TAC Xenta®

TAC Xenta® 511 and 911 Handbook

TAC Xenta®

TAC Xenta® 511 and 911 Handbook

Contents

INTRODUCTION

REFERENCE

Introduction

1 Introduction

1 Introduction

The TAC Xenta 511 and TAC Xenta 911 are communication devices, partly based on similar hardware.

This handbook describes the hardware installation and technical data for these devices.

For more information on applications and using the devices in networks, please refer to the documentation listed below.

Note

We are continuously improving and correcting our documentation. This manual may have been updated.

Please check our Docnet site at www.tac.com for the latest version.

The TAC Xenta 511 and 911, as well as other products mentioned in this manual, must not be used for any other purposes than those for which they were designed.

Installation, connection and repair should only be carried out by authorized personnel.

1.1 Structure

The manual is divided into the following parts:

- **Introduction**
  The Introduction section contains information on how this manual is structured and where to find additional information.
- **Reference**
  The Reference section contains comprehensive information about the products. It also provides you with information on mounting and electrical installation.

1.2 New in this Edition

In this edition there is a new section 3.3.8, “Using the TAC Xenta 911 as a Serial Gateway”.

1.3 Typographic Conventions

Throughout the manual four specially marked texts may occur.

Warning

Used to emphasize operations that can cause serious personal injury or damage to property if not handled correctly.

Caution

Used to emphasize operations that can cause serious problems if not handled correctly.

Note

Used to emphasize certain information.

1.4 More information

The TAC Xenta 511 and 911 are also described in the following documents.

- TAC Vista IV, Engineering Classic Networks, part no. 0-004-7841
- TAC Vista IV, Engineering LNS Networks, part no. 0-004-7842
- TAC Xenta Cable Guide, 0FL-3972

TAC Xenta 511

- Engineering TAC Xenta 511 manual, part no. 0-004-7845
- Operating TAC Xenta 511 manual, part no. 0-004-7846
- TAC Xenta 511 data sheet, part no. 0-003-1956
- Installation instructions, shipped with product

TAC Xenta 911

- TAC Xenta 911 data sheet, part no. 0-003-1930
- Installation instructions, shipped with product

Reference

2 TAC Xenta 511

2.1 General

The TAC Xenta 511 is a device that is used as a web-based presentation system for LONWORKS® networks. Using a standard web browser, the operator can easily view and control the devices in the LONWORKS network via the Internet or a local intranet.

The TAC Xenta 511 can also (at the same time) act as a LONTALK® adapter between TAC Vista® and a LONWORKS network.

2.2 Hardware Installation

The TAC Xenta 511 is cabinet-mounted on a TS 35 mm norm rail EN 50022.

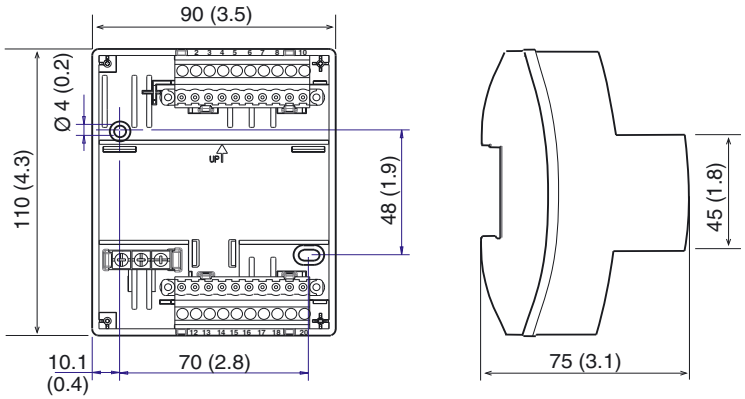


Fig. 2.1: TAC Xenta 511 dimensions, mm (in.)

Keep the unit dry and clean it externally using a dry cloth.

2.3 Connection and Startup

Sections 2.3.1 through 2.3.4 are mandatory for establishing web browser contact with the TAC Xenta 511.

2.3.1 Information from the Network Administrator

Determine whether *fixed IP address* or *DHCP* (Dynamic Host Configuration Protocol: IP address is assigned by the system) will be used.

Complete this “Setting List for Configuration”.

- IP address (If fixed; e.g. 172.20.4.21):
- Subnet mask (If fixed; e.g. 255.255.0.0):
- Default Gateway (e.g. 172.20.2.100):
- DNS (e.g. 192.165.248.22):
- Web site name:
- Domain name:
- Host name:

For explanations, please consult the *Engineering TAC Xenta 511* manual.

2.3.2 Power and Hyperterminal Connections

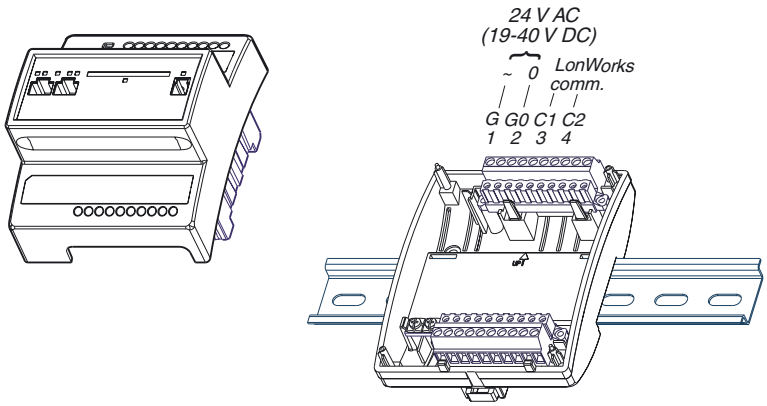


Fig. 2.2: TAC Xenta 511 mounting and electrical connections

1 **G** and **G0**: Supply 24 V power to terminals.
Minimum cross-sectional area 0.75 mm² (AWG-19).

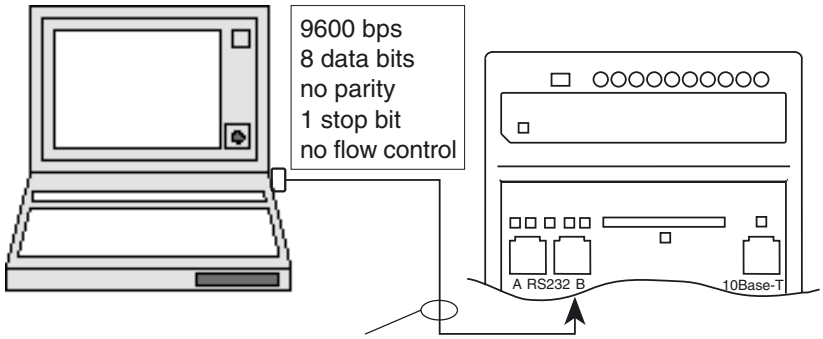
All equipment that is connected to the unit must comply with the following standards:

- **EN 60 742** (or other relevant safety standard) for the device(s) that provide an ELV-type power supply (normally 24 V AC) to the unit and other connected equipment.
- **EN 61 010** or **IEC 950** (or other relevant safety standard) for computers and other equipment supplied by power line voltage.

2 **C1** and **C2** (LonWorks connection, not used by Web Browser): standard unshielded (UTP) or shielded (STP) twisted pair cable.

3 Connect a serial cable between the PC and the Xenta 511 **RS232B**.

4 Start a terminal emulator such as the Windows Hyperterminal.



TAC Xenta Programming Serial Kit, part no. 0-073-0920

Fig. 2.3: Connecting a Hyperterminal to TAC Xenta 511

2.3.3 Assigning an IP Address to the Xenta 511

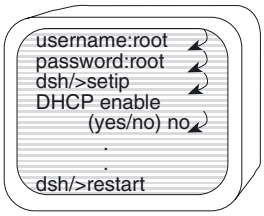


Fig. 2.4: Assigning the IP address using the Hyperterminal

1 Enter *user name* and *password*.

2 Type **setip** (see “Setting List for Configuration” on previous page) and then answer the DHCP enable question:
- **no** if you are using a fixed IP address. Continue with step 3a).
- **yes** if you are using dynamic IP addressing. Continue with step 3b).

3 a) Enter the IP items from the Setting List:

- IP address
- Subnet mask

b) Enter the remaining items from the Setting List:

- Default Gateway
- DNS
- Web site name

- Domain name
- Host name

4 Change root password (immediately or later, using **passwd**).

5 "Do you want to restart the IP interface?"

- *yes* will make the changes effective immediately
- *no* will make the changes effective after the next 511 restart.

6 Exit by typing **lo** (log out) and pressing Enter.

2.3.4 Connecting a PC to the TAC Xenta 511 via a LAN

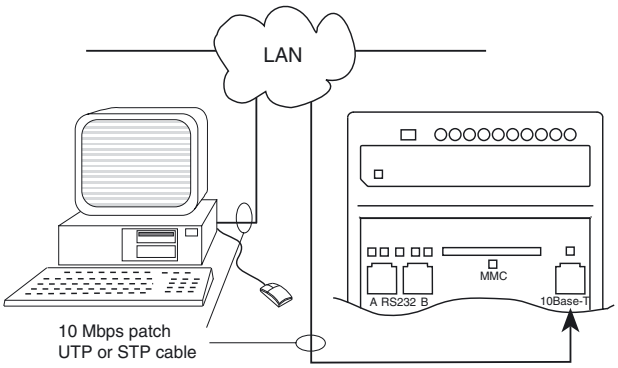
1 Connect the Xenta 511 to a LAN according to the figure below.

2 Connect the PC to the same network and start the PC HTML browser (for example Internet Explorer).

3 Enter the *IP address for the Xenta*. (e.g. http://172.20.4.21).

4 Log in as **root** and use the valid password. This should get you to the Welcome page of the Xenta 511.

5 Select the required item under the **System Configuration** header to configure the unit (next section).



LAN = Local Area Network
UTP = Unshielded Twisted Pair
STP = Shielded Twisted Pair

Fig. 2.5: Connecting the TAC Xenta 511 to a Local Area Network

2.3.5 Application System Configuration

1 In the *web browser*: Enter the remaining system parameters.

2 Decide on a LONWORKS strategy:
Variable binding: use an LNS Tool (e.g. LonMaker).
Non-variable binding: Use TAC Vista.

3 Create an application for the web-based presentation system using TAC XBuilder as described in the *Engineering TAC Xenta 511* manual.

2.3.6 Using the TAC Xenta 511 as an LTA

In addition to its web-based presentation, the TAC Xenta 511 can be used as an LTA, LONTALK Adapter, between TAC Vista and the LONWORKS network.

Connections - LTA

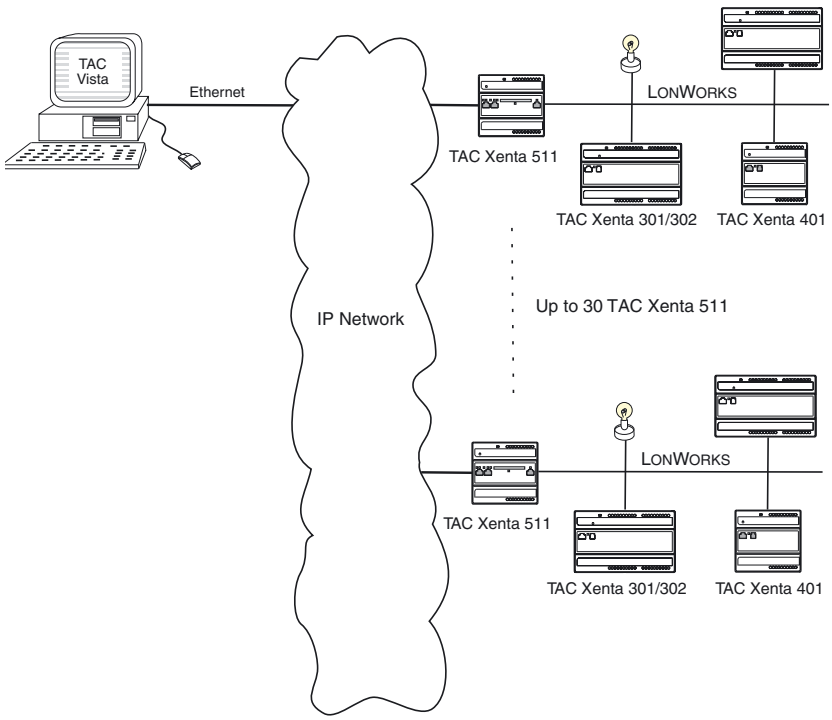


Fig. 2.6: TAC Xenta 511 as an LTA (LonTalk Adapter)

Cables

IP network to 511: Ethernet cable to 10Base-T socket.

LonWorks to 511: Twisted Pair to terminals C1 and C2.

TAC Vista can be configured for up to 30 TAC Xenta 511 connections.

LTA Communication with TAC Vista 3.21 - 3.33

(These functions are integrated with TAC Vista IV.)

LonTalk Adapter for TAC Vista

1 Install the program **LTA for TAC Vista** in the same directory as TAC Vista (ex. TAC 330).

2 Start **LTA for TAC Vista**.

- Select a **TACLON interface**
- **ADD**
- Enter the **IP address** of the intended TAC Xenta 511
- Select **Port** (default 1068)
- **UPDATE**
- **EXIT**

3 Connect to the TAC Xenta 511.

4 Select the **LDV Server Port** (default 1068) under **Configuration/ LTA for TAC Vista setup** and use the same value as in **LTA for TAC Vista**.

2.3.7 Other Connections, Port Usage, etc.

Device Connection

Please refer to the TAC Xenta Cable Guide, 0FL-3972, for details of connecting different devices to the TAC Xenta 511.

Port usage and Properties

- RS232 port Amodem
- RS232 port Bconfiguration, commissioning
- 10Base-TIP network
- FTT-10LonWorks network

User Administration

Users administration (user login, authority levels, etc.) is done via web pages in the TAC Xenta 511.

Using the TCP Ports (Firewall)

If a TAC Xenta 511 and the IP network are located on opposite sides of one or several firewalls, these firewalls must be configured to allow traffic through.

The TAC Xenta 511 uses the following TCP/IP ports.

- Ports 20, 21ftp access (fixed, only for testing purposes)
- Port 25SMTP access
- Port 80http access
- Port 443https access
- Port 1068 (default) TAC Xenta 511

- Port 1233 Variable data access (fixed)

Security

Access to the unit will only be granted if the correct user name (or group name) and password have been entered.

2.4 Operation and Service

2.4.1 LED Indicators

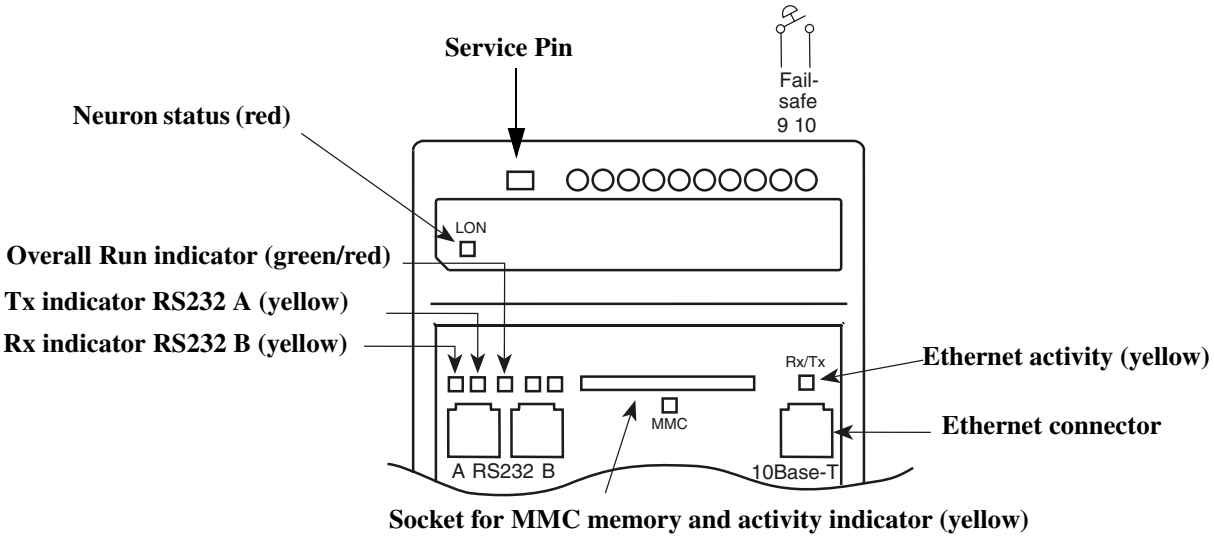


Fig. 2.7: TAC Xenta 511 status indicators

LON Neuron status

Off Normal Mode
Red, blinkingUnconfigured Node
Red, steadyHardware Fault

Fail-safe state

Shorting terminals Fail-safe 9 and 10 will put the unit in the “fail-safe” state. This may be used in an emergency if the system program keeps halting.

The position of the switch is noted directly after powering on.

Overall status indicator

Green, steadyNormal Mode
Green, blinkingStart Mode
Red, steadyFail-safe Mode (see description above)
Red, blinkingUnit Error

2.4.2 Service Utilities

System service functions are available using the web browser and are located under the *Utilities* menu. They are primarily intended to provide technical information about the system and its status and can be printed to a file or a printer.

System Info

- *sysinfo:*General system information. (This will be needed if consulting the TAC Solution Team.)

System error log

- *err:* Error log with the 10 most recent errors.
- *err select:*Filtering and error log search.
- *err file:*Error log listing an extended period.

Diagnostics

- *ps:* Process profile displaying processes currently running.

2.5 System Program Update

The TAC Xenta 511 system program can be updated via the IP network if you run an installation program on the PC (see figure below). The installation program is distributed by TAC.

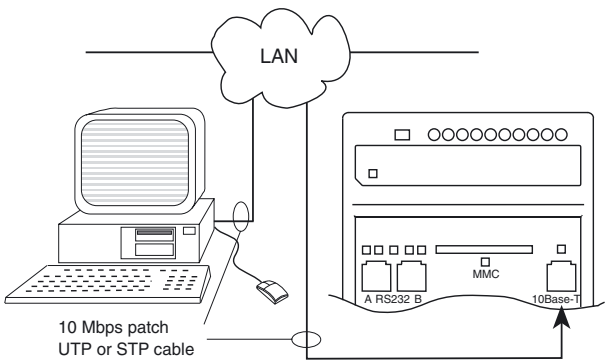


Fig. 2.8: Connecting the TAC Xenta 511 to a Local Area Network

1. Connect the TAC Xenta 511 to a LAN according to the figure.
2. Connect the PC to the same network and start the installation program *TAC Xenta511_nnnn.exe*. (Obtained via TARAI or on a TAC Vista IV CD.)

Type **root**, *password*, the 511 *IP address* and follow the instructions on the screen.

2.6 Technical Data for the TAC Xenta 511

Supply voltage ..... 24 V AC ±20%, 50/60 Hz
..... or 19–40 V DC

Power consumption ..... max. 5 W

Transformer sizing ..... 5 VA

Ambient temperature:
- Storage ..... –20 °C to +50 °C (-4 °F to +122 °F)
- Operation ..... ±0 °C to +50 °C (+32 °F to +122 °F)

Humidity ..... max. 90% RH non-condensing

Mechanical:
- Enclosure ..... ABS/PC
- Enclosure rating ..... IP 20
- Flammability class, materials ..... UL 94V-0
- Dimensions ..... see section 2.2 “Hardware Installation” on page 13
- Weight ..... 0.2 kg (0.44 lb.)

Real time clock:
- Accuracy at +25 °C ..... ±14 minutes per year
- Power outage protection ..... 72 h

Communication:
- Modem ..... 9,600-57,600 bps RS232A, RJ45, 8-p
- PC, configuration RS232B, RJ10, 4-p
- LONWORKS ..... TP/FT-10, terminal block
- Ethernet ..... TCP/IP, 10Base-T, RJ45

Storage:
- Nonvolatile
- System software, applications, files ..... 8 MB
- External memory, MMCFiles ..... 4-128 MB

Agency Compliances:
- Emission ..... C-Tick, EN 61000-6-3;
..... FCC Part 15, Subpart B, Class B
- Immunity ..... EN 61000-6-1
- Safety:
- CE ..... EN 61010-1
- UL 916 ..... C-UL-US Listed

Part numbers:
- Electronics part TAC Xenta 511 0-073-0811
- Terminal part TAC Xenta 400 0-073-0902
- TAC Xenta: PC to Serial Kit 0-073-0917
- TAC Xenta: Serial Link Kit 0-073-0918
- TAC Xenta: General Serial Kit 0-073-0919
- TAC Xenta: Programming Serial Kit 0-073-0920

3 TAC Xenta 911

3.1 General

The TAC Xenta 911 Communication device can be configured in either of three ways:

- As a LONTALK® adapter (LTA) between TAC Vista® and a LONWORKS® network
- As an IP modem, working as a direct replacement for a telephone modem with dial-up functionality over the computer network.
- As a serial gateway, allowing computer software, such as TAC Vista, to use a serial port on the TAC Xenta 911 as if it were physically connected to the computer.

3.2 Hardware Installation

The TAC Xenta 911 is cabinet-mounted on a TS 35 mm norm rail EN 50022.

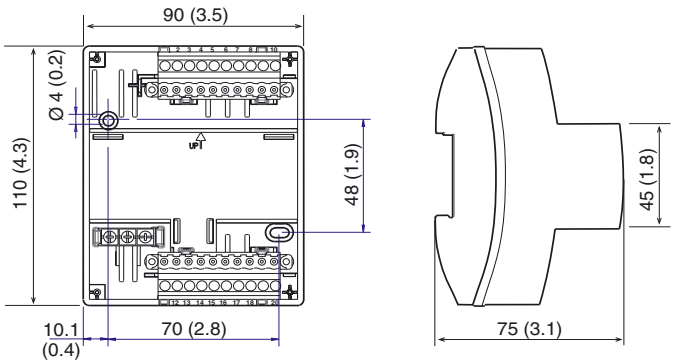


Fig. 3.1: TAC Xenta 911 dimensions, mm (in.)

Keep the unit dry and clean it externally using a dry cloth.

3.3 Connection and Startup

Sections 3.3.1 to 3.3.4 are mandatory for establishing web browser contact with the TAC Xenta 911.

3.3.1 Information from the Network Administrator

Determine whether fixed IP address or DHCP (Dynamic Host Configuration Protocol: IP address is assigned by the system) will be used.

Complete this “Setting List for Configuration”.

- IP address (If fixed; e.g. 172.20.4.21):
- Subnet mask (If fixed; e.g. 255.255.0.0):
- Default Gateway (e.g. 172.20.2.100):
- DNS (e.g. 192.165.248.22):
- Web site name:
- Domain name:
- Host name:

For explanations, please consult the Engineering TAC Xenta 511 manual.

3.3.2 Power and Hyperterminal Connections

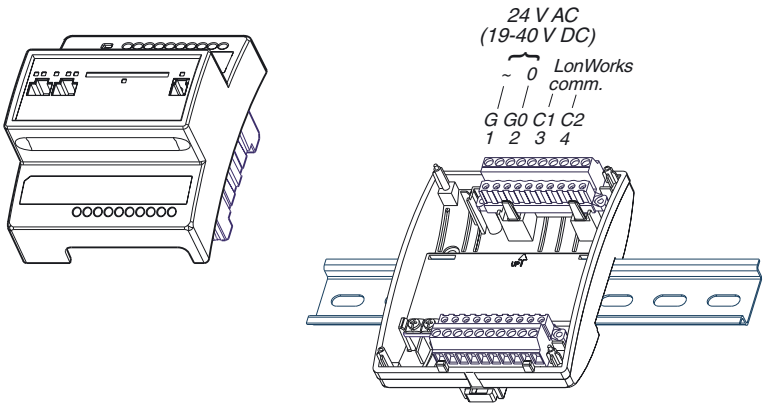


Fig. 3.2: TAC Xenta 911 mounting and electrical connections

1 **G and G0**: supply 24 V power to terminals.
Minimum cross-sectional area 0.75 mm² (AWG-19).

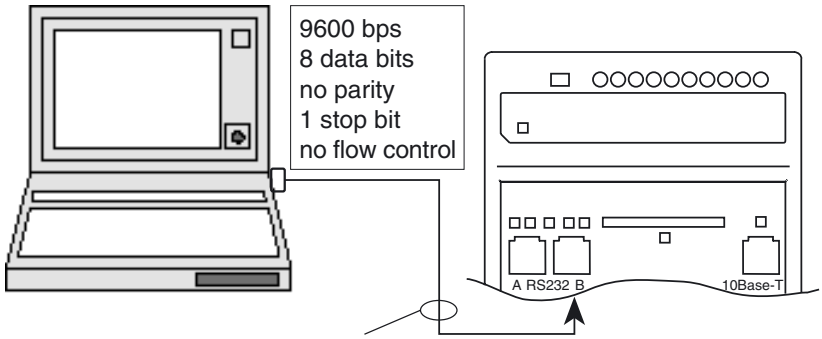
All equipment that is connected to the unit must comply with the following standards:

- **EN 60 742** (or other relevant safety standard) for the device(s) that provide an ELV-type power supply (normally 24 V AC) to the unit and other connected equipment.
- **EN 61 010** or **IEC 950** (or other relevant safety standard) for computers and other equipment supplied by power line voltage.

2 **C1** and **C2** (LonWorks connection, not used by Web Browser): standard unshielded (UTP) or shielded (STP) twisted pair cable.

3 Connect a serial cable between the PC and the Xenta 911 **RS232 B** port.

4 Start a terminal emulator, such as Windows Hyperterminal.



TAC Xenta Programming Serial Kit, part no. 0-073-0920

Fig. 3.3: Connecting Hyperterminal to the TAC Xenta 911

3.3.3 Assigning an IP Address to the Xenta 911

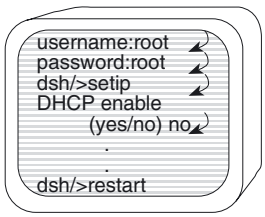


Fig. 3.4: Assigning the IP address using Hyperterminal

1 Enter *user name* and *password*.

2 Type **setip** (see “Setting List for Configuration” on previous. page) and then answer the DHCP enable question:
- **no** if you are using a fixed IP address. Continue with step 3a).
- **yes** if you are using dynamic IP addressing. Continue with step 3b).

3 a) Enter the IP items from the Setting List:

- IP address
- Subnet mask

b) Enter the remaining items from the Setting List:

- Default Gateway
- DNS
- Web site name
- Domain name
- Host name

4 Change root password (immediately or later, using **passwd**)

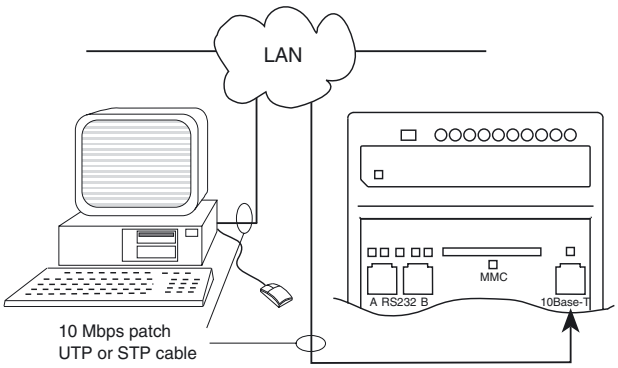
5 "Do you want to restart the IP interface?"
• *yes* will make the changes effective immediately
• *no* will make the changes effective after the next 911 restart.

6 Exit by typing **lo** (log out) and pressing Enter.

3.3.4 Connecting a PC to the TAC Xenta 911 via a LAN

1 Connect the Xenta 911 to a LAN according to the figure below.

2 Connect the PC to the same network and start the PC HTML browser (for example Internet Explorer).



LAN = Local Area Network
UTP = Unshielded Twisted Pair
STP = Shielded Twisted Pair

Fig. 3.5: Connecting the TAC Xenta 911 to a Local Area Network

3 Enter the *IP address for the Xenta* 911 (e.g. http://172.20.4.21).

4 Log in as **root** and use the valid password. This should get you to the Welcome page of the Xenta 911.

3.3.5 System Configuration

When you log in as **root** and use the valid password you will get to the Welcome page of the Xenta 911. From here you can start the Setup Wizard.

Fig. 3.6: The TAC Xenta 911 Setup Wizard

Select the required item under one of the navigational buttons to the upper left or start the Setup Wizard to configure the unit.

Start with the **Mandatory Steps**.

1 Configure the Date & Time:
Enter the date, time and zone (for the event log).

2 Select the Device Type:
Select which device the 911 will be connected to.

Continue, if required, with the **Optional Steps**.

3 Tune the Communication Parameters:
Normally, the default values should be used. Adjust only after con-

sulting with the Solution Team when it is vital to optimize the communication.

4 Configure the Telephone Numbers:
If the connection uses a phone number instead of an IP address, it will be necessary to specify the primary/secondary phone numbers and their corresponding IP addresses. This is normally done from TAC Vista, but may also be done here.

3.3.6 Using the TAC Xenta 911 as an LTA

The TAC Xenta 911 can be used as an LTA, LONTALK Adapter, between TAC Vista and the LONWORKS network.

Connections - LTA

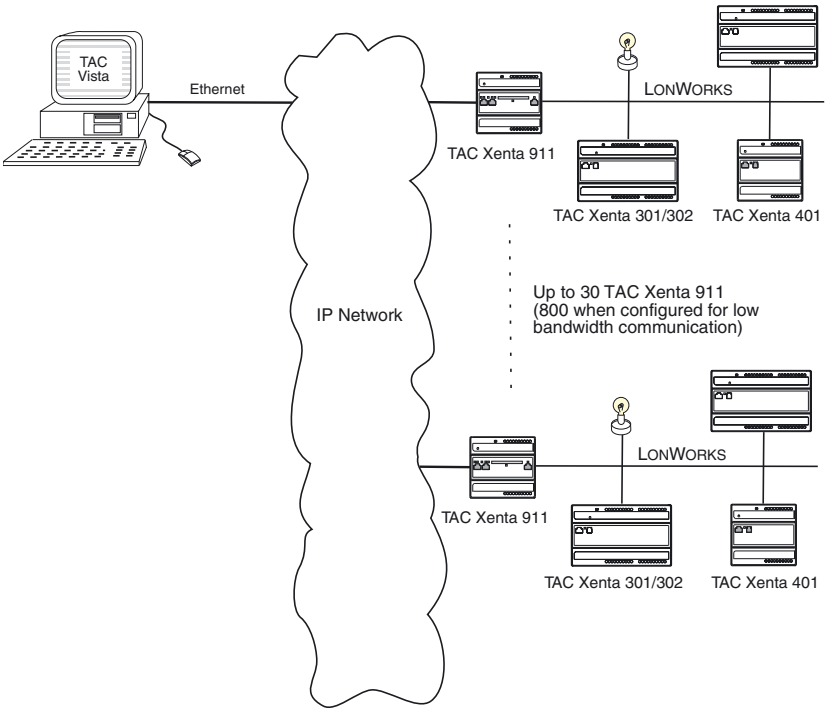


Fig. 3.7: TAC Xenta 911 as an LTA (LonTalk Adapter)

Cables

IP network to 911: Ethernet cable to 10Base-T socket.

LonWorks to 911: Twisted Pair to terminals C1 and C2.

In TAC Vista IV, the Xenta 911 can be configured in two ways:

- For continuous communication with up to 30 Xenta 911 connections.
- For event-driven, low bandwidth communication with up to 800 Xenta 911 connections. To reduce the network load, only a certain

number of these are allowed to communicate simultaneously. This number is set in TAC Vista. There is also a filter function to determine which events will activate the communication.

LTA Communication with TAC Vista 3.21 - 3.33

(These functions are integrated with TAC Vista IV.)

LonTalk Adapter for TAC Vista

1 Install the program **LTA for TAC Vista** in the same directory as TAC Vista (ex. TAC 330).

2 Start **LTA for TAC Vista**.

- Select a **TACLON interface**
- **ADD**
- Enter the **IP address** of the intended TAC Xenta 911
- Select **Port** (default 1068)
- **UPDATE**
- **EXIT**

3 Connect to the TAC Xenta 911.

4 Select the **LDV Server Port** (default 1068) under **Configuration/ LTA for TAC Vista setup** and use the same value as in **LTA for TAC Vista**.

Restrictions for TAC Vista 3.21 - 3.33:

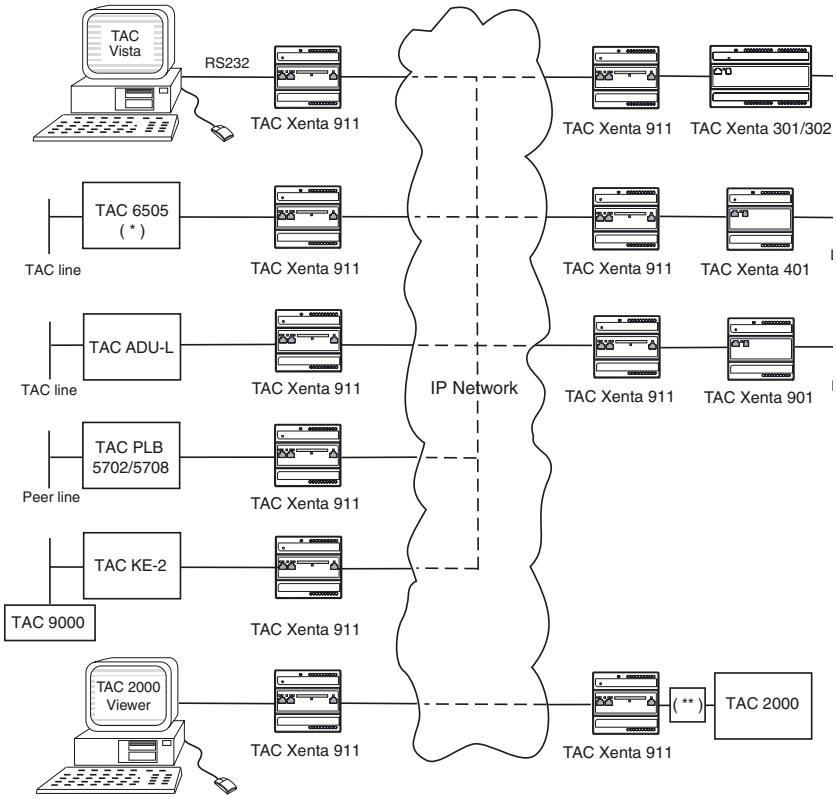
TAC Vista 3.21 - 3.33 can be configured for up to 30 TAC Xenta 911 connections.

3.3.7 Using the TAC Xenta 911 as an IP modem

The telephone modems are replaced by a pair of TAC Xenta 911s with a TCP/IP network in between them (shown in the figure below).

The IP modem interprets the AT (modem) commands from the RS232 connections and transmits data between the IP modems across the IP network. Normally, the IP address is used during dial-up, but a phone number may also be used. This phone number will be translated into an IP address in the TAC Xenta 911.

Connections - IP modem



(*): Requires a TAC 6505 Option Modem card to be installed.
(**): TAC 2000 requires a current supply adapter for the RS232 signal.

Fig. 3.8: The TAC Xenta 911 as an IP modem together with various units

The IP modem is used in the type of configurations shown in the figure above. Dial-up may be initiated by TAC Vista (slow-poll) or by the TAC Xenta 300/401.

Cables

- TAC Vista to 911: Normal serial cable to **RS232A**.
- 911 to required unit:

1 Select a connect kit from the table below or from the TAC Xenta Cable Guide, 0FL-3972, depending on which unit is to be connected to the Xenta 911.

2 Use a suitable cable from the connect kit between port **RS232A** of the TAC Xenta 911 and the connected unit.

Table 3.1: Connect Kits for different units

Connect Kit	Unit
PC to Serial (part.no. 0-073-0917)	PC (TAC Vista, TAC menta, DM 2000 TAC 2000 *
Serial Link ** (part.no. 0-073-0918)	TAC Xenta 301/302 TAC Xenta 401 TAC Xenta 901
General Serial (part.no. 0-073-0919)	ADU-L PLB KE 2 5702/5708 Danfoss GW-M Danfoss Danduc
Programm. Serial (part.no. 0-073-0920)	Required for commissioning and service using a local PC. This kit may also be used when connecting to the TAC Xenta 301/302, 401 and 901.
Modem Connect Kit (part.no. 0-073-0916)	All TAC Xenta units, for modem connection.

* TAC 2000 requires a current supply adapter.

** The Serial Link requires the TAC Xenta 911 unit to be installed immediately to the left of the TAC Xenta 301/302/401/901. If this is not possible, you will have to use the General Serial and Modem Connect Kits.

3.3.8 Using the TAC Xenta 911 as a Serial Gateway

Some systems are connected to a supervisory system using a serial port (RS232). In modern systems, where IP networks act as backbones, such systems may be difficult to integrate.

The TAC Xenta 911 can operate as a serial gateway, allowing computer software to use a serial port on the device as a communication port (COM port). For instance, a 65xx RPU can be connected to a TAC Vista over a TCP/ IP link by the use of a TAC Xenta 911 and a KE 11.

To make use of the remote serial port, a port driver is required on the computer. This software is called a Remote Serial Port Driver (RSPD)

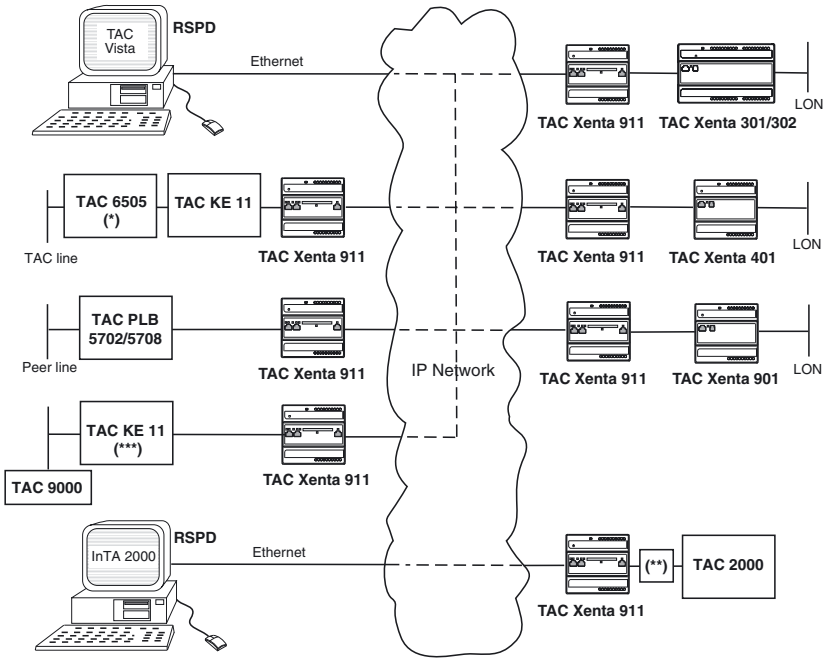
and is downloadable from TARAI and available on the TAC Software CD. See also the Software Installation Instruction 0FL-3955.

LONWORKS communication can be used simultaneously, making it cost effective to extend TAC installations with modern controllers.

The serial gateway is used in the type of configurations shown in the figure below.

In all cases (except for TAC 9000, see below) the Xenta 911 is configured as “Remote Com Port”.

Connections - Serial Gateway



(*): Requires a TAC 6505 Option Modem card to be installed.
(**): TAC 2000 requires a current supply adapter for the RS232 signal.
(***):For TAC 9000 the Xenta 911 is configured as “Remote Com Port - **9000**"

Fig. 3.9: The TAC Xenta 911 as an IP modem together with various units

Cables

- TAC Vista to IP Network: Normal Ethernet cable.
- 911 to required unit:

1 Select a connect kit from the table below or from the TAC Xenta Cable Guide, 0FL-3972, depending on which unit is to be connected to the Xenta 911.

2 Use a suitable cable from the connect kit between port **RS232A** of the TAC Xenta 911 and the connected unit.

Table 3.2: Connect Kits for different units

Connect Kit	Unit
PC to Serial (part.no. 0-073-0917)	PC (TAC Vista, TAC menta, DM 2000 TAC 2000 *
Serial Link ** (part.no. 0-073-0918)	TAC Xenta 301/302 TAC Xenta 401 TAC Xenta 901
General Serial (part.no. 0-073-0919)	PLB KE 11 5702/5708 Danfoss GW-M Danfoss Danduc
Programm. Serial (part.no. 0-073-0920)	Required for commissioning and service using a local PC. This kit may also be used when connecting to the TAC Xenta 301/302, 401 and 901.
Modem Connect Kit (part.no. 0-073-0916)	All TAC Xenta units, for modem connection.

* TAC 2000 requires a current supply adapter.

** The Serial Link requires the TAC Xenta 911 unit to be installed immediately to the left of the TAC Xenta 301/302/401/901. If this is not possible, you will have to use the General Serial and Modem Connect Kits.

3.3.9 Port Usage, etc.

Port usage, properties

- RS232 port AIP modem (DCE)
- RS232 port BConfiguration
- 10Base-TIP network, commissioning
- C1, C2LonWorks network

Available AT commands

The unit handles all AT commands for normal communication.

User Administration

Users administration (change password) is done via a web page in the TAC Xenta 911.

Using the TCP Ports (Firewall)

If two communicating TAC Xenta 911 units are located on opposite sides of one or more firewalls, these must be opened to allow traffic through.

The TAC Xenta 911 uses the following TCP/IP ports.

- Port 80http access
- Port 443https access
- Ports 20,21ftp access (fixed)
- Port 1066IP modem data port
- Port 1067IP modem update port
- Port 1068LTA for TAC Vista

With the exception of ftp access, these port numbers are adjustable in the web configuration for the TAC Xenta 911. If adjustment to the port number is made, it will be necessary to reconfigure all communicating units.

http and ftp access is only used for configuring and servicing the units.

Security

Access to the unit will only be granted if the correct user name and password have been entered.

3.4 Operation and Service

3.4.1 LED Indicators

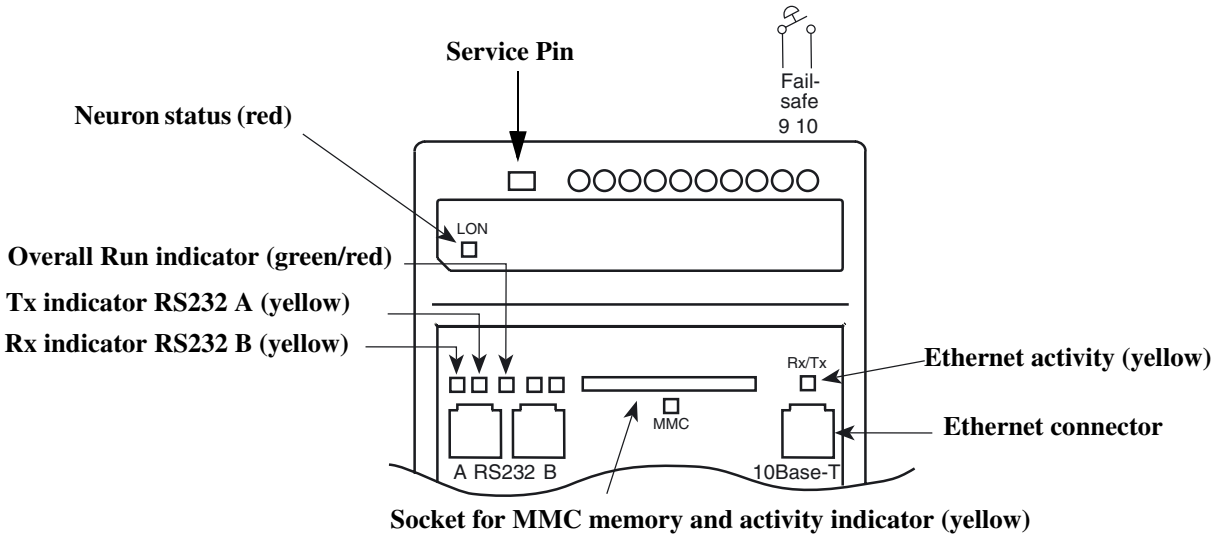


Fig. 3.10: TAC Xenta 911 status indicators

LON Neuron status

Off Normal Mode
Red, blinkingUnconfigured Node
Red, steadyHardware Fault

Fail-safe state

Shorting terminals Fail-safe 9 and 10 will put the unit in “fail-safe” state. This may be used in an emergency if the system program keeps halting.

The position of the switch is noted directly after powering on.

Overall status indicator

Green, steady:Program in normal mode
Green, blinking:Program in start mode
Red, steady:Fail-safe mode (see description above)
Red, blinking:Unit error

3.4.2 Service Utilities

System service functions are available using the web browser and are situated under the *Utilities* menu. They are primarily intended to pro-

vide technical information about the system and its status, and they can be printed to a file or a printer.

System Info

- *sysinfo:*General system information. (This will be needed if consulting the TAC Solution Team.

System error log

- *err:* Display error log with the 10 most recent errors
- *err select:*Filter and search error log
- *err file:*Display an error log listing an extended period

Diagnostics

- *ps:* Process profile, displaying processes currently running

3.5 System Program Update

The TAC Xenta 911 system program can be updated via the IP network if you run an installation program on the PC (see figure below). The installation program is distributed by TAC.

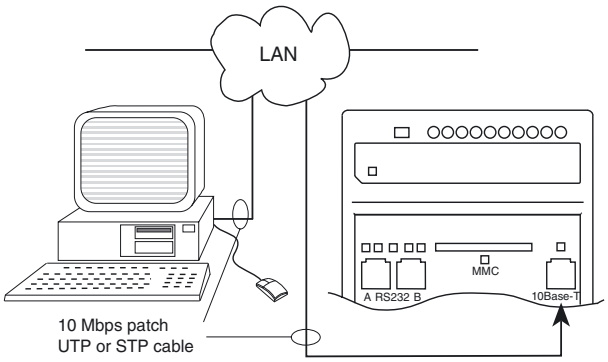


Fig. 3.11: Connecting the TAC Xenta 911 to a Local Area Network

1. Connect the TAC Xenta 911 to a LAN according to the figure.
2. Connect the PC to the same network and start the installation program *TAC Xenta911_nnnn.exe* (obtained via TARAI or on a TAC Vista IV CD).
3. Type **root**, *password*, the 911 *IP address* and follow the instructions on the screen.

3.6 Technical Data for the TAC Xenta 911

Supply voltage ..... 24 V AC ±20%, 50/60 Hz
..... or 19–40 V DC

Power consumption ..... max. 5 W

Transformer sizing ..... 5 VA

Ambient temperature:
- Storage ..... –20 °C to +50 °C (–4 °F to +122 °F)
- Operation± ..... 0 °C to +50 °C (+32 °F to +122 °F)

Humidity ..... max. 90% RH non-condensing

Mechanical:
- Enclosure ..... ABS/PC
- Enclosure rating ..... IP 20
- Flammability class, materials ..... UL 94V-0
- Dimensions ..... see section 3.2 “Hardware Installation” on page 23
- Weight ..... 0.2 kg (0.44 lb.)

Real time clock:
- Accuracy at +25 °C ..... ±14 minutes per year
- Power outage protection ..... 72 h

Communication:
- A: Modem ..... 9,600-57,600 bps RS232A, RJ45, 8-p
- B: PC, configuration RS232B, RJ10, 4-p
- LONWORKS ..... TP/FT-10, terminal block

Agency Compliances:
- Emission ..... C-Tick, EN 61000-6-3;
..... FCC Part 15, Subpart B, Class B
- Immunity ..... EN 61000-6-1

Safety:
- CE ..... EN 61010-1
- UL 916 ..... C-UL-US Listed

Part numbers:
- Electronics part TAC Xenta 911 0-073-0831
- Terminal part TAC Xenta 400 0-073-0902
- TAC Xenta: PC to Serial Kit 0-073-0917
- TAC Xenta: Serial Link Kit 0-073-0918
- TAC Xenta: General Serial Kit 0-073-0919
- TAC Xenta: Programming Serial Kit 0-073-0920
- TAC Xenta: Modem Connect Kit 0-073-0916

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www.tac.com

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