ZITON

900 Series Protocol Guide for ZP2 Series Control Panels

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Version

REV 01. This document covers control panels with firmware version 3.5 or later.

Certification

CE

European Union directives

2004/108/EC (EMC directive). Hereby, UTC Fire & Security declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC.

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2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info.

Contact information

For contact information, see www.utcfssecurityproducts.eu.

Content

Important information

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Advisory messages

Advisory messages alert you to conditions or practices that can cause unwanted results. The advisory messages used in this document are shown and described below.

WARNING: Warning messages advise you of hazards that could result in injury or loss of life. They tell you which actions to take or to avoid in order to prevent the injury or loss of life.

Caution: Caution messages advise you of possible equipment damage. They tell you which actions to take or to avoid in order to prevent the damage.

Note: Note messages advise you of the possible loss of time or effort. They describe how to avoid the loss. Notes are also used to point out important information that you should read.

Introduction

Intended audience and purpose

This manual is intended for those trained and certified to install, program, and maintain a ZP2 Series control panel. The purpose of this manual is to highlight the features and functions of the control panels that are specific to the 900 Series protocol.

For general information on topics not specific to the 900 Series protocol, see your control panel installation and operation manuals.

Firmware compatibility

Information in this document covers control panels with firmware version 3.5 or later. This document must not be used as a guide to installation, configuration, or operation of control panels with an earlier firmware version.

To check the firmware version of your control panel, see the Revision report in the Reports menu.

Installation

Registering the 2010-2-PAK-900

A 2010−2-PAK-900 Panel Activation Key (PAK) is required for each control panel that requires the 900 Series protocol.

Follow these steps to register or unregister the PAK. Installer level access is required.

To register the PAK:

1. Insert the PAK into either of the USB type A slots on the control panel main board.
2. On the control panel LCD, select Panel Setup, and then select Panel Activ. Key.

   The LCD displays two options: Register New PAK and Unregister PAK.
3. Select Register New PAK. The PAK information is displayed on the LCD. Confirm that the details are correct and press Continue.

   The PAK information includes: The PAK type, the PAK serial number, and the host control panel serial number (added when registration is complete).
4. Press Register, and then press Yes to confirm the registration.
5. Press Apply to apply the registration details to the panel, or Continue to register more PAKs for the same control panel.

To apply the 900 Series protocol:

1. Remove the PAK from the USB slot.
2. Insert a jumper onto JP4 on the control panel main board, and then restart the control panel.

   When the panel restarts, the System Update menu is displayed. This menu is only available in English.
3. Select Load 900 Series Protocol, and then press the jog dial to confirm the selection.
4. When the update is complete, remove the jumper from JP4, and then press Reboot to restart the control panel.

The control panel is now configured to use the 900 Series protocol and devices.

To unregister the PAK:

1. Insert the PAK into either of the USB type A slots on the control panel main board (see figure).
2. On the control panel LCD, select Panel Setup, and then select Panel Activ. Key.
3. Select Unregister PAK and follow the on-screen instructions.

To restore the default protocol:

1. Remove the PAK from the USB slot.
2. Insert a jumper onto JP4 on the control panel main board (see figure), and then restart the control panel.

   When the panel restarts, the System Update menu is displayed. This menu is only available in English.
3. Select Restore Default Protocol, and then press the jog dial to confirm the selection.
4. When the update is complete, remove the jumper from JP4, and then press Reboot to restart the control panel.

The control panel is now configured to use the default protocol and devices.

Connecting loop devices

Using the 900 Series protocol, each loop can support up to 126 devices (using the address range 1 to 126).

For detailed loop device installation information, see your device installation sheet.

Configuration

This section contains information specific to configuring your fire system for the 900 Series protocol. See your control panel installation manual for all other configuration information.

Note: Configuration options described here require Installer level access. The default password for the default installer user is 4444.

Detector configuration

Enabling a mounting base

Select the loop device configuration menu to enable a compatible mounting base and to disable the activation of the remote LED when the detector is in alarm. By default the mounting base is not enabled (the remote LED is activated when the detector is in alarm).

If enabled, the remote LED is only activated by output activation configuration or by rules programming in the Configuratioon Utility application.

To change the configuration:

1. Select Field setup from the Main menu, and then select Loop device config.
2. Select the corresponding loop and device.

   The loop device configuration menu displays.
3. Select Base, and then select YES to enable the detector base.
4. Press F4 (Enter), and then press F1 (Back).
5. Press F1 (Save), F3 (Apply), F4 (Discard), or F2 (Exit).

Configuring enhanced heat options

Select the loop device configuration menu to enable enhanced heat options for compatible CO detectors and multisensors. By default this option is disabled.

If enabled, a fire alarm detected by the device is reported to the control panel as a prealarm (instead of an alarm). The device is then polled every 60 seconds – if the temperature rises above the initial temperature plus the configured temperature gradient (in ºC), the alarm is reported to the control panel. After a configurable delay (in minutes), an alarm is reported regardless of the temperature state.

To change the configuration:

1. Select Field setup from the Main menu, and then select Loop device config.
2. Select the corresponding loop and device.

   The loop device configuration menu displays.
3. Select and check E_Heat to enable the enhanced heat options.

4. Select T_Grad, and then enter the temperature gradient (in ºC).

   Possible values 1 to 20 (the default value is 5).

5. Select Aly_Dly, and then enter the configurable delay (in minutes).

   Possible values 1 to 10 (the default value is 10).

6. Press F4 (Enter), and then press F1 (Back).
7. Press F1 (Save), F3 (Apply), F4 (Discard), or F2 (Exit).

   Remember to apply saved settings from the Main menu.

Sounder configuration

Assigning group addresses

Select the loop device configuration menu to assign a group address to control the simultaneous activation of compatible addressable sounders. By default the group address value is 0 (the simultaneous activation option is disabled).

Note: At least five compatible sounders are required in a loop to apply simultaneous activation. For loops with less than five sounders, devices are activated individually.

To change the configuration:

1. Select Field setup from the Main menu, and then select Loop device config.
2. Select the corresponding loop and device.

   The loop device configuration menu displays.

3. Select act_grp, and then assign the required group address.

   For device types SDxG, SDx, and SCCx, the group address can be any number from 112 to 126 that is not already assigned as a device address.

   For device types DdG, SDd, SDBd, SDVBd, and SDVd, the group address can be any number from 1 to 15.

4. Press F4 (Enter), and then press F1 (Back).
5. Press F1 (Save), F3 (Apply), F4 (Discard), or F2 (Exit).

   Remember to apply saved settings from the Main menu.

Automatically silencing sounders (noise pollution)

Select the loop device configuration menu to automatically silence compatible sounders 20 minutes after activation. By default this option is disabled (sounders continue to sound).

To change the configuration:

1. Select Field setup from the Main menu, and then select Loop device config.
2. Select the corresponding loop and device.

   The loop device configuration menu displays.

3. Select and check NPollut to automatically silence compatible sounders 20 minutes after activation.
4. Press F4 (Enter), and then press F1 (Back).
5. Press F1 (Save), F3 (Apply), F4 (Discard), or F2 (Exit).

   Remember to apply saved settings from the Main menu.

Performing walk tests

Select Sounders walk test to perform walk tests for compatible sounders using the optional magnetic wand accessory (not supplied).

To change the configuration:

1. Select Test from the Main menu, and then select Sounders walk test.
2. Select the loop where the sounders are located, and then press the jog dial to enable walk test mode for the loop.

   While the loop is in walk test mode, use the magnetic wand to locally test each of the loop sounders.
3. When you have finished, press the jog dial again to exit loop walk test mode.
4. Press F1 (Back) or F2 (Exit).

Adjusting the volume

Select Snd volume walk confg to locally set the volume level for compatible sounders using the optional magnetic wand accessory (not supplied).

To change the configuration:

1. Select Field setup from the Main menu, and then select Snd Vol Walk Confg.

   A list of compatible sounders displays, indicating the device address and current volume setting.

   Move from sounder to sounder and use the magnetic wand to manually adjust the volume to the required level.
2. When you have finished, press F4 (Enter), and then press F1 (Back).
3. Press F1 (Save), F3 (Apply), F4 (Discard), or F2 (Exit).

   Remember to apply saved settings from the Main menu.

Wireless configuration

Enabling wireless communication

Select the loop device configuration menu to enable wireless communication for compatible wireless devices. By default this option is disabled.

To change the configuration:

1. Select Field setup from the Main menu, and then select Loop device config.
2. Select the corresponding loop and device.

   The loop device configuration menu displays.
3. Select and check Radio to enable wireless communication.
4. Press F4 (Enter), and then press F1 (Back).
5. Press F1 (Save), F3 (Apply), F4 (Discard), or F2 (Exit).

   Remember to apply saved settings from the Main menu.

Compatibility

This section lists the products compatible with your addressable fire system when using the 900 Series protocol.

Note: Compatible products may change without notice. Always contact your local supplier to confirm availability and compatibility.

Caution: Products marked with an asterisk (*) are not suitable for installation in fire systems requiring EN 54-13 compliance.

Mounting bases for addressable devices

Model	Type	MFG code	Description
DB950	N/A	45681-210	950/990 Series mounting base
DB950B	N/A	45681-361	950/990 Series mounting base black
DB950EZ	N/A	45681-250	950 Series E-Z fit mounting base
DB950R	N/A	45681-242	950 Series low power relay base
DB951	N/A	45681-211	IU950/IU955 intelligent loop isolator base
DB961	N/A	45681-284	950 Series mounting base with isolator
DB970*	N/A	45681-215	970 Series IS detector base

Addressable manual call points

Model	Type	MFG code	Description
DM950BI-D*	MCPx	245663	950 Series blue manual call point with isolator (aluminum)
DM950I-D	MCPx	245739	950 Series red manual call point with isolator (aluminium)
DM980FI-N	MCPd	B30120	980 Series red manual call point with isolator – “feuerwehr” (plastic)
DM980I-N	MCPd	B30110	980 Series red manual call point with isolator – EN 54-11 (plastic)
DMN960I	MCPx	55100-908	950 Series red manual call point - red with back box and glass
DMN960IE	MCPd	58100-951	990 Series red manual call point with isolator (surface mount, waterproof)
DM961*	MCPx		950 Series yellow manual call point with back box and glass
DMN960G*	MCPd	58100-929	990 Series green manual call point with back box and resettable element
DM980BI-N*	MCPd	B30130	980 Series blue manual call point with isolator – “hausalarm" (plastic)
DM970	MCPx	55100-940	950 Series red IS manual call point (no flap)

Addressable point detectors

Model	Type	MFG code	Description
DP951	ODx	55000-620	950 Series optical detector
DP951B	ODx	55000-660	950 Series black optical detector
DP951T	OHDx	55000-885	950 Series optical/heat detector
DT952	HDx	55000-420	950 Series temperature detector
DT953	HDx	55000-401	950 Series high temperature detector
DI950	IDx	55000-520	950 Series ionisation sensor
DP991	ODd	58000-600	990 Series discovery optical detector
DP991T	OHDd	58000-700	990 Series multisensor
DT992	HDd	58000-400	990 Series heat detector

Addressable zone detectors

Model	Type	MFG code	Description
FD905R	BDx	55000-268	950 Series reflective beam detector (5 to 50 m)
FD910R	BDx	55000-273	950 Series reflective beam detector (50 to 100 m)

Addressable I/O modules

Model	Type	MFG code	Description
II950I	SIMx	55000-760	950 Series mini switch monitor with isolator
II952D	SIMx	55000-822	950 Series switch monitor with DIN rail mount
II952I	SIMx	55000-843	950 Series switch monitor with isolator
II953D	SIMx	55000-821	950 Series switch monitor plus with DIN rail mount
II953I	SIMx	55000-841	950 Series switch monitor plus with isolator
II955D	1ZMx	55000-812	950 Series zone monitor unit with isolator and DIN rail mount
II955I	1ZMx	55000-845	950 Series zone monitor unit with isolator
IO950I	IOx	55000-847	950 Series I/O unit with isolator
IO953I	IOx	55000-588	950 Series 3-channel I/O with isolator and protective housing
IO954	IOx	55000-875	950 Series mains switching unit
IO955I	IOx	55000-849	950 Series output unit with isolator
IO956CD	SDx	55000-182	950 Series sounder circuit controller with DIN rail mount (CPD certified)
IO956I	SDx	55000-852	950 Series, sounder circuit controller with isolator

Loop isolator

Model	Type	MFG code	Description
IU955	N/A	55000-720	900/950 Series isolator

Addressable notification devices

Model	Type	MFG code	Description
DB952IAS	SDx	45681-277	950 Series 85/92 dB integrated base sounder with isolator
DB952IAS-DIN	SDx	45681-300	950 Series 85/92 dB integrated base sounder with isolator (DIN tone)
DB952IAS-NEN	SDx	45681-290	950 Series 85/92 dB integrated base sounder with isolator (slow whoop)
DB952IVAS	SDx	45681-330	950 Series mounting base with sounder/beacon and isolator
DB952IVAS-DIN	SDx	45681-334	950 Series mounting base with sounder/beacon and isolator (DIN tone)
AS950I	SDx	45681-266	950 Series loop-powered sounder for isolator base
AS950INEN	SDx	45681-268	950 Series loop-powered sounder for isolator base (slow whoop)
AS955NEN	SDx	55000-276	950 Series 100 dB loop-powered standalone sounder (slow whoop)
AS967I	SDx	55000-005	950 Series intelligent loop-powered open area red sounder/beacon with isolator
AS967WRCI	SDx	55000-006	950 Series intelligent loop-powered open area white sounder/beacon with isolator (clear lens)
AS964I	SDx	55000-001	950 Series intelligent loop-powered open area red sounder with isolator
AS964WI	SDx	55000-002	950 Series intelligent loop-powered open area white sounder with isolator
FA955I	SDx	55000-009	950 Series intelligent loop-powered red beacon with isolator
FA955WRCI	SDx	55000-010	950 Series intelligent loop-powered white beacon with isolator (clear lens)
AI952N	IOx	AI952N	950 Series loop-powered dual indicator

HSSD detectors [1]

Model	Type	MFG code	Description
9-30430	ODs	9-30430	APIC card
9-30432	ZMUx	9-30432	APIC card (Ampac)
FHSD8010	ODs, ZMUx	FHSD8010	LaserSense Nano high sensitivity smoke detector

Model	Type	MFG code	Description
FHSD8025	ODs, ZMUx	FHSD8025	LaserSense 25 high sensitivity smoke detector
FHSD8100	ODs, ZMUx	FHSD8100	LaserSense 100 high sensitivity smoke detector
FHSD8200	ODs, ZMUx	FHSD8200	LaserSense HSSD2 high sensitivity smoke detector
FHSD8210	ODs, ZMUx	FHSD8210	LaserSense HSSD2 high sensitivity smoke detector (without display)
FHSD8220	ODs, ZMUx	FHSD8220	LaserSense HSSD2 high sensitivity smoke detector with integrated command module
FHSD8230	ODs, ZMUx	FHSD8230	LaserSense HSSD2 Command Module

[1] The scope of EN 54-13 covers the listed APIC cards only (and not the HSSD detectors).

Wireless devices

Model	Type	MFG code	Description
II955IRF	ZMx	XPA-IN-14007-APO	Xpander zone monitor unit with isolator
DT934RF	HDx	XPA-CB-11170-APO	Xpander A1R heat detector
DT937RF	HDx	XPA-CB-11171-APO	Xpander CS heat detector
DP931RF	ODx	XPA-CB-12034-APO	Xpander optical detector
DP931TRF	OHDx	XPA-CB-13032-APO	Xpander multisensor
DM930RF	MCPx	XPA-MC-14006-APO	Xpander manual call point
AS933RRF	SDx	XPA-CB-14001-APO	Xpander red sounder and base
AS933WRF	SDx	XPA-CB-14002-APO	Xpander white sounder and base
AS936RRF	SDx	XPA-CB-14003-APO	Xpander red sounder/beacon and base
AS936ARF	SDx	XPA-CB-14004-APO	Xpander amber sounder/beacon and white base
AS936WRF	SDx	XPA-CB-14005-APO	Xpander clear sounder/beacon and white base

Intrinsically safe devices

Model	Type	MFG code	Description
DP971*	ODx	55000-640	970 Series addressable IS optical sensor
DT972*	HDx	55000-440	970 Series addressable IS heat detector
DB970*	N/A	45681-215	970 Series IS detector base
GBX70*	N/A	29600-098	950 Series IS galvanic barrier
PT971*	N/A	55000-855	970 Series IS 1-channel protocol translator
PT972*	N/A	55000-856	970 Series IS 2-channel protocol translator