



INTEGRATED VIDEO SYSTEM

INSTALLATION GUIDE

Release:
Update:
Language:

2.0
April 2010
English

The product features can be subject to change without notice. Unauthorized reproduction or distribution of this manual, or any portion of it, on any device and in any form, is prohibited. The contents of this manual may be subject to change without notice.

CONFORMITY

Hereby, Tecnoalarm srl declares that the present equipment is in compliance with the essential requirements and other relevant provisions of the LVD 2006/95/EC and EMC 2004/108/EC directives.
The declaration of conformity is available on the website: www.tecnoalarm.com.

PREFACE

IMPORTANT NOTES

The use of monitoring devices in some environments can be prohibited by law.
The network cameras are devices with high performances ready to function on the web, but they can also be devices of a flexible surveillance system.
The user must ensure that the use of these surveillance devices is permitted and legal before proceeding with their installation.



WARNING

All the "**WARNING**" notes contain important information for the user.
To ignore these warnings can be dangerous.

INDEX

1. SETUP STEPS

1.A	VERIFICATION OF THE HARDWARE AND SOFTWARE REQUIREMENTS	1-2
1.A.1	Hardware	1-2
1.A.2	Software	1-2
1.A.3	Initial requirements	1-3
1.B	LOCAL PROGRAMMING OF THE CONTROL PANEL (USB)	1-3
1.B.1	Connection of the control panel via USB port	1-3
1.B.2	Date and time check	1-3
1.C	ETHERNET PROGRAMMING (PC-CONTROL PANEL)	1-4
1.C.1	Programming the control panel IP address	1-4
1.C.2	Uploading of programming to the control panel	1-4
1.C.3	Checking IP address of the PC	1-4
1.D	ETHERNET CONNECTION CHECK (PC-CONTROL PANEL)	1-5
1.D.1	Verification of the connection between control panel and the network	1-7
1.E	IP DEVICE CONNECTION (TSP7000-CAMERAS)	1-8
1.E.1	TSP7000 connection	1-8
1.E.2	TSP7000 initiation	1-9
1.E.3	Camera connection	1-10
1.F	CAMERA CONFIGURATION	1-12
1.F.1	"Installation Wizard 2" software	1-12
1.F.2	Verification of the presence of the jumper on the cameras	1-12
1.G	TSP7000 CONFIGURATION	1-13
1.G.1	Adding TSP7000 to user file	1-13
1.G.2	Selection of TSP LINK protocol (TP8-64 BUS and TP16-256)	1-13
1.G.3	Access to TSP7000 programming	1-13
1.G.4	Communication check	1-13
1.G.5	Configuration tables	1-14
1.G.6	Uploading of programming to TSP7000	1-14
1.H	VEDEOALARM SETUP	1-15
1.H.1	Camera initialization	1-15
1.H.2	System functioning check	1-15

2. SYSTEM

2.1	DESCRIPTION	2-1
2.2	COMPOSITION	2-1
2.3	LAN (ETHERNET) NETWORK	2-1
2.4	SWITCH	2-2
2.5	IP ADDRESS ASSIGNMENT	2-2
2.6	EXAMPLES OF CONNECTION	2-3
2.6.1	TP8-96 VIDEO + TSP7000 + cameras	2-3
2.6.2	TP16-256 + TSP7000 + TSP LINK	2-3

3. CONNECTION

3.1	TP16-256 - TSP7000 - CAMERAS	3-1
3.2	TP16-256 - TSP7000	3-2

3.3	TP8-96 VIDEO - TSP7000 - CAMERAS	3-3
3.3.1	Jumper settings on the CPU board	3-4
3.4	TP8-96 VIDEO - TSP7000 - CAMERAS - SPLITTER	3-5
3.4.1	Jumper settings on the CPU board	3-6
3.5	CAMERAS - CLOSURE OF THE DIGITAL INPUT TOWARDS THE EARTH	3-7
3.5.1	TEC2000 camera	3-7
3.5.2	IP7330 camera	3-7
3.5.3	IP7142 camera	3-8
3.5.4	FD7131 camera	3-8
3.5.5	VS7100 video server	3-8

4. PROGRAMMING OF THE CONTROL PANEL

4.1	CONNECTION OF THE PC TO THE CONTROL PANEL	4-1
4.1.1	Connection of the control panel with PROG USB (TP16-256 - TP8-64 BUS)	4-2
4.1.2	Direct control panel connection by USB (TP8-96 VIDEO - TP16-512 GSM)	4-3
4.2	CREATION OF A NEW SYSTEM IN THE USER ARCHIVE OF THE SOFTWARE	4-5
4.3	CHECK FIRMWARE VERSION	4-6
4.4	PROGRAMMING	4-7
4.4.1	IP address programming by Tecnoalarm software	4-7
4.4.2	IP address programming by LCD console	4-8
4.4.3	Check IP address programming	4-9
4.4.4	Configuration saving	4-10
4.4.5	Upload (send) configuration to the control panel	4-10
4.4.6	Indicators of coherence system configuration	4-11
4.4.7	Verification of the control panel functioning	4-11
4.5	TSP LINK PROTOCOL PROGRAMMING	4-12
4.6	PC CONNECTION TO THE ETHERNET NETWORK	4-13
4.7	VERIFICATION OF THE CONTROL PANEL COMMUNICATION VIA ETHERNET NETWORK	4-15

5. PROGRAMMING OF THE TSP7000

5.1	TSP7000 CONNECTION	5-1
5.2	IP ADDRESS	5-1
5.3	USER FILE CONFIGURATION	5-2
5.4	LOCAL PROGRAMMING	5-4
5.4.1	Configuration	5-4
5.4.2	IP cameras	5-6
5.4.3	Zone-IP camera association	5-7
5.4.4	Access	5-9
5.4.5	Stand-by screen	5-10
5.4.6	Configuration saving	5-14
5.4.7	Connection check	5-14
5.4.8	Upload (send) configuration to the console	5-14
5.4.9	Indicators of coherence system configuration	5-15
5.4.10	Functioning check	5-15
5.5	VIDEO ALARM SETUP	5-16
5.5.1	Initialization of the cameras	5-16

6. CONSOLE

6.1	FRONT VIEW	6-1
6.2	REAR SIDE	6-2
6.2.1	Connection with TP8-96 VIDEO	6-3
6.2.2	Connection with TP16-256 - TP8-64 BUS	6-4

APPENDIX A - SPECIAL PROCEDURES

A.1	IP ADDRESS MODIFICATION	A-3
A.1.1	Modification of the IP address of the PC	A-3
A.1.2	Windows Vista	A-4
A.1.3	Windows 7	A-4
A.2	RESET OF THE CONTROL PANEL	A-5
A.2.1	TP16-256 control panel	A-5
A.2.2	TP8-64 BUS control panel	A-5
A.2.3	TP8-96 VIDEO control panel	A-6
A.2.4	TP16-512 GSM control panel	A-6
A.3	RESET OF THE TEC2000 CAMERA	A-7
A.4	CONFIGURATION OF THE TEC2000 CAMERAS BY THE "INSTALLATION WIZARD 2" SOFTWARE	A-8
A.5	NON-TECNOALARM CAMERAS - PARAMETERS FOR STREAMING	A-14
A.6	RESET OF THE TSP7000 CONSOLE	A-15
A.6.1	Reset with installer code	A-15
A.6.2	Reset without installer code	A-16
A.7	FIRMWARE UPGRADE	A-18

1. SETUP STEPS

**WARNING**

Building a Videoalarm integrated video system components is a complex process. The installation and programming procedure is simplified by the below setup steps. However it is recommended to pay utmost attention when executing this procedure as skipping of some steps can prejudice the correct functioning of the system.

- A Verification of the hardware and software requirements**
 - Hardware
 - Software
 - Initial requirements
- B Local programming of control panel (USB)**
 - Connection of the control panel via USB port
 - Date and time check
- C Ethernet programming (PC-control panel)**
 - Programming the control panel IP address
 - Uploading of programming to the control panel
 - Checking IP address of PC
- D Ethernet connection check (PC-control panel)**
 - Verification of the connection between the control panel and the network
- E IP device connection (TSP7000-cameras)**
 - TSP7000 connection
 - TSP7000 initiation
 - Camera connection
- F Camera configuration**
 - Installation of Wizard 2 software
 - Verification of the presence of the jumper on the cameras
- G TSP7000 configuration**
 - Adding of TSP7000 to user file
 - Selection of TSP LINK protocol
 - Access to TSP7000 programming
 - Communication check
 - Configuration tables
 - Uploading of programming to TSP7000
- H VIDEOALARM setup**
 - Camera initialization
 - System functioning check

1.A VERIFICATION OF THE HARDWARE AND SOFTWARE REQUIREMENTS

1.A.1 HARDWARE

Compatible control panels

- TP16-256 From firmware rel. 3.0 onwards
- TP8-64 BUS From firmware rel. 2.0 onwards
- TP8-96 VIDEO From firmware rel. 0.5.14 onwards
- TP16-512 GSM From firmware rel. 0.5.14 onwards

Videotalarm cameras

- TEC2000/LF IP Tecnoalarm cameras 640x480 fixed lens
- TEC2000/LI IP Tecnoalarm cameras 640x480 interchangeable lens

Videotalarm Vivotek cameras

- IP7330 Outdoor IP cameras 640x480 fixed lens
- IP7142 Outdoor IP cameras 640x480 varifocal lens
- FD7130 Ceiling-mount IP cameras varifocal lens
- FD7131 Ceiling-mount IP cameras fixed lens

Videotalarm Vivotek Video Server

- VS7 100 Videoserver for connection of coaxial cameras

Programming interface

- PROG USB Multifunction TTL, USB, RS485 RS232 interface
- TSPLINK TTL interface

Ethernet switch

(not necessary with TP8-96 VIDEO control panel)

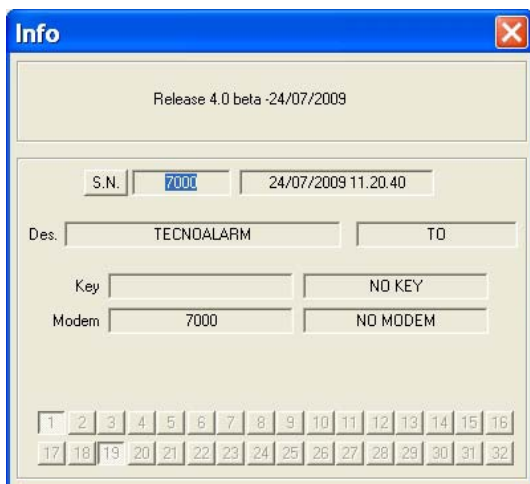
- Ethernet switch 10-100 Min. 8 ports

Ethernet network cable

- UTP ethernet cable Cat 5 Max. 100 meters length for each section

1.A.2 SOFTWARE

- Camera configuration software Installation Wizard 2 provided with cameras
- Tecnoalarm software Version 4.0 or following
- Software license Local programming or remote management with video system management (key 19 on the license)
- CDM 2.06.00 WHQL Certified
- PROG USB driver **tecnusb.inf**
- USB Tecnoalarm driver (for TP8-96 VIDEO and TP16-512 GSM control panels)



Info window showing release information and configuration fields:

- Release 4.0 beta -24/07/2009
- S.N.: 7000, Date: 24/07/2009 11.20.40
- Des.: TECNOALARM, TO
- Key: NO KEY
- Modem: 7000, NO MODEM
- Grid of numbers 1 to 32

1.A.3 INITIAL REQUIREMENTS

PC

- Tecnoalarm remote management software installed with appropriate license
- Installation Wizard 2 software for the installed devices
- IP address of the PC with the same class as the one for the cameras and the video consoles (i.e. 192.168.95.10)
Use the IP address 192.168.95.10 because it has the same class as, but it is distant enough from, that of the camera and the video console.



WARNING

Before changing the IP address of the PC, always check with the network administrator possible problems and/or limitations.

MODIFICATION OF THE IP ADDRESS OF THE PC

See § A.1

CONTROL PANEL RESET

See § A.2

TEC2000 CAMERA RESET

See § A.3

1.B LOCAL PROGRAMMING OF THE CONTROL PANEL (USB)

1.B.1 CONNECTION OF THE CONTROL PANEL VIA USB PORT

Program the control panel as usual through the internal USB port (TP8-96 VIDEO and TP16-512 GSM) or through the PROG USB interface (TP8-64 BUS and TP16-256) and using the Tecnoalarm software from the version 4.0 onwards (see chapter 4).

1.B.2 DATE AND TIME CHECK

Verify the correspondence of date and time between the control panel and the PC. If necessary synchronize them.



WARNING

For a correct functioning of the system, date and time on the control panel and on the PC must be synchronized.

1.C ETHERNET PROGRAMMING (PC-CONTROL PANEL)

1.C.1 PROGRAMMING THE CONTROL PANEL IP ADDRESS

TP8-96 VIDEO or TP16-512 GSM control panels

It is possible to program the IP address of the TP8-96 VIDEO and TP16-512 GSM

192.168.95.150 by console (installer code, Ethernet menu + IP address) or by PC using the Tecnoalarm software.

See the beside image.

See § 4.4.1

TP8-64 BUS or TP16-256 control panels

The IP address of the TP8-64 BUS and TP16-256 can be programmed by Tecnoalarm software only and it must be the same of the one assigned to the TSP7000 console.

Program the address **192.168.95.151**

See § 4.4.1.

1.C.2 UPLOADING OF PROGRAMMING TO THE CONTROL PANEL

Once programming is completed, upload it to the control panel.

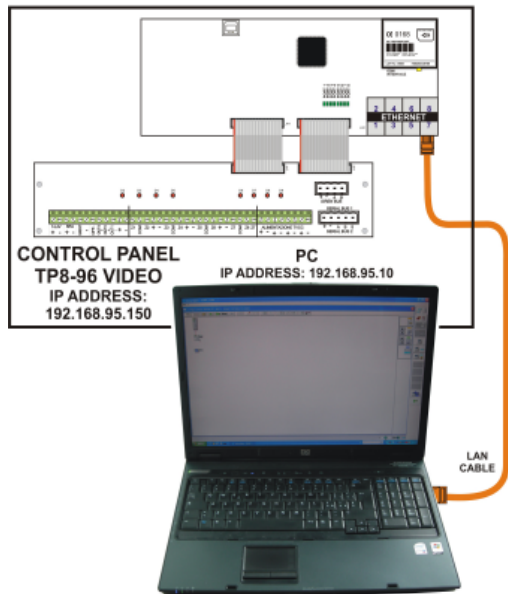
See § 4.4.5

1.C.3 CHECKING IP ADDRESS OF THE PC

Check if the IP address of the PC used for programming has the same class as the system. Program the address **192.168.95.10**.

See § A.1

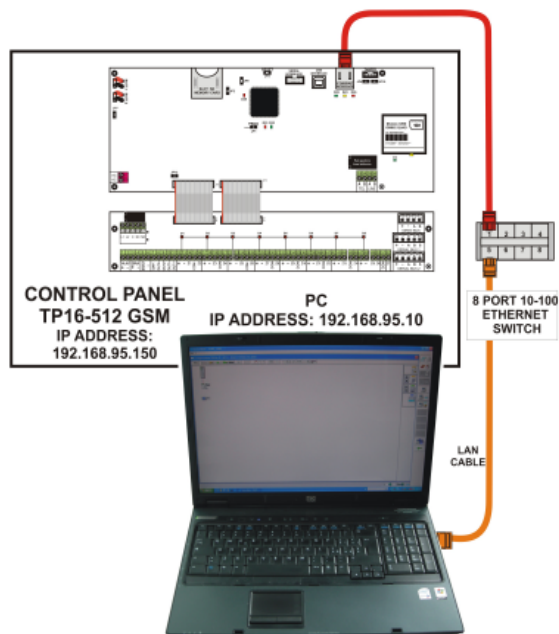
1.D ETHERNET CONNECTION CHECK (PC-CONTROL PANEL)



Remove the USB cable used for local programming of the control panel.

TP8-96 VIDEO control panel

Connect the UTP CAT 5 network cable between PC and the 8 ports Ethernet switch of the control panel. It is recommended to use the inputs 7 and 8 or one of the inputs 1 to 6. For this, insert either PWR1-ETH, PWR2-ETH or PWR3-ETH jumper so as to close the two positions on the left. See § 4.6

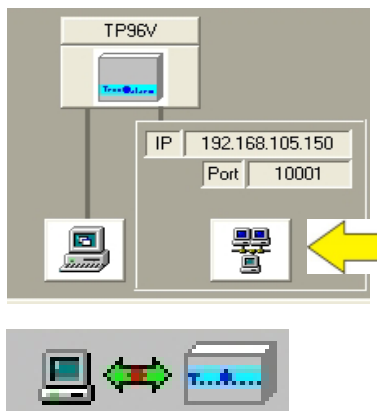


TP16-512 GSM control panel

Connect an external 10-100 switch to the Ethernet port of the control panel. Connect a network cable to the PC and to the switch.

TP16-256 control panel

TP8-64 BUS control panel



1.D.1 VERIFICATION OF THE CONNECTION BETWEEN THE CONTROL PANEL AND THE NETWORK

Once the control panel has been connected to the Ethernet network, verify its correct functioning.

- Start the Tecnoalarm software
- Open the user archive and select the system
- Enter to the local programming environment
- Click on the icon corresponding to the Ethernet connection (as indicated by the arrow on the beside image)
- Verify if the communication between the Tecnoalarm software and the selected control panel is active by means of the arrow in the lower right hand corner of the screen:
 - Green arrow = Ethernet network communication present
 - White arrow = Ethernet network communication absent



WARNING

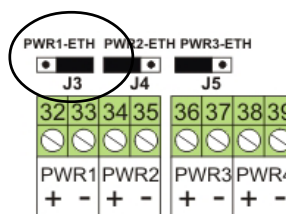
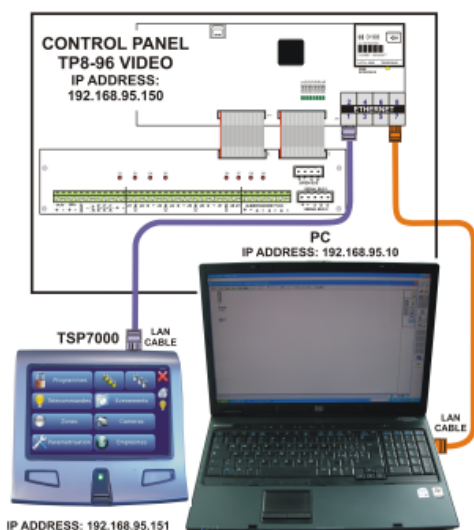
The connection is active when the IP address assigned to the control panel corresponds to that of the Tecnoalarm software.

1.E IP DEVICE CONNECTION (TSP7000-CAMERAS)

1.E.1 TSP7000 CONNECTION

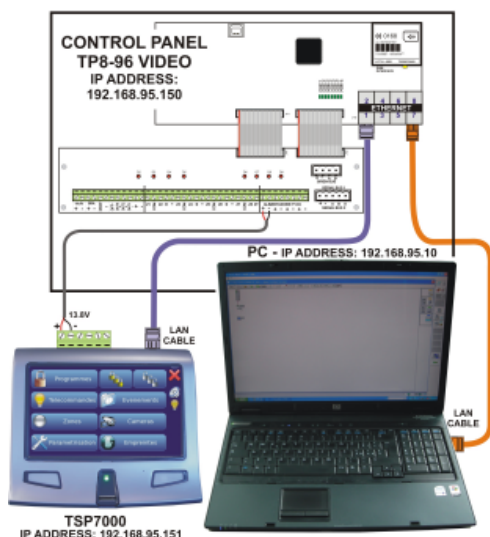
Power supply via Ethernet network

Connect a UTP CAT 5 network cable to the TSP7000 video console and the 8 ports Ethernet switch of the control panel (if possible, use the Ethernet inputs 1 to 6). On the CPU board of the control panel, insert either the PWR1-ETH, PWR2-ETH or PWR3-ETH jumper so as to close the two positions on the right. Using the input 1, insert the PWR1-ETH jumper so as to close the two positions on the right (ETH).



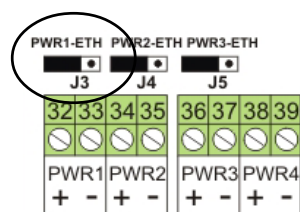
WARNING

By connecting the console to the Ethernet port 1 and by inserting the PWR1-ETH jumper over the two positions on the right, power supply of the console is provided by the switch through the network cable. It is not necessary to connect the power supply connector.



External power supply

Connect a UTP CAT 5 network cable to the TSP7000 video console and to the 8 ports Ethernet switch of the control panel (use any input). Insert either the PWR1-ETH, PWR2-ETH or PWR3-ETH jumper so as to close the 2 positions on the left. Using the input 1, insert the PWR1-ETH jumper over the two positions on the left (ETH).





1.E.2 TSP7000 INITIATION

The console is initiated as soon as power supply is connected.

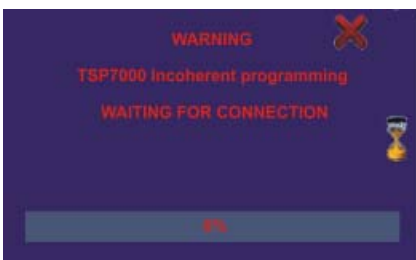


Once the initiation has been completed (which can require a few minutes), on the screen is viewed the beside page.

Program the IP address of the TSP7000 video console:

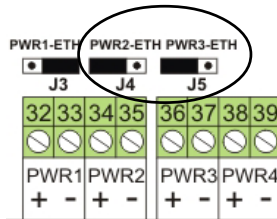
- Enter the IP address **192.168.95.151** on the virtual keypad viewed
- Touch **ENTER**

The console is initiated.



Wait until the beside image is viewed.

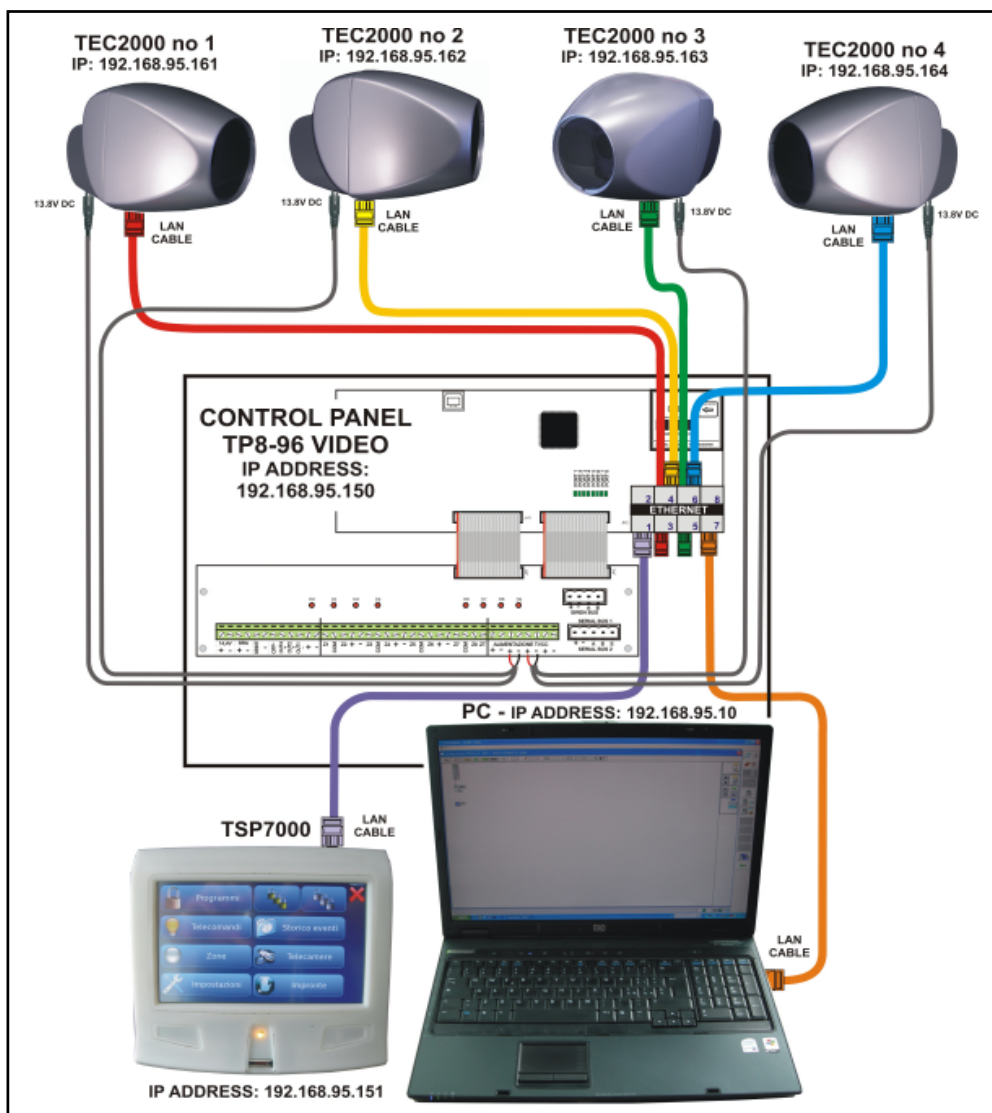
The TSP7000 video console is connected to the network and it is waiting for programming by PC.

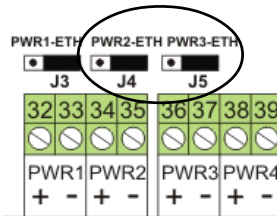


1.E.3 CAMERACONNECTION

Power supply through the TP8-96 VIDEO control panel
Connect a UTP CAT 5 network cable to the cameras and to the 8 ports switch of the control panel (it is recommended to use the Ethernet inputs 1 to 6). Insert either PWR1-ETH, PWR2-ETH or PWR3-ETH jumper so as to close the two positions on the left.

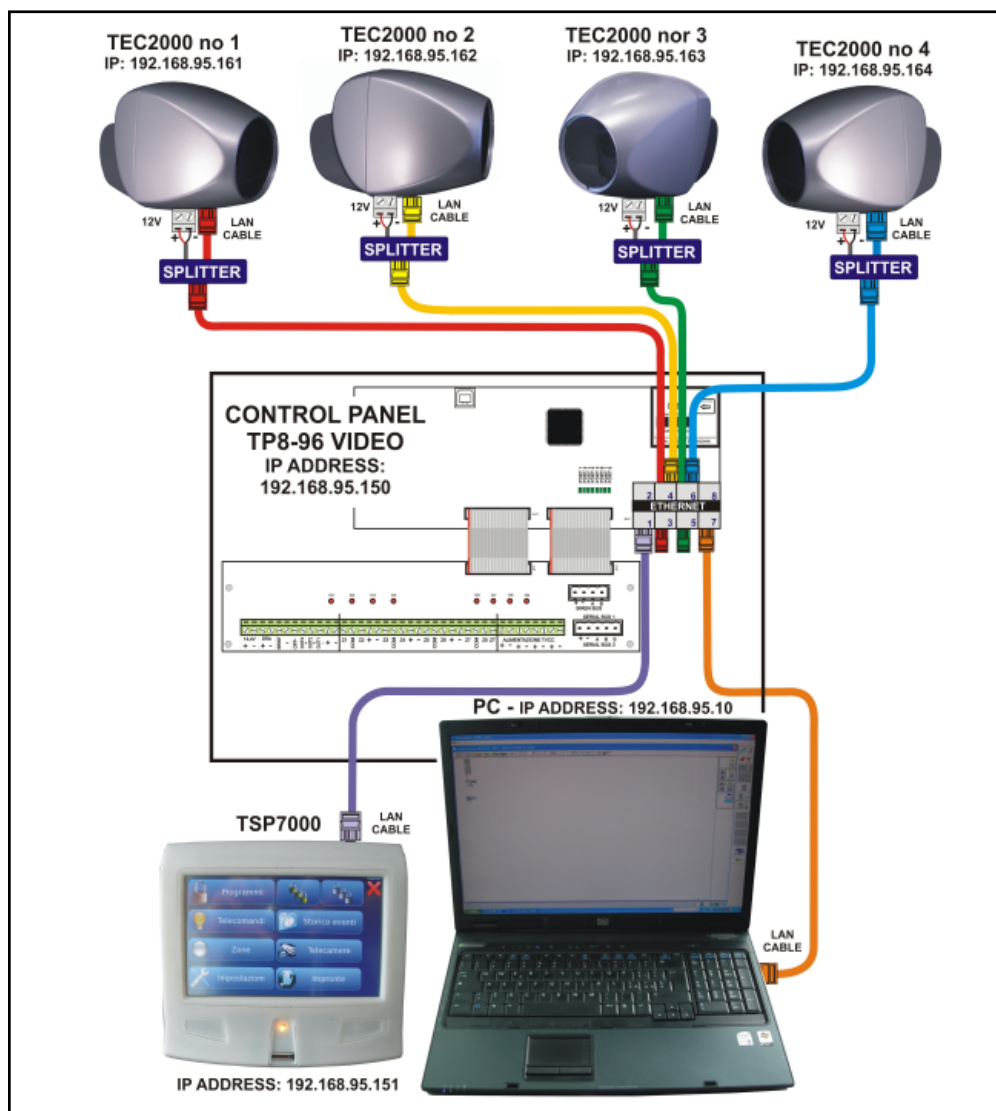
Connect the power supply cable of the cameras to the appropriate terminals of the control panel respecting the polarity (white wire = positive voltage and black wire = negative voltage).





TP8-96 VIDEO + Splitter power supply through the Ethernet network

Connect a UTP CAT 5 network cable to the cameras and to the 8 ports switch of the control panel (it is recommended to use the Ethernet inputs 1 to 6). Insert either the PWR1-ETH, PWR2-ETH or PWR3-ETH jumper so as to close the two positions on the right. Connect the power supply cable of the cameras to the appropriate terminals of the control panel respecting the polarity (white wire = positive voltage and black wire = negative voltage).



1.F CAMERA CONFIGURATION

1.F.1 "INSTALLATIONWIZARD2" SOFTWARE

Install the software for the detection and the configuration of the cameras **Installation Wizard 2** on the PC.



Start the Installation Wizard 2 software. For each camera detected on the network, it is necessary to program:

- The password
- Synchronize date and time with those of the PC
- IP address
- Subnet Mask
- Gateway

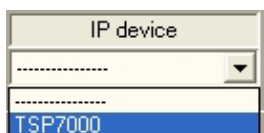
See § A.4.

1.F.2 VERIFICATION OF THE PRESENCE OF THE JUMPER ON THE CAMERAS

Always verify the presence of the hardware jumper between digital input and ground terminal on the reverse side of the camera.

See § 3.3.1 and 3.4.1

1.G TSP7000 CONFIGURATION



1.G.1 ADDING TSP7000 TO USER FILE

Add the TSP7000 console on the user file of the Tecnoalarm software in the "IP devices" section. See § 5.3.

1.G.2 SELECTION OF TSP LINK PROTOCOL (TP8-64 BUS AND TP16-256)

Connect the TSP LINK and select TSP LINK protocol (master code, menu, options, protocol). See § 4.5.



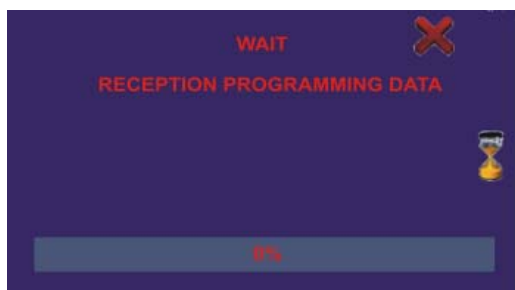
1.G.3 ACCESS TO TSP7000 PROGRAMMING

Click on the beside icon of the user file (Tecnoalarm software) to enter video console programming. See § 5.4.



1.G.4 COMMUNICATION CHECK

Check communication between Tecnoalarm software and TSP7000. The communication is active if the arrow is green.



Wait until the beside image is viewed on the video console.

1.G.5 CONFIGURATION TABLES

Complete the TSP7000 configuration table as requested.

	WARNING
	A Check if as many cameras have been programmed as have been installed (add or remove if necessary). B Check if the password programmed for each camera corresponds to the one programmed during camera configuration using the Installation Wizard 2 software. C For each camera it is compulsory to fill in the following items: ● Description name associated to the camera. It will be viewed on the photos registered by the camera permitting its identification ● IP address must correspond to programming § 1.F.2 ● User must correspond to programming § 1.F.2 ● Password must correspond to programming § 1.F.2 ● Page streaming address of the cameras ● Type type of cameras



1.G.6 UPLOADING OF PROGRAMMING TO TSP7000

To upload programming to the TSP7000, click on the opposite icon (arrow right key).
See § 5.4.8.



Wait until uploading has been completed and the stand-by screen is viewed on the console.
See § 5.4.10.

1.H VIDEOALARM SETUP



1.H.1 CAMERA INITIALIZATION

The camera must be initiated to function correctly.

Enter the installer code on the TSP7000 video console, then touch **VIDEOALARM Setup**. See § 5.5

Wait until the initialization has been completed then verify all the cameras have been initiated correctly.

1.H.2 SYSTEM FUNCTIONING CHECK

Check if the system functioning (control panel + TSP7000) is coherent with programming and if all cameras are found.

2. SYSTEM

2.1 DESCRIPTION

The Videoalarm integrated video system is both a complete alarm and a videosurveillance system integrating anti-intrusion functions with viewing of max. 24 cameras.

The heart of the system is the TSP7000 video console with 7 inches touch screen which permits the management of the system (arming/disarming of programs, viewing of the status zones, activation/deactivation of remote controls), a series of videosurveillance functions (viewing of video stream recorded by 1 to 4 cameras), a biometric finger print reader being able to replace access code typing. When the control panel is armed or in stand-by (according to programming) it is also possible to view the video streams of 1 to 4 cameras. If an event is detected, a photo sequence is logged, in addition it is possible to pop-up the video stream of the camera in question in order to immediately show the event.

2.2 COMPOSITION

The integrated video system is composed of:

- Control panel
 - Cameras
 - Programming interfaces
 - 10-100 Ethernet switch
 - UTP Cat 5 Ethernet cables
 - Tecnoalarm software
 - Software license
 - Camera configuration software
 - PC
- TP16-256, TP8-96 VIDEO, TP16-512 GSM, TP8-64 BUS
max. 24 IP cameras
PROG USB (multifunction TTL, USB, RS485)
TSP LINK (TTL)
Min. 8 ports
Not necessary with TP8-96 VIDEO control panel as it manages max. 6 cameras.
Max. 100 meters length per section
Version 4.0 and following for configuration of the control panel and TSP7000 videoconsole
Local programming or remote management with video system management
Installation Wizard 2 (provided with cameras)
For programming

2.3 LAN (ETHERNET) NETWORK



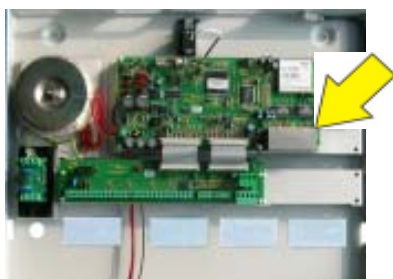
The control panel is connected to the cameras and to the console through the local area network (LAN) by using a UTP Cat 5 network cable.

The length for each cable must be less than 100 meters. Each device connected via LAN network must be identified by a unique code (IP address).

2.4 SWITCH



External 8 ports switch



TP8-96 VIDEO control panel
internal 8 ports switch

The network devices are connected between each other through a switch permitting the management of the informations traffic between all the devices.

The switch are easily available as they are used for all PC network connections.

Different types of switches are available according to the communication speed on the network (10-100MBps or the newest and the most performing models 10-100-1000MBps) and the number of inputs, i.e. devices which be connected simultaneously (4, 5, 8, 16, 32 etc).

For the TSP7000 connection with the cameras, it is necessary to use one or more switches according to the number of devices which must be connected on the network.

The TP8-96 VIDEO control panel, which is equipped by an internal switch with 8 ports (10-100MBps), permits the direct connection of 8 devices. If necessary, it is possible to extend the network by connecting one or more external switches to one of the inputs of the internal switch of the TP8-96 VIDEO control panel.

2.5 IP ADDRESS ASSIGNMENT

Each device must be programmed in order to be identified by the system.

For this reason, in order to avoid all kind of confusion or bad interpretation of the messages, it is important that two devices never have the same address.

Program the devices connected on the network with the addresses from the below list in order to simplify installation:

● PC	192.168.95.10
● TP8-96 VIDEO	192.168.95.150
● TP16-512 GSM	192.168.95.150
● TP16-256	192.168.95.151
● TP8-64 BUS	192.168.95.151
● TSP7000	192.168.95.151
● Camera 1	192.168.95.161
● Camera 2	192.168.95.162
● Camera 3	192.168.95.163
● Camera 4	192.168.95.164
● Camera 5	192.168.95.165
● Camera 6	192.168.95.166

and so on until the last camera (max. 24).

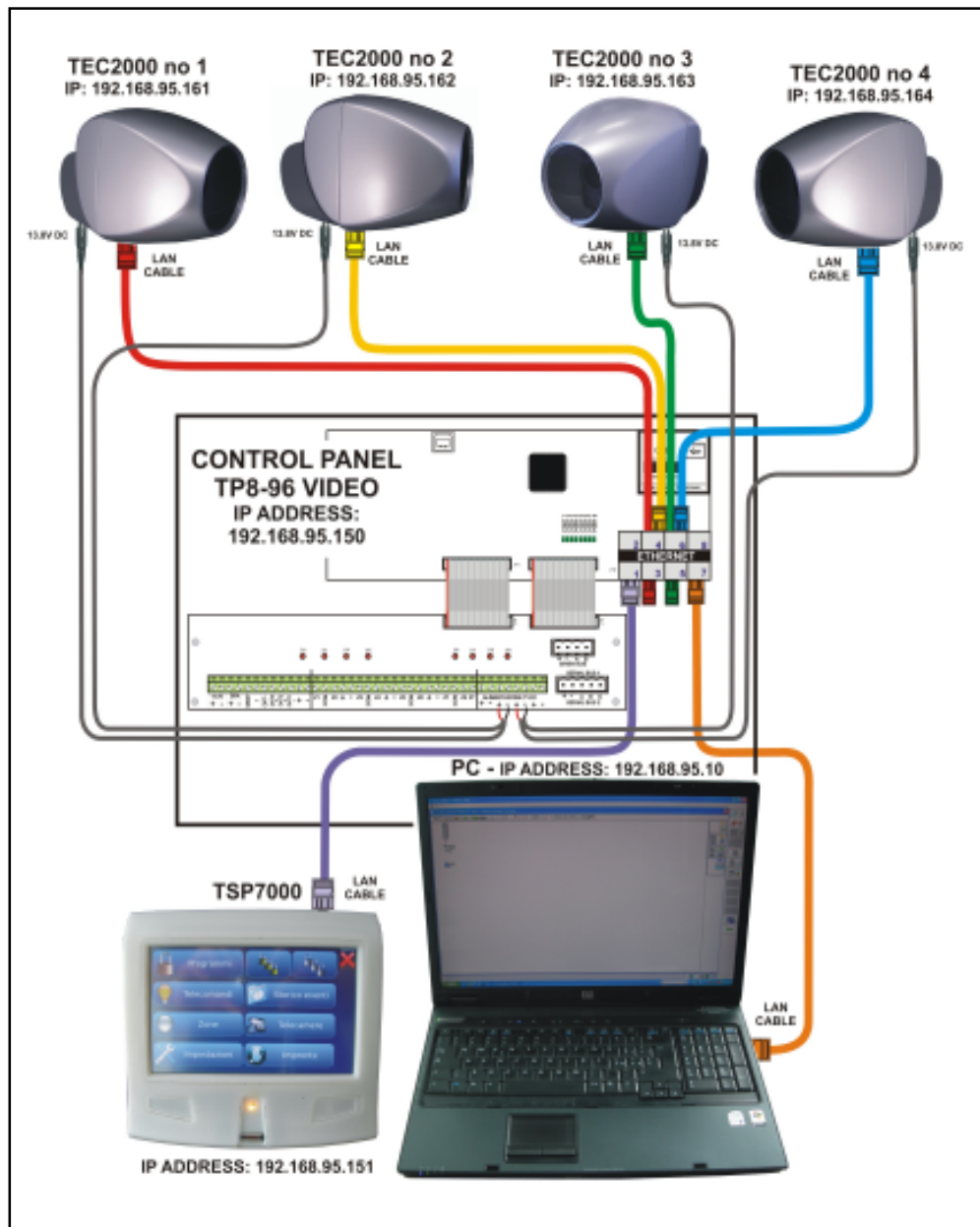


WARNING

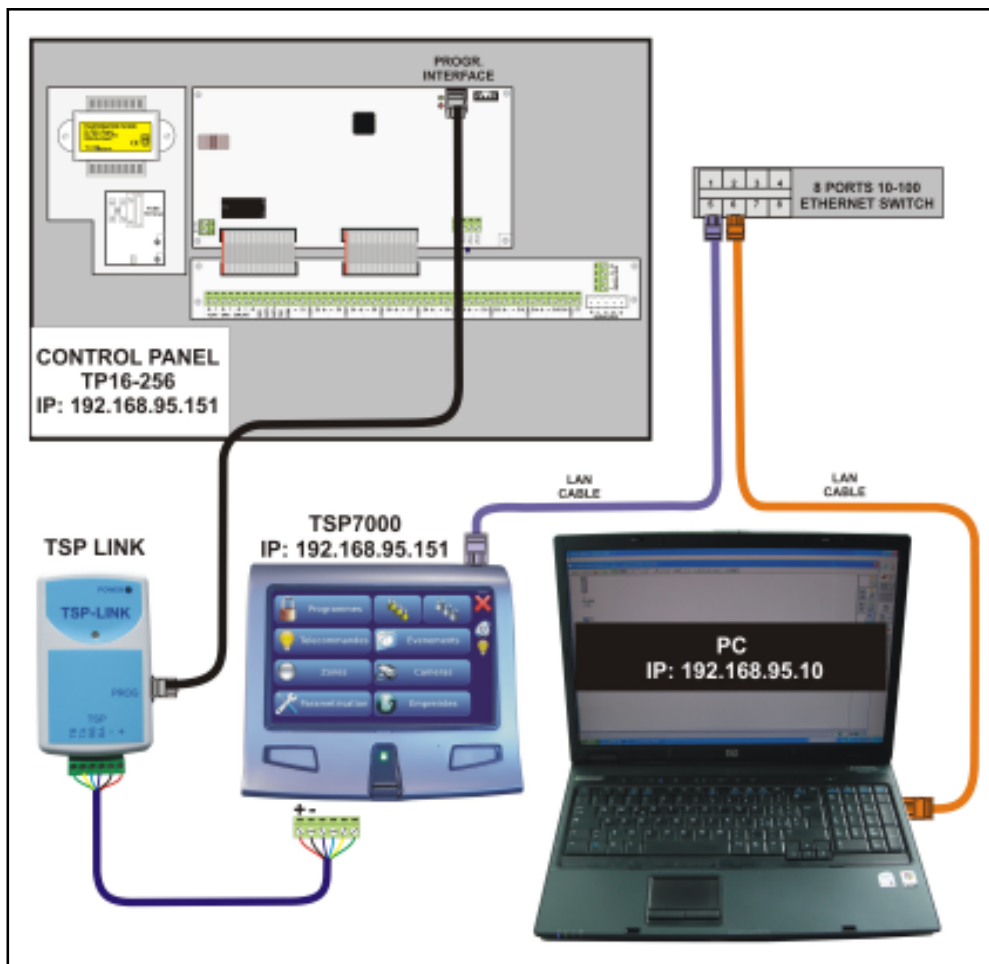
In order to permit the correct functioning of the system, respect the above addresses and never use the same IP address twice, exception made for the connection of TSP7000 to TP8-64 BUS/TP16-256 where the address **must** be the same.

2.6 EXAMPLES OF CONNECTION

2.6.1 TP8-96 VIDEO + TSP7000 + CAMERAS

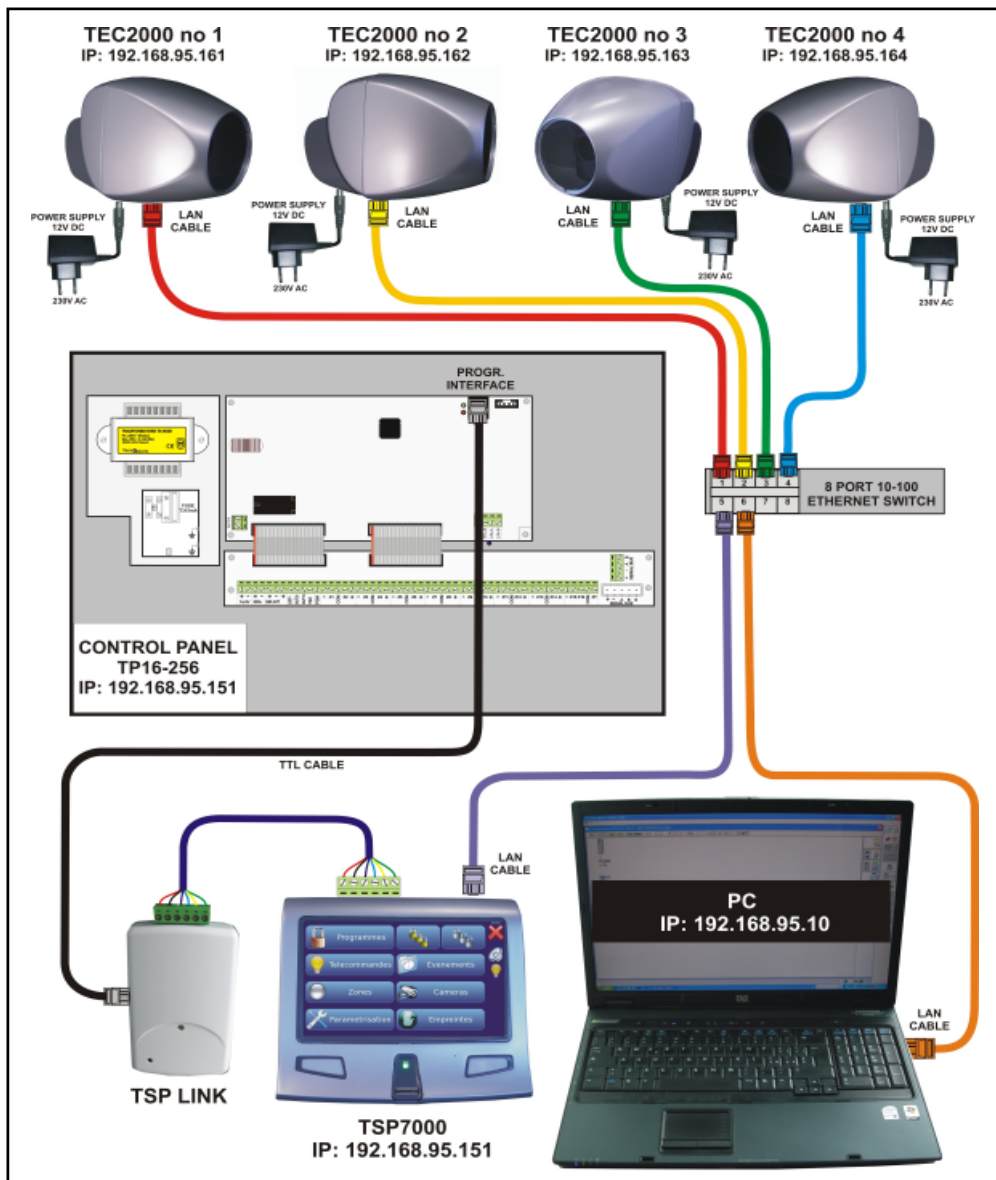


2.6.2 TP16-256 + TSP7000 + TSP LINK

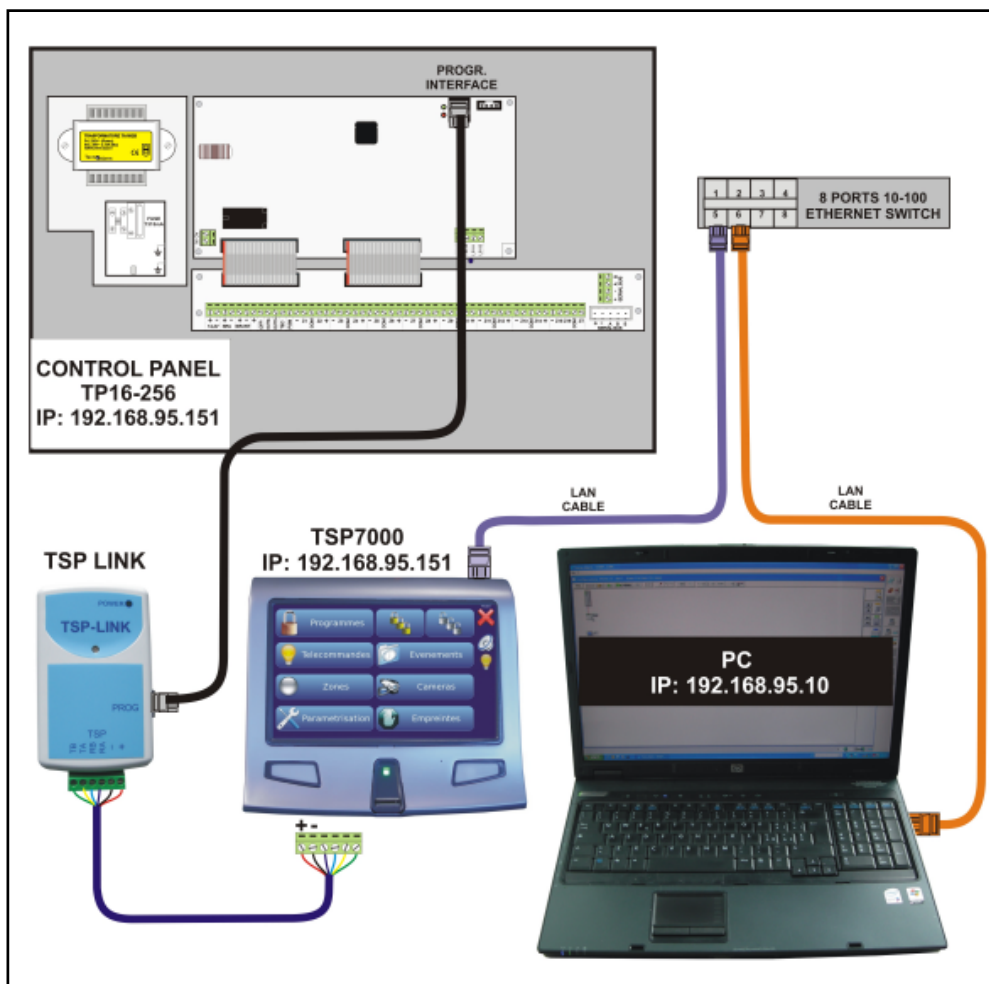


3. CONNECTION

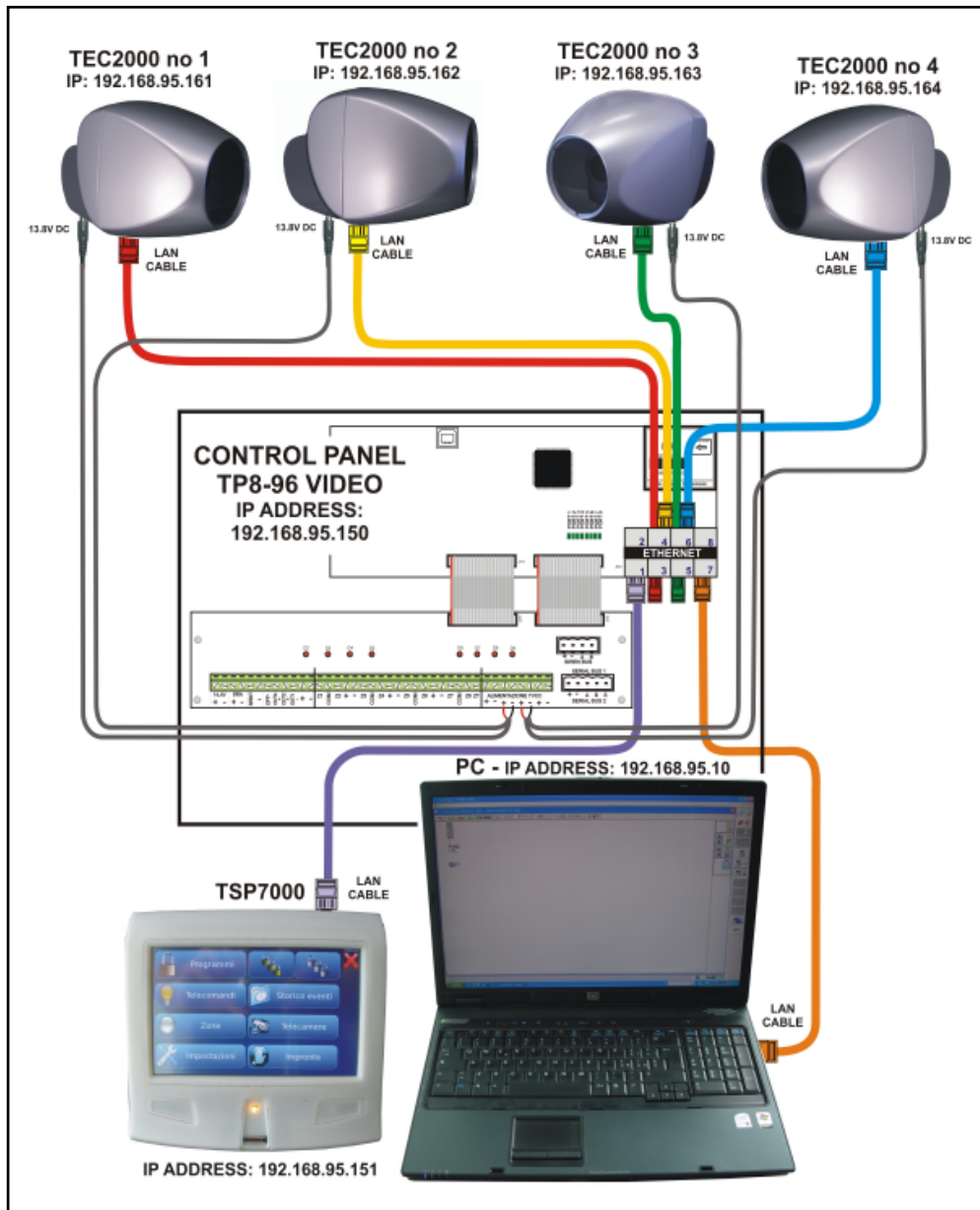
3.1 TP16-256 - TSP7000 - CAMERAS



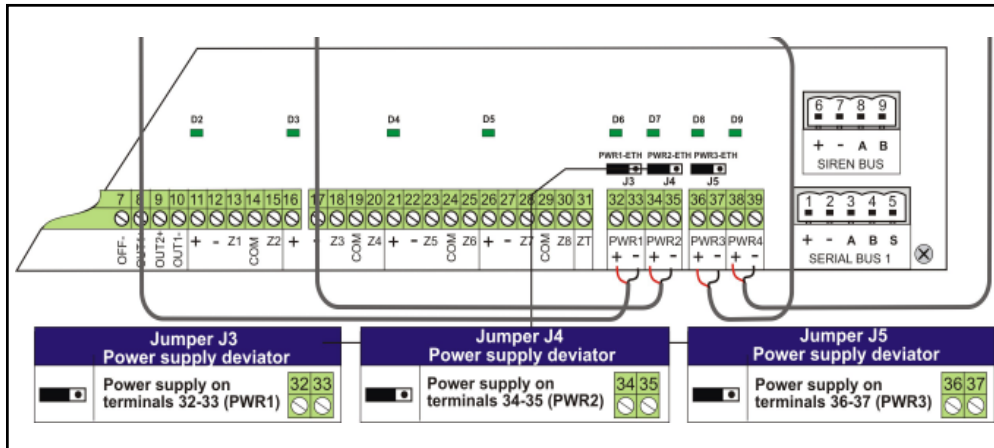
3.2 TP16-256 - TSP7000



3.3 TP8-96 VIDEO - TSP7000 - CAMERAS



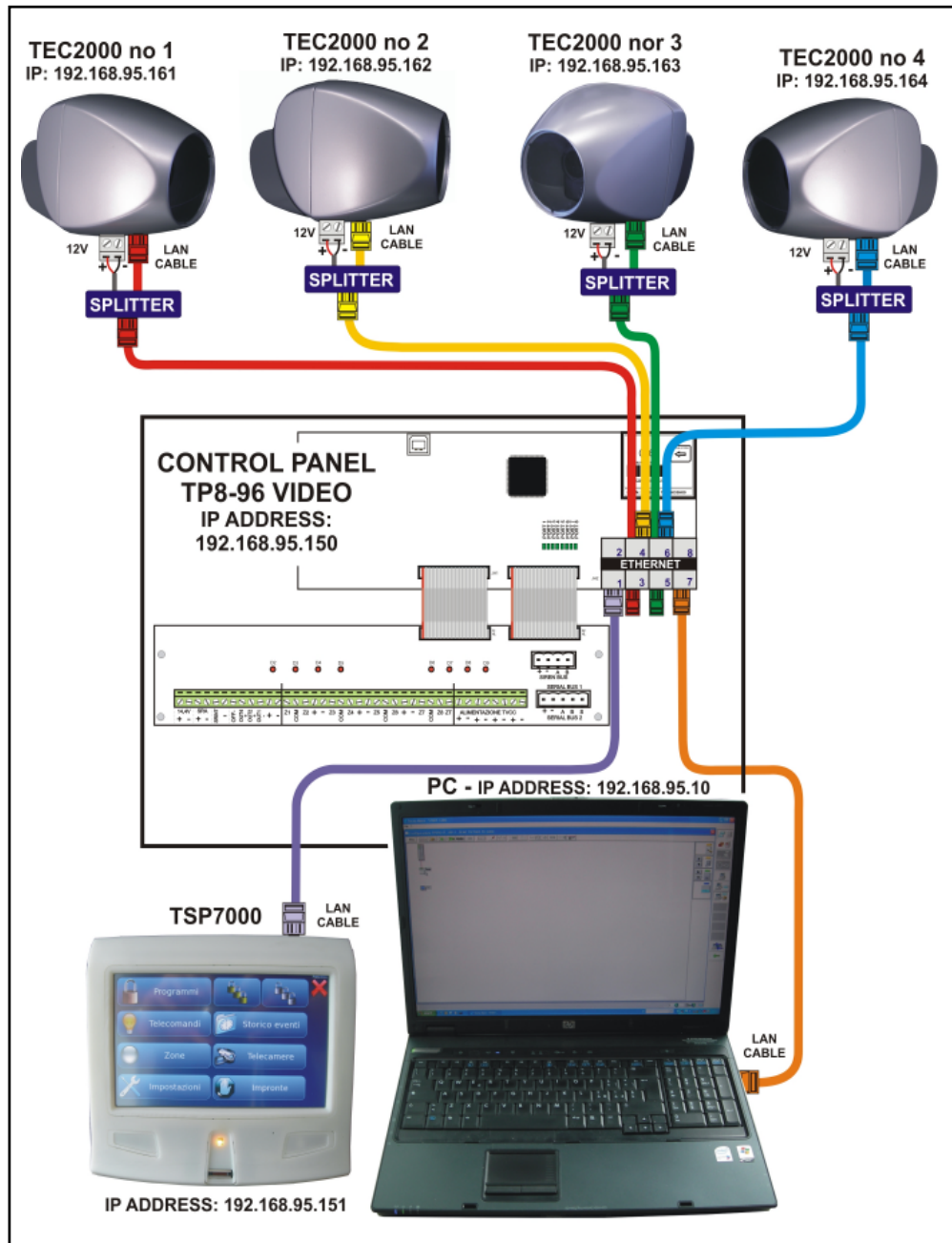
3.3.1 JUMPER SETTINGS ON THE CPU BOARD



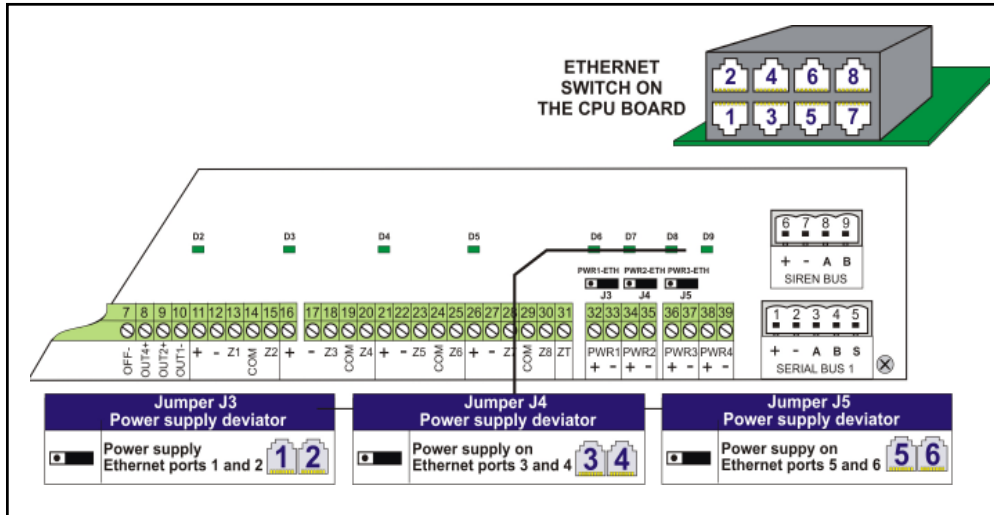
WARNING

For power supply of the cameras through the corresponding terminals, i.e. PWR1 (terminals 32 and 33), PWR2 (terminals 34 and 35) and PWR3 (terminals 36 and 37), insert the J3, J4 and J5 jumpers as indicated in the above image (close the two pins on the left).
The PWR4 output (terminals 38 and 39) is always present.

3.4 TP8-96 VIDEO - TSP7000 - CAMERAS - SPLITTER



3.4.1 JUMPER SETTINGS ON THE CPU BOARD

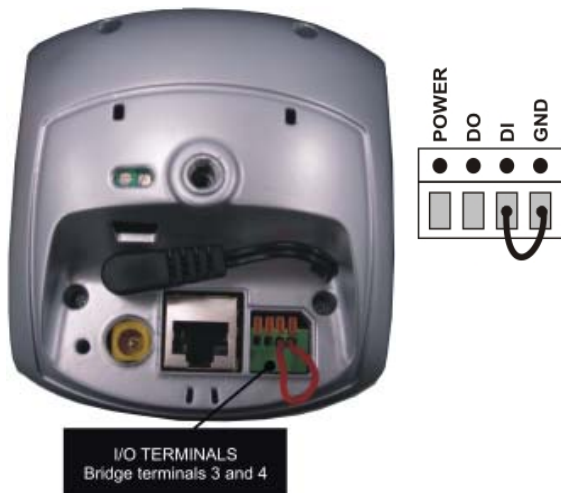


WARNING

Power supply of the cameras can be supplied via Ethernet network using the appropriate devices, i.e. **splitter**. In this case, it is not necessary to connect the power supply cables of the cameras to the corresponding control panel terminals. For direct power supply through Ethernet cable, simply insert the J3, J4 and J5 jumper as indicated in the above image (close the two pins on the right).

3.5 CAMERAS - CLOSURE OF THE DIGITAL INPUT TOWARDS THE EARTH

3.5.1 TEC2000 CAMERA



- I/O TERMINALS**
- 1 Power supply
 - 2 Digital output
 - 3 Digital input
 - 4 Earth (GND)



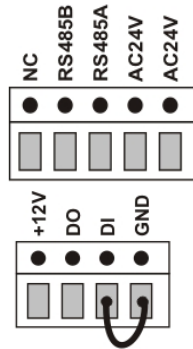
WARNING

The camera must be programmed in a way that it record the photos if an event is detected. In addition, the terminals 3 and 4 (see terminals on the rear side of the camera) must be jumpered.

3.5.2 IP7330 CAMERA



- I/O TERMINALS**
- 1 24V AC power supply
 - 2 24V AC power supply
 - 3 Digital input
 - 4 Earth (GND)



3.5.3 IP7142 CAMERA

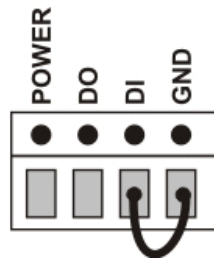
I/O TERMINALS 1

- 1 Not connected
- 2 RS485 - B
- 3 RS485 - A
- 4 24V AC power supply
- 5 24V AC power supply

BORNIER I/O 2

- 1 12V power supply
- 2 Digital output
- 3 Digital input
- 4 Earth (GND)

Jumper between DI and GND terminals

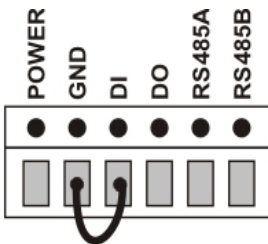


3.5.4 FD7131 CAMERA

I/O TERMINALS

- 1 Power
- 2 Digital output
- 3 Digital input
- 4 Earth (GND)

Jumper DI and GND terminals



3.5.5 VS7100 VIDEO SERVER

I/O TERMINALS

- 1 Power
- 2 Earth (GND)
- 3 Digital input
- 4 Digital output
- 5 RS485 - B
- 6 RS485 - A

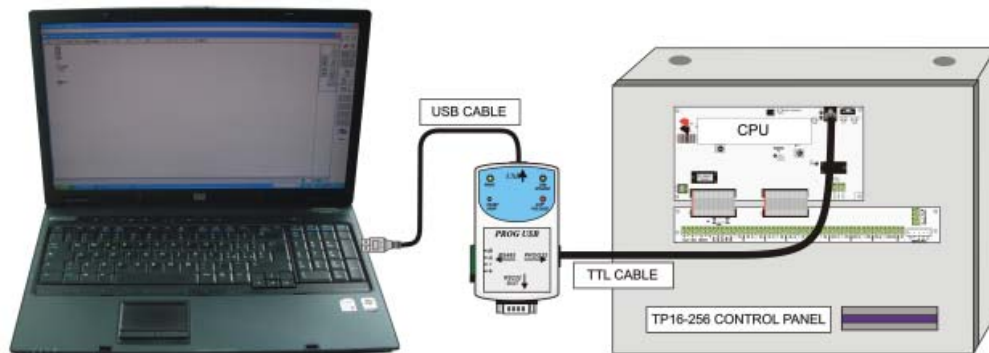
Jumper DI and GND terminals

4. PROGRAMMING OF THE CONTROL PANEL

4.1 CONNECTION OF THE PC TO THE CONTROL PANEL

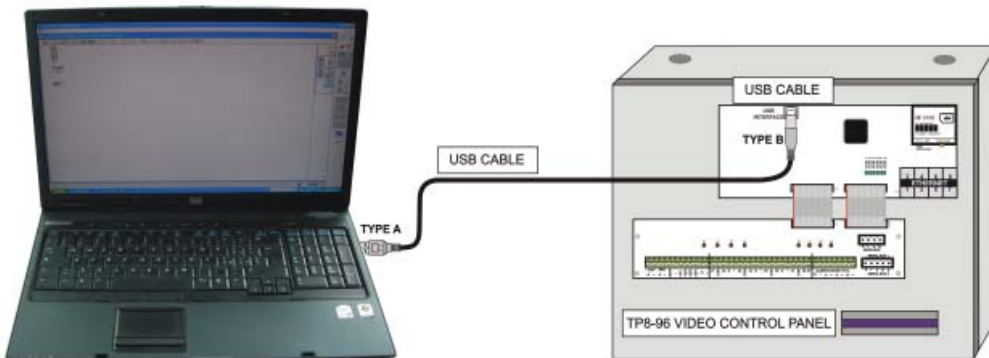
TP16-256 CONNECTION

- Connect the USB port of the PC to the USB connector of the PROG USB interface
- Connect the TTL connector of the PROG USB interface to the corresponding connector (PROGR. INTERFACE) of the CPU board of the control panel



TP8-96 VIDEO CONNECTION

- Connect the USB port of the PC to the USB connector of the control panel CPU board.

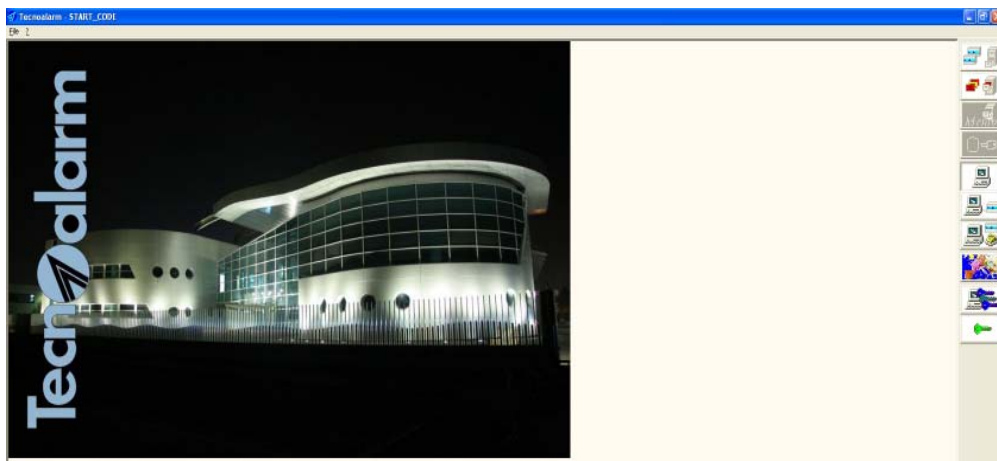


4.1.1 CONNECTION OF THE CONTROL PANEL WITH PROG USB (TP16-256 - TP8-64 BUS)

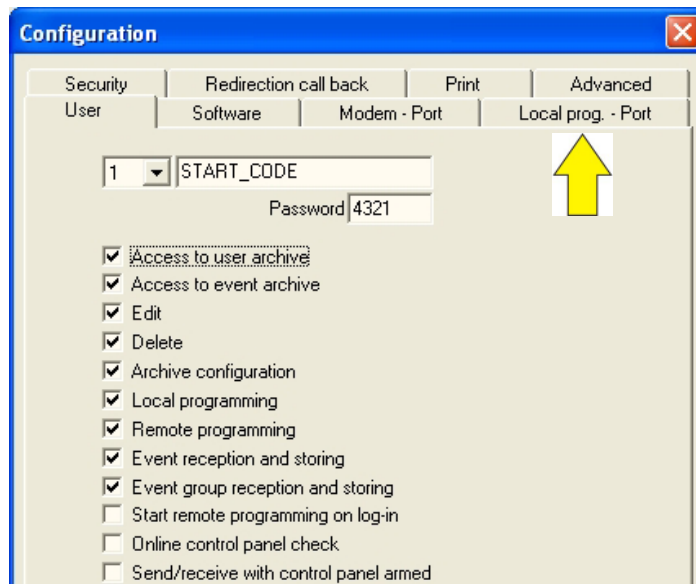


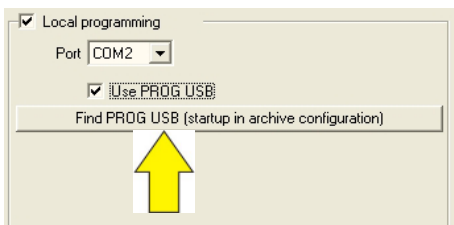
USB PORT ASSIGNMENT BY SOFTWARE

Click on the beside icon to start the Tecnoalarm software.
After having entered the password (default 4321), on the screen is viewed:



Click on the beside software configuration icon and select the **Local prog. - Port** table.





Enable the **Local programming** and **Use PROG USB** items, then click on **find PROG USB** as indicated by the beside image.



Once the search has been completed, on the screen is viewed the beside image. Click **OK** twice to confirm and close the software configuration tables.

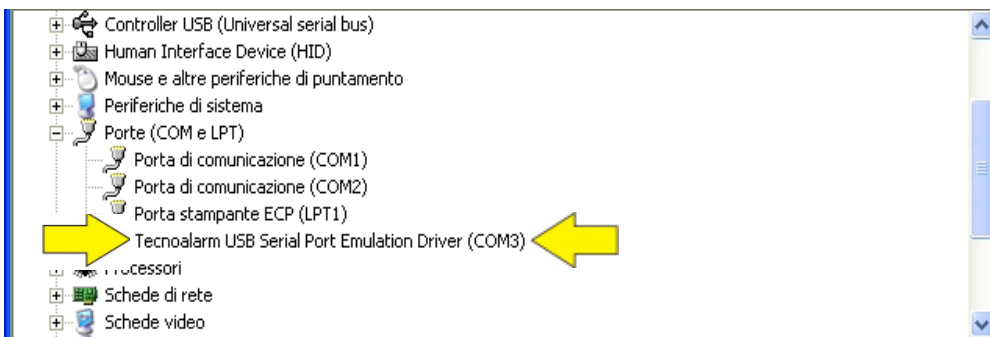
Enter again the password to confirm and restart the software.

4.1.2 DIRECT CONTROL PANEL CONNECTION BY USB (TP8-96 VIDEO - TP16-512 GSM)

Connect the USB cable to the control panel then to the PC.
Check the virtual port number created by the system (COM).

Select Start
Select Control panel
Select System
Select Hardware
Select Device manager
Select Port (COM and LPT)

Once the Tecnalarm USB Driver has been installed correctly, on the screen is viewed the beside image:



Check the number of the COM serial port which is assigned to the USB port used.



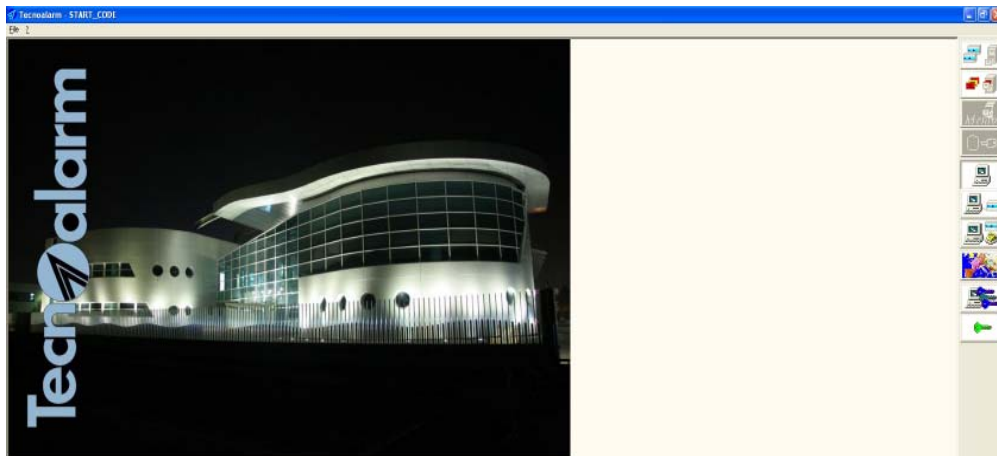
WARNING

Each time a USB port of the PC is used, it is possible that the operating system assigns a different COM port. Always check the assigned port before continuing programming.

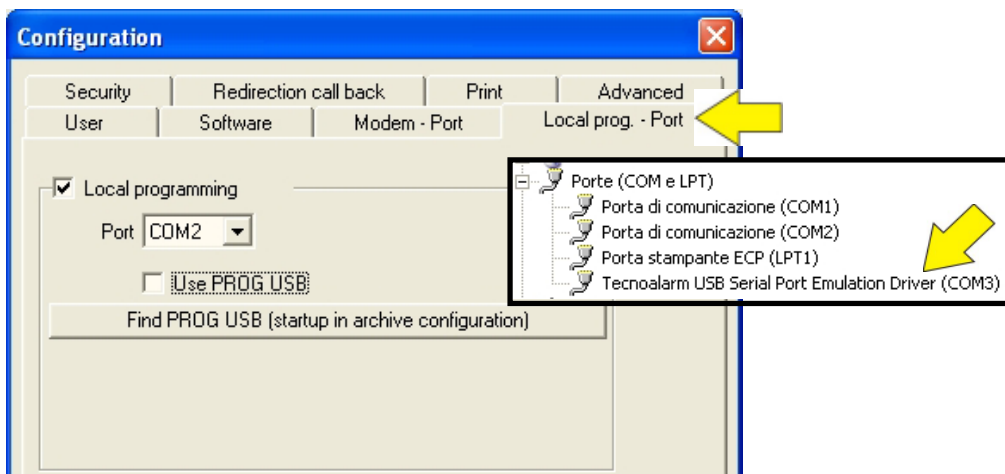


USB PORT ASSIGNMENT BY SOFTWARE

Click on the beside icon to start the Tecnoalarm software.
After having entered the password (default 4321), on the screen is viewed:



Click on the beside software configuration icon and select the **Local prog. - Port** table.

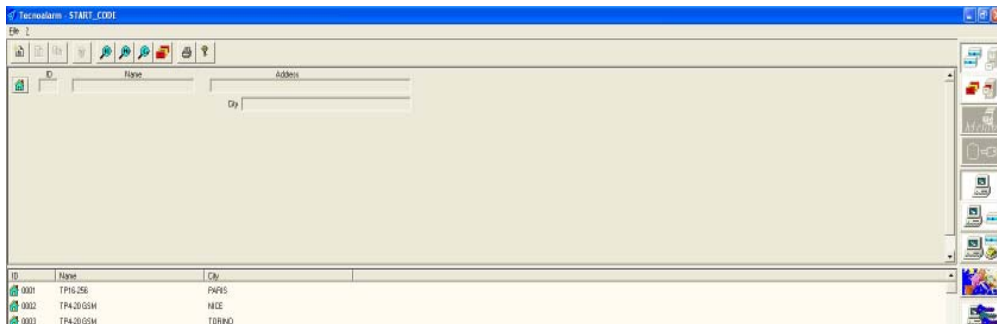


Enable the **Local progr.** item and select the COM port found in **Device manager** and disable the **Use PROG USB** function.
Click **OK** twice to confirm and close the software configuration tables.
Enter again the password to confirm and restart the software.

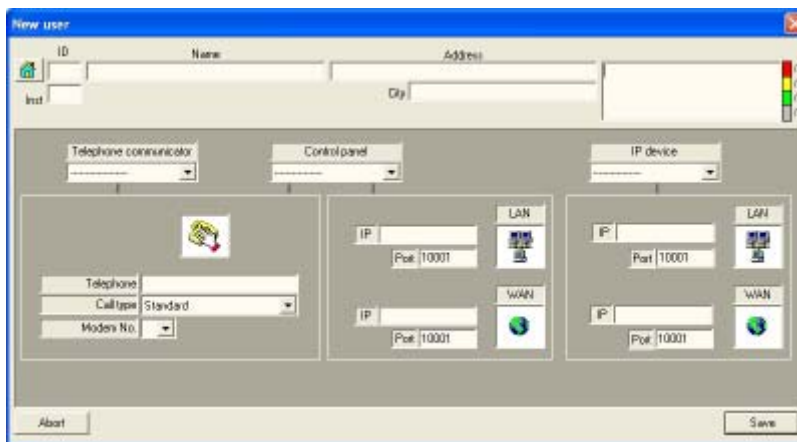
4.2 CREATION OF A NEW SYSTEM IN THE USER ARCHIVE OF THE SOFTWARE



Click on the beside icon to open the user archive.
On the screen is viewed:



Enter a new record (user) by clicking on the beside icon.
On the screen is viewed:



Insert the data of the system (ID, name, address, installer code, control panel, TSP7000 etc.) and save.

4.3 CHECK FIRMWARE VERSION



Enter the local programming environment by clicking on the beside icon to verify the firmware version .



WARNING
Verify that the connection between the PC and the control panel is active. If the connection between the devices is correct and the communication has been established, the arrow of the connection symbol (viewed in the lower right hand part of the screen) is green with a red dot running from the left to the right and back. If the arrow is white, the communication is interrupted.

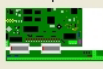




Click on the **Firmware** icon.
On the screen is viewed:

Firmware ✕

Control panel



Hardware version

Version installed

Vocabulary



Version installed

Module



Hardware version

Version installed

Check if the version is correct:

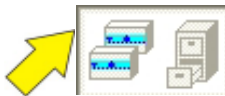
- TP16-256 FW 3.0 or following
- TP16-512 GSM FW 0.5.14 or following
- TP8-96 VIDEO FW 0.5.14 or following
- TP8-64 BUS FW 2.0 or following

4.4 PROGRAMMING



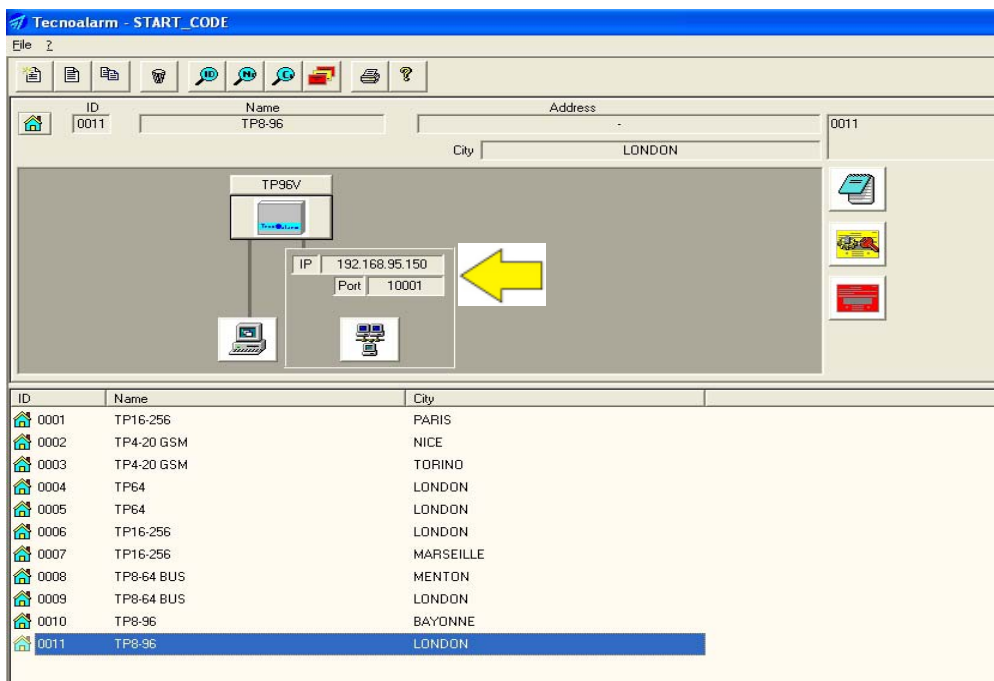
WARNING

Use the control panel manual as reference.



4.4.1 IP ADDRESS PROGRAMMING BY TECNOALARM SOFTWARE

Once programming has been completed, it is necessary to program the control panel IP address.



Assign the IP address to the control panel

- TP8-64 BUS and TP16-256
The IP address must be the same as that programmed on the TSP7000 console:

192.168.95.151

- TP8-96 VIDEO and TP16-512 GSM
The IP address must be:
192.168.95.150
- Save the programmed value

4.4.2 IP ADDRESS PROGRAMMING BY LCD CONSOLE

It is possible to program the IP address using the LCD300/S console or the virtual console of the programming software if the TP8-96 VIDEO or TP16-512 GSM control panel is used.

Enter the installer code (default 54321).

   to select the Ethernet menu
  **YES** to confirm

   to select the IP address menu
  **YES** to confirm

   enter the value **192.168.95.150**
 **MEM** to insert a point between the numbers (it is viewed as a hyphen).
  **YES** to confirm

   to select the Subnet Mask menu
  **YES** to confirm

   enter the value **255.255.255.0**
 **MEM** to insert a point between the numbers (it is viewed as a hyphen).
  **YES** to confirm

- ACCESS -
Installer

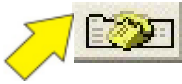
Menu 21
Ethernet

Ethernet
IP address

IP address
192-168-95-150

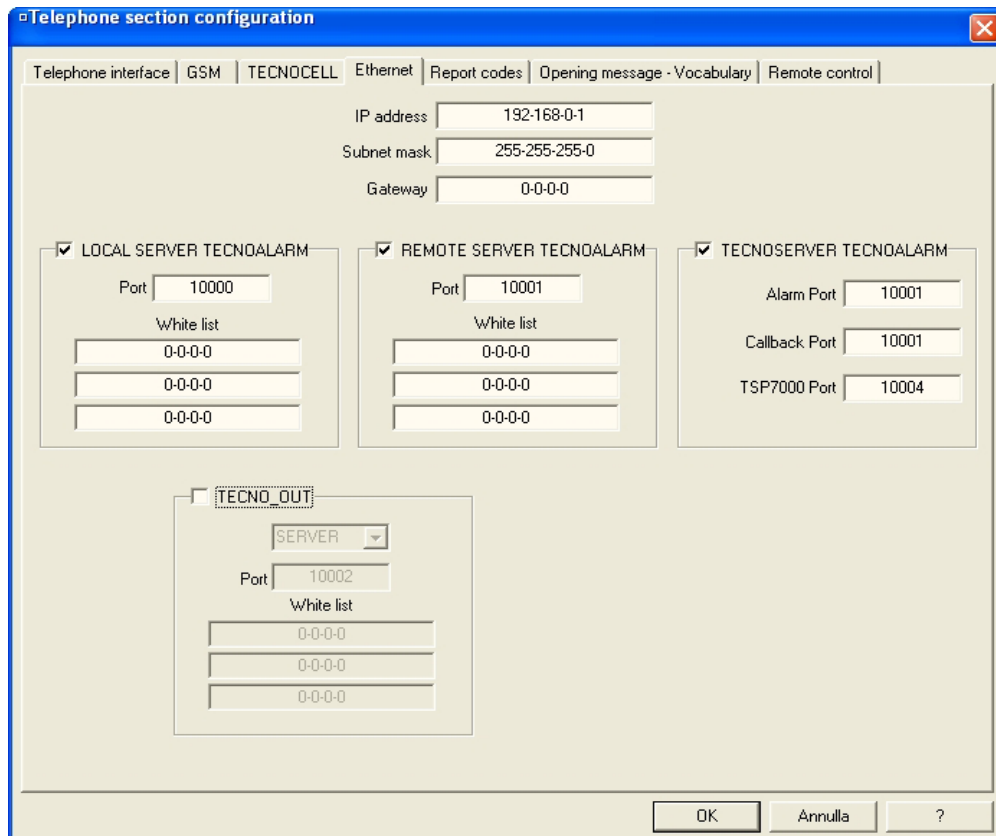
Ethernet
Subnet Mask

Subnet Mask
255-255-255-0



4.4.3 CHECK IP ADDRESS PROGRAMMING

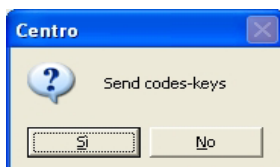
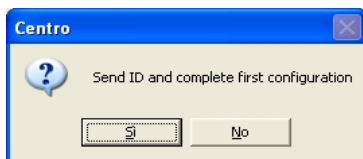
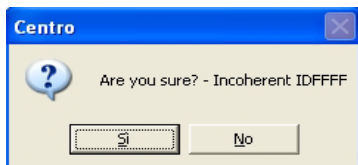
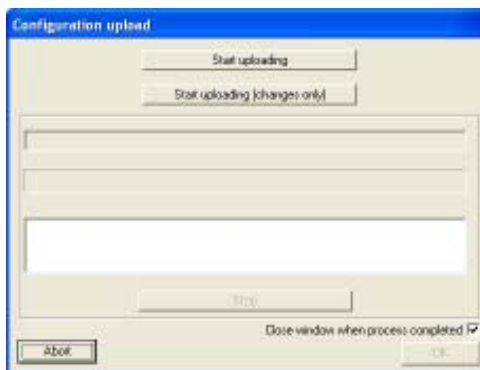
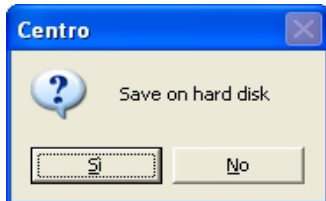
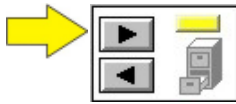
Return to control panel programming.
Click on the beside icon to enter the telephone tables
and select the **Ethernet** window.
On the screen is viewed:



CHECK THE CONFIGURATION

For a correct functioning of the system, the following items and values must be programmed:

- IP address
 - 192.168.95.150 TP8-96VIDEO
 - 192.168.95.150 TP16-512 GSM
 - 192.168.95.151 TP8-64 BUS
 - 192.168.95.151 TP16-256
- Subnet mask
 - 255.255.255.0
- Gateway
 - No setting
- LOCAL SERVER TECNOALARM - Port
 - 10000
- REMOTE SERVER TECNOALARM - Port
 - 10001
- TECNOSERVER TECNOALARM - Port
 - 10001 (Alarm Port)
 - 10001 (Callback Port)
 - 10004 (TSP7000 Port)



4.4.4 CONFIGURATIONSAVING

Save the system configuration (ex. ID 0011 - Tucker) in the user archive on the hard disk of the PC by clicking on the beside icon (arrow right key).

Commands available

- **Yes** to confirm saving
- **No** to quit without saving

The configuration will be saved as **TP96V0011.TCN**.

4.4.5 UPLOAD(SEND)CONFIGURATION TO THE CONTROL PANEL

To upload configuration to the control panel, click on the beside icon (arrow right key) as indicated.

On the screen is viewed the configuration upload window.

Commands available

- **Start uploading**
- **Upload of the complete system configuration**
- **Start uploading (changes only)**
- **Upload of changes (only if a complete system configuration has been sent to the control panel before by the same PC)**

First programming

If the control panel is new, during first programming, a warning appears on the screen signaling that the control panel has the ID code FFFF (unprogrammed).

Commands available

- **Yes** to confirm and proceed
- **No** to abandon

Send ID code

If you confirm, a warning appears on the screen signaling that upon completion of upload it is possible to send the control panel ID code.

Commands available

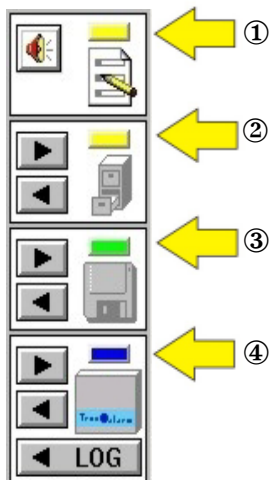
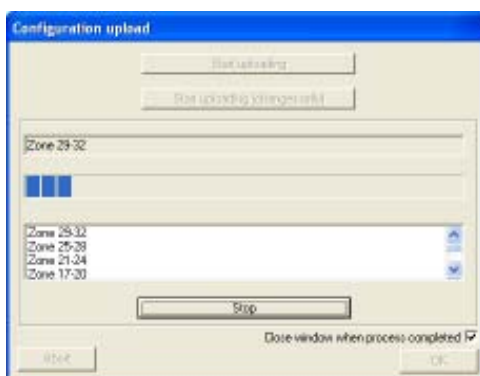
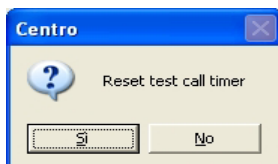
- **Yes** to confirm and proceed
- **No** to abandon

Send codes/keys

If you confirm, a warning asking whether you wish to upload the codes and keys is viewed on the screen.

Commands available

- **Yes** to confirm and upload codes/keys
- **No** to deny and upload without codes/keys



Reset test call timer

A warning appears on the screen asking whether you wish to synchronize the test call timer with the current date and time.

Commands available

- **Yes** to confirm and reset test call timer
- **No** to deny and upload without resetting test call timer

On the screen the progress of uploading is viewed.

If need be, press the **Stop** key to interrupt the process.

Once uploading of system configuration has been completed successfully, the control panel is ready to work according to the programmed parameters.

4.4.6 INDICATORS OF COHERENCE SYSTEM CONFIGURATION

In the local programming environment, on the screen is always viewed the coherence of system configuration with the help of 4 colored indicators:

- Same color = same version
- Different color = different version

- ① Indicator of the local programming window (i.e. system configuration viewed on the screen).
- ② Indicator of the user archive (configuration saved on the hard disk of the PC).
- ③ Indicator of the external storage device (configuration saved on external memory, e.g. floppy, USB key).
- ④ Indicator of the control panel connected.

4.4.7 VERIFICATION OF THE CONTROL PANEL FUNCTIONING



WARNING

After uploading system configuration, verify that the control panel works according to programming before to proceeding with the TSP7000 console programming.

4.5 TSP LINK PROTOCOL PROGRAMMING

To permit the connection of the TSP7000 and the TP16-256 or TP8-64 BUS, with an LCD300/S console or with the virtual console of the Tecnoalarm software, it is necessary to select the TSP LINK communication protocol.

- ACCESS -	
Master	
- ACCESS -	
Menu	
Menu	20
Options	
Options	
Protocol	
Protocol	
TSP LINK	6
TSP LINK	

Enter the master code (default 12345).

  1 2 3 4 5

   to select the Menu
  # YES to confirm

   to select Options
  # YES to confirm

   to select Protocol
  # YES to confirm

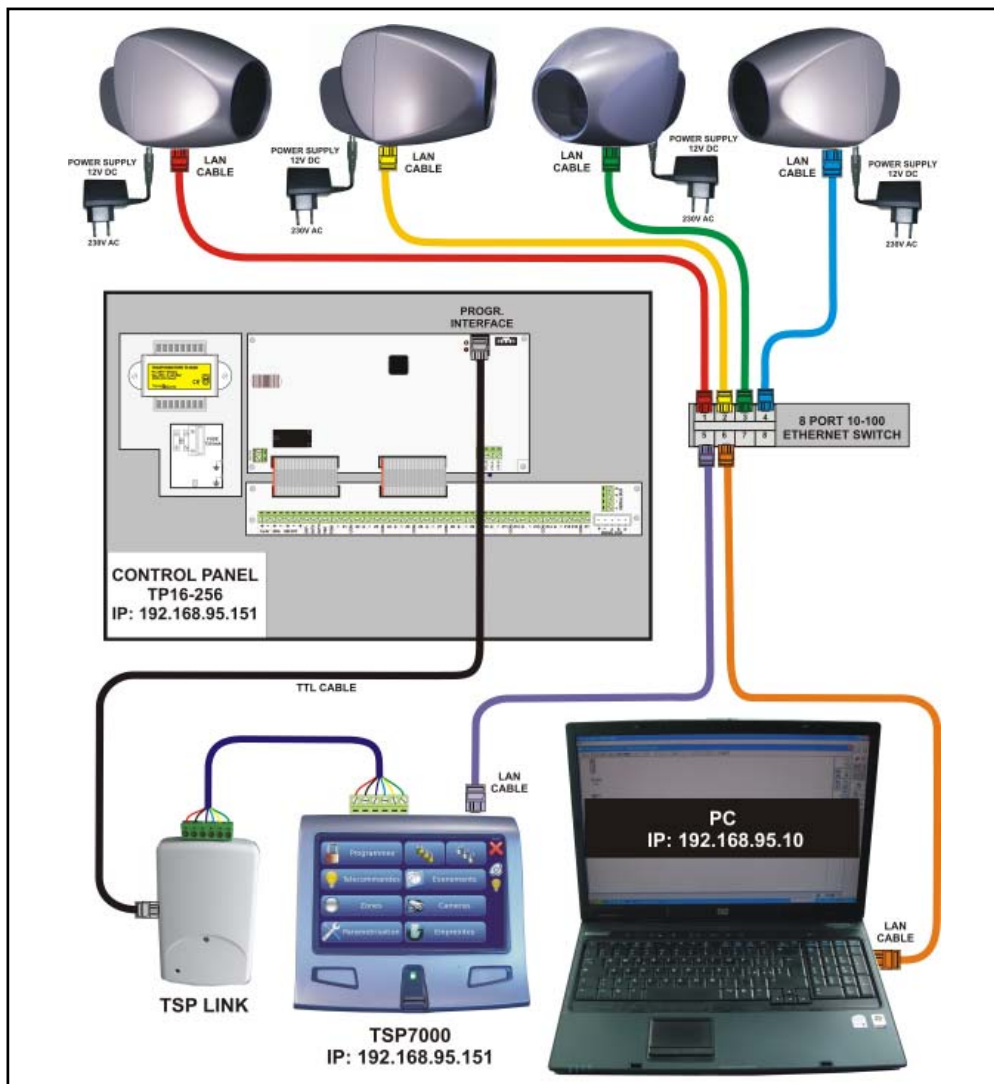
   to select TSP LINK
  # YES to confirm

4.6 PC CONNECTION TO THE ETHERNET NETWORK

TP16-256 CONNECTION

Once control panel programming has been completed, proceed as follow:

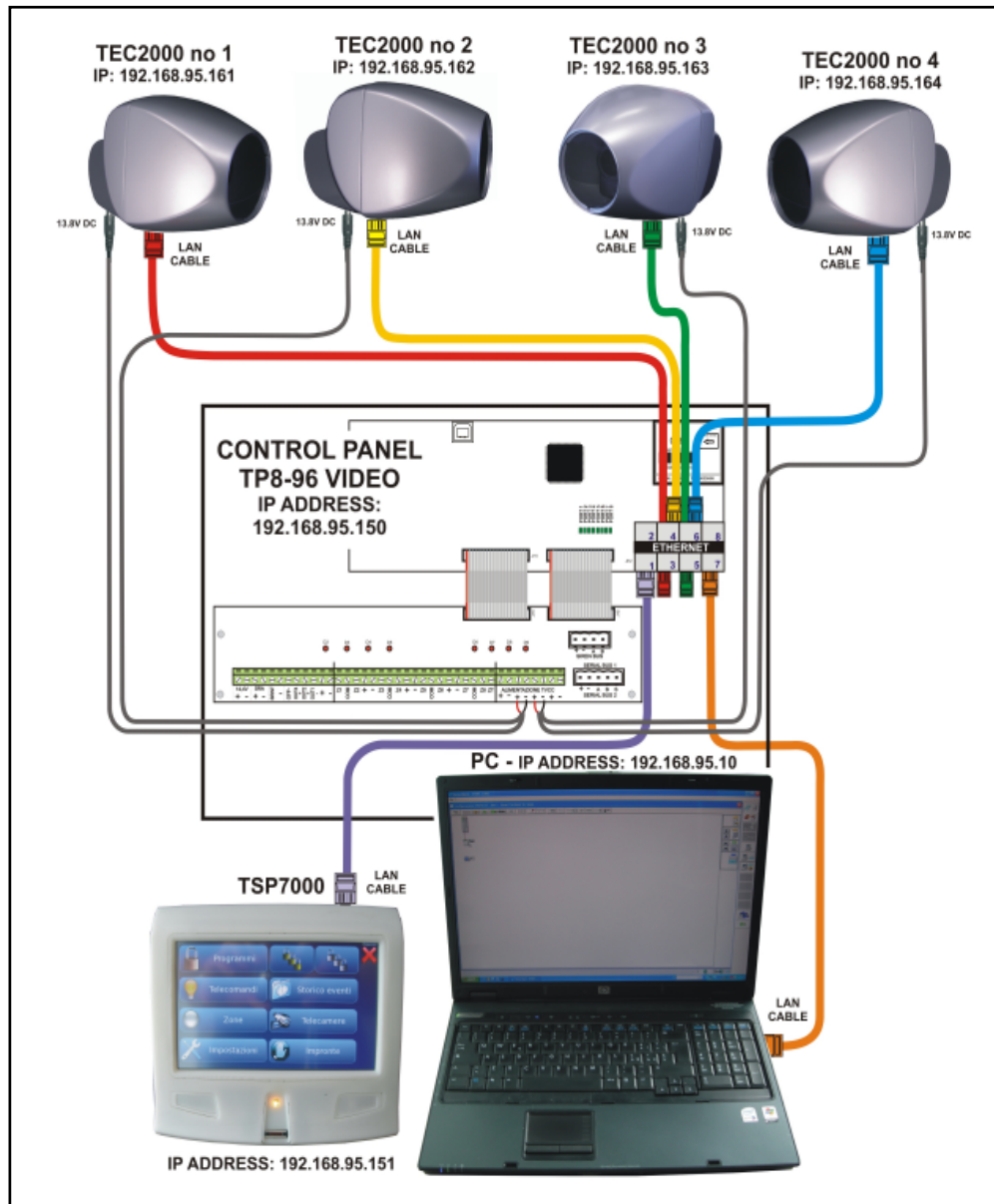
- Connect the PROG USB interface
- Connect an UTP Cat5 network cable to the Ethernet port of the PC and to the switch
- Connect an UTP Cat5 network cable to the Ethernet port of the TSP7000 video console and to the switch
- Connect a 6-wires cable to the TSP7000 video console and the corresponding connector of the TSP LINK interface
- Connect a TTL cable to the TSP LINK interface and to the corresponding connector of the control panel CPU board



TP8-96 VIDEO CONNECTION

Once control panel programming has been completed, proceed as follow:

- Connect a USB cable to the PC and to the control panel
- Connect the PROG USB interface
- Connect an UTP Cat5 network cable to the Ethernet port of the PC and to the port 7 or 8 of the on-board Ethernet switch of the TP8-96 VIDEO control panel



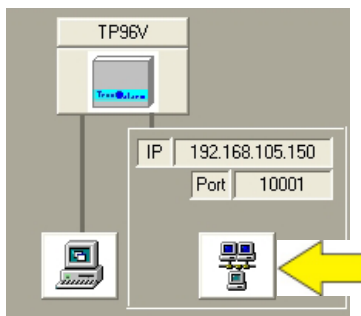
4.7 VERIFICATION OF THE CONTROL PANEL COMMUNICATION VIA ETHERNET NETWORK



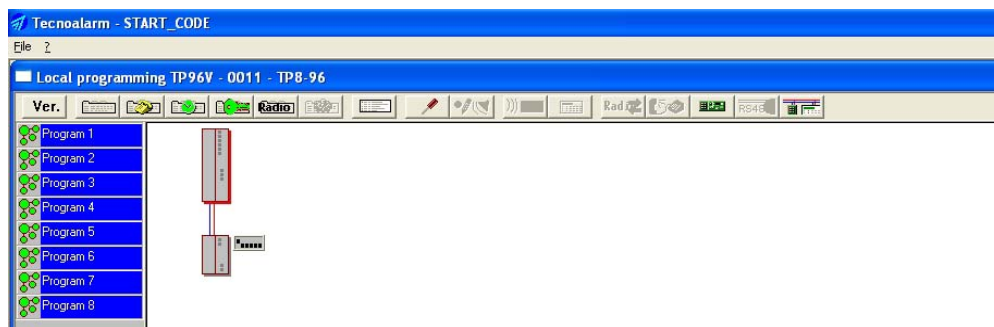
Once the control panel has been connected to the Ethernet network through an Ethernet switch, check if the communication on network is active.

Click on the beside icon to enter the local programming environment.

On the screen is viewed the beside image. Click on the icon corresponding to the Ethernet connection as indicated by the arrow.



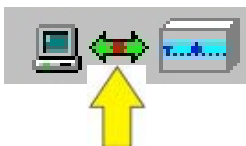
On the screen is viewed:



Check if the communication between the Tecnoalarm software and the control panel is active with the help of the arrow in the lower right hand corner of the screen. It must be green colored.

Green arrow = communication active

White arrow = communication missing



COMMUNICATION ACTIVE

The green arrow indicates that the programmed type of control panel, IP address, ID code and installer code both on the PC and on the control panel correspond.

COMMUNICATION MISSING

Verify thoroughly the programmed parameters (type of control panel, IP address, ID code, installer code) and the Ethernet connection (connection cables and Ethernet switch) because the communication between devices is missing.

5. PROGRAMMING OF THE TSP7000

5.1 TSP7000 CONNECTION



If the TP8-64 BUS or TP16-256 control panel is used, connect the TSP7000 video console to the switch (using a network cable) and to the control panel through the TSP LINK.
If the TP8-96 VIDEO or TP16-512 GSM control panel is used, connect the TSP7000 video console directly to the terminals of the control panel.

The console is initiated as soon as the power supply is connected (the beside image is viewed).

Once the console has been initiated (which may require a few minutes), on the screen is viewed the keypad screen for programming of the IP address.

5.2 IP ADDRESS



Program the IP address of the TSP7000.

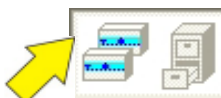
- Enter the **default** IP address
192.168.95.151
 - Touch **Enter** to confirm
- Wait for start up of the console.



On the screen is viewed the beside image.

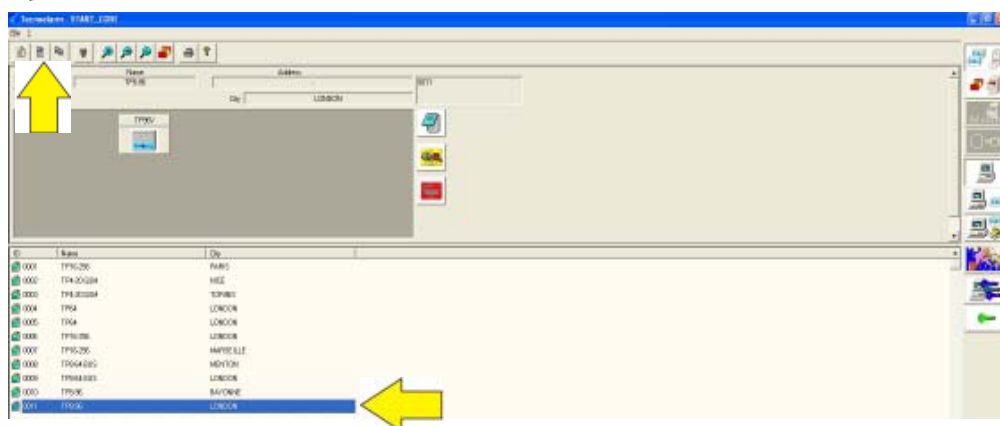
The TSP7000 is connected and is waiting for programming by PC.

5.3 USER FILE CONFIGURATION



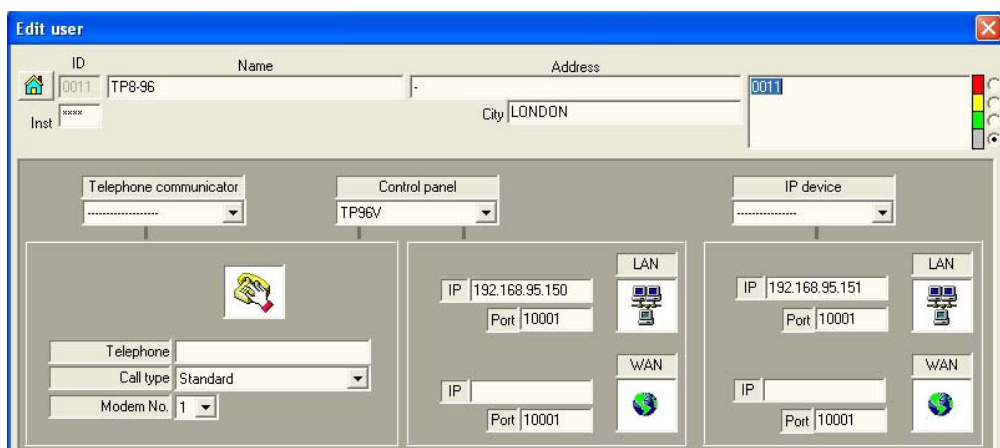
PROCEDURES

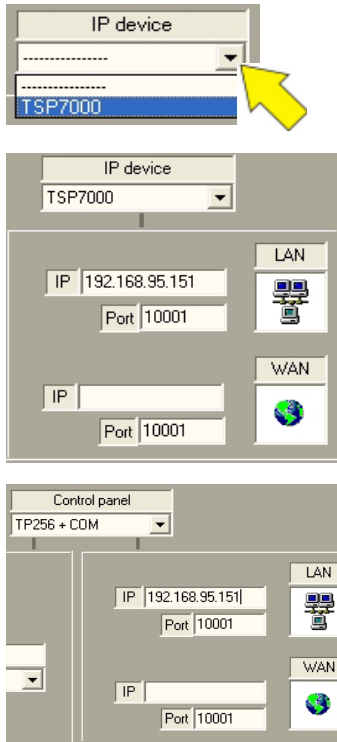
Start the Tecnoalarm software and click on the beside icon to enter the user archive.
On the screen is viewed:



USER ARCHIVE MODIFICATION

After selecting the installation (marked in blue), click on the beside icon to modify the user file.
On the screen is viewed:





IP device

TSP7000

IP device

TSP7000

IP 192.168.95.151 Port 10001 LAN

IP Port 10001 WAN

Control panel

TP256 + COM

IP 192.168.95.151 Port 10001 LAN

IP Port 10001 WAN

Select TSP7000 as IP device.

PROGRAMMING THE TSP7000 IP ADDRESS

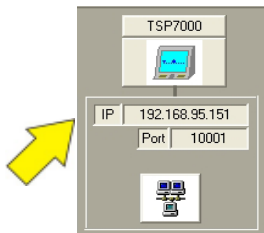
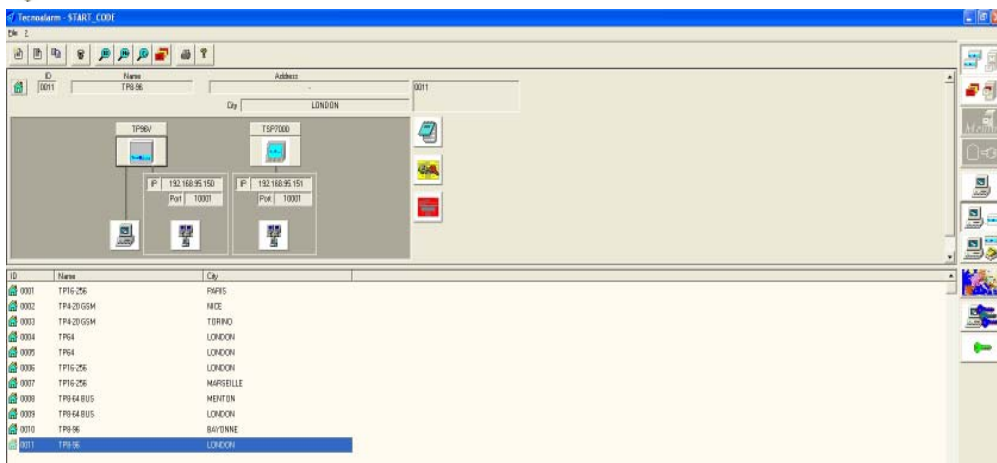
- Enter the IP address corresponding to that one of the TSP7000 video console:
192.168.95.151. See § 5.2
- Enter the port to use:
The **10001** port cannot be changed except if another device uses this port and cannot be moved to another port.
- The IP address of the WAN section cannot be programmed.
- The port of the WAN section must remain **10001**.
- The IP address of the TP8-96 VIDEO or TP16-512 GSM must correspond to the one programmed on the control panel
(**default programming 192.168.95.150**).
- The IP address of the TP16-256 or TP8-64 BUS must correspond to the one programmed on the control panel and the TSP7000
(**default programming 192.168.95.151**).

5.4 LOCAL PROGRAMMING



Click on the beside icon to enter the local programming environment.

On the screen is viewed:



Select the system and click on the TSP7000 icon to enter video console programming.

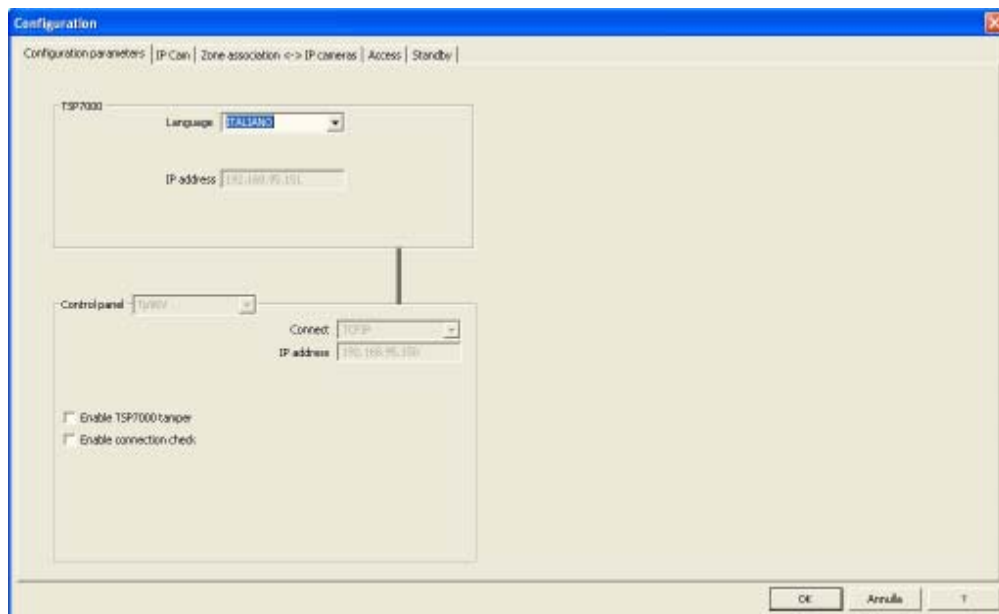
On the screen is viewed:



5.4.1 CONFIGURATION

Click on the beside icon to enter parameters **Configuration** tables of the TSP7000 video console.

On the screen is viewed:



The configuration tables permit:

- Configuration of the general TSP7000 parameters
- Monitoring and configuration of the cameras controlled by the video console
- Association of the zones of the control panel to the cameras programming of functioning
- Definition of the functions associated to each code of the control panel
- Definition of the video console functioning in the stand-by mode (i.e. stand-by screen in standby and principal commands).

TSP7000

- Language

The language for written and for general voice messages.

Languages available: italiano (male voice), français, english, español, italiana (female voice).

IP address of the console.

- IP address

CONTROL PANEL

The parameters of the selected control panel are viewed:

- Control panel
- Connect
- IP address
- Enable TSP7000 tamper
- Enable connection check

Type of control panel connected to the TSP7000:
TP16-256, TP8-64 BUS, TP16-512 GSM and
TP8-96 VIDEO.

Type of connection between PC and video console:
TSP LINK or TCP IP.

IP address of the control panel

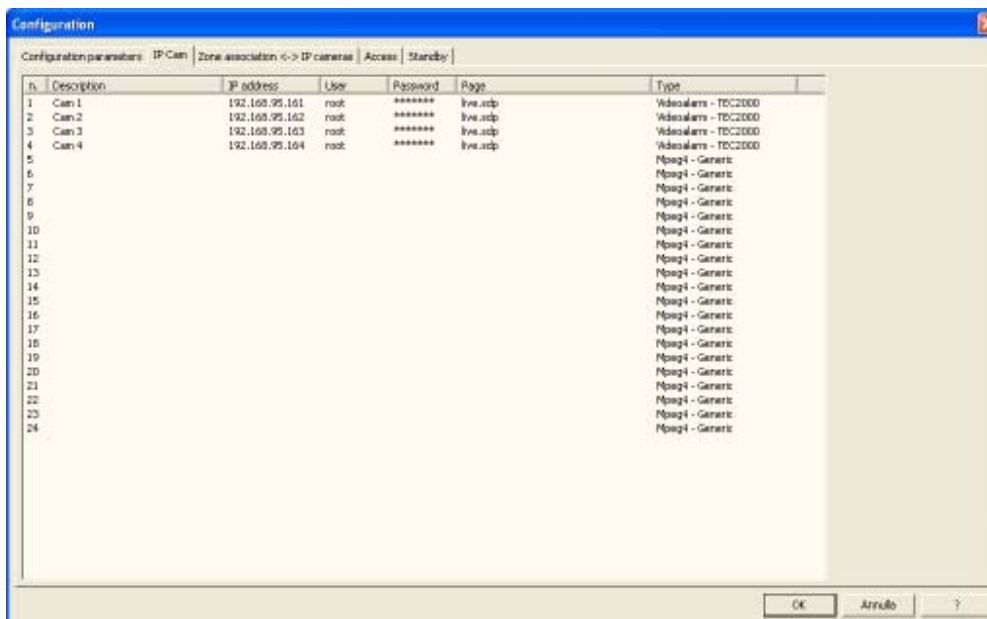
The option is enabled when the item is checked.
In this case, the tamper contact of the console is controlled.

The option is enabled when the item is checked.
In this case, the connection between the video console and the control panel is constantly controlled.

5.4.2 IPCAMERAS

Open the configuration tables and select the **IP Cam** table.

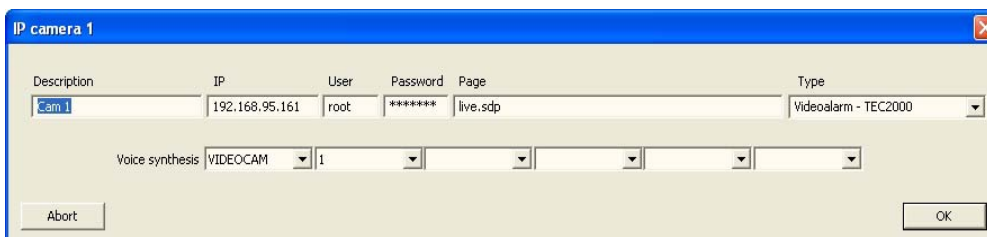
On the screen is viewed:



WARNING

The installation comprises by default 4 TEC2000 IP cameras.
The cameras are configured according to the necessary parameters for a correct functioning with the TSP7000.
Remove the cameras which are not present in the installation or add those missing.
Define the IP address of each camera.
The IP address of each camera must be that of the list displayed.
Assign the IP address using the "Installation Wizard 2" software provided with the Tecnoalarm cameras. The other parameters are automatically programmed by software.

Click on the desired position to program an IP camera connected to the system.
Clicking on the position 1, on the screen is viewed:



5.4.2.1 PARAMETER CONFIGURATION

The cameras are pre-programmed according to the datas viewed in the previous image.

- Description Name assigned to the camera (viewed on the photos/video stream)
- IP IP address of the camera.
By default the following address are already programmed:
 - camera 1 192.168.95.161
 - camera 2 192.168.95.162
 - camera 3 192.168.95.163
 - camera 4 192.168.95.164
- User User name for the access to the cameras (must be root)
- Password Password for the access to the cameras
- Page Description for the access to the RTSP video stream
- Type Type of the camera
By default Tecnoalarm TEC2000.
- Voice synthesis Vocal message to be associated to the selected camera.
Select 6 words from the vocabulary

5.4.2.2 CAMERA CONFIGURATION WITH "INSTALLATION WIZARD 2" SOFTWARE

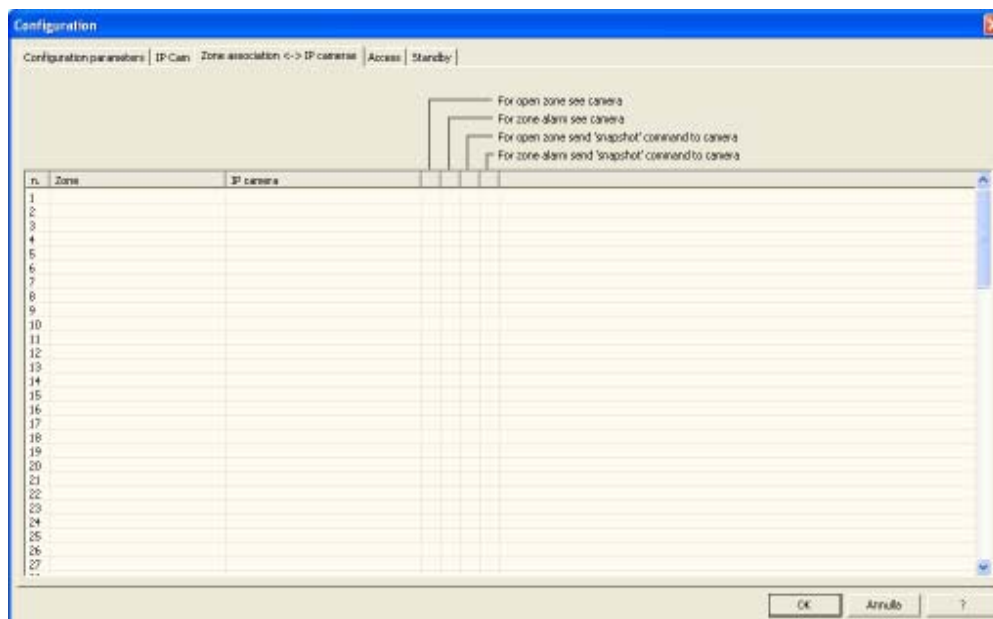


All the IP cameras connected to the system must have the IP address of the above list (§ 5.4.2.1).

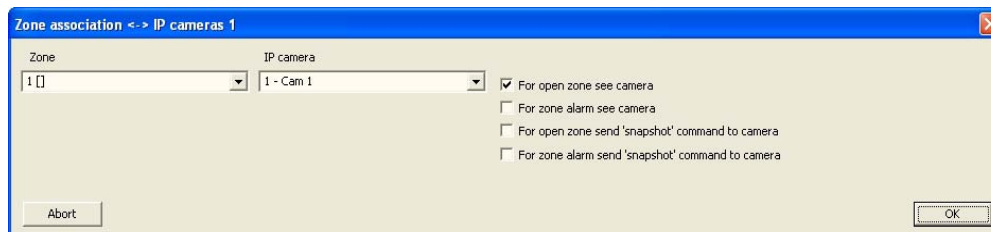
Program the cameras with the **Installation wizard 2** software (included into the cameras packaging) previously installed on the PC where the Tecnoalarm software is installed too.

5.4.3 ZONE-IP CAMERA ASSOCIATION

Open the configuration tables and select the **Zone association-IP cameras** table.
On the screen is viewed:



ZONE-CAMERA ASSOCIATION + ACTIONS



This table permits the association between the zones of control panel and the installed cameras. Once the association has been defined (e.g. zone 1 called contact zone and the camera 1 called camera 1), it is possible to define the action.

Functions available

• Control panel in stand-by - Open zones

- For open zone see camera
For opening of the zone, the video stream of the selected camera is viewed in total screen mode.
- For zone alarm see camera
For opening of the zone, the selected camera sends a sequence of photos (8) to the TSP7000 memory.
The images will be displayed simultaneously and they can be opened once at time or enlarged.

• Control panel armed - Zone alarm

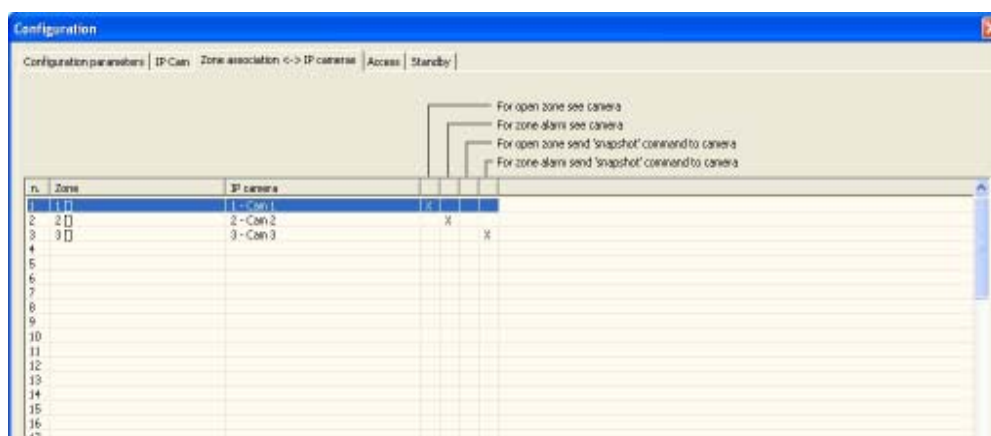
- For open zone send "snapshot" command to the camera
For opening of the zone with control panel armed (i.e. alarm condition), the video stream of the selected camera is viewed in total screen mode.
- For zone alarm end "snapshot" command to the camera
For opening of the zone with control panel arming (i.e. alarm condition), the camera sends a sequence of photos (8) to the TSP7000 memory.
The images will be displayed simultaneously and they can be opened once at time or enlarged.



WARNING

It is recommended to activate one option only for each zone-camera association.

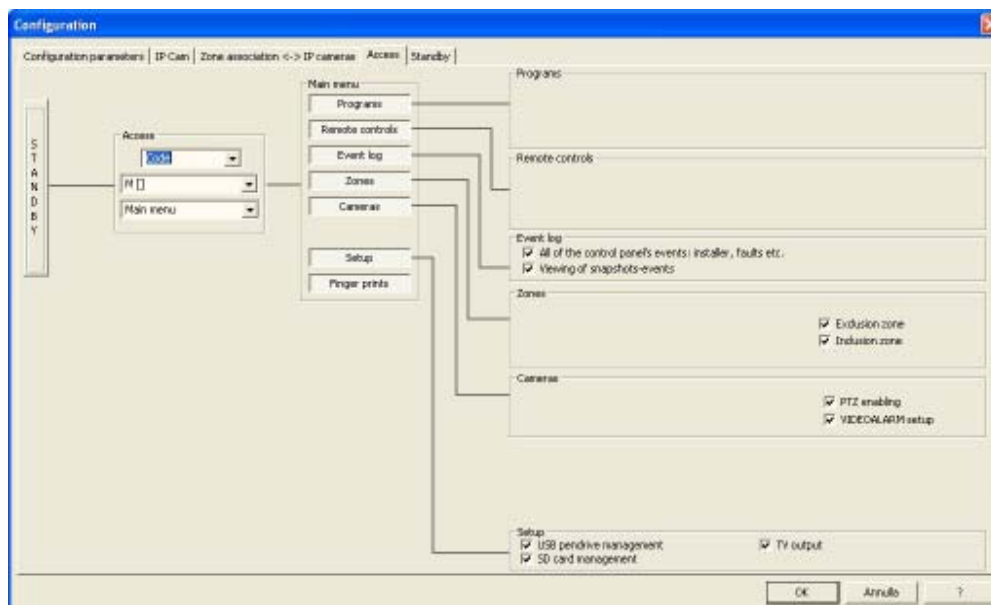
Once the association has been completed, on the screen is viewed:



No.	Zone	IP camera	For open zone see camera	For zone alarm see camera	For open zone send 'snapshot' command to camera	For zone alarm send 'snapshot' command to camera
1	1	1 - Cam 1	X	X		
2	2	2 - Cam 2	X	X		
3	3	3 - Cam 3	X	X		
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						

5.4.4 ACCESS

Open the configuration table and select the **Access** window.
On the screen is viewed:



The Access table permits to program the functions executed by each access code. A disabled code cannot execute any operation on the TSP7000.

ACCESS

Permits to select the code between those present in the archive (the codes are loaded from by the control panel). For each code it is possible to create a list of accessible commands (see main menu).

MAIN MENU

Permits the main menu configuration. A disabled function is not displayed, therefore the owner of the code cannot enter the selected submenu.

Functions available

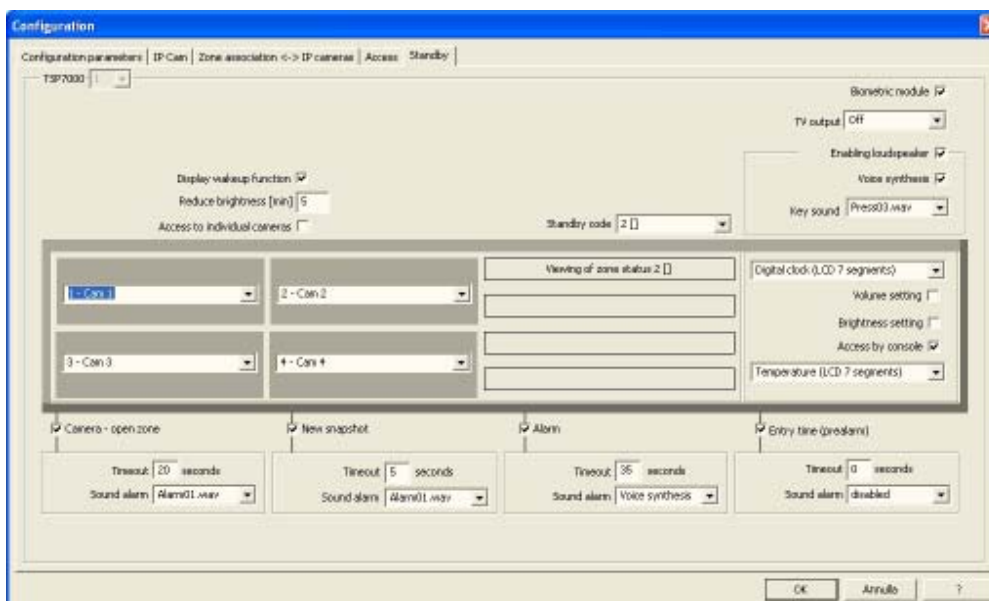
- **Programs**
Permits arming/disarming and verification of the status of the programs associated to the code
- **Remote controls**
Permits activation/deactivation and verification of the status of the remote controls associated to the code
- **Event log**
 - All the control panel's events
Permits viewing of all the events detected by the control panel. Check the item to enable the function.
 - Viewing of snapshots-events
Permits viewing of the photos associated to the events. Check the item to enable the function.



- **Zones**
Permits viewing of the status of the zones of the control panel and voluntary inclusion/exclusion of the zones.
 - Exclusion zone Permits the voluntary exclusion of the zones. Check the item to enable the function.
 - Inclusion zone Permits the voluntary inclusion of the zones. Check the item to enable the function.
- **Cameras**
Viewing of the cameras associated to the codes.
 - PTZ enabling Permits enabling of the movement of the motorized cameras. Check the item to enable the function.
 - VIDEOALARM setup Permits the initialization of the cameras produced by Tecnoalarm. Check the item to enable the function.
- **Setup**
 - USB pendrive management Permits copying the registered photos into a USB memory. Check the item to enable the function.
 - SD card management Permits the management of the internal SD memory (deletion of the photos). Check the item to enable the function.
 - TV output Permits enabling of the TV output for viewing of the video streams on an external monitor. Check the item to enable the function.
- **Finger prints**
Permits the management of the finger prints (biometric reader).

5.4.5 STAND-BY SCREEN

Open the configuration tables and select the **Standby** table.
On the screen is viewed:



The stand-by configuration table permits programming of the components of the TSP7000 stand-by screen.
The stand-by is the condition when no user code is composed.

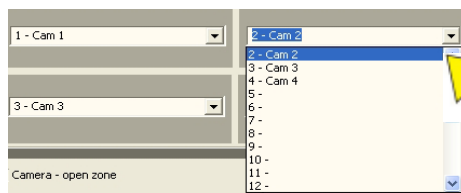
Functions available

- Biometric module
Permits enabling of the biometric module (finger prints reader).
- TV output
Permits enabling of the audio video output for an external monitor (off, PAL, NTCS).
- Enabling loudspeaker
Permits enabling of the loudspeaker for acoustic signalling. Check the item to enable the function.
- Voice synthesis
Permits enabling of the multilanguage voice messages. Check the item to enable the function.
- Key sound
Permits the selection of the keystroke sound (ex. press03.vaw).
- Display wakeup function
If the function is enabled, display back lighting is switched on every time the infrared detector (PIR) detects the presence of a human being and is automatically switched off after some time of non-activity. Check the item to enable the function.
- Reduce brightness (min)
Programming of timer after then the display brightness is reduced (5, 10..minutes).
The brightness is the maximum upon touching of the display. Check the item to enable the function.
- Access to individual cameras
Permits viewing of the photos registered by a selected single camera in the total screen mode.
Check the item to enable the function.
- Standby code
The stand-by code is a user code reserved to a determined TSP7000 console. It is programmable as all the other user codes (programs, attributs, access periods etc.).
When a stand-by code is present in the system, it is possible to program 4 quick comand links associated to 4 functions on the stand-by screen.



VIDEO STREAM VIEWING

In stand-by the console can show the video streams of 4 cameras selected among those programmed.
The TSP7000 can manage the video streams of a total of 24 cameras.
If less than 4 cameras are selected the stand-by screen is adapted.



Click on the arrow and select the camera from the list.

1- Can 1	2- Can 2	Viewing of zone status 2 []
		Activation/deactivation of remote control (nd-)
3- Can 3	4- Can 4	Viewing of zone status (nd-)

Operation

- Arming/disarming of program
- Activation/deactivation of remote control
- Viewing of zone status
- Viewing of camera
- Viewing of 4 cameras starting from
- Arming program
- Disarming program
- Activation of by-pass program
- Deactivation of by-pass program
- Activate remote control
- Deactivate remote control

Timeout: 35 seconds

Sound alarm: Voice synthesis

OK

Digital clock (LCD 7 segments)

Volume setting ☐

Brightness setting ☐

Access by console ☒

Temperature (LCD 7 segments)

STAND-BY CODE

When the standby code has been selected, it is possible to program 4 quick comand links associated to 4 functions which will ve viewed on the stand-by screen of the console.

The stand-by code is automatically added to the registered event in the event memory of the console.

Click on the arrow and select the function from the list:

- Arming/disarming of program
- Activation/deactivation of remote control
- Viewing of zone status
- Viewing of camera
- Viewing of 4 cameras starting from
- Arming program
- Disarming program
- Activation of by-pass program
- Deactivation of by-pass program
- Activate remote control

- ...
- Deactivate remote control
- By-pass ON-Off

VARIOUS

Functions available

- Clock
Viewing of the clock (date-time, digital, time hh:mm or crt time hh mm) mode available in a several formats. Click on the arrow and select the format from the list.
- Volume setting
Check the item to enable the function.
- Brightness setting
Check the item to enable the function.
- Access by console
Access to the system by console (console function). Check the item to enable the function.
- Temperature
Viewing of the temperature (digital....) available in a several formats. Click on the arrow and select the wished format.

POP-UP WINDOWS

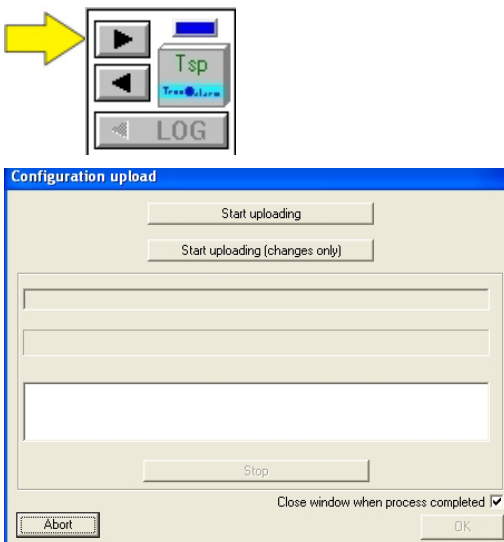
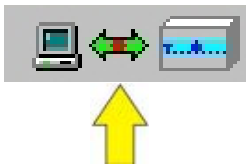
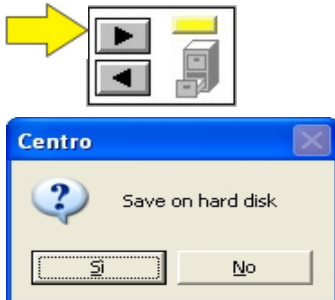
☒ Camera - open zone	☒ New snapshot	☒ Alarm	☒ Entry time (prealarm)
Timeout: 20 seconds	Timeout: 5 seconds	Timeout: 35 seconds	Timeout: 0 seconds
Sound alarm: Alarm01.wav	Sound alarm: Alarm01.wav	Sound alarm: Voice synthesis	Sound alarm: disabled

It is possible to program 4 types of pop-up windows which appear on the stand-by screen upon the detection of an event:

- Camera-open zone
Upon opening of a zone or beginning of the zone alarm, the selected camera is activated for the programmed period of time (5, 10, 20 seconds).
- New snapshot
Upon opening of a zone or beginning of the zone alarm, a sequence of 8 photos is recorded. The photos are displayed during the programmed period of time.
- Alarm
Upon detection of an alarm, the page of **prealarm/entry time** is displayed.
- Entry time (prealarm)
In case of prealarm, on the screen is viewed a pop-up window with a prealarm warning.
- Timeout
Permits programming of the period of time in seconds.
- Sound alarm
All of the pop-up windows can be accompanied by the individually programmable sound signal. This signaling is repeated during the programmed timeout.

**WARNING**

For simplicity reasons, it is recommended to activate only one function at time. If more functions are selected at the same time, the procedures overlap and functioning of the console may result confusing. The video streams which are not viewed because they coincide with another event, will however be saved in the event memory.



5.4.6 CONFIGURATIONSAVING

To save the TSP7000 programming (e.g. ID 0011 - Tucker) on the hard disk, click on the beside icon (arrow right key).

Commands available

- **Yes** to confirm saving
- **No** to quit without saving

The configuration will be saved as **TP96V0011.TCN**.

5.4.7 CONNECTIONCHECK

Verify that the communication between the Tecnoalarm software and the TSP7000 is active with the help of the arrow in the lower right hand corner of the screen.

It must be green colored.

Green arrow = communication OK

White arrow = communication missing

COMMUNICATION OK

The arrow is green when the programmed IP address on the PC and on the console correspond.

COMMUNICATION MISSING

Check thoroughly the programmed IP address and the Ethernet connection (connection cables and Ethernet switch) because the communication between the two devices is missing.

5.4.8 UPLOAD (SEND) CONFIGURATION TO THE CONSOLE

To upload the configuration to the console, click on the beside icon (arrow right key) as indicated.

On the screen is viewed the configuration upload window.

Commands available

- **Start uploading**
Upload of the complete system configuration.
- **Start uploading (changes only)**
Upload of the changes (only if system configuration has been sent to the control panel before using the same PC).

On the screen the progress of uploading is viewed.

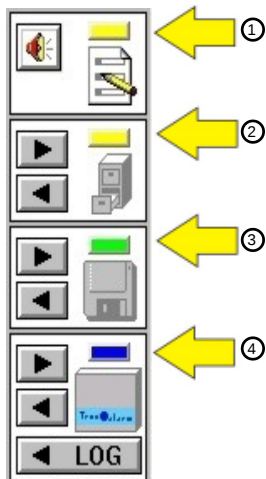
If need be, press **Stop** to interrupt the process.

Once uploading of system configuration has been completed successfully, the TSP7000 video console is ready to work according to the programmed parameters.



WARNING

Once programming has been sent, wait for the restart of the TSP7000 console.



5.4.9 INDICATORS OF COHERENCE OF SYSTEM CONFIGURATION

In the local programming environment, on the screen is always viewed the coherence of system configuration with the help of 4 colored indicators:

- Same color = same version
- Different color = different version

- ① Indicator of the local programming window (i.e. system configuration viewed on the screen).
- ② Indicator of the user archive (configuration saved on the hard disk of the PC).
- ③ Indicator of the external storage device (configuration saved on external memory, i.e. floppy, USB pendrive).
- ④ Indicator of the control panel connected.

5.4.10 FUNCTIONING CHECK

Once programming has been uploaded successfully, the TSP7000 console restarts. After a few minutes, the stand-by screen is viewed (beside image).

5.5 VIDEOALARM SETUP



The cameras must be initiated to function correctly.

Touch **VIDEOALARM Setup** to enter the cameras programming environment.

Touch **Proceed** to search for the cameras connected to the network of the TSP7000 video console.

Once the search has been completed, on the screen is viewed the beside image.

The system searches all of the Tecnoalarm cameras connected to the network and programmed by the installer.

The message **found 4 of 4** means that 4 cameras have been programmed and as many cameras have been detected.

If a camera is not connected or not found, the message viewed is **found 3 of 4**.



WARNING

If the cameras found are less than those programmed, it means that the cameras are not physically connected to the network or not active, or the IP address or password are not correct. Verify thoroughly the connections and settings of the cameras before you continue.



5.5.1 INITIALIZATION OF THE CAMERAS

Touch **Proceed** to start the initialization of the detected cameras.

On the screen is viewed the beside image.

The system restores the configuration for functioning with the TSP7000 consoles. All the procedure is viewed in sequence.

Once initialization has been completed successfully, on the screen is viewed the beside image.

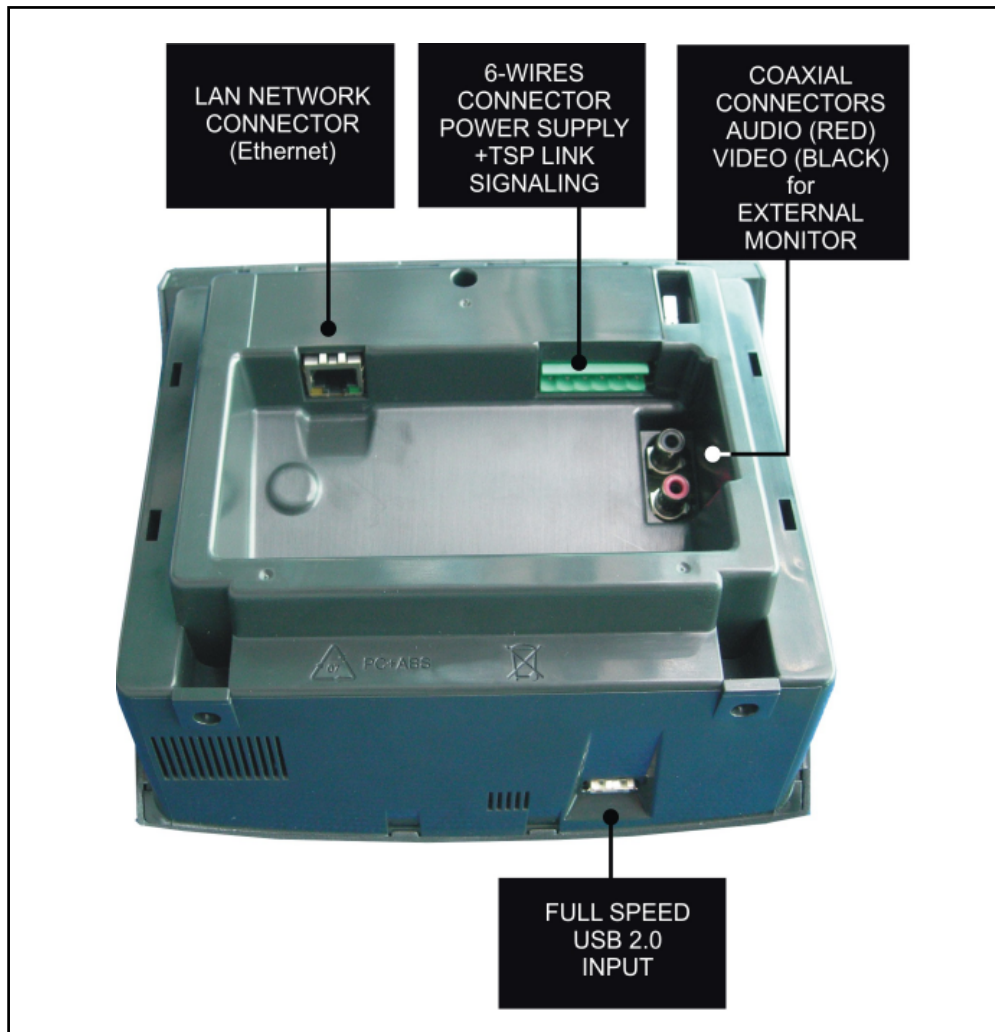
The cameras are ready to work.

6. CONSOLE

6.1 FRONT VIEW



6.2 REAR SIDE



6.2.1 CONNECTION WITH TP8-96 VIDEO

**Configuration A Power supply + signaling via Ethernet cable****6-wires terminal not connected**

Program the TP8-96 VIDEO control panel in order to **provide** the power supply through the Ethernet connectors.

The 6-wires cable is not necessary:

- Jumper J3 in position 2-3 - TSP7000 connected to the Ethernet ports 1 or 2
- Jumper J4 in position 2-3 - TSP7000 connected to the Ethernet ports 3 or 4
- Jumper J5 in position 2-3 - TSP7000 connected to the Ethernet ports 5 or 6

Configuration B Signaling via Ethernet cable**6-wires terminal - Only +/-VCC wires connected**

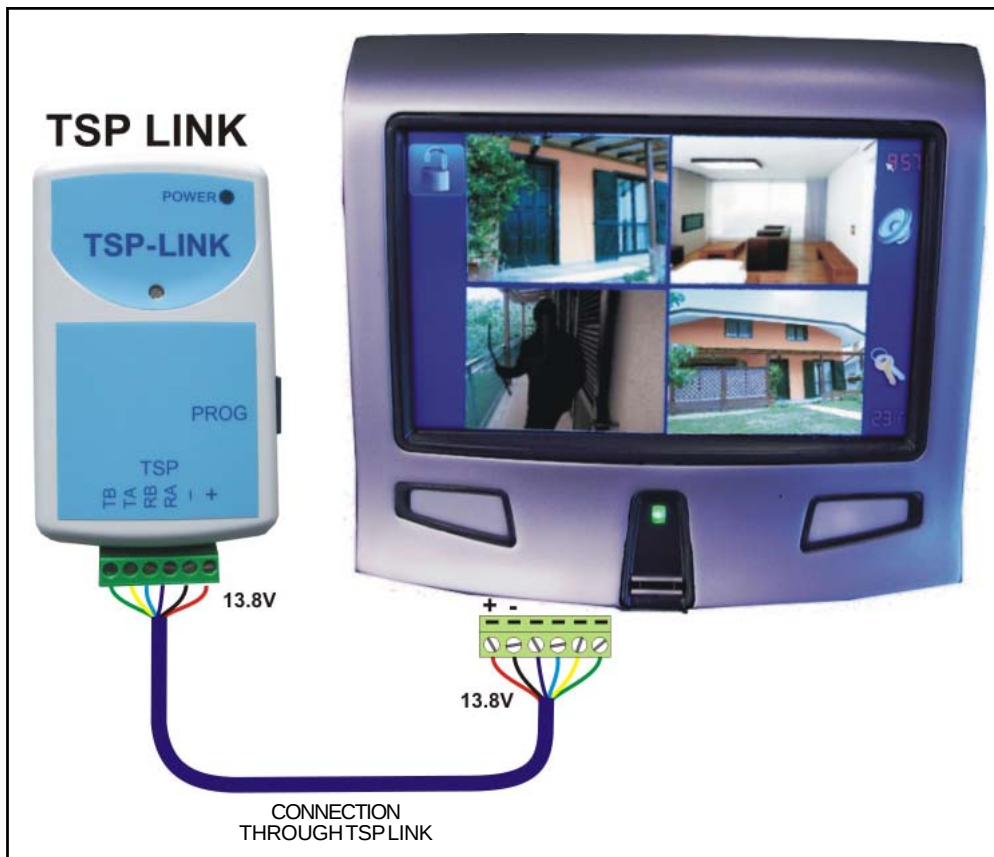
Disable the power supply through the Ethernet connectors on the TP8-96 VIDEO control panel.

On the 6-wires terminal, the +/- VCC cable must be connected to a control panel 13.8V power supply.

- Jumper J3 in position 1-2 - TSP7000 connected to the Ethernet ports 1 or 2
- Jumper J4 in position 1-2 - TSP7000 connected to the Ethernet ports 3 or 4
- Jumper J5 in position 1-2 - TSP7000 connected to the Ethernet ports 5 or 6
- TSP7000 console connected to the Ethernet ports 7 or 8

6.2.2 CONNECTION WITH TP16-256 AND TP8-64 BUS

For connection with the TP16-256 and TP8-64 BUS control panels, use the TSP LINK interface.



APPENDIX A

SPECIAL PROCEDURES

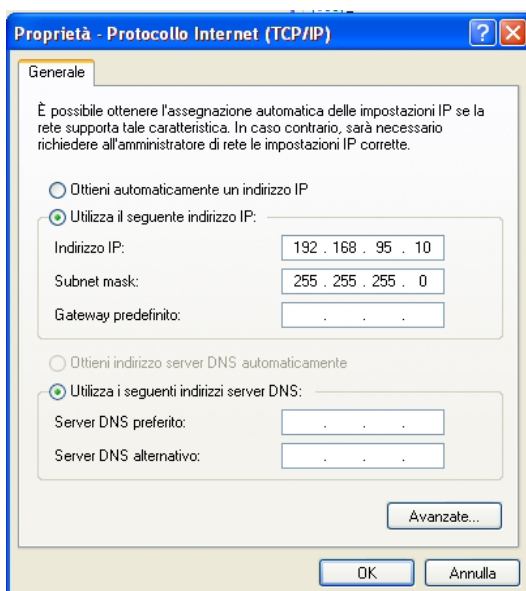
A. SPECIAL PROCEDURES

A.1 IP ADDRESS MODIFICATION



A.1.1 MODIFICATION OF THE IP ADDRESS OF THE PC

- Select Start
- Select Control panel
- Select Network and Internet connection
- Select Local area connection (LAN) (right click)
- Select Properties
- Select Internet Protocol (TCP/IP)
- Select Properties
- Select Utilizza il seguente indirizzo IP (Use the following IP address)



- Enter the "Indirizzo Ip" (IP address): **192.168.95.10**
 - Enter the "Subnet Mask": **255.255.255.0**
 - Click OK twice to confirm and quit
- The new IP address of the PC is **192.168.95.10**



WARNING

When the PC is connected to a company network, before changing the IP address, always check with the network administrator possible limitations and prohibited addresses.



A.1.2 WINDOWS VISTA

- Select Start
 - Select Control panel
 - Select Computer
 - Select Network
 - Select Network and Sharing Center
 - Select Manage Network Connections
 - Select the connection (right click)
 - Select Properties
 - Select Continue (user authorization)
 - Select Internet protocol vers. 4 (TCP/IPv4)
 - Select Properties
 - Select Utilizza il seguente indirizzo IP
(Use the following IP address)
 - Enter the "Indirizzo Ip" (IP address): **192.168.95.10**
 - Enter the "Subnet Mask": **255.255.255.0**
 - Click OK twice to confirm and quit
- The new IP address of the PC is **192.168.95.10**



A.1.3 WINDOWS 7

- Select Start
 - Select Control panel
 - Select Show network status and activity
(network category and Internet)
 - Select Local area connection (LAN)
 - Select Properties
 - Select Internet protocol vers. 4 (TCP/IPv4)
 - Select Properties
 - Select Utilizza il seguente indirizzo IP
(Use the following IP address)
 - Enter the "Indirizzo Ip" (IP address): **192.168.95.10**
 - Enter the "Subnet Mask": **255.255.255.0**
 - Click OK twice to confirm and quit
- The new IP address of the PC is **192.168.95.10**

A.2 RESET OF THE CONTROL PANEL

Tue 12 JAN 10
Work. 10:45

Line
! ABSENT !

(c) Tecnoalarm
TP256 v.3.x ENG

Config.
Deleted

Tue 12 JAN 10
Work. 10:45

A.2.1 TP16-256 CONTROL PANEL

When the control panel is in stand-by (date and time viewed), to reset the default configuration, proceed as follows:

- Remove the jumper JP1
 - Insert the jumper JP6
 - Wait until **Line Absent** is viewed
 - Remove the jumper JP6
 - After a few seconds, when Tecnoalarm is displayed, press ☐ NO (star) several times
 - On the display is viewed **Config. Deleted.**
 - Insert again the jumper JP1.
- After a few seconds, the control panel returns to stand-by and on the display reappears date and time signaling.

Tue 12 JAN 10
Work. 10:45

Line
! ABSENT !

(c) Tecnoalarm
TP64B v.2.x ENG

Config.
Deleted

Tue 12 JAN 10
Work. 10:45

A.2.2 TP8-64 BUS CONTROL PANEL

When the control panel is in stand-by (date and time viewed), to reset the default configuration, proceed as follows:

- Insert the jumper RESET
- Wait until **Line Absent** is viewed
- Remove the jumper RESET
- After a few seconds, when Tecnoalarm is displayed, press ☐ NO (star) several times
- On the display is viewed **Config. Deleted.**
- After a few seconds, the control panel returns to stand-by and on the display reappears date and time signaling.



WARNING

Upon reset, the control panel is set with the default configuration and with the following default codes:

- Default installer code 54321
- Default master code 12345
- User codes 00000 (no valid code)
- Default code length 5 digits

Tue 12 JAN 10 Work. 10:45
Line ! ABSENT !
(c) Tecnoalarm Ver 0.7.05 ENG
Config. Deleted
Tue 12 JAN 10 Work. 10:45

A.2.3 TP8-96 VIDEO CONTROL PANEL

When the control panel is in stand-by (date and time viewed), to reset the default configuration, proceed as follows:

- Remove the jumper JP9-CLR
- Insert the jumper JP3-RESET for a few seconds
- Wait until **Line Absent** is viewed
- Remove the jumper JP3-RESET
- After a few seconds, when Tecnoalarm is displayed, press NO (star) several times
- On the display is viewed **Config. Deleted**.
- Insert again the jumper JP9-CLR.
- After a few seconds, the control panel returns to stand-by and on the display reappears date and time signaling.

Tue 12 JAN 10 Work. 10:45
Line ! ABSENT !
(c) Tecnoalarm Ver 0.7.05 ENG
Config. Deleted
Tue 12 JAN 10 Work. 10:45

A.2.4 TP16-512 GSM CONTROL PANEL

When the control panel is in stand-by (date and time viewed), to reset the default configuration, proceed as follows:

- Remove the jumper JP9-CLR
- Insert the jumper JP3-RESET for a few seconds
- Wait until **Line Absent** is viewed
- Remove the jumper JP3-RESET
- After a few seconds, when Tecnoalarm is displayed, press NO (star) several times
- On the display is viewed **Config. Deleted**.
- Insert again the jumper JP9-CLR.
- After a few seconds, the control panel returns to stand-by and on the display reappears date and time signaling.



WARNING

Upon reset, the control panel is set with the default configuration and with the following default codes:

- | | |
|--------------------------|-----------------------|
| ● Default installer code | 54321 |
| ● Default master code | 12345 |
| ● User codes | 00000 (no valid code) |
| ● Default code length | 5 digits |

A.3 RESET OF THE TEC2000 CAMERA



To reset the camera, press the reset key (insert a needle into the hole in the casing).

Continue to press the RESET key until the end of the second cycle.

Press and maintain pressed the RESET key. The blue and red LED are switched off and on again.

1° RESET

The blue and red LED blink twice. The blue and red LED are switched on again. Wait until the blue LED is off.

2° RESET

The red LED blinks some times. The blue and red LED blink twice. The blue and red LED are switched on again. Wait until the blue LED is off.

END OF RESET CYCLE

When the blue LED is switched off for the second time, the reset cycle is finished. Release the RESET.

The camera is reset with the default settings.



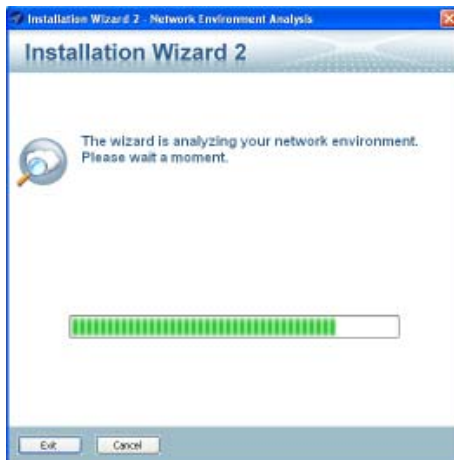
WARNING

Upon reset, the cameras are set with the default programming. Program a correct IP address and password using the Installation Wizard 2 software to use the cameras with the Tecnoalarm Video System.

A.4 CONFIGURATION OF THE TEC2000 CAMERAS BY THE "INSTALLATION WIZARD 2" SOFTWARE



Program the IP address using the "**Installation Wizard 2**" included into the cameras packaging. The software must be installed on the PC where the Tecnoalarm software is installed, too. To install the "Installation Wizard 2" software, click on the beside icon on the desktop of the PC. On the screen is viewed:



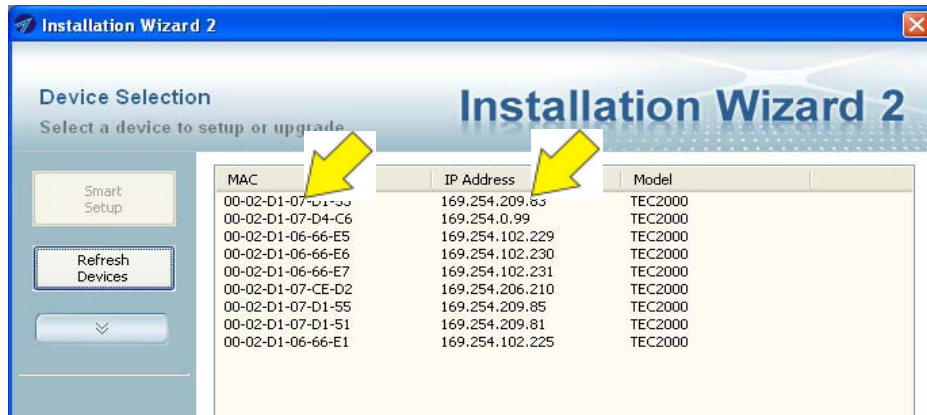
Click **Next** to continue.



On the screen is viewed the beside image. Click **OK** to continue.



On the screen is viewed:

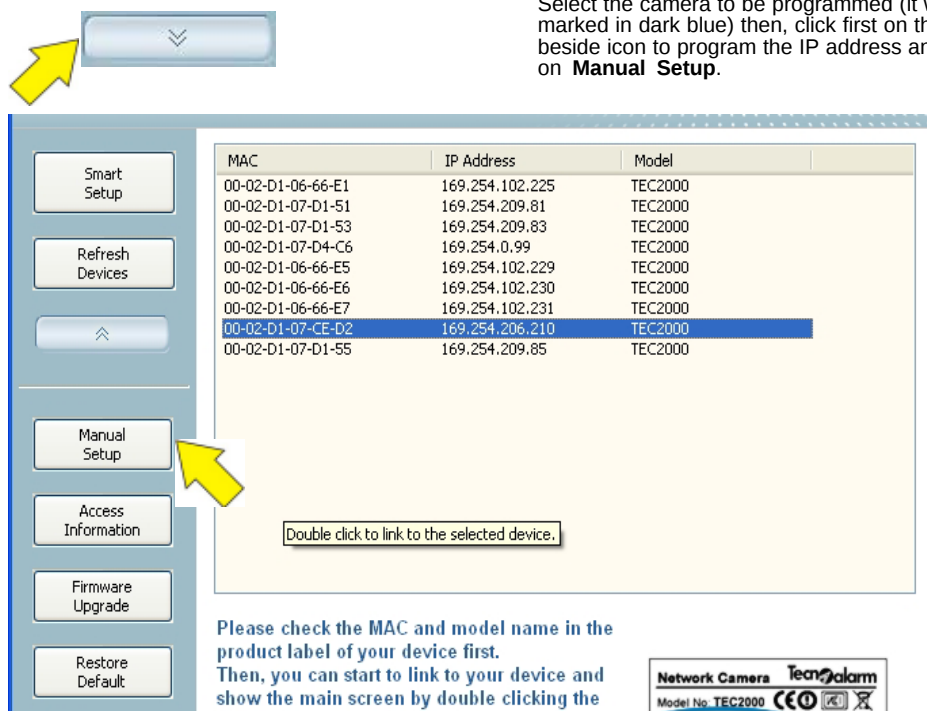


The list shows all the TEC2000 IP cameras found on the network.

For each camera the automatically assigned IP address and the previously programmed MAC address (i.e. code which identifying each camera) is listed.

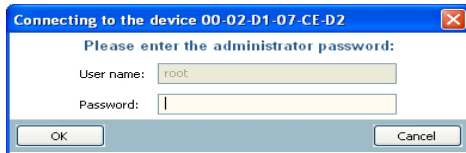
The MAC address is indicated on a label on the rear side of each camera casing.

Select the camera to be programmed (it will be marked in dark blue) then, click first on the beside icon to program the IP address and then on **Manual Setup**.



PROGRAMMING OF THE PASSWORD OF THE CAMERAS

On the screen is viewed the beside image.
The password administrator is only requested if the camera has already been used and a password has been programmed. In that case, enter the password. But if the camera has been rese (see § A.3), no password is required.
On the screen is viewed:



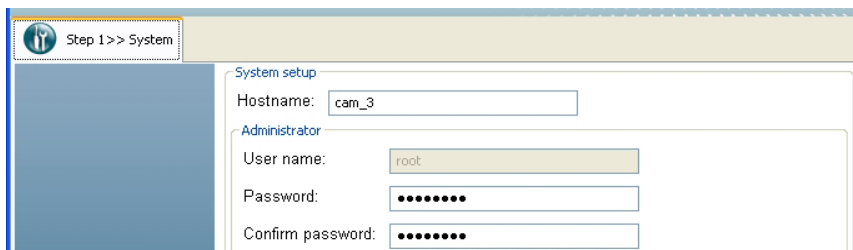
Connecting to the device 00-02-D1-07-CE-D2

Please enter the administrator password:

User name: root

Password:

OK Cancel



Step 1 >> System

System setup

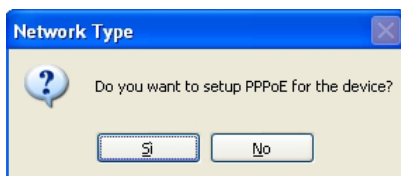
Hostname: cam_3

Administrator

User name: root

Password:

Confirm password:

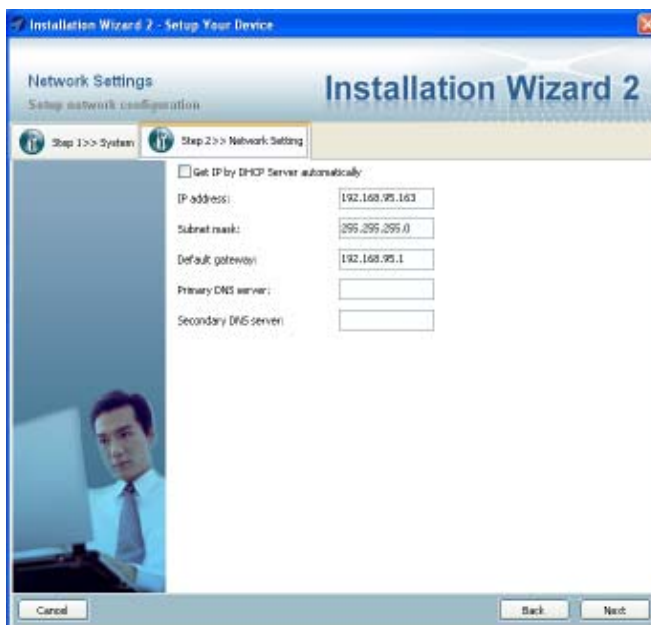


Network Type

Do you want to setup PPPoE for the device?

Si No

Always protect the access to the camera with a password.
Enter the password and repeat it to confirm.
Click **Next** to continue.
On the screen is viewed the beside image.
Click **No**.
On the screen is viewed:



Installation Wizard 2 - Setup Your Device

Network Settings

Setup network configuration

Step 1 >> System Step 2 >> Network Setting

Get IP by DHCP Server automatically:

IP address: 192.168.95.163

Subnet mask: 255.255.255.0

Default gateway: 192.168.95.1

Primary DNS server:

Secondary DNS server:

Cancel Back Next

IP ADDRESS OF THE CONNECTED CAMERAS

The cameras must be programmed with a fixed IP address.

- Automatic assignment by DHCP server
 - Option enabled The network automatically assigns an IP address to the camera. The address is automatically assigned by the DHCP server (Dynamic Host Configuration Protocol).
 - Option disabled The camera **cannot work** with the TSP7000 video console. An IP address must be manually assigned to the camera. The camera **works** correctly with the TSP7000 video console.
- IP address IP address corresponding to the camera. The following addresses must be programmed:

Camera 1:	192.168.95.161
Camera 2:	192.168.95.162
Camera 3:	192.168.95.163
Camera 4:	192.168.95.164
Compulsory:	255.255.255.0
Compulsory:	192.168.95.1
- Subnet Mask
- Preset gateway
- DNS primary server Must not be filled in
- Server DNS secondaire Must not be filled in

After having filling in the items, click **Next**.

On the screen is viewed:



Click **No**.

On the screen is viewed:

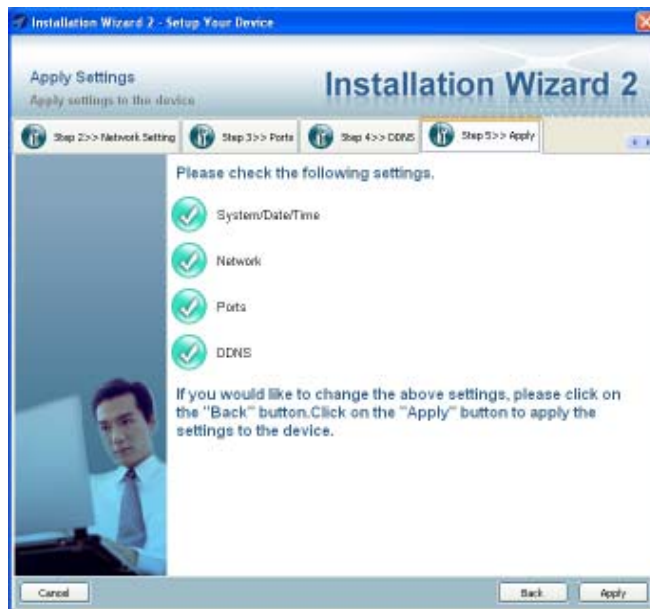


Click **Apply** to confirm the changes.

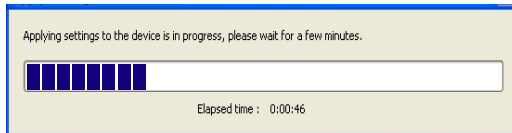
On the screen is viewed:



After filling in the items, click **Next**.
On the screen is viewed:



Click **Apply** to confirm the changes.

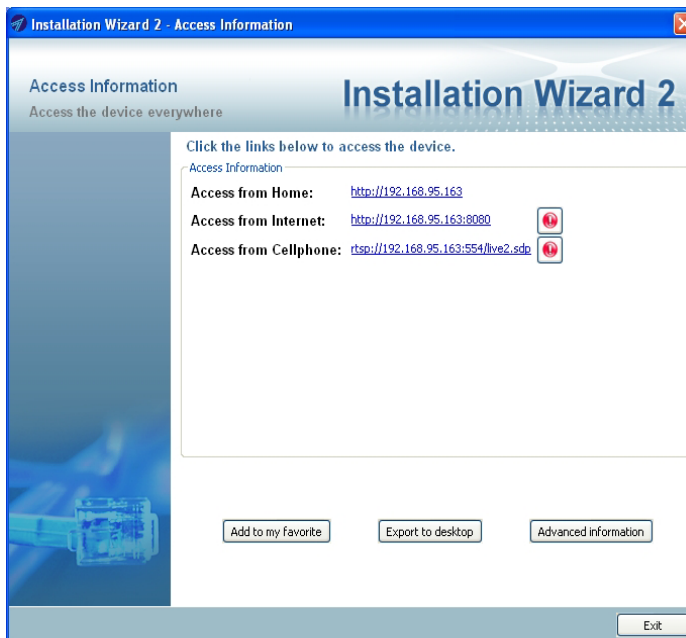


On the screen is viewed the beside image.



Wait until the end of device configuration when the beside image is displayed. Click **OK** to confirm the changes.

On the screen is viewed:



Click **Exit** to close the window. Both the IP address and the password have been correctly assigned to the first camera.

**WARNING**

Assign an IP address and a password to all the cameras of the system (repeat the procedures of § A.4 for each camera).

A.5 NON-TECNOALARM CAMERAS - PARAMETERS FOR STREAMING

The **non-Tecnoalarm** cameras connected to the TSP7000 video console can do streaming only if duly programmed by the installer with the below settings.
The cameras **not Tecnoalarm** cannot never realise events photos.

PARAMETERS FOR STREAMING

- | | | | |
|---------------------------------------|---|------|-----|
| ● Protocol | RTSP | Port | 554 |
| ● Authentication | Basic or disabled | | |
| ● Image compression | MPEG-4 SP (simple profile) | | |
| ● Max. resolution | D1 (640x480 highly recommended) | | |
| ● Horizontal resolution | 768, 720, 704, 640, 480, 384, 352, 320, 240, 192, 176, 160 | | |
| ● Vertical resolution | 576, 480, 360, 288, 240, 180, 144, 120 | | |
| ● Compression | 30 recommended | | |
| ● Max. frame rate | 5fps | | |
| ● Max. bit rate
(or peak bit rate) | 1000 Kbps (constant CBR or VBR limited)
(640Kbps recommended) | | |
| ● Audio | Disabled | | |

A.6 RESET OF THE TSP7000 CONSOLE



WARNING

The configuration reset function permits to completely delete the TSP7000 video console programming and to format its memory.

The IP address of the console is not modified.

The console stops functioning after reset.

Upload the console configuration by PC to restart the console.

The reset is possible in two ways:

- with installer code
- without installer code



A.6.1 RESET WITH INSTALLER CODE

The TSP7000 console must be in stand-by. Touch the key icon.

Enter the installer code (by default 54321).

On the screen is viewed the beside image. Touch the **Reset configuration** icon.



On the screen is viewed the beside image.

Commands available

- **YES** to confirm configuration reset
- **NO** to quit



The deletion of the memory includes the deletion of all the registered photos.

Commands available

- **YES** to confirm formatting of the memory of the console
- **NO** to quit



On the screen is viewed the beside image.

Options available

- **Modification of the IP address**
- **Programming upload**
Permits to upload a new programming by PC



IP ADDRESS MODIFICATION

To modify the IP address:

- Touch the **X** icon on the right hand side of the screen

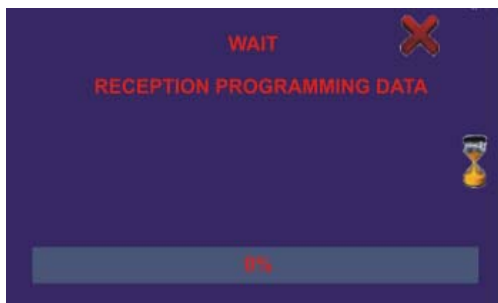
On the screen is viewed the beside image.

- Enter the new IP address of the TSP7000 (**default 192.168.95.151**)
- Touch **Enter**

The TSP7000 video console restarts with the new IP address.



Before proceeding, wait until the console has been completely restarted and the beside image is viewed.



To send the new configuration to the TSP7000 console, in the Tecnoalarm software, in the user archive, select the corresponding user file, enter the IP address of the console and proceed following the indications supplied by the software.

If the communication between the software and the video console is active, the beside image is displayed. Wait until the reception has been completed.



A.6.2 RESET WITHOUT INSTALLER CODE

During reset and formatting of the memory without installer code, the TSP7000 console must be off (i.e. remove power supply or press the on/off button for minimum 30 seconds). Restart the TSP7000 console (i.e. give power supply or press the on/off button until initiation). The console restarts.

During initiation (which can require a few minutes), the hourglass icon is viewed in the center of the screen (beside image).

Touch the hourglass icon.



On the screen is viewed the beside image.
Touch **Yes** to confirm the reset of the TSP7000 video console.



IP ADDRESS MODIFICATION

On the screen is viewed the beside image.
To modify the IP address:

- Enter the new IP address of the TSP7000 (default **192.168.95.151**)

- Touch **Enter**

The TSP7000 video console restarts with the new IP address.



WARNING

For re-initiation, it is necessary to resend programming by PC.



Before proceeding, wait until the console has been completely restarted and the beside image is viewed.



In the user archive of the Tecnoalarm software, select the video console and upload programming.
If the communication between the Tecnoalarm software and the video console is active, on the screen of the console is viewed the beside image.

Wait until all the programming data has been received.

A.7 FIRMWARE UPGRADE



WARNING

Firmware upgrade can modify functioning of the console.
Once started, it is impossible to interrupt the procedure.
This procedure must be executed with the assistance of the Tecnoalarm technicians only.



Proceed as follows:

- TSP7000 video console must be in stand-by
- Touch the key icon
- Enter the installer code (default 54321)



On the screen is viewed the installer menu

- Touch **Firmware upgrade**



On the screen is viewed the beside image:

- Touch **YES** to start the firmware upgrade of the TSP7000 video console



On the screen is viewed the beside image. Insert a USB key with the new firmware version. The new firmware (tsp7000.bin) must be found at the following path on the USB key:
tecnoalarm\tsp7000.bin

- Touch **Proceed** to start the firmware upgrade of the TSP7000 video console.
- The USB key is automatically installed on the system.



ERROR
USB key reading error.



ERROR
Position error or file missing.



KEYOK
Firmware upgrade is started.



At the end of the procedure, on the screen is viewed the beside image. Remove the USB key.
● Touch **Proceed** to continue.



On the screen is viewed:
● Touch **Proceed** to finish the procedure.

Wait until the system is restarted with the new firmware version.



WARNING

Firmware upgrade modifies neither programming nor the IP address of the TSP7000 video console. However, it is recommended to verify programming and functioning after the upgrade.

INTEGRATED VIDEO SYSTEM INSTALLATION GUIDE