## ZONE LED PANEL AND CONTROL UNIT

## ZLPX Zone Led Panel and Control Units

The ZLPX zone LED panel is used for fire brigade as primary information source of the place of alarm in the building. The panel can function as pure display device showing zone specific fire place. The ZLPX can be connected to the FX NET panels: FXS, FXM, FX and FXL.

Mechanical installation


Zone name label installation
See the last page how to install the zone name label.
Use Adobe Acrobat Reader and the document "Zone name definition" 66521547 to name and print a customer specific zone name label. The file 66521547 has been published in extranet.


Technical data of ZLPX panel

| Dimensions (W x H x D) | $328 \times 417 \times 79 \mathrm{~mm}$ |
| :--- | :--- |
| Weight | 5 kg |
| Colour | Blue <br> $(\mathrm{NCS} \mathrm{S} \mathrm{4020-R80B)}$ |
| Operating Temperature | $+5^{\circ} \mathrm{C} \ldots+40^{\circ} \mathrm{C}$ |
| Humidity | max. RH 95\% |
| Operating Voltage | $19 \ldots 30 \mathrm{VDC}$ |
| Standby current | 50 mA |
| Alarm state current. <br> Max. 50 LEDs "on" at <br> the same time | 72 mA |
| Serial communication <br> ports | $\mathrm{In}: \quad \mathrm{RS} 485$ or RS232 <br> Out: RS485 |
| IP Rating | IP 30 |

Note! Both 24VDC inputs must be connected.

## Current consumption/output

| LB200 | $0,15 \mathrm{~mA} /$ active output |
| :--- | :--- |
| OC-100L | $6,2 \mathrm{~mA} /$ active output |
| OC-100R+RB20 | $7,5 \mathrm{~mA} /$ active output |

Pelco reserves the right to modifications.
Product Codes

| Product | Code | Description |
| :--- | :--- | :--- |
| ZLPX | FFS0070 3840 | Zone led panel with <br> 200 LEDs |
| ZLPX-IC | FFS0070 3841 | ZLPX controller |
| LB200 | FFS0070 3842 | Led board 200 LEDs |
| OC-100L | FFS0070 3843 | Open collector output <br> for 100 LEDs |
| OC-100R | FFS0070 3844 | Open collector output <br> for 100 relays |
| CCLO | FFS0070 3845 | Connection cable for <br> LED outputs, 3m |
| COL-10 | FFS0070 3846 | 10 LEDs cable, 1m |
| RB20 | FFS0070 3847 | Relay board of 20 <br> relays |

ZLPX-IC
Electrical connections


Note! Both 24VDC inputs must be connected.

## Settings and LED indications

## A dip switch

| A1 | OFF | Not in use |
| :---: | :---: | :--- |
|  | ON | Not in use |
| A2 | OFF | Not in use |
|  | ON | Not in use |
| A3 | OFF | FX-panel connection <br> ESA/MESA panel connection (message set $F$ or <br>  |
|  |  |  |

## B dip switch

| B1 | OFF | Not in use |
| :---: | :---: | :---: |
|  | ON |  |
| B2 | OFF | Not in use |
|  | ON |  |
| B3 | OFF | OUT "B" port not in use |
|  | ON | OUT "B" port in use |
| B4 | OFF | Not in use |
|  | ON |  |
| B5 | OFF | Not in use |
|  | ON |  |
| B6 | OFF | IN "A" port baud rate 1200 |
|  | ON | IN "A" port baud rate 9600 |
| B7 | OFF | OUT "B" port baud rate 1200 |
|  | ON | OUT "B" port baud rate 9600 |
| B8 | OFF | To be "OFF"! Only for service purposes. |
|  | ON |  |

## LED indications in normal use

| LED 1 | Continuous | Fault in configuration file |
| :---: | :--- | :--- |
|  | Blinking | Configuration state |
| LED 2 | Continuous | Not in use |
|  | Blinking |  |
| LED 3 | Continuous | Power supply input 1 or 2 fault |
|  | Blinking | NA |
| LED 4 | Continuous | IN "A" communication fault |
|  | Blinking | IN "A" HW fault |
| LED 5 | Continuous | OUT "B" communication fault |
|  | Blinking | OUT "B" HW fault |
| LED 6 | Continuous | Not in use |
|  | Blinking |  |

Note! LEDs 1-6 in the ZLPX IC are activated in system fault.

## LED indications in start up condition (10 seconds)

| LED 1 | Continuous | Display HW installed |
| :---: | :--- | :--- |
|  | OFF | Display HW not installed |
| LED 2 | Continuous | Isolated port installed |
|  | OFF | Isolated port not installed |
| LED 3 | Continuous | NA |
|  | OFF | NA |
| LED 4 | Continuous | LED board connector installed |
|  | OFF | LED board connector not installed |
| LED 5 | Continuous | NA |
|  | OFF | NA |
| LED 6 | Continuous | MCO HW installed |
|  | OFF | MCO HW not installed |

Jumpers for service purposes

| Jumper | ON | OFF |
| :--- | :--- | :--- |
| Prog update | Program update | Normal use |
| Config | Configuration state | Normal use |

## Configuration

The ZLPX panel, as a part of FX NET fire detection system, can be used without a configuration in it. In this case the ZLPX displays the same fire alarm information as the FX fire panel. INFO protocol must be configured / enabled on the used port on fire panel (rs485 or rs232).

If there is a need to display zone/area specific fire alarm information only, then the ZLPX panel must be configured. The configuration is done with WinFMPX configuration tool via incoming RS232 serial port. During the configuration of the ZLPX panel the communication line to the FX panel (RS485) must be disconnected.

## Configuration memory erasure

The configuration memory can be erased back to the factory defaults by the following：
－disconnect power from the unit（power inputs Pl1 and PI2）
－set＂config＂jumper ON
－turn panel ID number switches to $E$ and $F(E=$ 10＇s， $\mathrm{F}=1$＇s）
－connect power back
－follow the LED number 1 ：
－when the LED is blinking quickly turn dip switch A8 ON
－LED1 OFF：erasure in progress
－LED ON continuous：erasure is ready
－disconnect power，set ID switches back to＂0＂ and remove the＂config＂jumper
－connect power back
－unit is starting without configuration data

## Software update

The panel is set to the software update state by setting＂prog update＂jumper ON and restarting the panel（by pressing the CPU reset button）．The software update is done with PC loader software via incoming RS232 serial port．During the software update the communication line to the FX panel （RS485）must be disconnected．

Electrical connections of OC－100L and OC－100R


| Input descriptions | Activates all outputs for 5 <br> seconds |
| :--- | :--- |
| Input 1 | Not in use |
| Inputs 2－5 | Normally not in use |
| External power input |  |

Electrical connections of RB－20


Electrical connections of LB－200

| 00 | $\bigcirc$ | $\square 0$ | $\bigcirc$ | $\square 0$ | O | $\bigcirc 0$ | $\bigcirc$ | 00 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 00 |  | $\square 0$ |  | $\square 0$ |  | 00 |  | 00 |  |
| 00 |  | $\square$ |  | 0 |  | 00 | Control line IN | 00 |  |
| 00 |  | $\square$ |  | 00 |  | $\bigcirc 0$ |  | 00 |  |
| － 0 |  | － 0 |  | －ロ |  | $\square 0$ |  | －0 |  |
| $00^{0}$ |  | －0 |  | － 0 |  | $00^{\circ}$ |  | －© |  |
| 00 |  | $\square 0$ |  | $\bigcirc \square$ |  | $\bigcirc 0$ |  | $\bigcirc 0$ |  |
| 00 |  | $\square 0$ |  | $\square 0$ |  | $\bigcirc 0$ |  | $\bigcirc 0$ |  |
| 00 |  | $\square 0$ |  | －0 |  | $\bigcirc 0$ |  | $\bigcirc 0$ |  |
| －$\quad$ |  | － |  | $\square \square$ |  | 00 |  | －0 |  |
|  | － |  | － |  | － |  | $\bigcirc$ |  |  |
| －0 |  | 日日 |  | 日 0 |  | $0 \cdot$ |  | 日 | 感 |
| 00 |  | $\square 0$ |  | $\square 0$ |  | 00 |  | 00 |  |
| 00 |  | $\square 0$ |  | $\bigcirc 0$ |  | 00 |  | $\bigcirc 0$ |  |
| 00 |  | $\square 0$ |  | $\square 0$ |  | 00 |  | $\bigcirc 0$ |  |
| $\square 0$ |  | －ロ |  | $\square$ |  | $\square 0$ |  | －0 |  |
| 00 |  | － 0 |  | －0 |  | 00 |  | 00 |  |
| 00 |  | $\square 0$ |  | 00 |  | 00 |  | 00 |  |
| 00 |  | $\square 0$ |  | $\bigcirc 0$ |  | $\bigcirc 0$ |  | $\bigcirc 0$ |  |
| 00 |  | $\square 0$ |  | $\square 0$ |  | $\bigcirc 0$ |  | $\bigcirc 0$ |  |
| 00 |  | $\bigcirc 0$ |  | 00 |  | 00 | Control line OUT | $\bigcirc 0$ |  |
|  |  |  |  | test bu |  |  |  |  |  |
|  | $\bigcirc$ |  | $\bigcirc$ | V： | $\bigcirc$ |  | $\bigcirc$ |  |  |

[^0]Basic system principle with ZLPX panels


Note! The maximum number of ZLPX, ZLPX-IC, FMPX, DAPX, REPX, REPX-OB, MCOX, MCOX-OB units connected to one FX_ panel is 16 .

The RS232 setting is used for the configuration and software update.
The INFO-line in the ZLPX (ZLPX-IC) panel must be disconnected during the ZLPX (ZLPX-IC) configuration.

Note! The maximum RS485 cable length between 2 devices is 1000 m .
The maximum RS232 cable length is 10 m .
Note! The maximum number of zones in one FX NET system is 8000.
Note! Due to current consumption max. 50 zonal outputs/ZLPX-IC card can be activated at the same time.
Note! There can be more than one output/zone.

## System example: open collector LED outputs



Note! The maximum number of ZLPX, ZLPX-IC, FMPX, DAPX, REPX, REPX-OB, MCOX, MCOX-OB units connected to one FX_ panel is 16.

The RS232 setting is used for the configuration and software update.
The INFO-line in the ZLPX (ZLPX-IC) panel must be disconnected during the ZLPX (ZLPX-IC) configuration.

Note! The maximum RS485 cable length between 2 devices is 1000 m .
The maximum RS232 cable length is 10 m .
Note! The maximum number of zones in one FX NET system is 8000.
If the load taken from IC board exceeds 1 A then an external power supply input (OC-100I and OC100R) must be used

Note! Due to current consumption max. 50 zonal outputs/ZLPX-IC card can be activated at the same time.
Note! There can be more than one output/zone.

## System example: relay outputs



Note! The maximum number of ZLPX, ZLPX-IC, FMPX, DAPX, REPX, REPX-OB, MCOX, MCOX-OB units connected to one FX _ panel is 16 .

The RS232 setting is used for the configuration and software update.
The INFO-line in the ZLPX (ZLPX-IC) panel must be disconnected during the ZLPX (ZLPX-IC) configuration.

Note! The maximum RS485 cable length between 2 devices is 1000 m .
The maximum RS232 cable length is 10 m .
Note! The maximum number of zones in one FX NET system is 8000 .
Note! Due to current consumption max. 50 zonal outputs/ZLPX-IC card can be activated at the same time.
Note! There can be more than one output/zone.

## System example: LED board LB200 outputs



Note! The maximum number of ZLPX, ZLPX-IC, FMPX, DAPX, REPX, REPX-OB, MCOX, MCOX-OB units connected to one FX_ panel is 16.

The RS232 setting is used for the configuration and software update.
The INFO-line in the ZLPX (ZLPX-IC) panel must be disconnected during the ZLPX (ZLPX-IC) configuration.

Note! The maximum RS485 cable length between 2 devices is 1000 m .
The maximum RS232 cable length is 10 m .
Note! The maximum number of zones in one FX NET system is 8000 .
Note! Due to current consumption max. 50 zonal outputs/ZLPX-IC card can be activated at the same time.
Note! There can be more than one output/zone.

## System example: mixed outputs



Note! The maximum number of ZLPX, ZLPX-IC, FMPX, DAPX, REPX, REPX-OB, MCOX, MCOX-OB units connected to one FX_panel is 16 .

The RS232 setting is used for the configuration and software update.
The INFO-line in the ZLPX (ZLPX-IC) panel must be disconnected during the ZLPX (ZLPX-IC) configuration.

Note! The maximum RS485 cable length between 2 devices is 1000 m .
The maximum RS232 cable length is 10 m .
Note! The maximum number of zones in one FX NET system is 8000 .
Note! Due to current consumption max. 50 zonal outputs/ZLPX-IC card can be activated at the same time.
Note! There can be more than one output/zone.

Zone numbering label installation



[^0]:    Note！By pressing＂LED test button＂all LEDs are ON 5 seconds．

