



User manual

MULTIPLEX PLUGIN

ENGLISH





Copyright by GPS Standard Srl

The rights of total or partial translation, reproduction and adaptation – with any means and in all countries – are reserved.

GPS Standard reserves to bring changes to the technical characteristics without prior notice. The information herein may be subject to modifications and/or contain errors. For detailed information, please contact your GPS Standard dealer or reference.



<u>Disposal of the electrical or electronic equipment at its life end</u> (Applicable in all countries of the European Union and in those where separate collection of rubbish is in force)

This symbol, on the product or on the packing, indicates that the product is not to be regarded as an ordinary household refuse, but rather that it must be delivered to an appropriate collection point for recycling electrical and electronic apparatuses. By assuring this product is disposed of correctly, you will contribute to preventing potential negative consequences to the environment and to health, which otherwise would subsist through inadequate disposal. Recycling of materials helps preserving natural resources. For more detailed information on how to recycle this product, you may contact your town hall or your local waste disposal service.

Document version:	T-MPXPLUGIN/101/23 – 20 February 2023
FW version:	
HW version:	
SW version:	
Language:	English
	-

Indice

3
4
5
7
10
11
11
13
13
14
15

Plugin installation

Status: Running
Restart Event Server service
Stop Event Server service
Show Event Server logs Show MIP logs
Enter current system configuration password
Server Configurator
Version: 22.1a (Build: 4987)
Exit Event Server Manager

Stop the **XProtect Event Server Service** and close any other XProtect applications that are open.

Open the Milestone plugin folder (*C:\Program Files\Milestone\ MIPPlugins*) with Windows *Explorer and create a new Multiplex* folder inside it .

Extract the contents of the MultiplexMIPPlugin.zip into the newly created folder:



Restart the XProtect Event Server Service

Open **XProtect Management Client** software, log in with an administrator account and check for the following items in the main tree:

- MIP Plug-ins
 - o Multiplex Perimeter Plugin



XProtect Management Client Plugin configuration

In order to use a Multiplex System within the XProtect software, you need to add a Multiplex device from the XProtect Management Client software.

The Multiplex System is a centralization network, designed by GPS Standard, in order to integrate and control different types of perimeter anti-intrusion devices.

The various systems for protecting a perimeter can have different technologies and can be installed on a fence, underground or in an open environment to form a barrier for detecting the unwanted entry of intruders.

The perimeter devices can be in Stand-Alone configuration or in Multiplex configuration, in the latter the system is supervised by a MIND control unit which collects and manages all the signals coming from the remote peripherals.

Stand-Alone configuration

Press the right mouse button on the "Standalone Perimeter Systems" node to add a Stand-Alone Device and choose the "Add New..." item from the menu.

· · · · · · · · ·				
🖃 🐏 MIP Plug-ins				
🗉 🚔 LicenseRegistration				
🕀 🏧 Miles Plugin				
🖻 📟 Multiplex Perimeter Plugi	n			
🕀 🙆 Standalone Perimeter	<u> </u>	omo		
🖽 👖 Multiplex Mind System		Add New	CTRL+N	
	2	Refresh	F5	
	_			

In the window that appears enter the device name:

Add Multiplex				Х
Name:	STDALONE]
		ОК	Cancel	

In the detailed configuration panel of the StdAlone Device, enter the required data (Name, Type, etc ...) and then save the data using the button on the main toolbar:



The Type identifies the type of perimeter device:

Type:	CPS PLUS 2 CHANNEL	~
	CPS PLUS 2 CHANNEL	
	CPS PLUS 4 CHANNEL	
	DPS	
	GPS PLUS	
	GPS PLUS con direzione	
	1/0	
	IPS	
	PPS/DPP	
	RADAR BLADE	
	RFC	
	SNAKE	
	TPS	
	WPS	

Depending on the type chosen, the sensors are inserted into the tree

Milestone XProtect Management Client 2022 R1			
File View Action Tools Help			
🗄 🦻 😧 🗢 🏛			
Site Navigation 👻 👎 🗙	Sensors 👻 👎	Sensor Information	
Windrighten Windright	STDALONE 4-9 03 - Tamper 4-9 03 - Tamper 4-9 04 - Fault 4-9 05 - Pre-Alarm CH 4-9 07 - Cable cut CH 4-9 08 - Cable short C 4-9 10 - Alarm CH2 4-9 10 - Alarm CH2 4-9 11 - Cable short C 4-9 12 - Cable short C 4-9 12 - Cable short C 4-9 12 - Cable short C 4-9 13 - Climb CH1 4-9 20 - Input 2 4-9 26 - Fence cut CH 4-9 28 - Input 4 4-9 36 - Input 5 4-9 36 - Input 6 4-9 34 - Climb CH2 4-9 34 - Climb T4 4-9 34 - Input 3	Name: 1 Sensor Number: 1 4	

MIND Multiplex configuration

Right-click on the Multiplex Mind Systems node to add a Multiplex Mind.

🖨 👬 MIP Plug-ins				
🎚 🚔 LicenseRegi	strat	ion		
🕀 📟 Miles Plugin				
🚊 📟 Multiplex Pe	rime	ter Plugin		
🕀 🙆 Standalor	ne P	erimeter Systems	3	
🗄 🚺 Multiplex		Add New	CTRL+N	
	2	Refresh	F5	
	-			

In the window that appears enter the device name:

Add Multiple	ex Mind		×
Name:	MIND		
		ОК	Cancel

In the detailed configuration panel of the MIND Multiplex, enter the required data (Name, Connection, etc ...) and then save the data using the button on the main toolbar.

The connection type for the Mind can be TCP/IP or serial.

Connection:		~
Connection.		
IP Address:	SERIAL	

In the case of TCP, the IP Address and Port must be specified

Milestone XProtect Management Client 2022 R1				
File View Action Tools Help				
8 🤊 🕝 🗢 🖴				
Site Navigation 👻 🕂 🗙	Multiplex Mind Systems 👻 🕈	Multiplex Mind Inf	formation	
WINDEV-XPROTE - (2.1e) @ Desixe	E ([] Multiplex Mind Systems	Name: Connection: IP Address: Port	ITCP/IP ✓ 122.0.01 602	



In the case of Serial it is necessary to specify Port

Milestone XProtect Management Client 2022 R1		
File View Action Tools Help		
🗟 🦻 🕝 🗢 🛱		
Site Navigation 👻	# X Multiplex Mind Systems - # Multiplex Mind Information	
PWINDEEVXPROTE - (22 1a) WINDEEVXPROTE - (22 1a) WID Basics Portices Client Security Securit	Minto Serial Mino Serial Mino Serial Ornection: SERial Port 1	

Each time a MIND is entered, its UCP is automatically entered



with its sensors



The user can enter the perimeters devices connected to the Mind by going to the "Perimeters MIND " node and then saving the data using the button on the main toolbar.



By specifying the Type (perimeter device type), address and name





Milestone XProtect Management Client 2022 R1	
File View Action Tools Help	
Site Nevigation – E Y	Soneore _ 1
Basics	1-WPS20
i Servers	
Revices	🐵 🔯 a-IPS-39
🖲 🖳 Client	🐵 🙆 GPS4
Rules and Events	🗈 🙍 GPS PLUS 4CH
E Carlos Security	GPS PLUS NEW
System Dashboard	
R Tansact	Port22-CHAIN
□ → MIP Plug-ins	4-) 03 - Tamper
🗄 🚔 LicenseRegistration	
Miles Plugin	
🖻 🚥 Multiplex Perimeter Plugin	
🐵 🙋 Standalone Perimeter Systems	
III Multiplex Mind Systems	
Perimeters	14 - Alarm Zone 7 CH 1
Sensors	15 - Alarm Zone 8 CH 1
	16 - Alarm Zone 9 CH 1
Statuses	17 - Alam Zone IU CH I
	4) 10 - Fault antenna
	20 Input 2
	w 21 - Alarm Zone 1 CH 1
	- Alarm Zone 2 CH 1
	4-9 23 - Alarm Zone 3 CH 1
	- 4-9 25 - Alarm Zone 5 CH 1
	1 31 - Prealarm zone 8
	10 32 - Prealarm zone 9
	And 27 - Prealarm zone 1
	Au) 38 - Preslam zone 2
	And 39 - Preslarm zone 3
	40 - Prealarm zone 4
	41 - Prealarm zone 5

Events

Once the data has been saved, the plugin will try to connect to the Multiplex device and start receiving statuses and events.

The following table shows the events that the Multiplex plugin can generate:

Event	Description	
Multiplexes		
Multiplex Connected	The plugin has connected to the device	
Multiplex Disconnected	The plugin has detected a disconnection from the device	
Perimeter		
Perimeter Arm	The device has been Armed	
Perimeter Disarm	The device has been Disarmed	
Sensor		
Sensor Excluded	Sensor excluded	
Sensor alarm	Sensor in alarm	
Sensor End Alarm	End of sensor alarm	

Device states

The following tables show the states of the Multiplex MIND, perimeters devices, perimeter inputs sensor, UCP units and UCP inputs which can be viewed on the maps within the XProtect Smart Client.

The states of the perimeter devices and its sensors depend on the technology of the devices.

The technologies currently managed by the system are: Barrier, Fence, Underground and Radar.

Since the StdAlone device is nothing more than a perimeter device in its own right; its states mirror the states of the sensor type.

Standalone & MIND states

In the Multiplex MIND configuration, the MIND control unit, supervises the perimeter devices connected to it on the proprietary BUS.

While a Stand-Alone Device is himself to send the states of the sensors via LAN.

The states of MIND and its UCP do not change.

Device	Image
MIND	
UCP-MIND The UCP is connected to the ECU mind	

UCP sensors States

States table of UCP sensors

State	Image
Normal	
Alarm	

Perimeter system states

The various systems for protecting a perimeter are divided according to the technology used.

Specifically, the types used are four types: Barrier, Underground, Radar and Fence.

Perimeter states of barrier type and its sensors

The perimeters belong to the following typology:

IPS

•

Table of perimeter technology barrier statuses on the map:

State	Image
Normal	
Disarmed	

Sensor status table of a Barrier technology perimeter:

State	Image
Normal	
Alarm	
Excluding	

Perimeter states of Fence type and its sensors

The perimeters belong to the following typology:

- WPS
- CPS PLUS
- CPS PLUS 4CH
- TPS
- I/O
- SNAKES

Perimeter status table Fence technology on the map:

State	Image
Normal	4
Disarmed	4

Status table of the sensors of a perimeter fence technology:

State	Image
Normal	//- »
Alarm	//))
Excluding	/ ≁••»)

Perimeter states of Underground type and its sensors

The perimeters belong to the following typology:

- DPS
- GPS PLUS
- GPS PLUS STDALONE
- RFC
- PPS RFC

Table of underground technology perimeter statuses on the map:

State	Image
Normal	× CA
Disarmed	ź ⁽)

Status table of the sensors of an underground technology perimeter:

State	Image
Normal	Ŕ
Alarm	ź.
Excluding	Ŕ

Perimeter states of Radar type and its sensors

The perimeters belong to the following typology:

• RADAR

Radar technology perimeter status table on the map:



Status table of the sensors of a Radar technology perimeter:

State	Image
Normal	
Alarm	
Excluding	





Commands

The plugin allows you to send the following commands:

Command	Description	
Multiplex StdAlone		
Arm	Inserting the device	
Disarm	Disarming the device	
perimeter		
Arm	Insertion of a perimeter	
Disarm	Unsetting a perimeter	
Sensor		
Exclude	Bypasses a sensor	
Include	Includes a sensor	

NOTE: It is not possible to carry out any commands on the UCP and its sensors

Usage On XProtect Smart Client

On XProtect Smart Client you can add the Multiplex device, perimeters and sensors in Maps.

# Milestone XProtect Smart Client						
Live	Playback	Exports	Search			
XProtect			< < Sel	ect view >		- 5
Views			^ 0	14:56:10	XProtect Smart Client is no	t performing optimally
Search views and cameras Q						
A 🛅 Default group						
🕨 🛅 Default view group						
🔚 Map						
🕨 📄 Operato	🛜 New group	<u> </u>				
Private	📑 New view	•	4:3	۱	1 1x1	
	🖊 Rename		4:3 portrait	۱.	≡ 1+1	
	🗙 Delete		16:9	۱.	■ 1 + 1*	
System o	骗 Сору		16:9 portrait	×	= 1 x 2	
	🖺 Paste				2 x 1	
				1 + 2		
WINTODEV-XPROTE				■ 1 + 2*		

Go to "Setup" mode, create a new view, for example a grid in 1x1 mode:

Give the view a name and then drag a map into the view (drag the "Map " node from the "System overview " with the mouse). You will be asked to insert an existing map or to create a new one.

Once the map with the desired background has been created, the desired devices can be added: to do this, from the "Tools" one must select the "Add plug-in element " icon (it is the puzzle-shaped icon).

A window then opens "Element selector" where you will see the name of the plugin, Multiplex Perimeter Plugin, and under the tree the type STDALONE and/or MIND with the relative perimeters and sensors created in the Management Client: then drag the desired devices onto the map:



At this point you can go back to normal mode (by pressing the Setup button) and view the states, events and send commands to the devices.

Selecting an element of the perimeter Multiplex or sensor with the right key, you can execute the commands provided according to the status of the selected element.

Example of "Disarm " command on a Multiplex perimeter:





Menu:



State detail of a perimeter:



To view the events and alarms of the Multiplex, you can create a view with a suitably divided grid like the following example:





AOSTA Head Office and Factory GPS Standard Srl Fraz. Arnad Le Vieux, 45/C - 11020 Arnad (AO) - Italy

Tel. (+39) 0125 968611 - Fax (+39) 0125 966043 info@gps-standard.com www.gps-standard.com VAT: 00473450070



COMPANY WITH ENVIRONMENTAL SYSTEM CERTIFIED BY DNV GL = ISO 14001:2015 = COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001:2015 = COMPANY WITH SAFETY MANAGEMENT SYSTEM CERTIFIED BY DNV GL = ISO 45001 = N° doc.: T-MPXPLUGIN/101/23 – 20 February 2023