

MYVISION

Hardware Manual Rev. 1.00

Visualyser - Hardware Manual - rev. 1.00

CHAPTER'S INDEX

Premise
The manual
What is it used for?
Essential information
Graphical terminals
Touch screen
Laying and shielding of cables
Laying the cables
Cable shielding
Power supply 11
Connection pins
Wiring 12
Recommended connection 13
Connection NOT to be made
Connection NOT to be made 15
YT4G Visualyser 17
Technical features
Product codes
Front 19
Rear
Products rear with KNX board (Konnex)
Drilling template
Wall box
Panel mounting
Plates
Plate Assembly
Plate dimensions
Order codes
Service page
Control panel 31

YT4T Visualyser	. 41
Technical features	. 42
Product codes	. 42
Front	. 43
Rear	. 44
Products rear with KNX board (Konnex)	. 45
Drilling template	. 46
Wall box	. 49
Panel mounting	. 50
Plates	. 51
Plate Assembly	. 52
Plate dimensions	. 53
Order codes	. 53
Service page	. 54
Control panel	. 55
YT5T Visualyser	. 65
Technical features	. 66
Product codes	. 66
Front	. 67
Rear	. 69
Products rear with KNX board (Konnex)	. 70
Drilling template	. 71
Wall box	. 74
Panel mounting	. 75
Plates	. 76
Plate Assembly	. 77
Plate dimensions	. 78
Order codes	. 81
Service page	. 81
Control panel	. 82
-	
YT7T Visualyser	. 93
Technical features	. 94
Product codes	. 94
Front	. 95
Rear	. 97

Products rear with KNX board (Konnex)	98
Drilling template	99
Wall box	102
Panel mounting	103
Plates	104
Plate Assembly	105
Plate dimensions	106
Codici ordinazione	109
Pagina di servizio	109
Control panel	110
YTAT Visualyser	121
Technical features	122
Product codes	122
Front	123
Rear	125
Products rear with KNX board (Konnex)	126
Drilling template	127
Wall box	130
Panel mounting	131
Plates	132
Plate Assembly	133
Plate dimensions	134
Codici ordinazione	137
Pagina di servizio	137
Control panel	138
VVDT Viguelyger	140
Tabrical factures	149
Lendruore Configuration	150
Hardware Configuration	151
Operational System	151
Front	151
	152
Drilling template	152
w all box	155
Panel mounting	156
Plates	157

Plate Assembly	158
Plate dimensions	158
Order codes	159
Communication ports	161
General notes	161
PC Terminal <-> Connection	162
Connection cables	165
General notes	165
Desistance to chemical substances	171
	171
Chemical substances	1/1
Cleaning the terminal	172
After-sales assistance	173
Customer Care	173
Product return	173

1. Premise

The hardware installation manual is unique for all types of Visualyser.

- **The manual** The installation manual is the instrument that allows the user to obtain information regarding the type of fixing, connections, as well as optional accessories, functions available in the terminals and connection cables to the device.
- What is it usedThe manual contains all notions, concepts and examplesfor?necessary for an easy and quick installation.

4 Chapter 1

Premise

5

7. **Essential information**

The terminal is an appliance made up from a series of components, which due to their construction features MUST be used in a suitable way; moreover, due to their construction peculiarities, the terminal may behave in a way that could be interpreted as malfunctioning of the product and/or construction defects.

The displays used on the Visualyser terminals are active matrix defined as TFT (Thin Film Transistor).

One component that envisions certain attention when used is the Touch Screen.

Below is a series of information regarding possible behaviour and correct use of the terminal.



If some of these notions are not put into practice, 🚵 they may damage the terminal.

The LCD graphic terminals category with TFT type display can Graphical terminals have LED back-lighting or with CCFL lamps.

> In the displays with CCFL back-lighting, the brightness may be slightly uneven; it may be lighter in the area where the bulb is located.



All displays have a certain visual angle within which to be positioned in order to have a correct view of the images. If the user is outside of the specified angle, he could see the images with colours inverted or with different tones to the original ones or not see any colour, etc. The visual angle can be slightly adjusted by acting on the display contrast.



The figure shown above shows the direction of the angles depending on the observation point. The table states the value of the display angles depending on the type of display.

Display type	Direction (Hours)				
Display type	12 - α	6 - β	9 - γ	3 - δ	
TFT	80 Degrees	80 Degrees	70 Degrees	70 Degrees	

7

This prerogative leads to a difference in display (while maintaining the same contrast and temperature) when the observers are at different distances with respect to the terminal. Note that in some cases the displays can have some white pixels (always on) or black (always off). This phenomenon can be visible or invisible to the user depending on the colour displayed.



Touch screenThe touch screen is activated by applying a force equal to
200g indifferently to the use of a pen or finger.
A Peripheral Area of the touch screen exists that must never
be stressed, especially with pointed objects (pens etc.). The
glass in this area is very sensitive to pressing and is subject to
breakage.

Chapter 2 8

Essential information



The peripheral area is about 2 mm per side and is outside of the sensitive area.



By stressing this area the terminal may be damaged.

9

3. Laying and shielding of cables

Electronic appliances are frequently used in the command and control systems of the home systems.

Electric interference caused by the functioning of these appliances can jeopardise the correct functioning and the life span of the electronic appliances present in the plant. To allow the correct functioning of the electric and electronic

appliances the presence of interference must be reduced.

- Laying the
cablesRemember to separate the measurement, control and commu-
nication cables from the power cables. Power cables laid near
to and parallel to the communication cables cause coupling
voltages that interfere with or destroy the electronic compo-
nents.
- Cable shieldingFor connection of the communication signals, it is necessary to
use suitable shielded cables (total shielding is recommended).
The shielding must be connected to the earth potential.
The earthing of the home system must be carried out in com-
pliance with all Standards in force.

Visualyser - Hardware Manual - rev. 1.00

10 Chapter 3

Laying and shielding of cables

4. Power supply

Use a 24VCC(18..32Vdc) feeder to power the terminal.

Connection pins

Table 0.1: Three-poles power supply connector

Connector	Pin	Meaning
3 2 1	1	+24Vdc input power supply
	2	0Vdc input power supply
	3	Protection earth
24000		



Check the connections before applying voltage.

Table 0.2: Four-poles power supply connector

Connector	Pin	Meaning
4 3 2 1	1	+24Vdc input power supply
• • • •	2	0Vdc input power supply
	3	Not connected
N.C. 24VCC	4	Protection earth



Check the connections before applying voltage.

Connector	Pin	Meaning
	1	+24Vdc input power supply
	2	0Vdc input power supply
□ <u></u> <u>N.C.</u> +	3	Not connected
	4	Protection earth

Check the connections before applying voltage.

Table 0.3: Four-poles power supply connector from panel



The data given refer to maximum values among those certified. The coupling torque is linked to the regulations applicable to the product and type of use.

Recommended connection

To prevent any damage to the terminal, carry out the connection as shown in the figure of tables 0.4 and 0.5:





Correct earthing is indispensable.



Table 0.5: Terminal YG4/YT4: Power supply with 0Vcc connected to EP



Correct earthing is indispensable.

Connection NOT to be made To prevent any damage to the terminal **do not** carry out the connections represented in the figure shown below.

Table 0.6: Connections not to be made



The configurations stated above seriously damage some components of the terminal.

16 Capitolo 4

Power supply



Technical features

The table below lists the main technical features of the product in question.

Display	YT4G		
Type	Graphic LCD TET		
Colors/levels	32 grav levels		
Size	4 3" (widescreen)		
Touch screen	Analog		
Resolution (landscape)	480 x 272		
Brightness	500 cd/m ²		
Backlight	White LED		
Custom			
System			
Runtime	Polymath E2Duilder / Myvision		
KAM	64 MB		
Flash memory	32 MB		
CPU type	Intel PXA270		
CPU clock	312MHz		
Interfaces			
First integrated port	RS-485		
Second integrated port	KNX (optional)		
USB Host port	USB Host 1.1		
USB Device port	-		
Slot CardBus	<u>4</u> 7		
Network	Ethernet 10/100 Mbit		
Dimensions			
External (mm) (W x H x D)	180 x 140 x 35 (D=54 with KNX)		
Technical data			
Power supply	1832 Vcc		
Consumption (24 Vcc)	~ 7 W		
Protection level (with cover)	IP 40 (frontal)		
Operating temperature	0+50 °C		
Storage temperature	-20+65°C		
Humidity (non condensing)	85%		
Certifications	CE, cULus		
Wall box			
Dimensions (mm) (W x H x D)	160 x 130 x 70		

Product codes The purchase codes with possible configurations of the product are given in the following table :

Product codes	
VISUALYSER (standard configuration)	YT4G1010
VISUALYSER with Konnex port	YT4G1210
Wall box	YB400

Front Vertical assembly



Horizontal assembly



Rear



Products rear with KNX board (Konnex)



22 | Chapter 5 YT4G Visualyser

> Drilling template





Rear





Side







Wall box ESA supplies the wall box (order code: YB400) for fixing the terminal :







Panel mountingAfter having inserted the wall box in the wall following the
instruction of the installation sheet of the boxes, proceed with
the wiring and fixing of the terminal following the instructions
on the installation sheet of the terminal.
For fixing use appropriate screws contained in the terminal

For fixing use appropriate screws contained in the terminal packing kit :



27

PlatesThe Visualyser line has a design studied to make the ESA terminals a valid technological mean and a excellent furniture, thanks to the design of the interchangeable plates.
The plate is easily, quickly and reliably applied to the terminal

using magnets (for further details consult the installation sheet of the plates) :



The plates made available by ESA are divided into the following lines :

- Classic
- Prime
- Vogue
- Bold

For the terminal described in this chapter, ESA supplies the "Classic" line plate, for further information (materials, colours, etc...) regarding the lines of the plates, consult the information brochure.

YT4G Visualyser

Plate Assembly Vertical assembly



Horizontal assembly





Side (Classic line plate)



Order codes For the terminal described in this chapter, the codes of the purchasable plates are the following :

YC4LFXXXXXXX (Classic line)

30 Chapter 5 YT4G Visualyser

Service page

Start ESA Applications	
Downloader Configuration	
Control Panel	

Service page to which access is gained by inserting a button in the project (exit runtime).

- Start ESA Application performs the project runtime
- Download configuration opens the download configuration
- Control Panel opens the control panel



By clicking on downloader configurator the connection settings can be configured

- Disable disables the connection with the terminal
- USB enables the USB connection with the terminal

- Http enables the ethernet connection with the terminal through an http protocol

- Ethernet enables the ethernet connection with the terminal and allows configuring the port.

Control panel



By clicking on each of these icons access is gained to the terminal configuration.

Stylus

The terminal uses a resistant type sensitive glass, for this type of glass to function correctly requires a calibration procedure (the terminal is supplied already calibrated), meaning the resistant area of the glass must be suitable to the visual area of the display.

If it is necessary to repeat the calibration procedure, it is possible to do so by following the instructions below.

The procedure requires great attention because the precision of the keys' area depends from the calibration.



From the control panel click on the stylus icon and, subsequently, the following screens are displayed on the recalibrate key. Touch the screen near the crosses that appear on the screen.





Step 2: touch the screen near the crosses



Step 3: touch the screen near the crosses


Carefully press and briefly hold stylus on the center of the target. Press the Esc key to cancel.

Step 4: touch the screen near the crosses









The terminal returns to the initial page, by clicking on ok calibration is confirmed.

Date/Time

From here it is possible to amend: date, time and time zone. By enabling the "automatically adjust clock for daylight saving" check, the time is automatically updated at BST or GMT.

			Х
6	- C	Date/Time Properties OK 🗙 🥒	
Stylus	Date/Tin	Date/Time ightness	
Backup	Passwor	April 2010 Current Time Sid 700 71 2 20 20 11 2 3 20 20 11 2 3 11 21 14 56 77 8 9 10 11 21 14 15 17 10 100	

<u>Owner</u>

							Х
Owner Properti	es		OK	×			
Network ID			Input I	Panel	~		
The system uses	User Name:		ESC	7	8	9	BS
gain access to	Password:		+	4	5	6	ţ
resources. Enter	Domain:		-	1	2	3	→
password and domain provided		1	→ ABC	TAB	0		+
by your network administrator.							

This information is used by Windows CE to access the network resources.

Username: enter the user name to access the network Password: enter the password to access the network Domain: enter the domain to access the network

In case the above data is unknown, contact the network administrator.

Network

IP address

				_				X
'SMSC	:11X Et	hernet	Driver	' Settir	ngs			OK ×
IP Ad	dress 🗗	lame Se	rvers					
An II auto com does IP ag	P addres matically outer. I not aut	s can be assigne f your n comatica	e d to this etwork Ily assign	0 0	<u>O</u> btain a Specify Address:	an IP add an IP ad	dress via DHCP dress 192 .168 .100 .3	
admi	Input I	Panel				k:	255 .255 .255 .0	
prov	ESC	7	8	9	BS	eway:		
	+	4	5	6	÷			
	-	1	2	3	→			

Obtain an IP address via DHCP: by selecting this option, an IP address is automatically obtained (ensure that the DHCP server is enabled on the network)

Specify an IP address: by selecting this option the parameters must be entered manually (IP Address, Subnet Mask, Default Gateway)

In case the above data is unknown, contact the network administrator.

	-	<i>i</i>	2							X
'S	MSC11)	(Ether	net Dri	iver' Se	ettings				(ж×
IF	Addres	s Name	e Server	s						
i i	Name se automati s enable You can	rver add ically assi d on thi specify	resses n igned if I s adapte addition	nay be DHCP er. al	Primary Second	DNS: lary D <u>N</u> S: <u>W</u> INS:	•	•	•	
4	ESC 1		0	0	De	ary W <u>I</u> NS:				
	ESC	/	0	9	БЭ					
	+	4	5	6	←					
	-	1	2	3	→					

Name servers

If necessary, the parameters relating to the relative DNS or AL WINS must be entered

In case the above data is unknown, contact the network administrator.

Lamp Saver



By enabling the Lamp Saver, the lamp switches off after a time set in the Wait box.

Brightness



The Brightness allows regulating the brightness of the display lamp.

Backup

Daslue & Destere	0			r		X
Backup & Restore	U	<u> </u>	00 mp.Saver	- Briabt	nerr	
	Input I	Panel				
	ESC	7	8	9	BS	
RunTime Project	+	4	5	6	t	
History (alarms, recipes, trends, v	-	1	2	3	→	
Start Backup	→ ABC	TAB	0		←	
Ready						
1		_				

A backup copy of the components chosen through ticking can be made from here: Runtime, Project, History. It is essential to tick at least one of the components to be exported and choose a path where to save the file. The restore can be done for all exported components or through ticking, choose the component or components for which restore is to be carried out.

Password

							X
	60						
Password Propertie	s 🕻	ж ×	Ľ	°(V)	Delahara		
Password Settings		P	< Lamp) Saver	Brightne	55	1
	6	Input	Panel				
Password:		ESC	7	8	9	BS	
Confirm password		+	4	5	6	t	
		-	1	2	3	+	
		→ ABC	TAB	0		t	

The Password option allows assigning a password to the terminal.

The password is requested (not compulsorily) during the use of the "Remote Desktop" application.

<u>FTP</u>



The "FTP" acronym means "Files Transfer Protocol". It gives the user the possibility to enable and disable the "FTP Server" service of the panel from any other device (PC,XS,IT,YT) connected to the network.

This function is very useful when it is necessary to write, cancel or modify data on the terminal easily from a remote access.

Selecting the "Enable" option, the "FTP" folder sharing service in the "Hard Disk" directory is enabled :

Reset



"Reset" is an application of the terminal control panel which allows to cancel all that been transferred onto the Hard Disk. Selecting the "Enable" option, the "FTP" folder sharing service in the "Hard Disk" directory is enabled.

The user can choose from 2 options :

-"Remove project and runtime" -> choosing this option, both the project and the runtime that have been transferred from Polymath onto the terminal will be cancelled.

-"Complete terminal disk reset" -> choosing this option, the whole content of the "Hard Disk" folder will be cancelled, with the exception of the files that are essential for operating the terminal.

Information



Information regarding the panel is displayed, which: terminal model, revision of the Windows CE image and the image date.

IP Config

IPConfig		ок 🗙					
[Terminal —			1				
IP address	192.168.100.5	Port 1 (ch.A)					
Subnet	255.255.255.0	-					
Gateway	0.0.0.0		Input I	Panel			
r Devices —			ESC	7	8	9	BS
Device 1	IP address	Port	+	4	5	6	₽
Device I	192.100.100.2		-	1	2	3	→
			→ ABC	ТАВ	0		+
		ţ.					

By clicking on the "IP Config" icon, the mask displaying the IP Address of the terminal and IP Address (or IP Addresses) of the devices connected via Ethernet will appear.

The function "IP Config" is useful in that it is possible to change the addresses of the devices without having to use the POLYMATH configuration software (very useful operation during the system's start-up).

By using the appropriate key "Input Panel", the user can carry out any variations to the IP addresses of the devices directly from the ESA terminal.

6. YT4T Visualyser



Technical features

The table below lists the main technical features of the product in question.

Display	YT4T				
Time	Cranhin LCD TET				
Type	65 526 colors				
Colors/levels	65.536 colors				
Size	4,3" (widescreen)				
Touch screen	Analog				
Resolution (landscape)	480 x 272				
Brightness	500 cd/m*				
Backlight	White LED				
System					
Runtime	Polymath EZbuilder / MyVision				
RAM	64 MB				
Flash memory	32 MB				
CPU type	Intel PXA270				
CPU clock	312MHz				
Interfaces					
First integrated port	RS-485				
Second integrated port	KNX (optional)				
LISB Host port	LISB Host 1 1				
USB Device port	-				
Slot CardBus					
Network	Ethernet 10/100 Mbit				
THE WORK					
Dimensions					
External (mm) (W x H x D)	180 x 140 x 35				
	(D=54 with KNX)				
Technical data					
Power supply	1832 Vcc				
Consumption (24 Vcc)	~ 7 W				
Protection level (with cover)	IP 40 (frontal)				
Operating temperature	0+50 °C				
Storage temperature	-20+65°C				
Humidity (non condensing)	85%				
Certifications	CE, cULus				
Wall box					
Dimensions (mm) (W x H x D)	160 x 130 x 70				

Product codes The purchase codes with possible configurations of the product are given in the following table :

Product codes	
VISUALYSER (standard configuration)	YT4T1010
VISUALYSER with Konnex port	YT4T1210
Wall box	YB400





Horizontal assembly



Rear



Products rear with KNX board (Konnex)



46 | Chapter 6 YT4T Visualyser

> Drilling template

Front



Rear



Visualyser - Hardware Manual - rev. 1.00

Side







49

Wall box ESA supplies the wall box (order code: YB400) for fixing the terminal :







Panel mountingAfter having inserted the wall box in the wall following the
instruction of the installation sheet of the boxes, proceed with
the wiring and fixing of the terminal following the instructions
on the installation sheet of the terminal.
For fixing use appropriate screws contained in the terminal

For fixing use appropriate screws contained in the terminal packing kit :



PlatesThe Visualyser line has a design studied to make the ESA terminals a valid technological mean and a excellent furniture, thanks to the design of the interchangeable plates.
The plate is easily, quickly and reliably applied to the terminal

using magnets (for further details consult the installation sheet of the plates) :



The plates made available by ESA are divided into the following lines :

- Classic
- Prime
- Vogue
- Bold

For the terminal described in this chapter, ESA supplies the "Classic" line plate, for further information (materials, colours, etc...) regarding the lines of the plates, consult the information brochure.

Plate Assembly Vertical assembly



Horizontal assembly





Order codes For the terminal described in this chapter, the codes of the purchasable plates are the following :

YC4LFXXXXXXX (Classic line)

Service page

Start ESA Applications	
Downloader Configuration	
Control Panel	

Service page to which access is gained by inserting a button in the project (exit runtime).

- Start ESA Application performs the project runtime
- Download configuration opens the download configuration
- Control Panel opens the control panel



By clicking on downloader configurator the connection settings can be configured

- Disable disables the connection with the terminal
- USB enables the USB connection with the terminal

- Http enables the ethernet connection with the terminal through an http protocol

- Ethernet enables the ethernet connection with the terminal and allows configuring the port.

Control panel



By clicking on each of these icons access is gained to the terminal configuration.

<u>Stylus</u>

The terminal uses a resistant type sensitive glass, for this type of glass to function correctly requires a calibration procedure (the terminal is supplied already calibrated), meaning the resistant area of the glass must be suitable to the visual area of the display.

If it is necessary to repeat the calibration procedure, it is possible to do so by following the instructions below.

The procedure requires great attention because the precision of the keys' area depends from the calibration.



From the control panel click on the stylus icon and, subsequently, the following screens are displayed on the recalibrate key. Touch the screen near the crosses that appear on the screen.





Step 2: touch the screen near the crosses



Step 3: touch the screen near the crosses



Carefully press and briefly hold stylus on the center of the target. Press the Esc key to cancel.

Step 4: touch the screen near the crosses









The terminal returns to the initial page, by clicking on ok calibration is confirmed.

Visualyser - Hardware Manual - rev. 1.00

Date/Time

From here it is possible to amend: date, time and time zone. By enabling the "automatically adjust clock for daylight saving" check, the time is automatically updated at BST or GMT.

			Х
6	- C	Date/Time Properties OK 🗙 🥒	
Stylus	Date/Tin	Date/Time ightness	
Backup	Passwor	April 2010 Current Time Sid 700 71 2 20 20 11 2 3 20 20 11 2 3 11 21 14 56 77 8 9 10 11 21 14 15 17 10 100	

<u>Owner</u>

							X
Owner Properti	es		OK	×			
Network ID			Input I	Panel			
The system uses	User Name:		ESC	7	8	9	BS
gain access to	Password:	, 	+	4	5	6	ţ
resources. Enter the user name.	Domain:		-	1	2	3	→
password and domain provided			→ ABC	TAB	0	•	+
by your network administrator.							

This information is used by Windows CE to access the network resources.

Username: enter the user name to access the network Password: enter the password to access the network Domain: enter the domain to access the network

In case the above data is unknown, contact the network administrator.

Network

IP address

								X		
'SMSC11X Ethernet Driver' Settings OK X										
IP Address Name Servers										
An IP address can be automatically assigned to this computer. If your network does not automatically assign IP address: 192.168.100.3										
and prov	ESC	7	8	9	BS	eway:				
	+	4	5	6	L L					
	-	1	2	3	→					

Obtain an IP address via DHCP: by selecting this option, an IP address is automatically obtained (ensure that the DHCP server is enabled on the network)

Specify an IP address: by selecting this option the parameters must be entered manually (IP Address, Subnet Mask, Default Gateway)

In case the above data is unknown, contact the network administrator.

	-	<i>i</i>	2							X
'S	MSC11)	(Ether	net Dri	iver' Se	ettings					DK ×
IF	P Addres	s Name	e Server	s						
Name server addresses may be automatically assigned if DHCP is enabled on this adapter. You can specify additional				Primary Second	DNS: lary D <u>N</u> S: <u>W</u> INS:	•	•	•		
4	Input	Pariei	0	0	DO	ary W <u>I</u> NS:				
	ESC	/	ð	9	82					
	+	4	5	6	←					
	-	1	2	3	→					

Name servers

If necessary, the parameters relating to the relative DNS or AL WINS must be entered

In case the above data is unknown, contact the network administrator.

Lamp Saver



By enabling the Lamp Saver, the lamp switches off after a time set in the Wait box.

Brightness



The Brightness allows regulating the brightness of the display lamp.

Backup

Packup & Postoro	0	Z		7		X
Backup Restore	Input I	Panel	inn Saver	Bright	Decc	
	ESC	7	8	9	BS	
RunTime Project	+	4	5	6	Ļ	
History (alarms, recipes, trends, v	-	1	2	3	→	
Start Backup	→ ABC	TAB	0	•	t	
Ready						
		_				

A backup copy of the components chosen through ticking can be made from here: Runtime, Project, History. It is essential to tick at least one of the components to be exported and choose a path where to save the file. The restore can be done for all exported components or through ticking, choose the component or components for which restore is to be carried out.

Password

							X
	6 0						
Password Propertie	s 🖸	K ×	Ľ	~ ()	Delahara		
Password Settings		P	< Lamp) Saver	Brightne	55	1
	6	Input	Panel				
Password:		ESC	7	8	9	BS	
Confirm password		+	4	5	6	t	
		-	1	2	3	+	
		→ ABC	TAB	0		t	

The Password option allows assigning a password to the terminal.

The password is requested (not compulsorily) during the use of the "Remote Desktop" application.

<u>FTP</u>



The "FTP" acronym means "Files Transfer Protocol". It gives the user the possibility to enable and disable the "FTP Server" service of the panel from any other device (PC,XS,IT,YT) connected to the network.

This function is very useful when it is necessary to write, cancel or modify data on the terminal easily from a remote access.

Selecting the "Enable" option, the "FTP" folder sharing service in the "Hard Disk" directory is enabled :

Reset



"Reset" is an application of the terminal control panel which allows to cancel all that been transferred onto the Hard Disk. Selecting the "Enable" option, the "FTP" folder sharing service in the "Hard Disk" directory is enabled. The user can choose from 2 options : -"Remove project and runtime" -> choosing this option, both the project and the runtime that have been transferred from Polymath onto the terminal will be cancelled.

-"Complete terminal disk reset" -> choosing this option, the whole content of the "Hard Disk" folder will be cancelled, with the exception of the files that are essential for operating the terminal.

Information



Information regarding the panel is displayed, which: terminal model, revision of the Windows CE image and the image date.

IP Config

IPConfig		ок 🗙					
[Terminal —			1				
IP address	192.168.100.5	Port 1 (ch.A)					
Subnet	255.255.255.0	-					
Gateway	0.0.0.0		Input	Panel			
r Devices —			ESC	7	8	9	BS
Device 1	IP address	Port	+	4	5	6	₽
Device I	192.100.100.2		-	1	2	3	→
			→ ABC	TAB	0		+
		ţ.					

By clicking on the "IP Config" icon, the mask displaying the IP Address of the terminal and IP Address (or IP Addresses) of the devices connected via Ethernet will appear.

The function "IP Config" is useful in that it is possible to change the addresses of the devices without having to use the POLYMATH configuration software (very useful operation during the system's start-up).

By using the appropriate key "Input Panel", the user can carry out any variations to the IP addresses of the devices directly from the ESA terminal.

7. YT5T Visualyser



YT5T Visualyser

Technical features

The table below lists the main technical features of the product in question.

	VTST					
Display						
Туре	Graphic LCD TFT					
Colors/levels	65.536 colors					
Size	5,7"					
Touch screen	Analog					
Resolution (landscape)	320 x 240					
Brightness	300 cd/m ²					
Backlight	White LED					
System						
Runtime	Polymath EZbuilder / MyVision					
RAM	64 MB					
Flash memory	32 MB					
CPU type	Intel PXA270					
CPU clock	520MHz					
Interfaces						
First integrated port	RS-485					
Second integrated port	KNX (optional)					
USB Host port	USB Host 1.1 (frontal)					
USB Device port	USB Device 1.1 (frontal)					
Slot CardBus	SD/MMC					
Network	Ethernet 10/100 Mbit					
Dimensions						
External (mm) (W x H x D)	222 x 163 x 60					
Technical data						
Power supply	1832 Vcc					
Consumption (24 Vcc)	~ 7 W					
Protection level (with cover)	IP 40 (frontal)					
Operating temperature	0+50 °C					
Storage temperature	-20+65°C					
Humidity (non condensing)	85%					
Certifications	CE, cULus					
Wall box						
Dimensions (mm) (W x H x D)	216 x 168 x 73					

Product codes The purchase codes with possible configurations of the product are given in the following table :

Product codes	
VISUALYSER (standard configuration)	YT5T1010
VISUALYSER with Konnex port	YT5T1210
Wall box	YB500

Front



1	Porta seriale USB	3	Pulsante di reset
	USB port		Reset button
	Port USB		Bouton de reset
	USB-Schnittstelle		Reset-Taste
	Puerto USB		Tecla de reset
2	Porta seriale per il trasferimento del progetto		
	Serial port to transfer the project		
	Port sériel pour le transfert du projet		
	Serielle Schnittstelle für die Projektübertragung		
	Puerto serie para la trasferencia del proyecto		

Visualyser - Hardware Manual - rev. 1.00




Rear



	Connecteur d'alimentation Anschluß für die Spannungsversorgung Conector de alimentación		Serial port for communicating with other devices Port seriel pour la communication avec autre dispositifs Serielle Schrittstelle für die Kommunikation mit anderen Komponenten Puerto serie para la comunicación con otros dispositivos
В	ETH 10/100	D	SD/MMC (Push-Push System)
	Ethernet 10/100 Mbit - Ri45		Premere per inserire / Premere per estrarre
	Ethernet 10/100 Mbit - Bi45		Push-in / Push-out
	Ethernet 10/100 Mbit - Ri45		Pousser pour insérer / Pousser pour extraire
	Ethernet 10/100 Mbit - Ri45		Drücken - Karte einfügen / Drücken - Karte entnehmen
	Ethernet 10/100 Mbit - Ri45		Se inserta apretando / Se extrae apretando

70 | Chapter 7

YT5T Visualyser

Products rear with KNX board (Konnex)





A	Connettore di alimentazione Power supply connector Connecteur d'alimentation Anschluß für die Spannungsversorgung Conector de alimentación	D	RS485 Porta seriale per la comunicazione con altri dispositivi Serial port for communicating with other devices Port sériel pour la communication avec autre dispositifs Serielle Schrittstelle für die Kommunikation mit anderen Komponenten Puerto serie para la comunicación con otros dispositivos
В	ETH 10/100 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45 Ethernet 10/100 Mbit - Rj45	E	SD/MMC (Push-Push System) Premere per inserire / Premere per estrarre Push-in / Push-out Pousser pour insérer / Pousser pour extraire Drücken - Karte einfügen / Drücken - Karte entnehmen Se inserta apretando / Se extrae apretando
С	KNX (opzionale / optional / option / option / opción) Porta seriale KONNEX. KONNEX serial port. Port sérial KONNEX. KONNEX - Schnittstelle. Puerto serie KONNEX.		





Side



Products side with KNX board (Konnex)



Visualyser - Hardware Manual - rev. 1.00

Wall box

ESA supplies the wall box (order code: YB500) for fixing the terminal :





75

Panel mounting After having inserted the wall box in the wall following the instruction of the installation sheet of the boxes, proceed with the wiring and fixing of the terminal following the instructions on the installation sheet of the terminal.

For fixing use appropriate screws contained in the terminal packing kit :



Plates

The Visualyser line has a design studied to make the ESA terminals a valid technological mean and a excellent furniture, thanks to the design of the interchangeable plates.

The plate is easily, quickly and reliably applied to the terminal using magnets (for further details consult the installation sheet of the plates) :



The plates made available by ESA are divided into the following lines :

- Classic
- Prime
- Vogue
- Bold

For the terminal described in this chapter, ESA supplies the "Classic", "Prime" and "Vogue" lines plates, for further information (materials, colours, etc...) regarding the lines of the plates, consult the information brochure.

```
Plate Assembly Vertical assembly
```



Horizontal assembly





Side (Classic line plate)



Chapter 7

Front (Prime line plate)



Side (Prime line plate)



80 | Chapter 7 YT5T Visualyser

Front (Vogue line plate)



Side (Vogue line plate)



81

Order codes For the terminal described in this chapter, the codes of the purchasable plates are the following :

```
YC5LFXXXXXXX (Classic line)
YC5LSXXXXXXX (Prime line)
YC5TRXXXXXXX (Vogue line)
```

Service page

	Start ESA Application
0	Downloader Configuration
•	Control Panel

Service page to which access is gained by inserting a button in the project (exit runtime).

- Start ESA Application performs the project runtime
- Download configuration opens the download configuration
- Control Panel opens the control panel

Start ESA A	oplication Settings		
Disable USB Http Ethernet	Ethernet conr Port 4	Apply nection	

By clicking on downloader configurator the connection settings can be configured

- Disable disables the connection with the terminal

- USB enables the USB connection with the terminal
- Http enables the ethernet connection with the terminal through an http protocol
- Ethernet enables the ethernet connection with the terminal and allows configuring the port.

Control panel



By clicking on each of these icons access is gained to the terminal configuration.

Stylus

The terminal uses a resistant type sensitive glass, for this type of glass to function correctly requires a calibration procedure (the terminal is supplied already calibrated), meaning the resistant area of the glass must be suitable to the visual area of the display.

If it is necessary to repeat the calibration procedure, it is possible to do so by following the instructions below.

The procedure requires great attention because the precision of the keys' area depends from the calibration.



From the control panel click on the stylus icon and, subsequently, the following screens are displayed on the recalibrate key. Touch the screen near the crosses that appear on the screen.

Step 1: touch the screen near the crosses







Step 3: touch the screen near the crosses







Step 5: touch the screen near the crosses



Step 6 Touch anywhere on the screen to end calibration.



The terminal returns to the initial page, by clicking on ok calibration is confirmed.

Date/Time

From here it is possible to amend: date, time and time zone. By enabling the "automatically adjust clock for daylight saving" check, the time is automatically updated at BST or GMT.



<u>Owner</u>

Owner P	roperti	es			0	КΧ
Network I The syst this info gain acc network	tem uses rmation to ess to	User M D Passw	Name: Vord:			
the user	name, d and	Domai	in:			
domain by your	Input I	Panel				
administ ESC 7 8 9 BS						
	+	4	5	6	Ţ	

This information is used by Windows CE to access the network resources.

Username: enter the user name to access the network Password: enter the password to access the network Domain: enter the domain to access the network

In case the above data is unknown, contact the network administrator.

Network

IP address

'SMSC11X Etl Input Panel								
IP Address N	ESC	7	8		9	BS		
An IP address	+	4	5		6	Ļ		
Obtain an	1	1	2		3	1		
Specify an	→ ABC	TAB	0		•	ţ		
IP Address:	19	92.168.	100.1					
Subnet Mask:	5 .255 .	255 .0						
Default Gateway: 192.168.100.2								

Obtain an IP address via DHCP: by selecting this option, an IP address is automatically obtained (ensure that the DHCP server is enabled on the network)

Specify an IP address: by selecting this option the parameters must be entered manually (IP Address, Subnet Mask, Default Gateway)

In case the above data is unknown, contact the network administrator.

Name servers

'SMSC11X Ethernet Driver OK 🗙							
IP Address Name Servers							
Name server addresses							
Primary DNS:							
Secondary DNS:	<u> </u>		. 1				
Primary WINS:							
Input Panel							
ESC 7 8 9 BS							

If necessary, the parameters relating to the relative DNS or AL WINS must be entered

In case the above data is unknown, contact the network administrator.

Lamp Saver

Lamp saver		ок 🗙
Wait: 10	4	minutes

By enabling the Lamp Saver, the lamp switches off after a time set in the Wait box.

Brightness

Brightness	OK ×
31	
	>

The Brightness allows regulating the brightness of the display lamp.

Backup

Backup &	Backup & Restore OK							
Backup Restore								
RunTim Input Panel								
	ESC	7	8	9	BS			
History	+	4	5	6	Ļ			
Deedu	-	1	2	3	1			
јкеаду	→ ABC	TAB	0		t			

A backup copy of the components chosen through ticking can be made from here: Runtime, Project, History.

It is essential to tick at least one of the components to be exported and choose a path where to save the file.

The restore can be done for all exported components or through ticking, choose the component or components for which restore is to be carried out.

Password

Password	l Prope	erties		ок 🗙	
Password	Password Settings				
Passwor	rd:	Ē			
Confirm	Input I	Panel			
Committ	ESC		8	9	BS
	+	4	5	6	t
	-	1	2	3	→
	→ ABC	TAB	0		+

The Password option allows assigning a password to the terminal.

The password is requested (not compulsorily) during the use of the "Remote Desktop" application.

FTP



The "FTP" acronym means "Files Transfer Protocol". It gives the user the possibility to enable and disable the "FTP Server" service of the panel from any other device (PC,XS,IT,YT) connected to the network.

This function is very useful when it is necessary to write, cancel or modify data on the terminal easily from a remote access.

Selecting the "Enable" option, the "FTP" folder sharing service in the "Hard Disk" directory is enabled :

Reset



"Reset" is an application of the terminal control panel which allows to cancel all that been transferred onto the Hard Disk. Selecting the "Enable" option, the "FTP" folder sharing service in the "Hard Disk" directory is enabled. The user can choose from 2 options :

-"Remove project and runtime" -> choosing this option, both the project and the runtime that have been transferred from Polymath onto the terminal will be cancelled.

-"Complete terminal disk reset" -> choosing this option, the whole content of the "Hard Disk" folder will be cancelled, with the exception of the files that are essential for operating the terminal.



Information

Information regarding the panel is displayed, which: terminal model, revision of the Windows CE image and the image date.

IP Config

IPConfig		ок 🗙					
ГTerminal —							
IP address	192.168.100.5	Port 1 (ch.A)					
Subnet	255.255.255.0						
Gateway	0.0.0.0		Input I	Panel			
L _ Devices			ESC	7	8	9	BS
Davias 1	IP address	Port	+	4	5	6	↓
Device I	192.166.100.2		_	1	2	3	
				-	~	5	
			→ ABC	TAB	0	•	←
	I	4	Г				
-			·				

By clicking on the "IP Config" icon, the mask displaying the IP Address of the terminal and IP Address (or IP Addresses) of the devices connected via Ethernet will appear.

The function "IP Config" is useful in that it is possible to change the addresses of the devices without having to use the POLYMATH configuration software (very useful operation during the system's start-up).

By using the appropriate key "Input Panel", the user can carry out any variations to the IP addresses of the devices directly from the ESA terminal. 8. YT7T Visualyser



Technical features

The table below lists the main technical features of the product in question.

	YT7T		
Display	and the second		
lype	Graphic LCD TFT		
Colors/levels	65.536 colors		
Size	7,5"		
Touch screen	Analog		
Resolution (landscape)	640 x 480		
Brightness	350 cd/m ²		
Backlight	CCFL		
System			
Runtime	Polymath EZbuilder / MyVision		
RAM	64 MB		
Flash memory	32 MB		
CPU type	Intel PXA270		
CPU clock	520MHz		
Interfaces			
First integrated port	RS-485		
Second integrated port	KNX (optional)		
USB Host port	USB Host 1.1 (frontal)		
USB Device port	USB Device 1.1 (frontal)		
Slot CardBus	SD/MMC		
Network	Ethernet 10/100 Mbit		
Dimensions			
External (mm) (W x H x D)	290 x 196 x 65		
Technical data			
Power supply	1832 Vcc		
Consumption (24 Vcc)	~ 10 W		
Protection level (with cover)	IP 40 (frontal)		
Operating temperature	0+50 °C		
Storage temperature	-20+65°C		
Humidity (non condensing)	85%		
Certifications	CE, cULus		
Wall box			
Dimensions (mm) (W x H x D)	267 x 205 x 72		

Product codes The purchase codes with possible configurations of the product are given in the following table :

Product codes	
VISUALYSER (standard configuration)	YT7T1010
VISUALYSER with Konnex port	YT7T1210
Wall box	YB700

Front



1	Porta seriale USB	3	Pulsante di reset
	USB port		Reset button
	Port USB		Bouton de reset
	USB-Schnittstelle		Reset-Taste
	Puerto USB		Tecla de reset
2	Porta seriale per il trasferimento del progetto		
	Serial port to transfer the project		
	Port sériel pour le transfert du projet		
	Serielle Schnittstelle für die Projektübertragung		
	Puerto serie para la trasferencia del proyecto		







Horizontal assembly



Rear



A	Connettore di alimentazione	C	RS485
1	Power supply connector		Porta seriale per la comunicazione con altri dispositivi
1	Connecteur d'alimentation		Serial port for communicating with other devices
1	Anschluß für die Spannungsversorgung		Port sériel pour la communication avec autre dispositifs
1	Conector de alimentación		Serielle Schnittstelle für die Kommunikation mit anderen Komponenten
			Puerto serie para la comunicación con otros dispositivos
В	ETH 10/100	D	SD/MMC (Push-Push System)
1	Ethernet 10/100 Mbit - Rj45		Premere per inserire / Premere per estrarre
1	Ethernet 10/100 Mbit - R 45		Push-In / Push-out
	Ethernet 10/100 Mbit - Rj45		Pousser pour insérer / Pousser pour extraire
1	Ethernet 10/100 Mbit - Rj45		Drücken - Karte einfügen / Drücken - Karte entnehmen
	Ethernet 10/100 Mbit - Rj45		Se inserta apretando / Se extrae apretando

YT7T Visualyser

Products rear with KNX board (Konnex)





A	Connettore di alimentazione Power supply connector Connecteur d'alimentation Anschluß für die Spannungsversorgung Conector de alimentación	D	RS485 Porta seriale per la comunicazione con altri dispositivi Serial port for communicating with other devices Port sériel pour la communication avec autre dispositifs Seriels Schnitstelle für die Kommunikation mit anderen Komponenten
В	ETH 10/100 Ethernet 10/100 Mbit - RJ45 Ethernet 10/100 Mbit - RJ45 Ethernet 10/100 Mbit - RJ45 Ethernet 10/100 Mbit - RJ45 Ethernet 10/100 Mbit - RJ45	E	Puero serie para la comunicăción con otros dispositivos SD/IMIC (Push-Push System) Premere per inserire / Premere per estrarre Push-in / Push-out Pousser pour insérer / Pousser pour extraire Drücken - Karte einfügen / Drücken - Karte entrehmen Se inserta apretando / Se extrae apretando
С	KNX (opzionale / optional / option / option / opción) Porta seriale KONNEX. KONNEX serial port. Port sérial KONNEX. KONNEX - Schnittstelle. Puerto serie KONNEX.		



Rear



100 | Chapter 8 YT7T Visualyser

Side



Visualyser - Hardware Manual - rev. 1.00

Products side with KNX board (Konnex)



Wall box ESA supplies the wall box (order code: YB700) for fixing the terminal :





103

Panel mounting After having inserted the wall box in the wall following the instruction of the installation sheet of the boxes, proceed with the wiring and fixing of the terminal following the instructions on the installation sheet of the terminal.

For fixing use appropriate screws contained in the terminal packing kit :



Plates

The Visualyser line has a design studied to make the ESA terminals a valid technological mean and a excellent furniture, thanks to the design of the interchangeable plates.

The plate is easily, quickly and reliably applied to the terminal using magnets (for further details consult the installation sheet of the plates) :



The plates made available by ESA are divided into the following lines :

- Classic
- Prime
- Vogue
- Bold

For the terminal described in this chapter, ESA supplies the "Prime", "Vogue" and "Bold" lines plates, for further information (materials, colours, etc...) regarding the lines of the plates, consult the information brochure.




Horizontal assembly







Side (Prime line plate)



Front (Vogue line plate)



Side (Vogue line plate)



108 | Chapter 8 YT7T Visualyser





Side (Bold line plate)



109

CodiciFor the terminal described in this chapter, the codes of the
purchasable plates are the following:

YC7LSXXXXXXX (Prime line) YC7MNXXXXXXX (Bold line) YC7TRXXXXXXX (Vogue line)

Pagina di servizio

a	Start ESA Application		
0	Downloader Configuration		
			\mathbf{N}

Service page to which access is gained by inserting a button in the project (exit runtime).

- Start ESA Application performs the project runtime
- Download configuration opens the download configuration
- Control Panel opens the control panel



By clicking on downloader configurator the connection settings can be configured

- Disable disables the connection with the terminal
- USB enables the USB connection with the terminal
- Http enables the ethernet connection with the terminal through an http protocol

- Ethernet enables the ethernet connection with the terminal and allows configuring the port.

Control panel



By clicking on each of these icons access is gained to the terminal configuration.

Stylus

The terminal uses a resistant type sensitive glass, for this type of glass to function correctly requires a calibration procedure (the terminal is supplied already calibrated), meaning the resistant area of the glass must be suitable to the visual area of the display.

If it is necessary to repeat the calibration procedure, it is possible to do so by following the instructions below.

The procedure requires great attention because the precision of the keys' area depends from the calibration.



From the control panel click on the stylus icon and, subsequently, the following screens are displayed on the recalibrate key. Touch the screen near the crosses that appear on the screen.





Step 2: touch the screen near the crosses



Step 3: touch the screen near the crosses



Step 4: touch the screen near the crosses



Step 5: touch the screen near the crosses







The terminal returns to the initial page, by clicking on ok calibration is confirmed.

Date/Time

From here it is possible to amend: date, time and time zone. By enabling the "automatically adjust clock for daylight saving" check, the time is automatically updated at BST or GMT.

Date	ate/Time Properties OK 🗙							
Date	Date/Time							
•	1	Apr	il 2	010		F I	Current Time	
S	м	т	₩	т	F	s	3:35:15 PM 🕂	
28	29	30	31	1	2	3	· · ·	
4	5	6	7	8	9	10	Time Zone	
11	12	13	14	15	16	17	(GMT-08:00) Pac 😈	
18	19	20	21	22	23	24		
25	26	27	28	29	30	1	- Auto-adjust for	
2	3	4	.5	6	.7	8	✓ daylight saving	
To	Today: 7/10/2006							
							Apply	

<u>Owner</u>

Owner P	roperti	es			0	КΧ	
Network ID The system uses this information to gain access to network resources. Enter the user name, password and den via							
by your	Input I	Panel					
administ	ESC	7	8	9	BS		
	+	4	5	6	Ţ		

This information is used by Windows CE to access the network resources.

Username: enter the user name to access the network Password: enter the password to access the network Domain: enter the domain to access the network

In case the above data is unknown, contact the network administrator.

Network

IP address

'SMSC11X Etl	Input	Panel			
IP Address N	ESC	7	8	9	BS
An IP address	+	4	5	6	Ļ
Obtain an	-	1	2	3	→
Specify an	→ ABC	TAB	0	•	t
IP Address:	19	92.168.	100.1		
Subnet Mask:	2	55 .255 .			
Default Gatev	vay: 19	92.168.	100 .2		

Obtain an IP address via DHCP: by selecting this option, an IP address is automatically obtained (ensure that the DHCP server is enabled on the network)

Specify an IP address: by selecting this option the parameters must be entered manually (IP Address, Subnet Mask, Default Gateway)

In case the above data is unknown, contact the network administrator.

Name servers

'SMSC11X Ethernet Driver OK ×						
IP Address Name Servers						
Name server addresses						
Primary DNS:						
Secondary DNS:						
Primary WINS:						
Input Panel						
ESC 7	8	9	BS			

If necessary, the parameters relating to the relative DNS or AL WINS must be entered

In case the above data is unknown, contact the network administrator.

Lamp Saver

Lamp saver	OK ×
Wait: 10	minutes

By enabling the Lamp Saver, the lamp switches off after a time set in the Wait box.

Brightness

Brightness	ок 🗙	
31		
	>	

The Brightness allows regulating the brightness of the display lamp.

Backup

Backup &	Restore OK						
Backup Restore							
RunTim Input Panel							
Project	ESC	7	8	9	BS		
History	+	4	5	6	L L		
Deadu	-	1	2	3	→		
кеаду	→ ABC	TAB	0	•	↓		

A backup copy of the components chosen through ticking can be made from here: Runtime, Project, History.

It is essential to tick at least one of the components to be exported and choose a path where to save the file.

The restore can be done for all exported components or through ticking, choose the component or components for which restore is to be carried out.

Password

Password	l Prope	erties		ок 🗙	
Password	l Setting	js			
Password:					
Confirm	Input I	Panel			
Connirm	ESC	7	8	9	BS
	+	4	5	6	t
	-	1	2	3	1
	→ ABC	TAB	0		t

The Password option allows assigning a password to the terminal.

The password is requested (not compulsorily) during the use of the "Remote Desktop" application.

<u>FTP</u>

FTP Config	OK ×	
Enable Upload Directory	☐ │ \Hard Disk\FTP\	4

The "FTP" acronym means "Files Transfer Protocol". It gives the user the possibility to enable and disable the "FTP Server" service of the panel from any other device (PC,XS,IT,YT) connected to the network.

This function is very useful when it is necessary to write, cancel or modify data on the terminal easily from a remote access.

Selecting the "Enable" option, the "FTP" folder sharing service in the "Hard Disk" directory is enabled :

Reset



"Reset" is an application of the terminal control panel which allows to cancel all that been transferred onto the Hard Disk. Selecting the "Enable" option, the "FTP" folder sharing service in the "Hard Disk" directory is enabled. The user can choose from 2 options :

-"Remove project and runtime" -> choosing this option, both the project and the runtime that have been transferred from Polymath onto the terminal will be cancelled. - "Complete terminal disk reset" -> choosing this option, the whole content of the "Hard Disk" folder will be cancelled, with the exception of the files that are essential for operating the terminal.

Information

Platfor	n Information	×
e	VT Model: Image Release: Image Date:	ҮТ7Т 1.20 11 Feb 2010

Information regarding the panel is displayed, which: terminal model, revision of the Windows CE image and the image date.

IP Config

IPConfig		ок 🗙					
[Terminal —			1				
IP address	192.168.100.5	Port 1 (ch.A)					
Subnet	255.255.255.0						
Gateway	0.0.0.0		Input I	Panel			
L Devices			ESC	7	8	9	BS
Device 1	IP address	Port	+	4	5	6	Ч
Doneo I			-	1	2	3	→
			→ ABC	TAB	0		+
		4					

By clicking on the "IP Config" icon, the mask displaying the IP Address of the terminal and IP Address (or IP Addresses) of the devices connected via Ethernet will appear.

The function "IP Config" is useful in that it is possible to change the addresses of the devices without having to use the POLYMATH configuration software (very useful operation during the system's start-up).

By using the appropriate key "Input Panel", the user can carry out any variations to the IP addresses of the devices directly from the ESA terminal.



Technical features

The table below lists the main technical features of the product in question.

	VTAT			
Display	LIAI			
Туре	Graphic LCD TFT			
Colors/levels	65.536 colors			
Size	10,4"			
Touch screen	Analog			
Resolution (landscape)	640 x 480			
Brightness	380 cd/m ²			
Backlight	CCFL			
System				
Runtime	Polymath EZbuilder / MyVision			
RAM	64 MB			
Flash memory	32 MB			
CPU type	Intel PXA270			
CPU clock	520MHz			
Interfaces				
First integrated port	RS-485			
Second integrated port	KNX (optional)			
USB Host port	USB Host 1.1 (frontal)			
USB Device port	USB Device 1.1 (frontal)			
Slot CardBus	SD/MMC			
Network	Ethernet 10/100 Mbit			
Dimensions				
External (mm) (W x H x D)	314 x 294 x 64			
Technical data				
Power supply	1832 Vcc			
Consumption (24 Vcc)	~ 13 W			
Protection level (with cover)	IP 40 (frontal)			
Operating temperature	0+50 °C			
Storage temperature	-20+65°C			
Humidity (non condensing)	85%			
Certifications	CE, cULus			
Wall box				
Dimensions (mm) (W x H x D)	318 x 288 x 73			

The purchase codes with possible configurations of the product Product codes are given in the following table :

Product codes	
VISUALYSER (standard configuration)	YTAT1010
VISUALYSER with Konnex port	YTAT1210
Wall box	YBA00

Front



	Porta seriale USB USB port Port USB USB-Schnittstelle Puerto USB	3	Pulsante di reset Reset button Bouton de reset Reset-Taste Tecla de reset
2	Porta seriale per il trasferimento del progetto Serial port to transfer the project Port sériel pour le transfert du projet Serielle Schnittstelle für die Projektübertragung Puerto serie para la trasferencia del proyecto		







Horizontal assembly



Rear



	Power supply connector		Porta seriale per la comunicazione con altri dispositivi
	Connecteur d'alimentation		Serial port for communicating with other devices
	Anschluß für die Spannungsversorgung		Port seriel pour la communication avec autre dispositifs
	Conector de alimentación		Serielle Schnittstelle für die Kommunikation mit anderen Komponenten
			Puerto serie para la comunicación con otros dispositivos
В	ETH 10/100	D	SD/MMC (Push-Push System)
	Ethernet 10/100 Mbit - Rj45		Premere per inserire / Premere per estrarre
	Ethernet 10/100 Mbit - Rj45		Push-in / Push-out
	Ethernet 10/100 Mbit - Rj45		Pousser pour insérer / Pousser pour extraire
	Ethernet 10/100 Mbit - Rj45		Drücken - Karte einfügen / Drücken - Karte entnehmen
	Ethernet 10/100 Mbit - Rj45		Se inserta apretando / Se extrae apretando

YTAT Visualyser

Products rear with KNX board (Konnex)





A	Connettore di alimentazione Power supply connector Connecteur d'alimentation Anschluß für die Spannungsversorgung Conector de alimentación	D	RS485 Porta seriale per la comunicazione con altri dispositivi Serial port for communicating with other devices Port sériel pour la communication avec autre dispositifs Serielle Schrittstelle für die Kommunikation mit anderen Komponenten
			Puerto serie para la comunicación con otros dispositivos
В	ETH 10/100	E	SD/MMC (Push-Push System)
	Ethernet 10/100 Mbit - Rj45		Premere per inserire / Premere per estrarre
	Ethernet 10/100 Mbit - Rj45		Push-in / Push-out
	Ethernet 10/100 Mbit - Rj45		Pousser pour insérer / Pousser pour extraire
	Ethernet 10/100 Mbit - Rj45		Drücken - Karte einfügen / Drücken - Karte entnehmen
	Ethernet 10/100 Mbit - Rj45		Se inserta apretando / Se extrae apretando
С	KNX (opzionale / optional / option / option / opción)		
	Porta seriale KONNEX.		
	KONNEX serial port.		
	Port sériel KONNEX.		
	KONNEX - Schnittstelle.		
	Puerto serie KONNEX.		





Side



Products side with KNX board (Konnex)



Wall box

ESA supplies the wall box (order code: YBA00) for fixing the terminal :





Panel mounting After having inserted the wall box in the wall following the instruction of the installation sheet of the boxes, proceed with the wiring and fixing of the terminal following the instructions on the installation sheet of the terminal.

For fixing use appropriate screws contained in the terminal packing kit :



Plates

The Visualyser line has a design studied to make the ESA terminals a valid technological mean and a excellent furniture, thanks to the design of the interchangeable plates.

The plate is easily, quickly and reliably applied to the terminal using magnets (for further details consult the installation sheet of the plates) :



The plates made available by ESA are divided into the following lines :

- Classic
- Prime
- Vogue
- Bold

For the terminal described in this chapter, ESA supplies the "Prime", "Vogue" and "Bold" lines plates, for further information (materials, colours, etc...) regarding the lines of the plates, consult the information brochure.

```
Plate Assembly Vertical assembly
```



Horizontal assembly





Side (Prime line plate)



Visualyser - Hardware Manual - rev. 1.00

Front (Vogue line plate)



Side (Vogue line plate)







Side (Bold line plate)



CodiciFor the terminal described in this chapter, the codes of the
purchasable plates are the following:

YC7LSXXXXXXX (Prime line) YC7MNXXXXXXX (Bold line) YC7TRXXXXXXX (Vogue line)

Pagina di servizio

Ocwnleader Configuration	

Service page to which access is gained by inserting a button in the project (exit runtime).

- Start ESA Application performs the project runtime
- Download configuration opens the download configuration
- Control Panel opens the control panel



By clicking on downloader configurator the connection settings can be configured

- Disable disables the connection with the terminal
- USB enables the USB connection with the terminal
- Http enables the ethernet connection with the terminal through an http protocol

- Ethernet enables the ethernet connection with the terminal and allows configuring the port.



Control panel

By clicking on each of these icons access is gained to the terminal configuration.

Stylus

The terminal uses a resistant type sensitive glass, for this type of glass to function correctly requires a calibration procedure (the terminal is supplied already calibrated), meaning the resistant area of the glass must be suitable to the visual area of the display.

If it is necessary to repeat the calibration procedure, it is possible to do so by following the instructions below.

The procedure requires great attention because the precision of the keys' area depends from the calibration.



From the control panel click on the stylus icon and, subsequently, the following screens are displayed on the recalibrate key. Touch the screen near the crosses that appear on the screen.





Step 2: touch the screen near the crosses



Step 3: touch the screen near the crosses


Step 4: touch the screen near the crosses



Step 5: touch the screen near the crosses







The terminal returns to the initial page, by clicking on ok calibration is confirmed.

Date/Time

From here it is possible to amend: date, time and time zone. By enabling the "automatically adjust clock for daylight saving" check, the time is automatically updated at BST or GMT.

)ati	e/1	Гim	e	Pro	ope	erti	es OK 🗙
Date	e/Tir	ne					
		Apr	il 2	010			Current Time
s	м	т	w	т	F	s	3:35:15 PM
28	29	30	31	1	2	3	
4	5	6	7	8	9	10	Time Zone
11	12	13	14	15	16	17	(GMT-08:00) Pac 🗨
18	19	20	21	22	23	24	
25	26	27	28	29	30	1	- Auto-adjust for
2	3	4	5	6	7	8	davlight saving
To	day	1: 7	/10,	/20	06		
							Apply

<u>Owner</u>

Owner P	Properties OK					КΧ
Network I The syst this info gain acc network resource the user passwot	em uses rmation to ess to es. Enter name, d and	User M Passw Domai	Vame: vord: 			
domain by your	Input I	Panel				
administ	ESC	7	8	9	BS	
	+	4	5	6	Ţ	

This information is used by Windows CE to access the network resources.

Username: enter the user name to access the network Password: enter the password to access the network Domain: enter the domain to access the network

In case the above data is unknown, contact the network administrator.

Visualyser - Hardware Manual - rev. 1.00

Network

IP address

'SMSC11X Etl <mark>Input Panel</mark>						
IP Address N	ESC	7	8		9	BS
An IP address	+	4	5		6	L L
Obtain an	1	1	2		3	1
Specify an	→ ABC	TAB	0		•	ţ
IP Address:	19	92.168.	100.1			
Subnet Mask:	25	255 .255 .255 .0				
Default Gateway: 192.168.100.2						

Obtain an IP address via DHCP: by selecting this option, an IP address is automatically obtained (ensure that the DHCP server is enabled on the network)

Specify an IP address: by selecting this option the parameters must be entered manually (IP Address, Subnet Mask, Default Gateway)

In case the above data is unknown, contact the network administrator.

Name servers

'SMSC11X Ethernet Driver OK 🗙					
IP Address N	ame Serv	ers			
Name server a	Name server addresses				
Primary DNS:					
Secondary DN	ıs: 🗌				
Primary WINS	:				
Input Pane	el 🗌				
ESC 7	8	9	BS		

If necessary, the parameters relating to the relative DNS or AL WINS must be entered

In case the above data is unknown, contact the network administrator.

Lamp Saver

Lamp saver	OK ×
Wait:	▲ minutes

By enabling the Lamp Saver, the lamp switches off after a time set in the Wait box.

Brightness

Brightness	ок 🗙	
31		
-		
<	>	

The Brightness allows regulating the brightness of the display lamp.

Backup

Backup &	Backup & Restore OK				
🔘 Backup	O Re	store			
]
🔲 RunTim	Input I	Panel			
Project	ESC	7	8	9	BS
History	+	4	5	6	L L
Deadu	-	1	2	3	→
кеаду	→ ABC	TAB	0	•	↓

A backup copy of the components chosen through ticking can be made from here: Runtime, Project, History.

It is essential to tick at least one of the components to be exported and choose a path where to save the file.

The restore can be done for all exported components or through ticking, choose the component or components for which restore is to be carried out.

Password

Password	d Properties OK				
Password	l Setting	js			
Passwor	rd:	Г			
Confirm	Input I	Panel			
Commin	ESC	7	8	9	BS
	+	4	5	6	t
	-	1	2	3	1
	→ ABC	TAB	0		t

The Password option allows assigning a password to the terminal.

The password is requested (not compulsorily) during the use of the "Remote Desktop" application.

FTP



The "FTP" acronym means "Files Transfer Protocol". It gives the user the possibility to enable and disable the "FTP Server" service of the panel from any other device (PC,XS,IT,YT) connected to the network.

This function is very useful when it is necessary to write, cancel or modify data on the terminal easily from a remote access.

Selecting the "Enable" option, the "FTP" folder sharing service in the "Hard Disk" directory is enabled :

Reset



"Reset" is an application of the terminal control panel which allows to cancel all that been transferred onto the Hard Disk. Selecting the "Enable" option, the "FTP" folder sharing service in the "Hard Disk" directory is enabled. The user can choose from 2 options :

-"Remove project and runtime" -> choosing this option, both the project and the runtime that have been transferred from Polymath onto the terminal will be cancelled.

-"Complete terminal disk reset" -> choosing this option, the whole content of the "Hard Disk" folder will be cancelled, with the exception of the files that are essential for operating the terminal.

Information

Platfor	n Information	×
e	VT Model: Image Release: Image Date:	YTAT 1.10 14 Mag 2009

Information regarding the panel is displayed, which: terminal model, revision of the Windows CE image and the image date.

IP Config

IPConfig		ок 🗙					
[Terminal —							
IP address	192.168.100.5	Port 1 (ch.A)					
Subnet	255.255.255.0						
Gateway	0.0.0.0		Input I	Panel			
Devices —			ESC	7	8	9	BS
Device 1	IP address	Port	+	4	5	6	Ļ
			-	1	2	3	→
			→ ABC	TAB	0		↓
	1	÷.					

By clicking on the "IP Config" icon, the mask displaying the IP Address of the terminal and IP Address (or IP Addresses) of the devices connected via Ethernet will appear.

The function "IP Config" is useful in that it is possible to change the addresses of the devices without having to use the POLYMATH configuration software (very useful operation during the system's start-up).

By using the appropriate key "Input Panel", the user can carry out any variations to the IP addresses of the devices directly from the ESA terminal.

10. YXDT Visualyser



150 | Capitolo 10

YXDT Visualyser

Technical features

The table below lists the main technical features of the product in question.

	VVD			
Display	TAD			
Dimension	15"			
Technology	TFT			
Colors	262.000			
Touch screen	Analogic (5 wires)			
Backlight	CCFL (2 lamps)			
Lamp life (min hours at 25°C)	50.000			
Resolution	1024 x 768			
Brightness	350 cd/m ²			
Contrast	700:1			
Vision angle	140 horizzontal / 125 vertical			
Processor				
CDU	Intel® Celeron M - 1GHz FANLESS			
cro	Intere celefontini Ionz PARESS			
System memory				
RAM	512 MB - 1 GB			
Flash array (Compact flash)	1 GB - 2 GB			
Disk Drive				
Hard disk	160 CB Serial ATA			
Solid State Dick (SSD)	8 GB Serial ATA			
Solid State Disk (SSD)				
Interfaces				
Serial port	2 x RS232			
USB port	5 x 2.0 (one frontal)			
PS/2 keyboard port	1			
PS/2 mouse port	1			
VGA port for external monitor	1			
Audio ports	Integrated Stereo Speakers and Microphone			
	-			
Networks				
Ethernet	Ethernet 10/100 Mbit			
Dimensions				
External (mm) (W x H x D)	452 x 342 x 76			
External (min) (w x m x D)	432 × 342 × 10			
Clock				
Supercapacitor Hardware Clock	With battery			
Technical specifications	and the second se			
Power supply	18 30 Vcc			
Consumption (24 Vcc)	10			
Protection level (with cover)	ID 40 frontal			
Operating temperature (°C)	0+50			
Storage/transport topporat (°C)	-20+65			
Storage/transport temperat. (C)	85%			
Weight (kg)	85%			
Contifications	CE allius (in progress)			
Ceruncations	CE, CULUS (In progress)			
Wall box				
Dimensions (mm) (W x H x D)	433 x 332 x 80			
Wall box product code	VBD00			

Hardware Configuration

The purchase codes with possible configurations of the product are given in the following table :



OperationalThe purchase codes with possible configurations of the productSystemare given in the following table :

XSSYSWINXPEEN03	Windows XP Embedded EN (single partition)
XSSYSWINXPEEN04	Windows XP Embedded EN (double partition)
XSSYSWINXPPML00	Windows XP Professional SP3 (Multilanguage)

Front



1	2 x Altoparlante	3	Porta seriale USB
	2 x Speaker		USB port
	2 x haut-parleur		Port USB
	2 x Lautsprecher		USB-Schnittstelle
	2 x Altavoz		Puerto USB
2	Microfono	4	ATX power on switch
	Microphone		Vedi manuale scheda madre
	Microphone		See motherboard manual
	Mikrofon		Voir le manuel de la carte mère
	Micrófono		Siehe Gebrauchsanweisung der Hauptplatine
			Ver el manual de la placa base

152 Capitolo 10

YXDT Visualyser

Rear



A	COM2	С	Vedi manuale scheda madre
	Vedi manuale scheda madre		See motherboard manual
	See motherboard manual		Voir le manuel de la carte mère
	Voir le manuel de la carte mère		Siehe Gebrauchsanweisung der Hauptplatine
	Siehe Gebrauchsanweisung der Hauptplatine		Ver el manual de la placa base
	Ver el manual de la placa base		
В	REMOTE RESET	D	Alimentazione
	Vedi manuale scheda madre		Power supply
	See motherboard manual		Aalimentation
	Voir le manuel de la carte mère		Spannungsversorgung
	Siehe Gebrauchsanweisung der Hauptplatine		Alimentación
	Ver el manual de la placa base		





154 | Capitolo 10 YXDT Visualyser

Side



Visualyser - Hardware Manual - rev. 1.00

Wall boxESA supplies the wall box (order code: YBD00) for fixing the
terminal :





156 | Capitolo 10

YXDT Visualyser

Panel mounting After having inserted the wall box in the wall following the instruction of the installation sheet of the boxes, proceed with the wiring and fixing of the terminal following the instructions on the installation sheet of the terminal.

For fixing use appropriate screws contained in the terminal packing kit:



157

PlatesThe Visualyser line has a design studied to make the ESA
terminals a valid technological mean and a excellent furniture,
thanks to the design of the interchangeable plates.
The plate is easily, quickly and reliably applied to the terminal
using magnets (for further details consult the installation
sheet of the plates) :



For the terminal described in this chapter, ESA supplies the "Classic" line plates, for further information (materials, colours, etc...) regarding the lines of the plates, consult the information brochure. Plate Assembly Horizontal assembly







Side (Classic line plate)

r- 15.0

Order codes For the terminal described in this chapter, the codes of the purchasable plates are the following:

YCDLFXXXXXXX (Classic line)

160 Capitolo 10 YXDT Visualyser

11. Communication ports

All terminals communicate with other equipment by means of serial communication (RS485), USB, ETH-10/100. Reported below are the individual ports with the type of communication and meaning of the connection pins.

General notes The serial communications are greatly affected by interference. Top-quality shielded cables must be used to limit the effects of interference to a maximum.

Visualyser YG4-YT4 communication ports :



Visualyser YT5-YT7-YTA communication ports :

	USB-A
4 pi	n male connector
1	USBVCC (OUT)
2	USBD-
3	USBD+
4	Signal GND

N.C. : Not connected.

4 p	in male connector
1	USBVCC (IN)
2	USBD-
3	USBD+
4	Signal GND

RJ45 8	ETH 10/100
1	TX+
2	TX-
3	RX+
4	N.C.
5	N.C.
6	RX-
7	N.C.
8	N.C.

	RS485
3	pin connector
1	Tx Rx485 +IN/OUT
2	Tx Rx485 –IN/OUT
3	Signal GND

162 | Chapter 11

Communication ports

For the communication ports of the YXD terminal, consult the main board manual.

PC Terminal <->
ConnectionThe connection of the terminal with the PC is indispensable for
the transfer of the communication firmware, of the communi-
cation driver and of the project (see Software Manual) and can
take place by means of the USB Port or Ethernet.



The connection cables are shown below.



If a connection is to be made using the RJ45 Ethernet port there are two methods and two cables to use.

If the PC is directly connected to the terminal, use a crossed Ethernet cable



If the terminal is connected to a hub, a switch or directly to a network, use a normal Ethernet cable.



164 Chapter 11

Communication ports

12. **Connection cables**

All terminals communicate with the other appliances by serial General notes communication.

> As serial communications are greatly affected by interference, top-quality shielded cables must be used in order to limit the influence of interference to a maximum.

> The table below shows the features of the cable that is recommended for use for the serial connection.

Features of the serial connection	cable
Resistance in direct current	Max. 151 Ohm/Km
Capacitive coupling	Max. 29pF/m
Shielding	> 80% or Total

Great attention must be paid in the choice and laying of the cables, especially regarding the serial connection cable.

In all cases:

Look for the shortest route Lay disturbed cables separately



Disconnect the power supplies before connecting or disconnecting the communication cables to prevent any damage to the terminals and/or the device connected.

The correct shielding of the interface cables between the ter-Connection of the cable shield minals and the devices connected to it, is indispensable in order to guarantee a serial communication without any type of external interference, therefore, all cables stated in this manual must be the shielded type and tank containers must have a metal or plastic conductive case.

> The correct method of connecting the shielding is shown in the lay-out below.

166 Chapter 12 Connection cables



The interface cable shield must be electrically connected to the case and to the body of the connector itself from both sides of the cable.

If it is not possible to connect the shield due to the type of particular serial connector, the shielding itself must be taken externally to the connector and connected to the earth clamp.

The same operation must also be performed if the body of the Device serial connector, even if standard, is not electrically connected to the earth clamp of the PLC itself.

It is, however, intended that also in this condition the shield must be connected to the case and the body of the connector.

Some cable shields have the pin configuration of the Device side shielding signals: in these cases, considering the above, the shield must also be connected.

In all cases the connection of the Terminal side shield (pin 1) must never be carried out.

Earth potentials obtained from DIN guides, machine framework, doors of the electric control boards etc. are not allowed and it is a good ides to avoid equipotential earth bars where earths converge coming from inverter, drive, step-by-step motor type loads and all those loads that generally can be a source of great interference..

The failure to comply with these indications can jeopardise the compatibility of the YT-PLC system with EMC regulations in force.

USB-A / USB-B PROGRAMMING CABLE

PC SIDE (USB-A) :



VISUALYSER SIDE (USB-B) :



Order code: CVUSB11102



PC USB-A / YT USB-B PROGRAMMING CABLE

169 Chapter 12 Connection cables

170 Chapter 12

Connection cables

13. Resistance to chemical substances

Chemical substances

The table below shows a summary of all substances used for the test with the various results.

The table must however be considered an approximate guide regarding resistance to chemical substances. Tests have never been performed on an entirely assembled terminal.

	Parts of the term		e terminal	minal			
Substance		Film ² matt	Film ¹ transparent	Touch ² screen	Glass	Gaskets	Resistance
Vinegar	NS		D				\odot
Water	NS	>24h				Е	\odot
Salt water	NS					Е	\odot
Benzylalcohol	NS	0		0			$\overline{\otimes}$
	NS					Е	\odot
	<2%	>24h		>24h			\odot
Ammonia	5%				>24h		\odot
	10%						\odot
	35%						\odot
Fabric softener	NS	>24h		>24h			\odot
Carbon Dioxide	NS					Е	\odot
Petrol	NS		Α	>24h	>24h	F	\bigcirc
Dichromate	NS			>24h			\odot

Table 0.1: Resistance to chemical substances (Part 1 of 2)

Key:

A - No visible deterioration, B - Very slight deterioration, C - Slight deterioration, D - Great visible damage, E - Unlimited use, F - Limited use, G - Use not recommended, S - The film loosens, X - The film has bubbles, O - The film is destroyed, CO - Concentrated, HC - High Concentration, LC - Low concentration SA - Saturo/a, NS - Not specified, h - Hour/s, M - Month/s, Y - Year/s, O - All elements tested resist the substances, O - At least one of the elements tested can be deteriorated by the substance in question, O - All of the elements tested are damaged by the substance in question, -- Not tested.

Note:

1 - According to Alcatel Bell, 2 - According to DIN42115 Part 2, 3 - According to the producer of raw materials, 4 - Tested at 50° C

172 | Chapter 13

Resistance to chemical substances

				Parts of th	e terminal		
Substance		Film ² matt	Film ¹ transparent	Touch ² screen	Glass	Gaskets	Resistance
Sodium Carbonate	SA	>24h					\odot
Chlorine	NS					G	$\overline{\mbox{\scriptsize (i)}}$
Sodium Chloride	3%						\odot
Coca Cola	NS		А				\odot
Detergent	NS		А				\odot
Detersive	NS	>24h		>24h		Е	\odot
Diesel	NS	>24h	А	>24h			\odot
Milk	NS	>24h ⁴		>24h ⁴			\odot
Hydraulic liquids	NS					F	\odot
Edible oil	NS						\odot
Linseed oil	NS	>24h		>24h			\odot
Tomato sauce	NS	B ⁴		B ⁴			\odot
Senape	NS	>24h ⁴		>24h ⁴			\odot
Solution with cooking salt	NS					Е	\odot
Lemon juice	NS	B ⁴		B ⁴			\odot
Tomato juice	NS	B ⁴		B ⁴			\bigcirc
Grape juice	NS	>24h ⁴		>24h ⁴			\odot

Table 0.1: Resistance to chemical substances (Part 2 of 2)

Key:

A - No visible deterioration, B - Very slight deterioration, C - Slight deterioration, D - Great visible damage, E - Unlimited use, F - Limited use, G - Use not recommended, S - The film loosens, X - The film has bubbles, O - The film is destroyed, CO - Concentrated, HC - High Concentration, LC - Low concentration SA - Saturo/a, NS - Not specified, h - Hour/s, M - Month/s, Y- Year/s, ③ - All elements tested resist the substances, ④ - At least one of the elements tested can be deteriorated by the substance in question, ④ - All of the elements tested are damaged by the substance in question, -- Not tested.

Note:

1 - According to Alcatel Bell, 2 - According to DIN42115 Part 2, 3 - According to the producer of raw materials, 4 - Tested at 50°C

Cleaning the terminal

The use of Denatured Ethyl Alcohol is recommended to clean the terminal. If this should not be sufficient to remove deposits and other products must be used, consult the table given above.

14. After-sales assistance

In the case of problems linked to use of the terminal, please contact out Customer Care service. The service is available on working days during office hours. **Customer Care**Customer Care can be contacted by:
Telephone: + + 39-031757400
Fax: + + 39-031751777
E-Mail: customer.care@esahmi.com Web Site: http://www.esahmi.com

Product return If the terminal must be sent back for repairs:

Contact the Customer Care service for authorisation regarding return.

Fill in the file accompanying the product completely.

Customer Care will supply all explanations necessary for returning the piece.

!!! IMPORTANT !!!

ESA elettronica will accept:

carriage paid goods (transport expenses paid by the customer). carriage forward goods (transport expenses paid by ESA) with previous authorisation.

ESA elettronica will not accept:

no unauthorised carriage forward goods.

It is not necessary to send connectors, cables and accessories (unless connected to the problem indicated).

Thank you for your collaboration.

	Chapter 14 After-sales assistance
	REPAIR RETURN ACCOMPANYING FORM
	ATTENTION!!! The form must be filled-in using block letters
P	Product:
C	Customer Data (Introduction compulsory)
v	Vho filling the form in:
(Company :
A	Address : P.code
L	ocality :
Т	Telephone :
N	lame of person to contact (If different to Customer Data)
F	Person:
T	elephone:
-	formation revealing the product (Introduction compulsors)
<u>п</u>	
5	Detailed description of the problem and conditions when it occurs:
•	
•	
٩	Note:
•	