function for smoke detectors / sensors can be used.
- Two-zone or two-unit dependent (co-incidence) fire alarm activation can be used.
- In an installation with addressable detectors / sensors, the affected detectors can be individually disabled (or whole zones) for temporary work in the premises. Bear in mind that the smoke spreads, and consideration must be taken to adjacent detectors / zones. Disablements can be done automatically via a time channel (built-in or external) or via Disable menu  . Automatic re-enabling can be used.
- If there is an alarm organisation for the personnel on site, the alert annunciation function can be used.
- Pre-warning can be used as information before a fire alarm is activated.

19 Guarantee

If Firefocus control panel has any defect due to faulty workmanship or material, it is to be returned to Brooks freight paid. BROOKS will, at its sole discretion, repair or replace the item free of charge.

On returning a component or complete product, proof of purchase will be required If returning the complete product all accessories and documentation MUST be returned.

This guarantee does not cover damage caused to the product or its components because of incorrect installation, accident, negligence, misuse, unauthorised dismantling or contamination howsoever caused, careless handling or where repairs have been made or attempted by others.

No other guarantees written or verbal are authorised to be made on behalf of BROOKS. All other conditions and warranties whether expressed or implied are, to the extent permitted by law, hereby excluded.

As BROOKS has no control over the system's design, installation to the relevant Australian Standard or maintenance, the Company and its agents take no responsibility for any damage, consequential loss or injury caused to any equipment, property or persons resulting from the use of Firefocus.

BROOKS guarantees Firefocus units for a period of 15 months from the date of purchasing the equipment or 12 months from the date of operation.

20 Revision history

Issue	Date	Description	Written By	Checked By
1.0	12-10-2024	Firefocus Operational Manual	B.M/N.S.	A.S.
1.1	16-04-2025	Firefocus Operational Manual	B.M/N.S	C.O.

NSW - Head Office

P.O. Box 7050 Silverwater NSW 1811

4 Pike Street Rydalmere NSW 2116

Ph: 02 9684 1466

Website: www.Brooks.com.au

VIC

9/71 Victoria Crescent, Abbotsford VIC 3067

Ph: 03 9879 5294

SA

P.O. Box 101 Woodville SA 5011

729A Port Road, Woodville, SA 5011

Ph: 08 8347 0000

QLD

P.O. Box 511 Archerfield QLD 4108

2/49 Boyland Ave Coopers Plains, QLD 4108

Ph: 07 3373 8222

WA

P.O. Box 2114, Midland DC W.A. 6936

Ph: 08 6262 8095

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