

entra

GB

TWO-FAMILY VIDEO PANEL HD WITH RFID READER VO-2021CSHD / VO-2021CBHD



zameL

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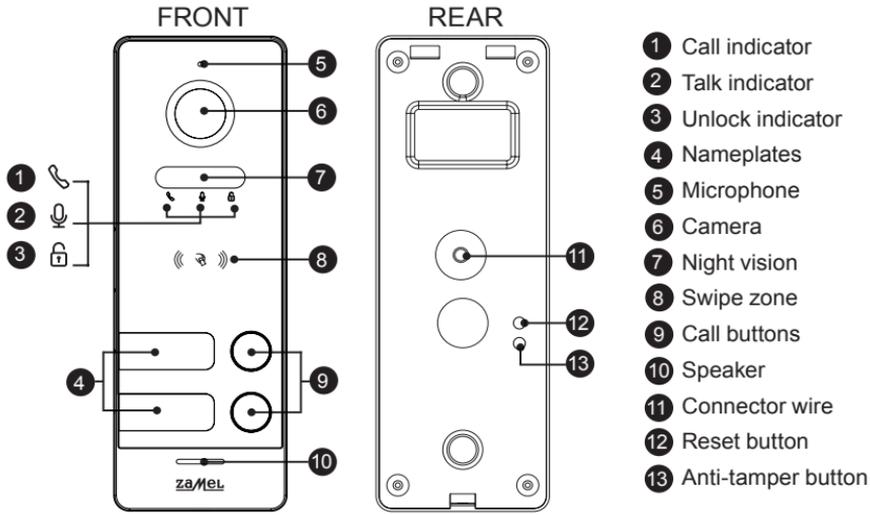


Do not dispose of this device with other waste! In order to avoid harmful effects on the environment and human health, the used device should be stored in designated areas. For this purpose, you can dispose of household waste free of charge and in any quantity to a collection point set up, as well as to the shop when you buy new equipment.

- Thank you for purchasing our products.
- Products, including their design and software, are subject to change without prior notice.
- The company is not responsible for any safety accidents caused by abnormal operation of the product.
- Before using the product, read this user manual carefully and follow the provisions contained therein.
- The Guide is for reference only. If there is inconsistency between the Guide and the actual product, the actual product shall prevail.
- Implemented improvements on the product may lead to some differences between the actual device and the one described in the manual. To obtain the latest version of the software documentation and additional documentation, please contact customer service.
- In case of any doubts or ambiguities, please contact our customer service department.

INFORMATION PART

APPEARANCE



PACKAGE CONTENTS

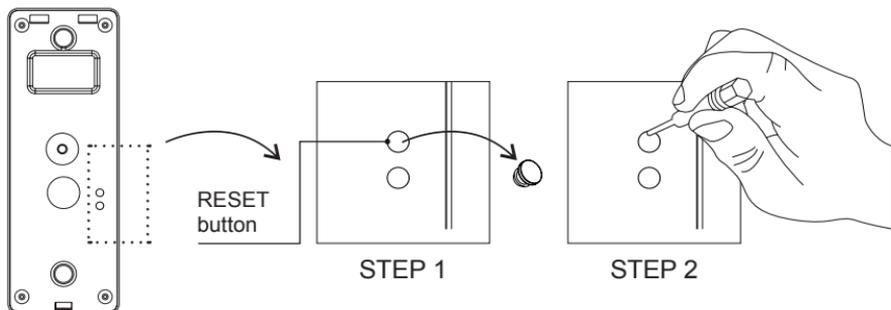
- | | | | | | | |
|----------------|------------------------------|-----------------------|--------------------------|-------------------------|--------------------------|--------------|
| | | | | | | |
| panel | wall bracket | 2 x expansion bolt | 2 x fixing screw M3,5x30 | hexagon screw KM3x5 | 2 x phillips screw KM3x5 | allen wrench |
| | | | | | | |
| name plate key | 3 x IC keychain with pendant | 2 x nameplate sticker | 4P female terminal wire | 3P female terminal wire | quick guide | |

TECHNICAL SPECIFICATION

Operation system:	Linux
Mounting:	surface
Connection:	2-wire BUS (non polarized)
Audio intercom mode:	two-way (full duplex)
Power supply:	18 ÷ 36 V DC
Gate relay:	NO (max. 30 V; 4 A AC/DC)
Electric lock relay:	NO/NC (max. 30 V; 4 A AC/DC)
Tamper alarm:	against open, break, shocks
RFID:	13.56 MHz / MIFARE / Supports ISO/IEC 14443 type A 106 kB/s (support for one access zone)
Number of cards supported RFID:	100
Card reading distance:	≤ 2 cm
Resolution:	Main stream: 1920 x 1080 p, 720 p, Sub stream: 640 x 360 p
Angle of view:	H: 120°, V: 71°
Video compression standard:	H.265 (default), H.264
Noise reduction:	3D
Backlight:	IR
Protection grade:	IK07, IP66
Operating temperature range:	-40 ÷ +60 °C (-22 ÷ +140 °F)
Operating humidity range:	10 ÷ 90 %RH (non-condensing)
Dimensions:	154 x 55 x 21 mm
Weight:	0,35 kg

CONFIGURATION PART

RESTORING FACTORY SETTINGS



Attention: Long press the button of the corresponding user + RESET button for 3 seconds will delete the settings of the corresponding user, long press the RESET button for 5 seconds will delete the settings of all users. After deleting of settings, the button light will flash 3 times and sound a beep.

REGISTRATION AND USE TRANSPONDERS OPERATION

1. Registering master transponder

For the first time to use, after switching on the panel, the loudspeaker keeps beep sound and the three indicator lights keeps blinking. When you swipe a IC transponder (card or fob), there will be a beep sound at the same time, then this transponder is successfully authorized as a master transponder. Immediately after the first application of the master transponder, user transponders can be registered one after the other. To complete the transponder registration process, the last of the added transponders should be touched again or wait for the reader to automatically exit the programming mode.

Remark: Master transponder can not be swiped to open the lock.

2. Registering user transponders

- a. Swipe master transponder 1 time, three indicators will keep lighting on, then swipe another IC transponder, which will be added as an user transponder. The authorization of the new user transponder is signaled by a short high-pitched tone. Continue to swipe other IC transponder in sequence can add more user transponders. Swipe recently added user transponder again to exit the setting mode when you finished operation. The door station will exit from setting mode automatically when there is no operation in 30 seconds.
- b. Up to 100 user transponders can be registered by the door station. Transponder reading distance is $\leq 2\text{cm}$. The master transponder is necessary when you add or delete user transponders. Please keep it well for future use and do not mix with user transponders. A possible mistake may result in restoring the RFID reader to factory settings.

3. Deleting master and user transponders

- a. Swipe the master transponder 4 times in a row, all user transponders and the master transponder will be deleted, loudspeaker keeps beep sound and the three indicator lights keeps blinking again.
- b. If the master transponder is lost, shortly press "RESET" button in the rear side can also delete the master transponder and all user cards (see section RESTORING FACTORY SETTINGS).

4. Swiping unlock by users transponders

You can connect, for example, an NO or NC electric strike to it by connecting an appropriately selected additional power supply to the circuit, or gate.

In the standby state, swipe a user transponder, the NO/NC/COM relay (see INSTALLATION PART) will be opened. Please note that the default unlock time for a NO/NC/COM relay is 5 seconds. Changes to the unlock time settings can be made from the computer browser after first connecting the signal distributor to the router via the RJ45 port (see section CONFIGURATION OF SETTINGS FOR THE TWO-BUTTON PANEL).

Remark: Approaching the transponder allows only opening the NO/NC/COM relay. To open the NO/COM connector intended to control the gate, use the monitor or smartphone application.

CONFIGURATION OF SETTINGS FOR THE TWO-BUTTON PANEL

1. Finding the IP address of the external panel.

To start the configuration, you must first connect the VP-SW2 Signal Distributor by cable via the built-in RJ45 connector to the router. The condition for successful login to the settings interface via a web browser is that the device from which you will be logged in must be at same local network to which the video intercom installation was previously logged in. If you use two different networks, login will fail.

To find the IP address of the external panel, enter the monitor settings interface - Figure 1. Then select ADD NEW DEVICES from the settings list. The IP address of the outdoor panel will be listed as shown in Figure 2. The IP addresses indicated below are examples.

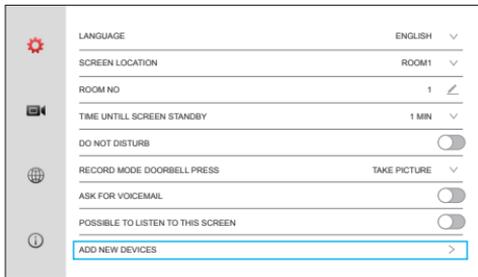


Figure 1



Figure 2

2. Login to the settings interface via a web browser.

1. Open a browser and enter the IP address of the external panel.
2. Click Enter on your keyboard to initialize the login page.
3. Enter your Username and Password.
4. Click Login to enter the settings interface.

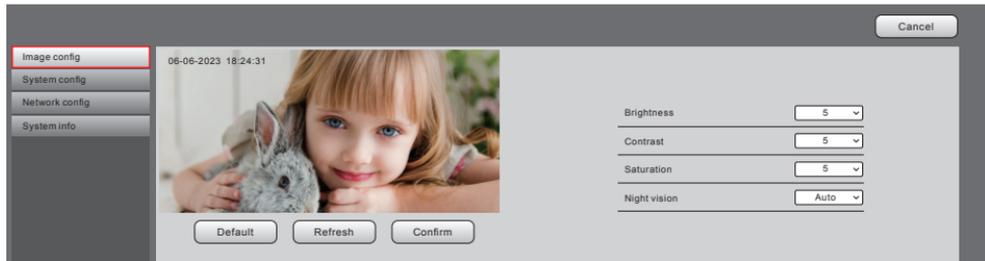
ATTENTION:

User: admin; default password: admin123



3. Image setting.

Select **Image config** to enter the external panel's image configuration interface. From the level of this interface you can configure Brightness / Contrast / Saturation / Night illumination depending on needs.

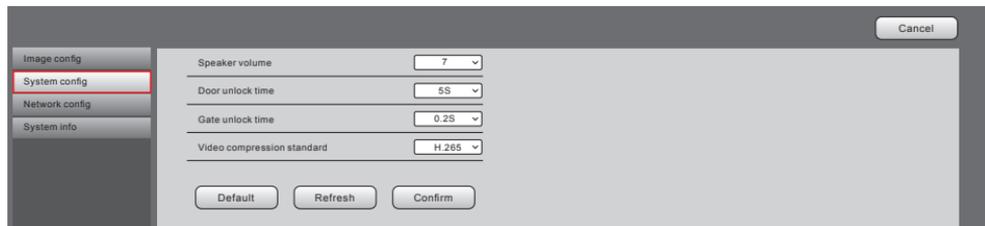


ATTENTION:

- Default: Restore the default parameters of the outdoor panel.
- Refresh: Refresh the parameters and image of the outdoor panel.
- Confirm: Save the configured parameters in the external panel.

4. System settings.

Select **System config** to enter the system configuration interface of the outdoor panel. From the level of this interface can be configured Speaker Volume / Door Unlock Time / Time gateway unlocking / Video compression standard.



5. Network settings.

Select **Network config** to enter the system configuration interface of the outdoor panel. From this interface you can configure ONVIF and DHCP settings.

Image config
System config
Network config
System info

ONVIF

DHCP

Local IP

Subnet mask

Gateway

Main stream: rtsp://admin.password@192.168.0.37/01/main
Sub stream: rtsp://admin.password@192.168.0.37/01/sub

6. System information.

Select **System info** to enter the system information interface of the outdoor panel. From this interface you can Manage User / Reboot Device / Reset Settings / Reset Device to Factory Settings / Update Software / Check Software Version.

Image config
System config
Network config
System info

User management

Restart the device

Reset all settings, but the following will not be reset: Network settings, users password and cards, bound device

Reset all data to factory default setting

System upgrade

Upload upgrade file

System info

Firmware version: 1.1.4.09.03

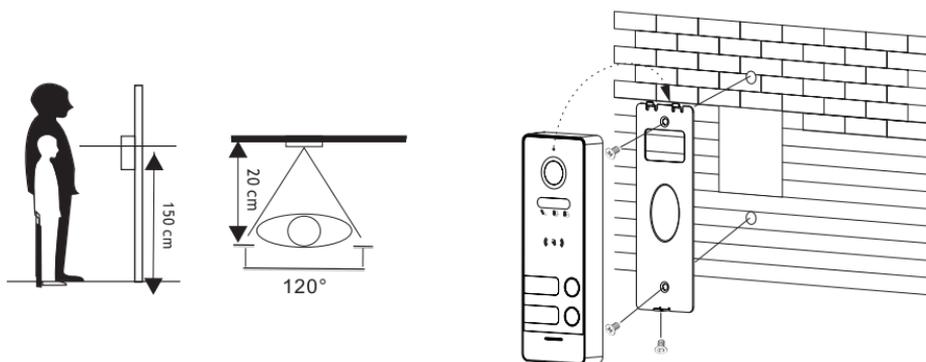
LP	Option	Description of how the setting works
1.	Revise	Access data to the external panel will be modified.
2.	Restart	The device will restart.
3.	Reset	Will reset the settings. Network settings, user settings, saved passwords, assigned cards, and added devices will remain intact.
4.	Reset factory setting	Will restore factory settings. All data will be deleted.
5.	System upgrade	Select Upload , then select the software file. Select Upgrade , then the software will be updated. Do not turn off devices during the update. In case of interruption updating may cause irreversible damage to the device.
6.	System info	Shows the current software version.

INSTALLATION PART

MOUNTING

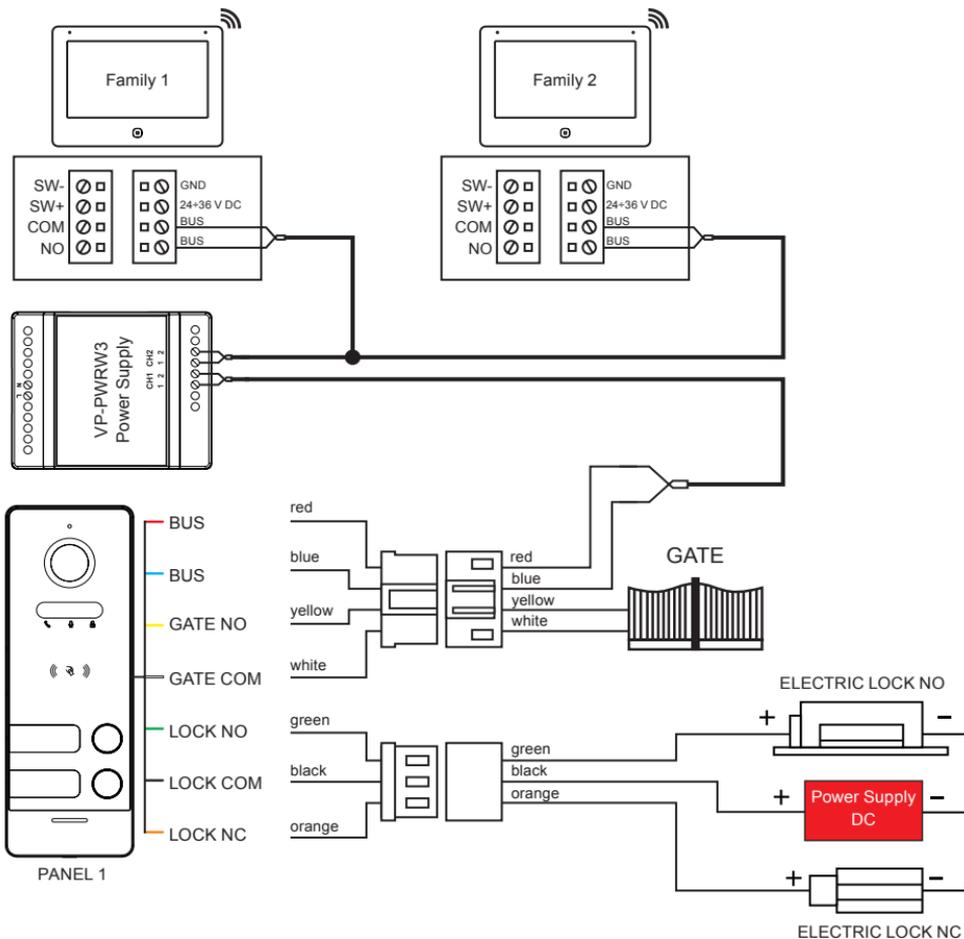
1. If possible, please select the most suitable panel position avoid direct sunshine to camera, dark surroundings, rain.
2. Determine panel installation height: suggest to be 1.5~1.6 meters.
3. Disassemble bracket from the outdoor panel.
4. Dig a hole at the suitable height on the wall.
5. Fix the bracket on the wall with screws and expansion bolts.
6. Make the cables through the wall & bracket to connect to the outdoor panel connector wire.
7. Put the outdoor panel onto the bracket, and fix it with the screw on the bottom.

Remark: If there is a risk of flooding the installation, especially the panel connection cable with the rest of the installation, including installation connectors, the gaps between the device and the mounting surface should be secured. In the event of a risk of a short circuit in the installation, it is recommended to use construction silicone characterized by good adhesion to both smooth and porous substrates, e.g. stone, plaster, glass, wood, brick, ceramics or metal. It is the installer's responsibility to decide whether the seal is appropriate. Any damage to the panel due to a short circuit in the installation is not covered by the warranty.



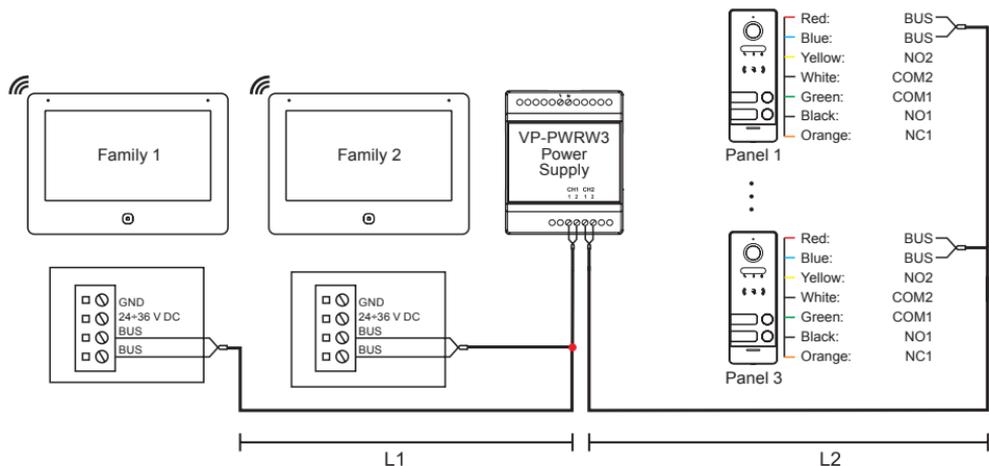
The use of VP-PWRW2 and VP-PWRW3 power supplies to power the system determines the entire installation as WLAN (Wi-Fi). This means that a wired connection to the router is not possible due to the lack of a VP-SW2 signal distributor with a built-in RJ45 LAN port in the installation. Wireless connectivity is provided by Wi-Fi video monitors. To establish a stable connection, video monitors must be within range of a local Wi-Fi network.

CONNECTION VIA WLAN (WI-FI) 2 MONITORS + 1 PANEL WIDEO

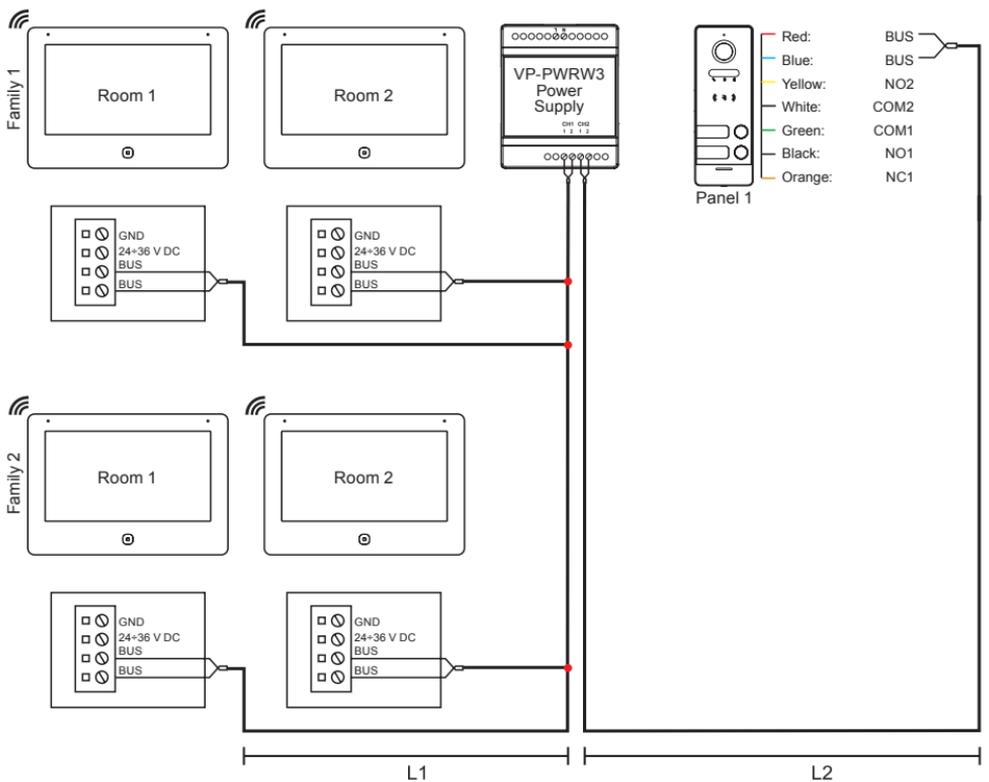


Note: Additional power supply for the electric lock is not included. It is recommended to buy it depending the purchase on the voltage and current requirements (power supply with current 2 A or stronger recommended).

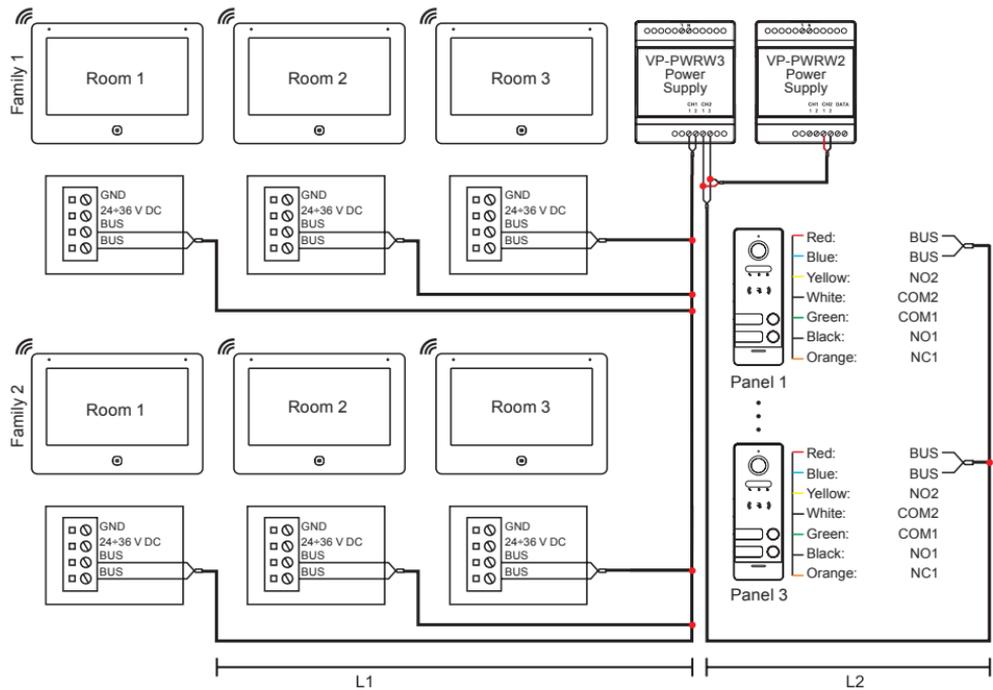
2 MONITORS + 3 VIDEO PANELS



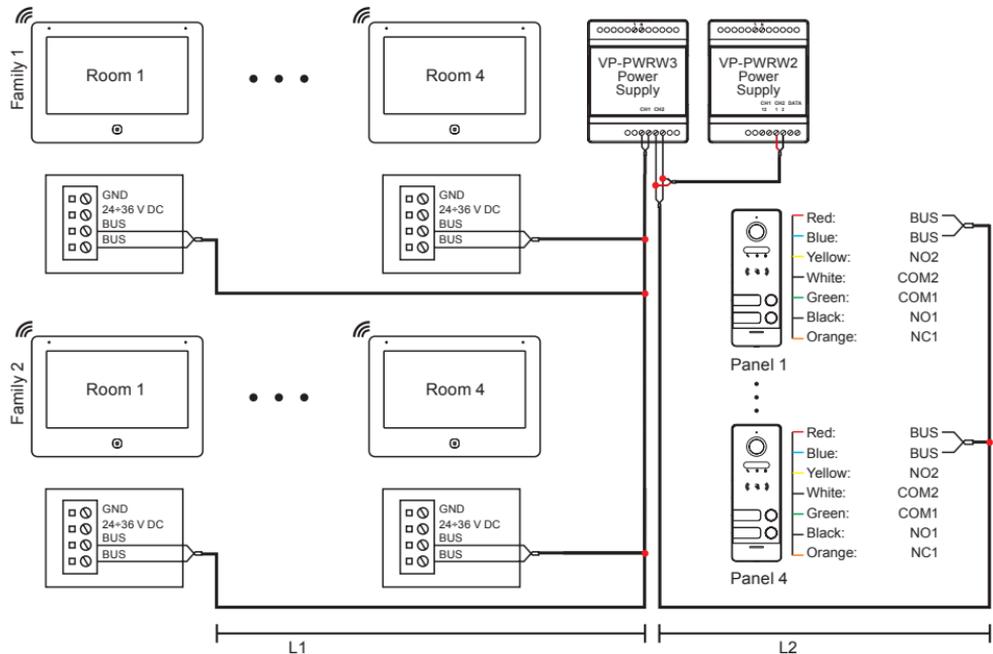
4 MONITORS + 1 VIDEO PANELS



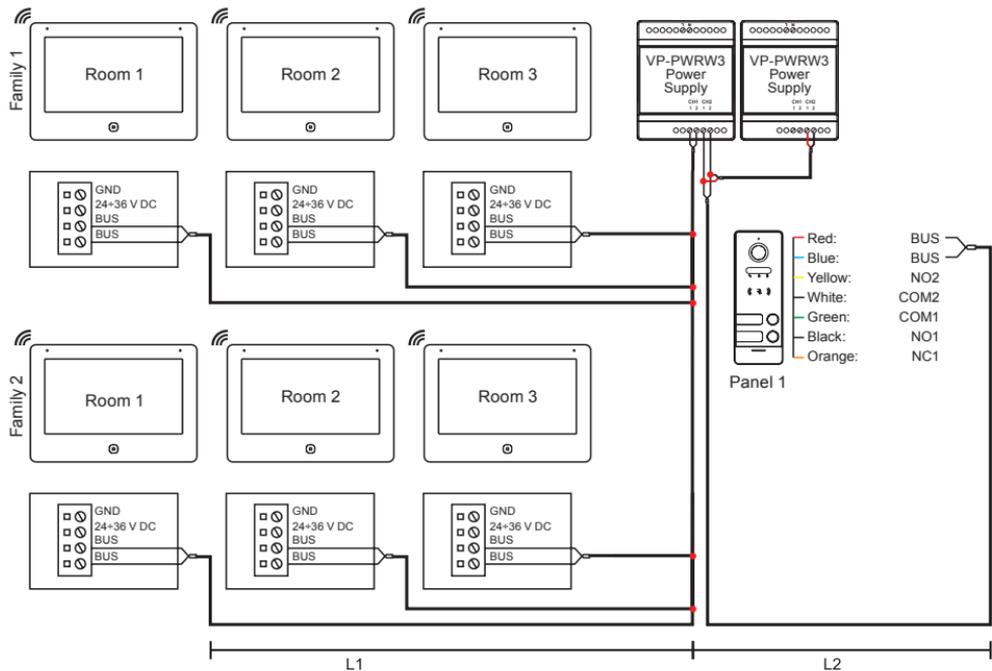
6 MONITORS + 3 VIDEO PANELS



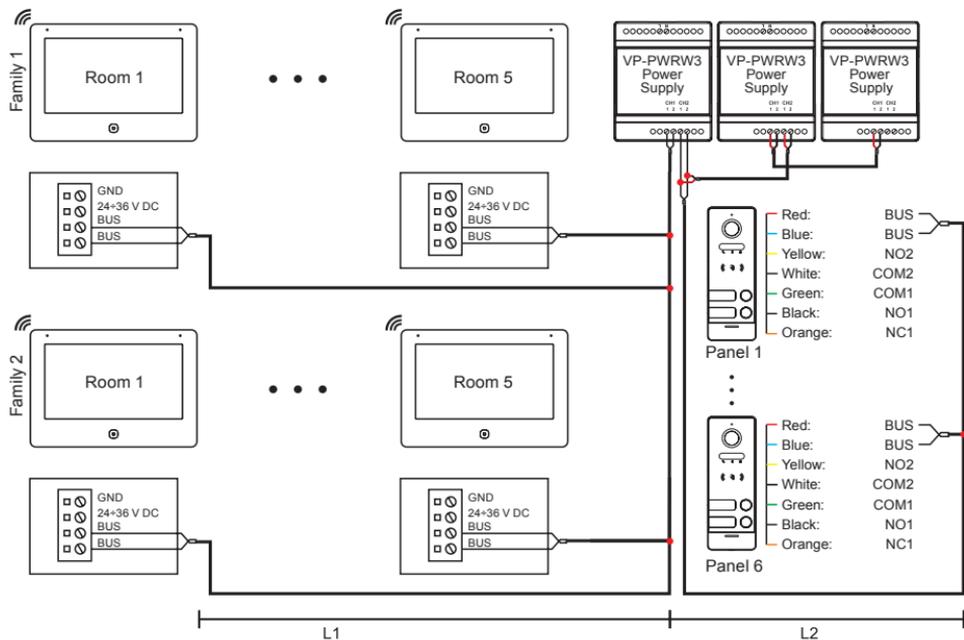
8 MONITORS + 4 VIDEO PANELS



6 MONITORS + 1 VIDEO PANELS

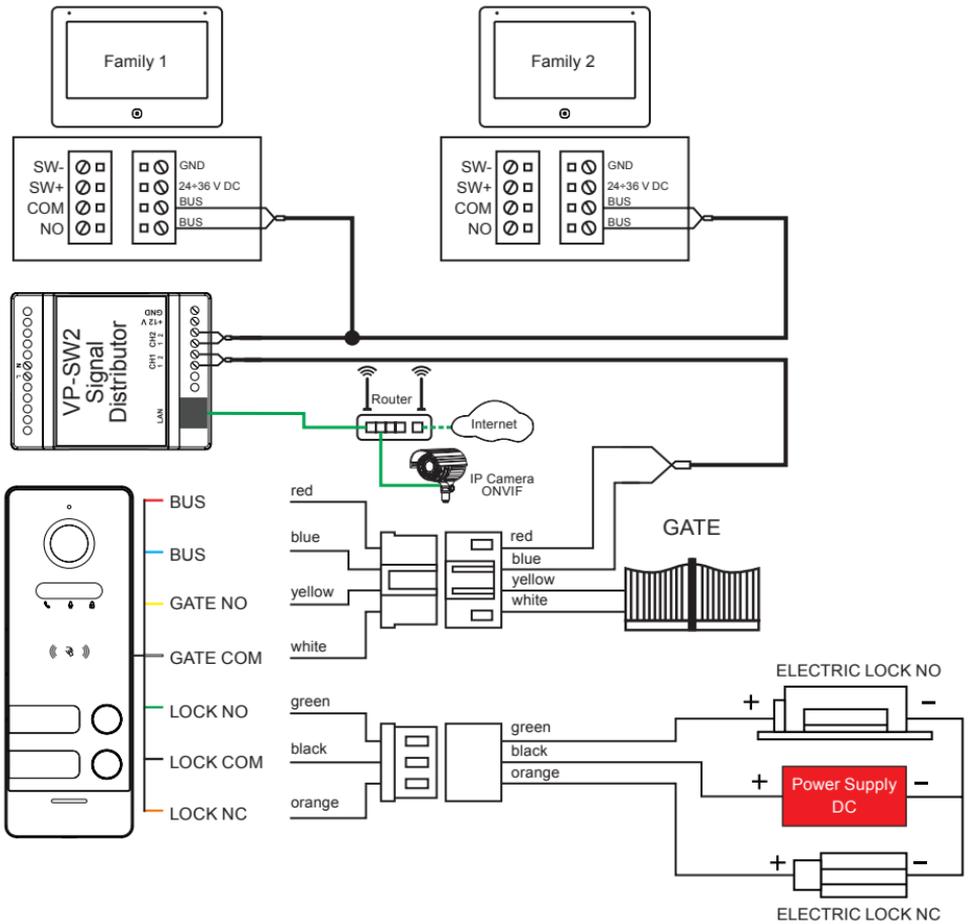


10 MONITORS + 6 VIDEO PANELS



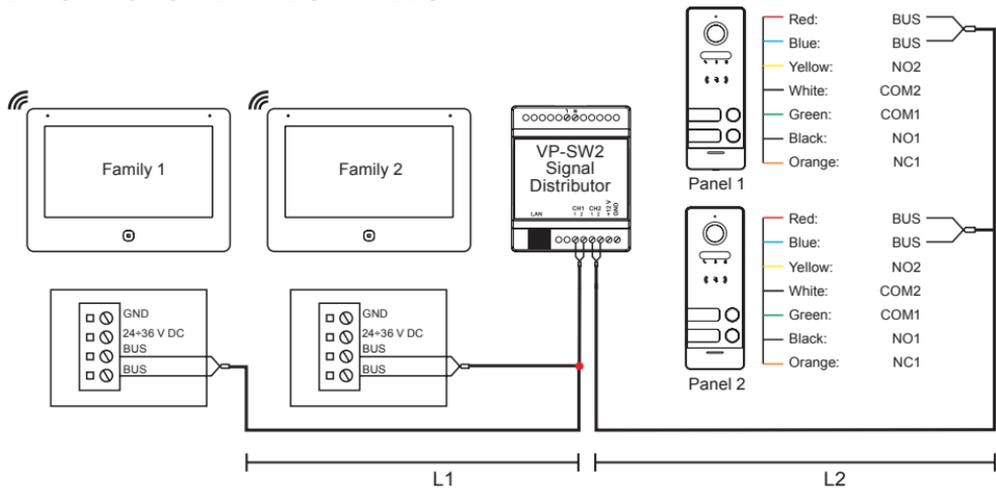
CONNECTION VIA LAN OR WLAN (WI-FI)

2 MONITORS + 1 VIDEO PANEL

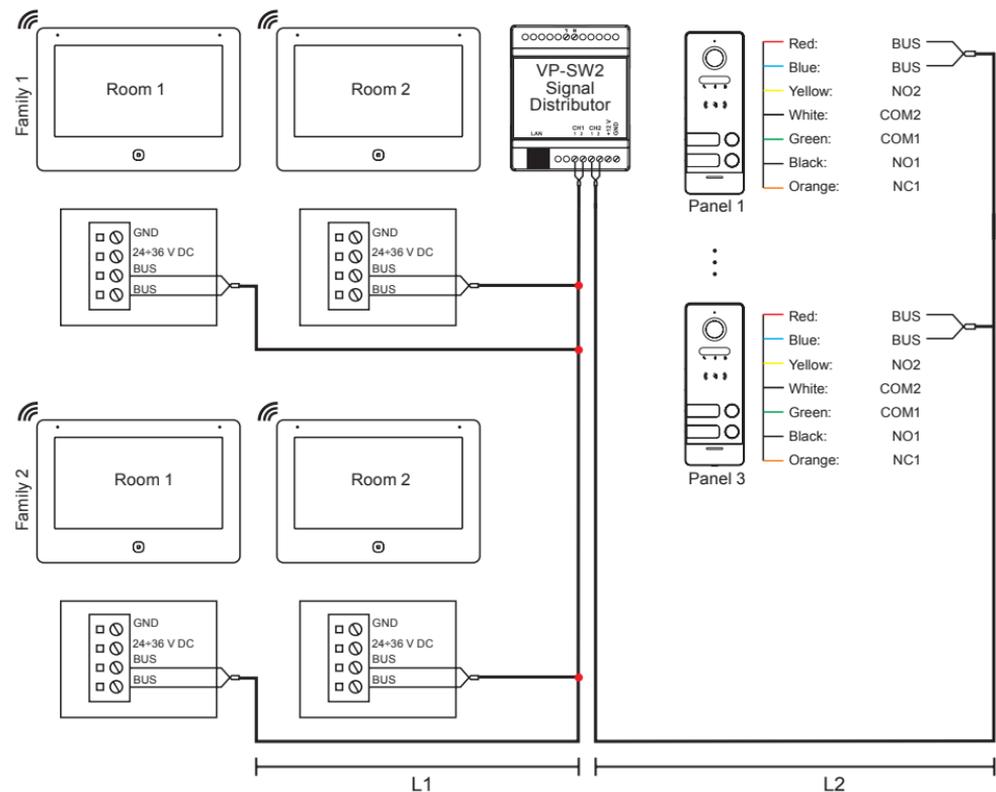


Note: Additional power supply for the electric lock is not included. It is recommended to buy it depending the purchase on the voltage and current requirements (power supply with current 2 A or stronger recommended).

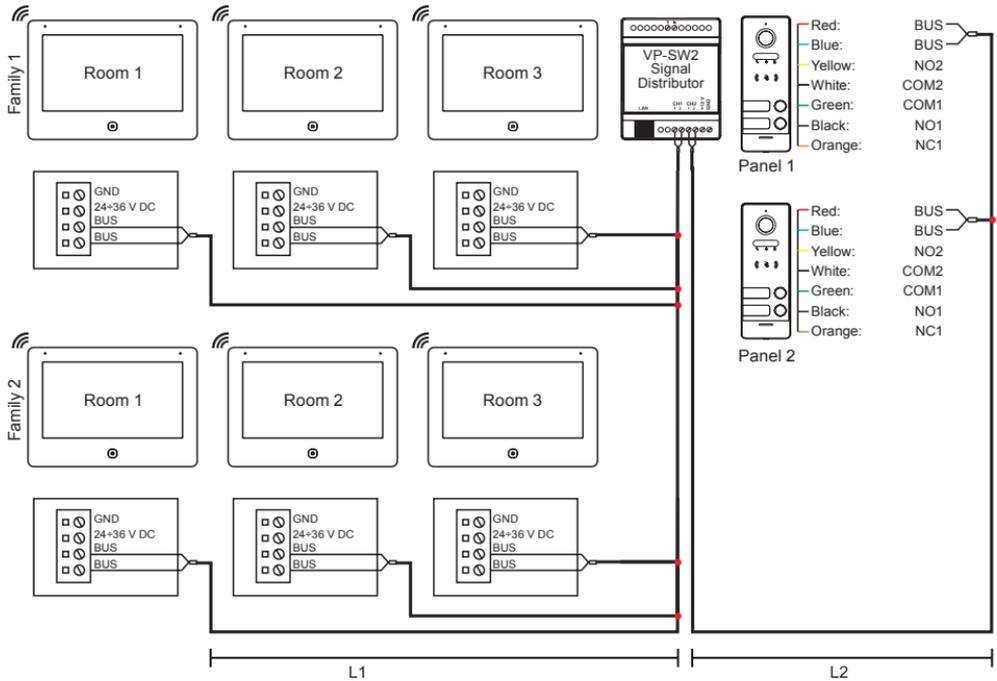
2 MONITORS + 2 VIDEO PANELS



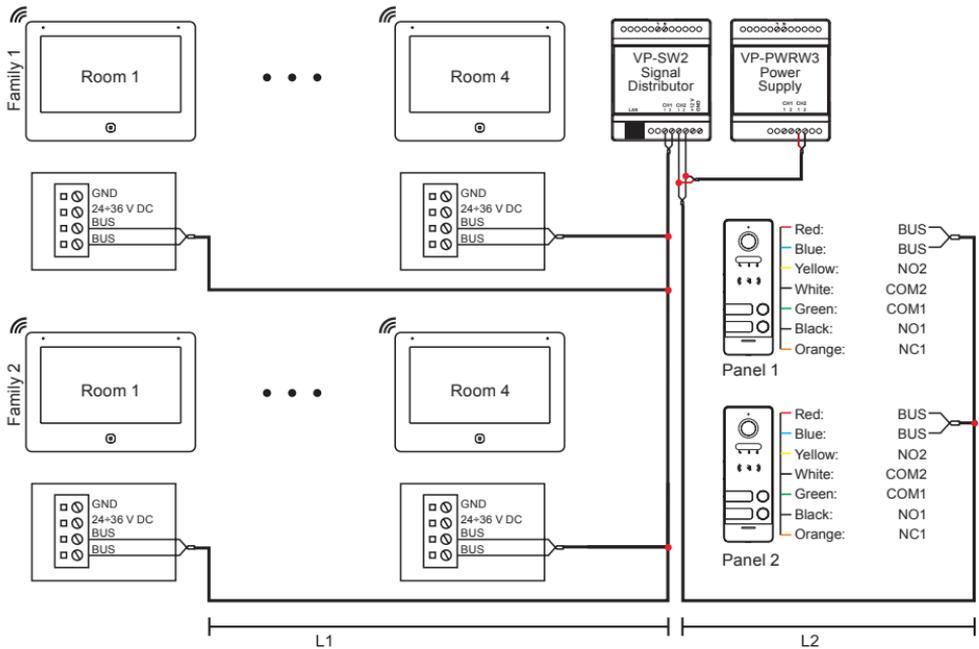
4 MONITORS + 3 VIDEO PANELS



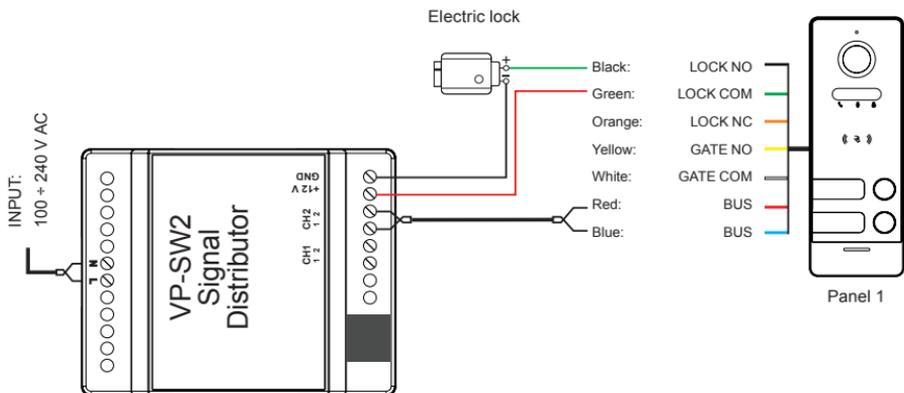
6 MONITORS + 2 VIDEO PANELS



8 MONITORS + 2 VIDEO PANELS



POWER SUPPLY OF THE ELECTRIC LOCK THROUGH THE SIGNAL DISTRIBUTOR VP-SW2



Attention:

The +12 V and GND connectors support magnetic locks and electric strikes operating in the range of (\leq) 12 V 0.5 A, 6 W. The relay opening time is defined from the monitor settings. If the given values are exceeded, damage may occur to both the magnetic lock, electric strike and the relay.

SUGGESTED CABLE TYPES AND ACCEPTABLE INSTALLATION LENGTHS

Cable type	1 monitor	2 monitors	3 monitors	4 monitors	5 monitors	6 monitors	7 monitors	8 monitors	9 monitors	10 monitors	1 panel	2 panels	3 panels	4 panels	5 panels	6 panels	7 panels	8 panels
	L1 max [m]										L2 max [m]							
	135	70	45	-	-	-	-	-	-	-	235	120	80	60	45	-	-	-
UTP CAT5	135	70	45	-	-	-	-	-	-	-	235	120	80	60	45	-	-	-
UTP CAT6	175	90	60	45	-	-	-	-	-	-	300	150	100	75	60	50	-	-
YTLY 2x 0,2 mm ²	135	70	45	-	-	-	-	-	-	-	235	120	80	60	45	-	-	-
YTLY 2x 0,3 mm ²	220	110	75	55	-	-	-	-	-	-	300	185	125	90	70	60	50	-
RVV / LiYCY 2x 0,5 mm ²	300	180	120	90	75	60	50	-	-	-	300	300	210	150	120	100	85	75
RVV / LiYCY 2x 0,75 mm ²	300	260	170	130	100	85	75	65	55	50	300	300	290	210	170	140	120	100
RVV / LiYCY 2x 1 mm ²	300	300	260	190	150	130	110	95	85	75	300	300	300	300	260	210	180	160

Note:

1. L1: Distance from monitor to power, L2: Distance from panel to power.
2. The same BUS should use the same wire with the same specification.

COMBINATIONS OF POWER SUPPLY SOURCES

VP-PWRW3 POWER SUPPLY OR ITS MULTIPLE

		NUMBER OF OUTDOOR PANELS IN ONE INSTALLATION (MAX. 8 PIECES)							
		1	2	3	4	5	6	7	8
NUMBER OF MONITORS IN ONE INSTALLATION (MAX. 10 PIECES)	1	1	1	1	1	1	2	2	2
	2	1	1	1	1	2	2	2	2
	3	1	1	2	2	2	2	2	2
	4	1	2	2	2	2	2	2	2
	5	2	2	2	2	2	2	3	3
	6	2	2	2	2	2	3	3	3
	7	2	2	2	3	3	3	3	3
	8	2	2	3	3	3	3	3	3
	9	3	3	3	3	3	3	3	4
	10	3	3	3	3	3	3	4	4

The table shows the total number of power supplies needed to power the entire system.

VP-PWRW2 POWER SUPPLY OR ITS MULTIPLE

		NUMBER OF OUTDOOR PANELS IN ONE INSTALLATION (MAX. 8 PIECES)							
		1	2	3	4	5	6	7	8
NUMBER OF MONITORS IN ONE INSTALLATION (MAX. 10 PIECES)	1	1	1	1	1	1	1	1	1
	2	1	1	1	1	1	1	1	1
	3	1	1	1	1	1	1	1	1
	4	1	1	1	1	1	1	1	1
	5	1	1	1	1	1	1	2	2
	6	1	1	1	1	1	2	2	2
	7	1	1	1	2	2	2	2	2
	8	1	1	2	2	2	2	2	2
	9	2	2	2	2	2	2	2	2
	10	2	2	2	2	2	2	2	2

The table shows the total number of power supplies needed to power the entire system.

VP-PWRW3 POWER SUPPLY AND ADDITIONALLY VP-PWRW2 POWER SUPPLY OR ITS MULTIPLE

		NUMBER OF OUTDOOR PANELS IN ONE INSTALLATION (MAX. 8 PIECES)							
		1	2	3	4	5	6	7	8
NUMBER OF MONITORS IN ONE INSTALLATION (MAX. 10 PIECES)	1					1	1	1	1
	2				1	1	1	1	1
	3			1	1	1	1	1	1
	4		1	1	1	1	1	1	1
	5	1	1	1	1	1	1	1	1
	6	1	1	1	1	1	1	1	1
	7	1	1	1	1	1	1	1	1
	8	1	1	1	1	1	1	1	1
	9	1	1	1	1	1	1	1	2
	10	1	1	1	1	1	1	2	2

The table shows the number of additional VP-PWRW2 power supplies needed to power the entire system in addition to one VP-PWRW3 power supply that is the basic power supply module. An empty field means that the VP-PWRW3 power supply is sufficient for the selected configuration and no additional power sources are required.

VP-SW2 DISTRIBUTOR AND ADDITIONALLY VP-PWRW3 POWER SUPPLY OR ITS MULTIPLE

		NUMBER OF OUTDOOR PANELS IN ONE INSTALLATION (MAX. 8 PIECES)							
		1	2	3	4	5	6	7	8
NUMBER OF MONITORS IN ONE INSTALLATION (MAX. 10 PIECES)	1								
	2								
	3								
	4							1	1
	5						1	1	1
	6				1	1	1	1	1
	7			1	1	1	1	1	1
	8	1	1	1	1	1	1	1	2
	9	1	1	1	1	1	1	2	2
	10	1	1	1	1	1	2	2	2

The table shows the number of additional VP-PWRW3 power supplies needed to power the entire system in addition to one VP-SW2 distributor which is the basic power supply module. An empty field means that the VP-SW2 distributor is sufficient in the selected configuration and no additional power sources are required.

**VP-SW2 DISTRIBUTOR AND
ADDITIONALLY VP-PWRW2 POWER
SUPPLY OR ITS MULTIPLE**

		NUMBER OF OUTDOOR PANELS IN ONE INSTALLATION (MAX. 8 PIECES)							
		1	2	3	4	5	6	7	8
NUMBER OF MONITORS IN ONE INSTALLATION (MAX. 10 PIECES)	1								
	2								
	3								
	4							1	1
	5						1	1	1
	6				1	1	1	1	1
	7			1	1	1	1	1	1
	8	1	1	1	1	1	1	1	1
	9	1	1	1	1	1	1	1	1
	10	1	1	1	1	1	1	1	1

The table shows the number of additional VP-PWRW2 power supplies needed to power the entire system in addition to one VP-SW2 distributor which is the basic power supply module. An empty field means that the VP-SW2 distributor is sufficient in the selected configuration and no additional power sources are required.

**VP-PWRW2 POWER SUPPLY AND
ADDITIONALLY VP-PWRW3 POWER
SUPPLY OR ITS MULTIPLE**

		NUMBER OF OUTDOOR PANELS IN ONE INSTALLATION (MAX. 8 PIECES)							
		1	2	3	4	5	6	7	8
NUMBER OF MONITORS IN ONE INSTALLATION (MAX. 10 PIECES)	1								
	2								
	3								
	4								
	5							1	1
	6						1	1	1
	7				1	1	1	1	1
	8			1	1	1	1	1	1
	9	1	1	1	1	1	1	1	2
	10	1	1	1	1	1	1	2	2

The table shows the number of additional VP-PWRW3 power supplies needed to power the entire system in addition to one VP-PWRW2 power supply that is the basic power supply module. An empty field means that the VP-PWRW2 power supply is sufficient for the selected configuration and no additional power sources are required.