

# System Description

## AutroMaster V Presentation System



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# 1. Introduction

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## 1.1 About this handbook

This handbook provides a system overview of the AutoMaster V Presentation System - Onshore Edition.

## 1.2 The reader

This handbook is intended for consultants, sales personnel, potential customers and distributors.

## 1.3 Reference documentation

The documentation consists of the following documents:

Document Name	File name
System Description	AutoMaster-V-System-Description-eng
Installation, Configuration and Commissioning Handbook	AutoMaster-V-Installation-Configuration-Commissioning-Handbook-eng
Operator's Handbook	AutoMaster-V-Operator's-Handbook-eng
User Guide	AutoMaster-V-User-Guide-eng
Datasheet (system)	AutoMaster-V-System-Datasheet-eng
Datasheet (PC)	AutoMaster-Industrial-PC-Datasheet-eng

## 2. System Overview

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### 2.1 System Characteristics

**AutroMaster V** is a graphical presentation system which can be used together with the Autronica's interactive fire detection systems.

The AutroMaster V has an intuitive control and monitoring interface, providing an easy-to-understand graphical presentation of the premises and events that may occur. Navigation is fast and instinctual, and the powerful zoom functions allow you to monitor all areas in great detail.

The system can be connected to a large number of fire-alarm panels of different types (such as operator, control or repeater panels) via an Ethernet network.

AutroMaster V uses colour graphics for the display of system events (smoke/heat development, switching, placement, etc.), providing detailed information so that necessary actions can be taken. The system provides overviews of measured values for specific detectors, as well as status for the entire system using the built-in report generator; these provide cost-efficient documentation and maintenance logs.

Control of the alarmed area and its subsystems are unlimited; core features include: detector-group management for logical grouping of detectors; enablement/disablement of detectors and groups; control of performance class, operation class.

AutroMaster V, can be distributed on a synchronized network, ensuring information and control is available throughout the system.

### 2.2 Platform

AutroMaster uses Linux as an operating system.

Computer platform	Operating system
PC	Ubuntu 22.04 LTS, 64-bits

### 2.3 Software License

AutroMaster V is delivered with a software license key, consisting of a series of numbers and/or letters. This software license key certifies that the copy of the software is original, and is required in order to use the system.

## 2.4 Installation and Configuration

Client and servers are installed on standard PC hardware and virtual machines.

Both client and servers are normally preinstalled, both OS and applications, by Autronica Fire and Security.

Systems communicate over standard TCP/IP. Server, Client and AutoSafe can be configured with connections and supports routing.

Neither the server nor client is intended for generic use (ie. office tasks like word processing, email etc).

AutoMaster is configured only for fire alarm presentation. The user interface is locked to prevent misuse.

For information on the installation of Linux and AutoMaster V, refer to Installation, Configuration & Commissioning Handbook for AutoMaster V.

## 2.5 Installing AutoMaster V on Custom Hardware

AutoMaster V can be purchased preinstalled from Autronica Fire & Security. This is the recommended and by far easiest way of setting up a AutoMaster V system.

If you need to run AutoMaster V on your own or custom hardware, refer to the specification on next page.

Note: Autronica cannot support you on any installations issues related to your custom hardware, and will not make any warranties that the software will run on your custom hardware.

If your AutoMaster V installation relies on certifications obtained by Autronica, these will not be valid on custom hardware.

Running AutoMaster V as a virtual machine is also possible, and is also considered custom hardware.

AutoMaster V runs on Ubuntu LTS. Thus, hardware must be compatible with required Ubuntu version (see chapter 2.2).

## Specifications

System Core		Power Supply	
Processor	AMD Ryzen™ Embedded V1605B CPU (4C/ 8T, 2M Cache, 2.0/ 3.6 GHz, 12W - 25W TDP)	DC Input	1x mini-DIN for 12V DC input or 1x 3-pin pluggable terminal block for 8 to 35V DC input (IGN/ GND/ V+)
Graphics	Vega GPU with 8 compute units	<b>Mechanical</b>	
Memory	16 GB DDR4-2400 SDRAM by two SODIMM sockets	Dimension	173 mm (W) x 174 mm (D) x 50 mm (H)
<b>Panel I/O Interface</b>		Weight	1.6 kg
Video Port	4x DisplayPort, supporting 4K UHD resolution	Mounting	Wall-mount (optional)
Ethernet Port	2x Gigabit Ethernet ports by 2x Intel I210® controller	<b>Environmental</b>	
USB 3.1	2x USB 3.1 Gen1 (5 Gbps) ports	Operating Temperature	-25°C ~ 70°C
USB 2.0	2x USB 2.0	Storage Temperature	-40°C ~ 85°C
Audio	1x 3.5mm jack for mic-in and line-out	Humidity	10% ~ 90%, non-condensing
Serial Port	2x RS-232 (COM1 in DB9, COM2 in RJ50)	Vibration	Operating, MIL-STD-810G, Method 514.7, Category 4
<b>Storage</b>		Shock	Operating, MIL-STD-810G, Method 516.7, Procedure I
	256 GByte M2 SSD	EMC	CE/FCC Class A, according to EN 55032 & EN 55035

\* For sub-zero and over 60°C operating temperature, a wide temperature HDD or Solid State Disk (SSD) is required.

## 2.6 Compatibility

### 2.6.1 AutoMaster/AutoSafe Compatibility

AutoMaster V is compatible with AutoSafe Interactive Fire Detection System version 4.6 and later versions, except for Dual Safety systems.

### 2.6.2 AutoMaster/Autoprime Compatibility

AutoMaster V is compatible with Autoprime Interactive Fire Detection System version 2.0.3 and later versions.

### 2.6.3 AutoMaster/AutoMaster Compatibility

AutoMaster 4.4.x and earlier versions are not compatible with AutoMaster V.

### 2.6.4 AutoMaster/Emergency Light Systems Compatibility

AutoMaster is compatible with Gessler GV-1500 and KV-2000 Emergency Light Systems.

## 2.7 Capacity – Loop Units

AutoMaster V supports systems with maximum 6000 loop units.

## 2.8 AutoMaster V – Add-on System

AutoMaster V is an add-on system and cannot replace mandatory components of a fire alarm system according to local/national regulations.

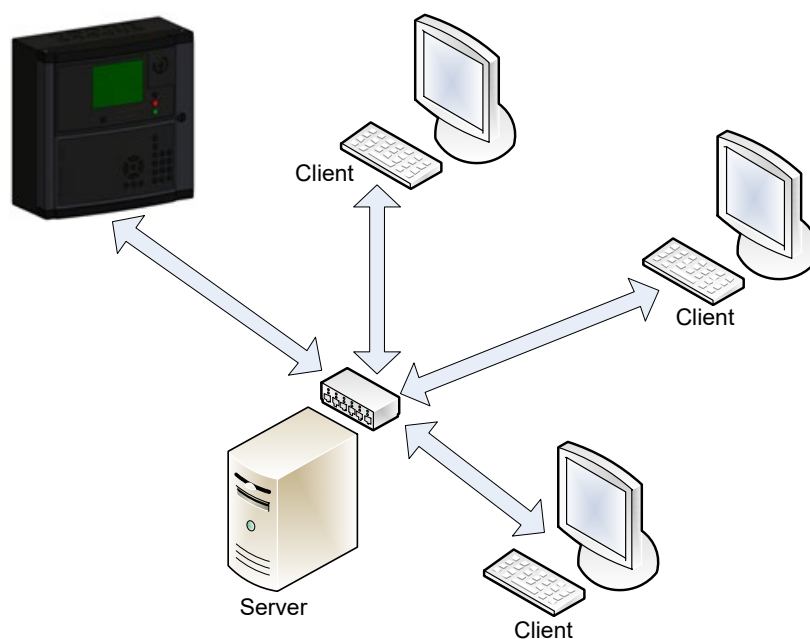


## 2.9 Client-server Network Solution

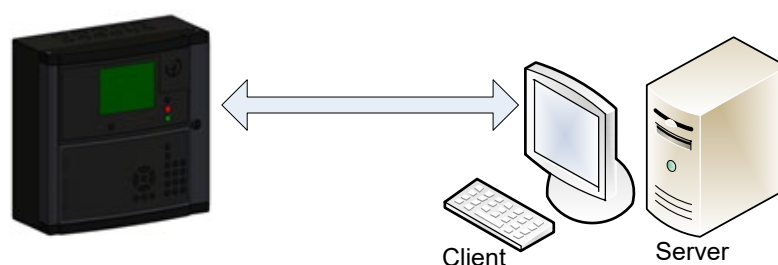
### 2.9.1 System Setups

AutoMaster V is based on a client-server network solution. One server can be connected to multiple clients or a single computer can serve as both a server and client.

### 2.9.2 One Server with Multiple Clients



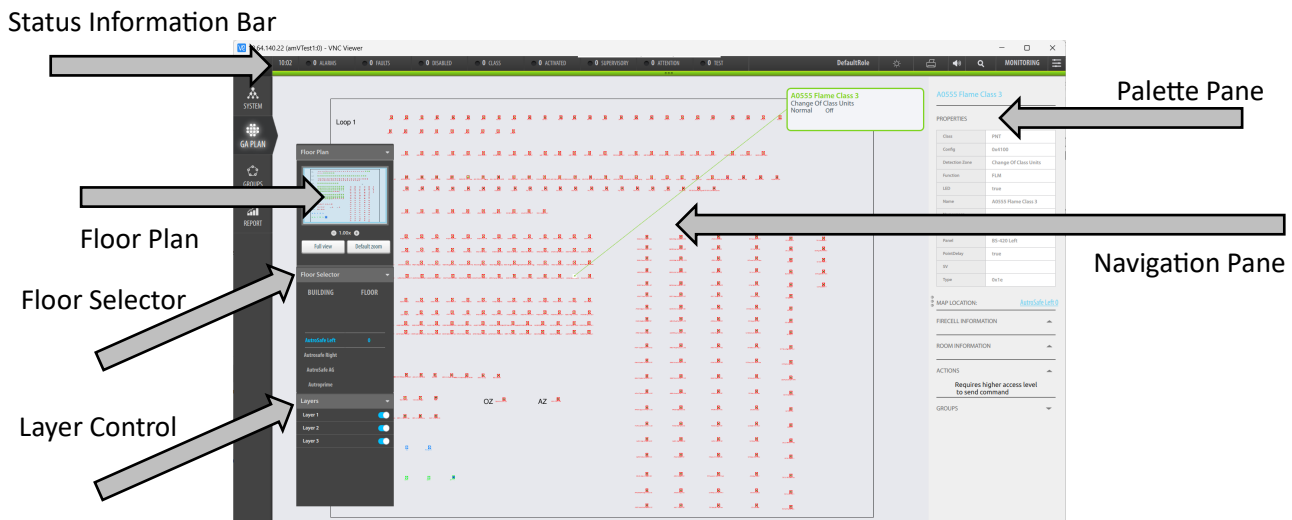
### 2.9.3 Server and Client on same Computer



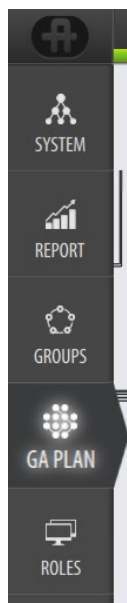
## 3. The Presentation Window

### 3.1 Graphical Interfaces

The graphical interfaces comprise display views, menu handling, buttons, panes, navigation techniques, system operating techniques, the change of drawings, the selection of points (detectors, manual call points, etc.) and status information on the uppermost horizontal bar.



## 3.2 Main View Buttons



In the GA Plan (General Arrangement Plan) the Main View Buttons are located on the leftmost vertical bar.

The different views for these buttons include:

- System View; provides system information and a tree structure of added panels with status indication and available commands.
- GA Plan View; provides an overview of the entire alarmed area based on the site specific drawings, including Navigation Pane, Building/Floor Selector, Floor Plan, Palette Pane, navigation functionality, ON/OFF layers, zooming.
- Groups View; allows users to create groups with specific properties (class settings and disablements) for selected points and temporarily activate/deactivate these groups
- Report View; allows users to preview, print and presave various reports
- Roles View; this view is only available in Configuration Access Level. Client Roles are added in this view. A Client Role defines all properties and the layout of a Client, including the type/number of buttons in the left vertical bar and the status views in the horizontal top bar.

For detailed information on the views and functionality, refer to the Operator's Handbook, AutroMaster V.

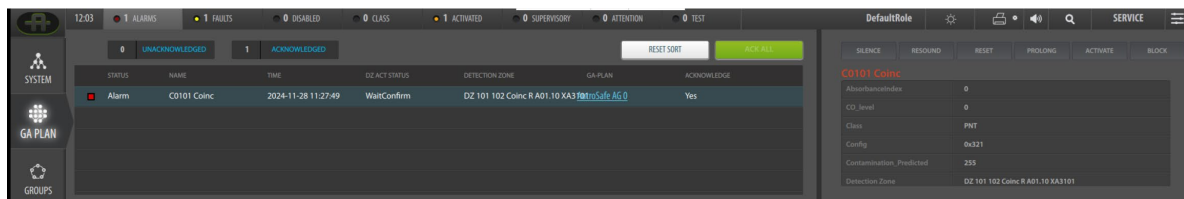
### 3.3 Status Information



All status information is found on the uppermost horizontal Status Bar, including the following topics (configurable):

- Alarms
- Faults
- Disabled
- Supervisory
- Class
- Activated
- Test
- Attention

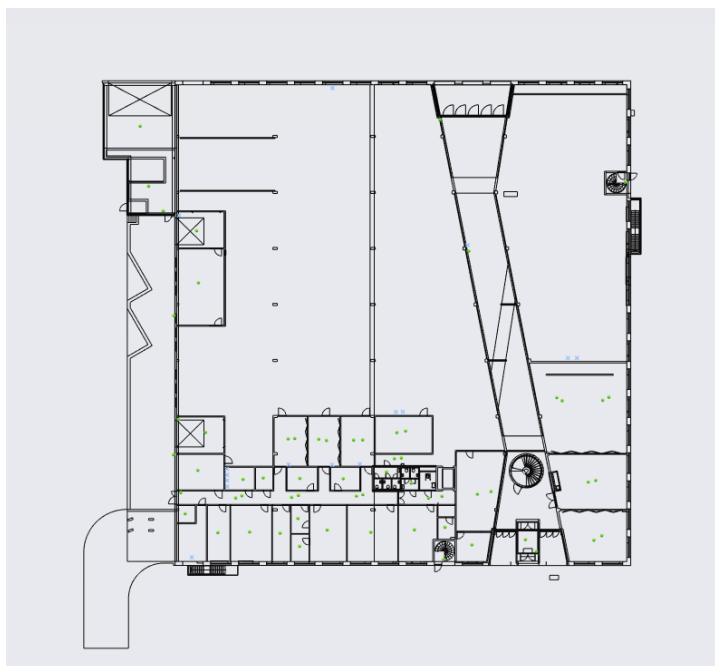
Each topic provides a list with relevant information and possible actions (if available).



The size of the window will increase automatically (vertically), and the window will show relevant headings where content for the selected topic is listed (if available).

## 3.4 Navigation Pane

The Navigation Pane provides an overview of the entire alarmed area based on the site specific drawings.



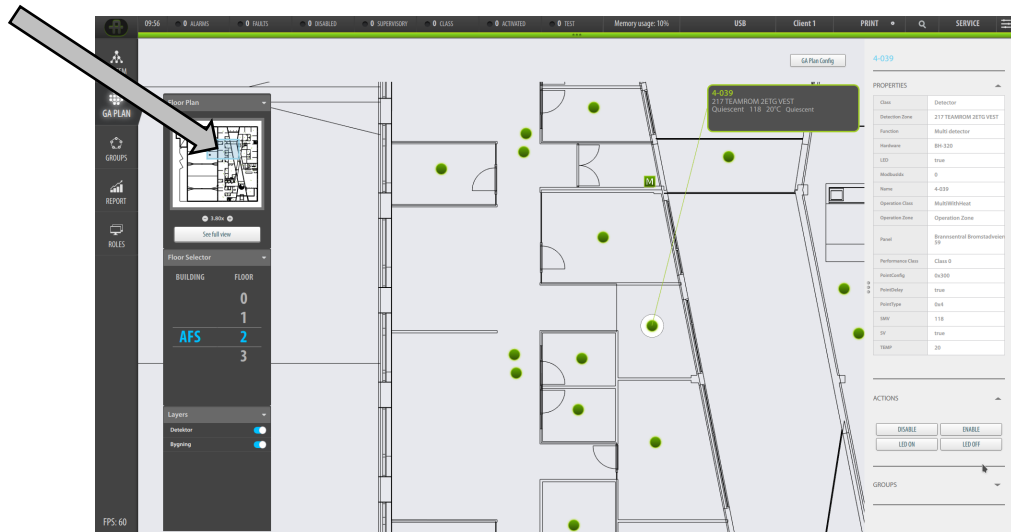
## 3.5 Building/Floor Selector

The Building/Floor Selector allows you to select one of several buildings and floors.



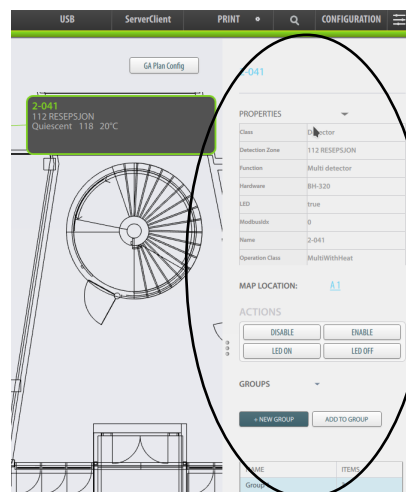
## 3.6 Floor Plan

The Floor Plan displays the focused area of the drawing.



## 3.7 Palette Pane

Information for a selected point is shown in the Palette Pane (the rightmost pane).








The Information Pane provides the following information:

- Properties
- Actions
- Groups
- Global Selection

## 3.8 Global Utility Functions



The global utility functions are always available for the user, regardless of the view that is selected from the leftmost vertical bar. The functions are located on the right hand side of the uppermost horizontal Status Bar, and include:

- USB (visible only if a USB memory stick is used)
- Role (the name of the role, freely selected)
- Day/Night Mode 
- Print 
- Mute 
- Search 
- Access Levels (the current Access Level is shown, in the example above Monitoring Access Level is shown)
- Service 

## 4. System Functions

### 4.1 Presentation of Alarmed Areas

**Description:** AutoMaster V provides a full-colour presentation of the alarmed areas in the form of a custom-made map providing an instantaneous and up-to-date overview of relevant information from installed fire-safety equipment.

**Use:** AutoMaster V provides information about hazards/changes in the alarmed area on screen, ensuring that any abnormal occurrence is brought to the attention of the system operator.





## 4.2 Access Levels

**Description:** AutoMaster V can be configured to require user identification from the user before access is given to the different access levels.

**Use:** Eliminates the possibility that non-authorized personnel can affect the system.

The different access levels are listed in the table below.

Access Level		Comment	Description
1	Monitoring	Observation only (read only).	<ul style="list-style-type: none"> <li>• licence administration (software licence key)</li> <li>• select points</li> <li>• change drawings</li> <li>• turn ON/OFF layers</li> <li>• generate and printout all reports</li> <li>• view Groups</li> </ul>
2	Control	Operation; permission to operate everything that affects/changes the status of the Fire Detection System.	<ul style="list-style-type: none"> <li>• reset alarm sounders</li> <li>• reset the system</li> <li>• acknowledge alarms/faults</li> <li>• resound</li> <li>• disable/enable single points</li> <li>• create/change/delete groups</li> <li>• activate/deactivate groups</li> <li>• activate/deactivate panels/systems</li> </ul>
3	Configuration	All configuration. Password required.	<ul style="list-style-type: none"> <li>• add/delete/change drawings</li> <li>• configure client roles</li> <li>• add/delete Excel files</li> <li>• add/delete AutoSafe configuration files and other files</li> <li>• add/delete Main View buttons / status views</li> </ul>
4	Operation	Access to Read and Send commands and configuration. Password required.	<ul style="list-style-type: none"> <li>• Read and Send commands and configuration</li> </ul>
5	Service	Access to command-line functions, including password changes. Password required.	<ul style="list-style-type: none"> <li>• Loading Master configuration</li> <li>• Generating Master configuration</li> </ul>

## 4.3 Group Management

**Description:** Detectors and other loop units may be grouped together so that a whole group can be managed simultaneously instead of single detectors/points being controlled individually.

AutroMaster V allows you to create groups with specific properties.

**Use:** The operator can group system units logically. A group with its defined properties can be activated, making it easy to, for example, temporarily disable all the detectors in one area belonging to this group, and/or temporarily change the Operation Class / Performance Class of detectors belonging to this group.

The group properties for a selected group will take effect when the group is activated (either manually or by a timer) and will apply until the group is deactivated (either manually or by a timer).

## 4.4 Information Layers

**Description:** AutroMaster V provides customer-specific information for the alarmed area. These layers can be toggled on/off in order to simplify overviews and present only necessary information at any given time.

**Use:** Information layers allow operators to toggle information such as power/water supply networks, sprinkler systems and fire doors, etc., which may be relevant in an emergency.

## 4.5 Zooming

AutroMaster V provides zooming functionality. You can easily zoom a drawing in/out in the Navigation Pane by using the mouse scroll wheel, or in the Floor Plan by reducing or enlarging the size (+/-). It is also possible to set a default view allowing you to quickly return this default zoom level by clicking the Default View button.

## 4.6 Night/Day Mode

**Description:** The Day/Night Mode functionality allows you to quickly switch between day and night mode

**Use:** Operators can switch between day and night mode in order to provide the best visibility under the current light conditions

## 4.7 Report Generator

**Description:** AutoMaster V allows users to create reports and logs of various properties and information from the system.

**Use:** Operators can create historical logs for the system and/or individual units between specified dates, analogue values read from detectors, disablement data, configuration data, configuration information and fault/alarm information. The report generator provides the operator with a simple method of creating a cost-effective system log for maintenance and documentation purposes.

## 4.8 Time Synchronization

**Description:** AutoMaster V can synchronize its clock to a master clock. In a network configuration, one AutoMaster V must be defined as master clock, allowing the remaining AutoMaster Vs to synchronize to this system. This is an important function for system logging.

**Use:** Allows AutoMaster in a network to operate with synchronized clocks, which provides synchronized logging and display across all AutoMasters.

## 4.9 Multi-Language Support

**Description:** AutoMaster V is available in the following languages: English, Swedish, Dutch, Finnish, Hungarian, Norwegian and Danish.

**Use:** Allows operators to use their own language, speeding up learning curves and response in emergencies.

## 4.10 Touchscreen Support

**Description:** AutoMaster V supports touchscreen.

**Use:** In case there is no physical keyboard connected to your AutoMaster, a virtual keyboard can be used. When the keyboard is enabled in this menu (Enable Keyboard), a virtual keyboard will appear automatically on the screen whenever a text field/dialogue box appears and the cursor is blinking (for example, when you click the Search button).

## 4.11 Backup of AutoMaster Configuration

**Description:** AutoMaster V includes a function for creating backups of the Master Configuration to a USB memory stick.

**Use:** Backup purposes.

## 4.12 Interfacing Gessler Emergency Light System

**Description:** A Gessler Merlin KV2000 or Gessler GV1500 Emergency Light System can be connected to an AutoMaster V system.

**Use:** The operator can view status information and perform different actions from AutoMaster V.

## 4.13 Interfacing Voyage Data Recorder (VDR)

**Description:** VDR system can be connected to an AutoMaster V system.

**Use:** The primary purpose of the VDR is for accident investigation, preventive maintenance, performance efficiency monitoring, accident avoidance and training purposes to improve safety and reduce running costs.

## 4.14 Interfacing ESPA

**Description:** An ESPA paging system can be connected to an AutoMaster V system.

**Use:** Short messages can be exchanged between AutoMaster V and an onsite paging system.



