

```
AH02: West
_STATUS
TEMPERATURES
ALARMS
```

TAC Xenta[®] OP

Handbook

Foreword

Welcome to the manual of TAC Xenta OP, version VMX 3.2 and higher.

Should you discover errors and/or unclear descriptions in this manual, please contact your TAC representative.

You may also want to send an e-mail to **helpdesk@tac.se**.

This edition, -4, applies to TAC Xenta OP version VMX 3.2 or later.

The procedure for de-installation of the OP has been clarified and put in a separate section, 2.7.

The possibility to select which unit system (SI or US Imperial) is used, when connecting to TAC Xenta 100, is now described in section 3.2.

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Revisions list

Art no	Comments	Editor	Date
0-004-7506-0	First version.	KW	1996-08-08
0-004-7506-1	This document has been revised to cover TAC Xenta v 3.0. The following major changes have been made: - The Chapter contents have been rearranged. - A new chapter has been added, showing how to communicate with Xenta 100 and how to reach the Network Variables. Trade mark change from TA to TAC.	KW	1997-09-01 1998-06-11
0-004-7506-2	This document has been revised to cover TAC Xenta v 3.2.	KW	1999-01-26
0-004-7506-3	The explanation of the OP communication mode has been expanded (section 2.6). The OP/RU model with Cyrillic characters added.	KW	2000-08-08
0-004-7506-4	The de-installation procedure has been clarified (section 2.7). Switching between SI and I-P units has been added to section 3.2.	KW	2001-08-08

TAC Xenta OP

Handbook

Subject to modification.

Contents

1	Introduction	7
1.1	TAC Xenta OP	7
1.2	This manual	7
1.3	More information	8
2	Connection and Basic Functions	9
2.1	Description	9
2.2	Connecting to TAC Xenta 100	10
2.3	Connecting to TAC Xenta 300/401	11
2.4	Keys	12
2.5	Local functions of the OP Service menu	13
2.6	Selecting the OP communication mode	15
2.7	De-installing the OP	17
2.7.1	Tool: MetraVision	17
2.7.2	Tool: LonMaker	18
3	Dialogs with TAC Xenta 100.....	19
3.1	General	19
3.2	Connecting to TAC Xenta 100	19
3.3	Setting the Node state in TAC Xenta 100	21
3.4	Reading/checking NVs in TAC Xenta 100	21
3.5	Initiate Service pin message	22
4	Dialogs with TAC Xenta 300 and 401	23
4.1	The menus	23
4.2	Find and change a setpoint	24
4.3	View/acknowledge alarms	25
4.4	Change the Time channels	26
4.5	Access Code	28
4.6	Edit access code	29
4.7	Overriding inputs/outputs	29
4.8	Daylight saving	30
4.9	Log off.....	30

5 Technical data 31

Index 33

This manual contains a total of 36 pages.

1 Introduction

1.1 TAC Xenta OP

TAC Xenta OP is a small operator panel designed to be used together with TAC Xenta 100, 300, 401 and 901 units.

The operator panel gives the user access to parameters and alarms without communicating with a central system. Additionally, it is used to monitor status, adjust setpoints and time channels. All values are displayed with an explanatory text in the alphanumeric display window.



Please note!

The TAC Xenta OP and the other products of the Xenta family must not be used for any other purpose than that for which it was designed.

Installation and repair may only be performed by authorized personnel.

1.2 This manual

This handbook has the following contents:

Chapter 2

In this chapter the connection of the operator panel, TAC Xenta OP, to the TAC Xenta 100 and TAC Xenta 300/401 controllers is shown.

Chapter 3

The use of the OP together with TAC Xenta 100 and the principles for handling display of Network Variables are explained in this chapter.

Chapter 4

The use of the OP together with TAC Xenta 300/401 controllers and the most common menus are discussed here

Chapter 5

This chapter contains technical data on the TAC Xenta OP.

1.3 More information

TAC Xenta OP is also described or mentioned in the following documents:

- the TAC Xenta OP Operator panel data sheet (C-98-05)
- the handbooks for the different TAC Xenta controller units
- the “TAC Menta User’s manual”

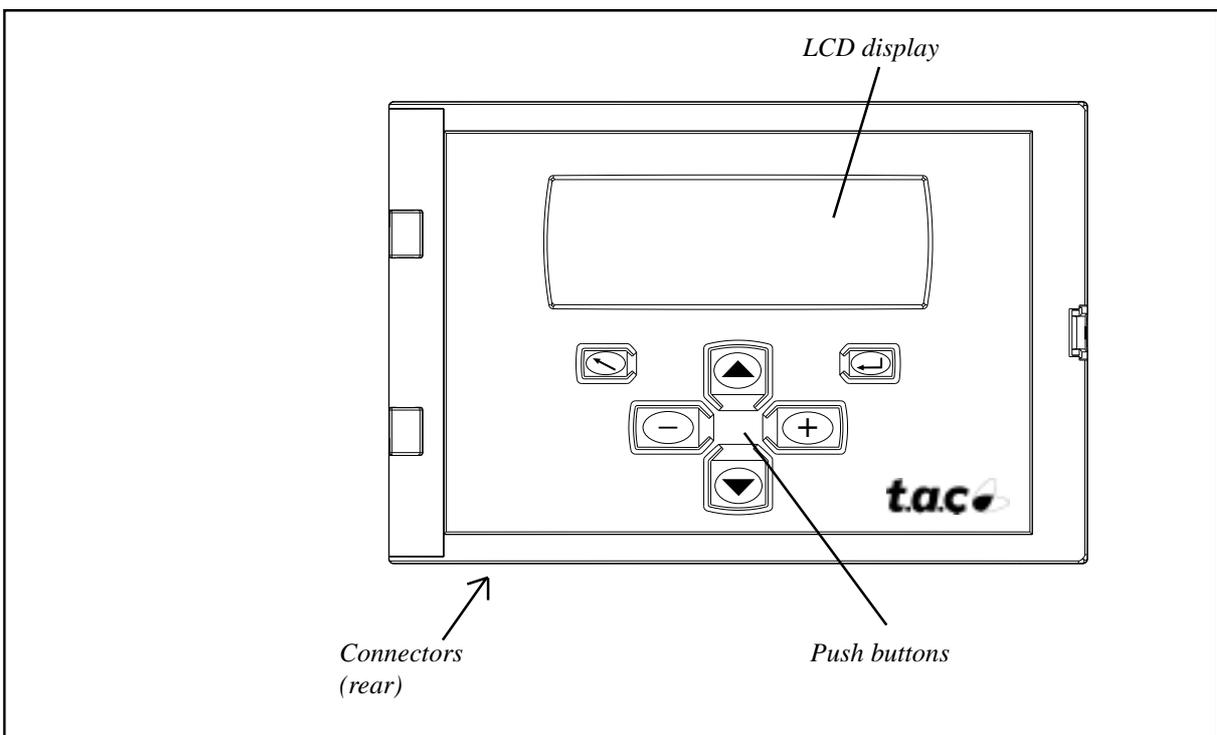
Stand-alone TAC Xenta 300/3000 controllers and I/O modules can be commissioned by using the Service menu of TAC Xenta OP (which is not the same as the local OP service menu). This procedure is described in the TAC Xenta 300 and 401 Handbook.

2 Connection and Basic Functions

2.1 Description

The TAC Xenta OP Operator panel has an LCD display with 4*20 characters and six push buttons. A modular socket or four screw terminals are used for communication and for connecting the power supply. These connectors are placed on the rear. There is also a potentiometer to adjust the contrast of the display, on the rear.

The OP has an LCD display that can be lighted from beneath. The light is controlled from the OP Service menu (section 2.5).



The TAC Xenta OP operator panel

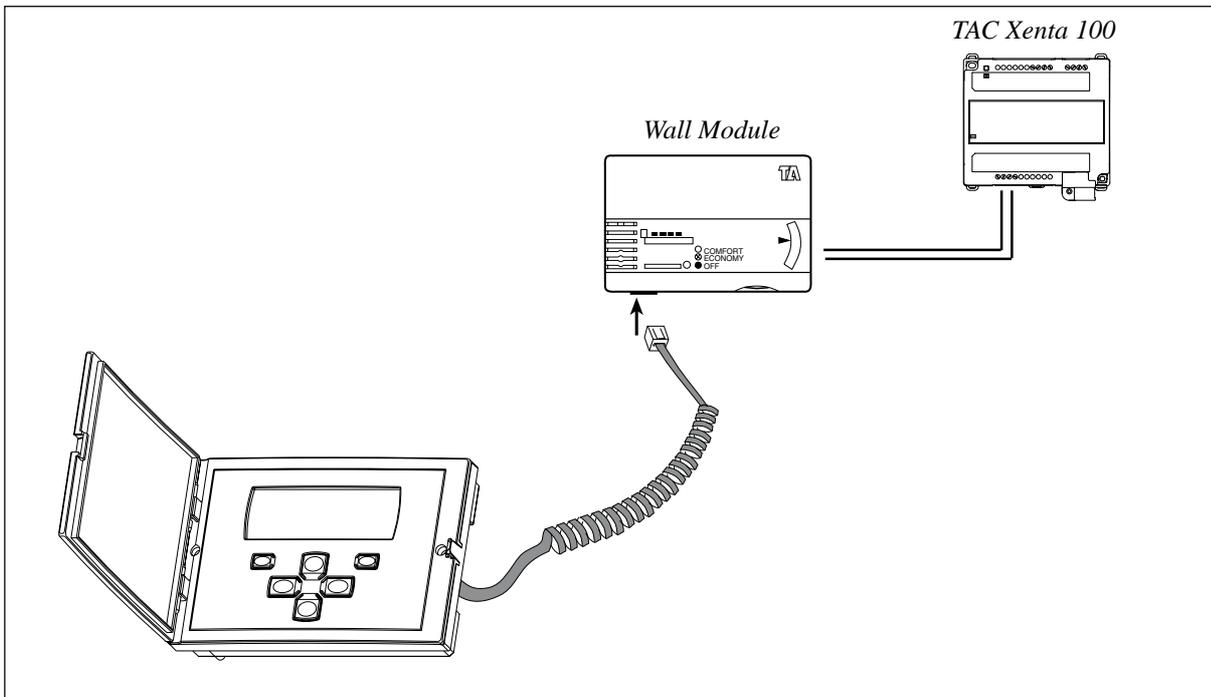
The operator panel is used to monitor status and to adjust setpoints and time channels. It also makes it possible to list the alarms without communicating with a central system.

The operator panel is controlled from a master, a TAC Xenta 100, 300 or 401 controller. When you start using the operator panel, it will send a message to the master telling it what button was pushed. The master contains the dialogue messages and will direct the operator panel what to show on the display. Thus the operator panel will act as a dumb terminal.

2.2 Connecting to TAC Xenta 100

Normally the TAC Xenta OP is connected to the modular jack on the lower side of the Wall Module. In this way the Xenta OP will get power supply from the TAC Xenta 100 unit.

Cable between controller and Operator panel..... max. 10 m



Connecting the TAC Xenta OP to TAC Xenta 100 via the Wall Module

The contrast of the display can be adjusted with the potentiometer on the rear of the operator panel; please refer to the figure in the next section.

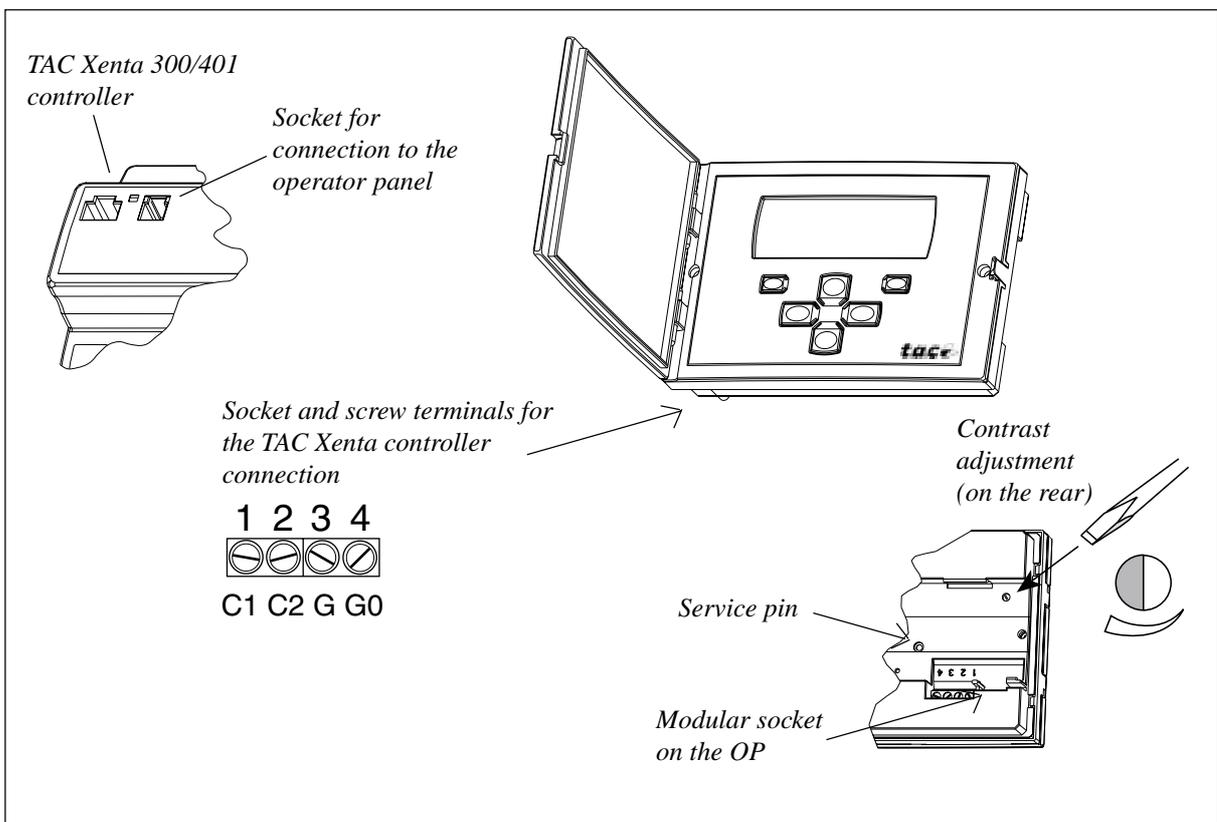
2.3 Connecting to TAC Xenta 300/401

Cable between controller and Operator panel..... max. 10 m

When connecting the operator panel there are two alternatives (please refer to the adjacent figures):

- Use the modular socket on the front of the TAC Xenta 300 or 401 controller and the corresponding socket on the back of the operator panel. This requires a special cable.
- Use the screw terminals on the back of the operator panel, labelled 1–4. Terminals 1 and 2 are used for communication and terminals 3 and 4 for 24 V AC (or DC).

At the controller you use the terminals C1, C2 and G, G0.



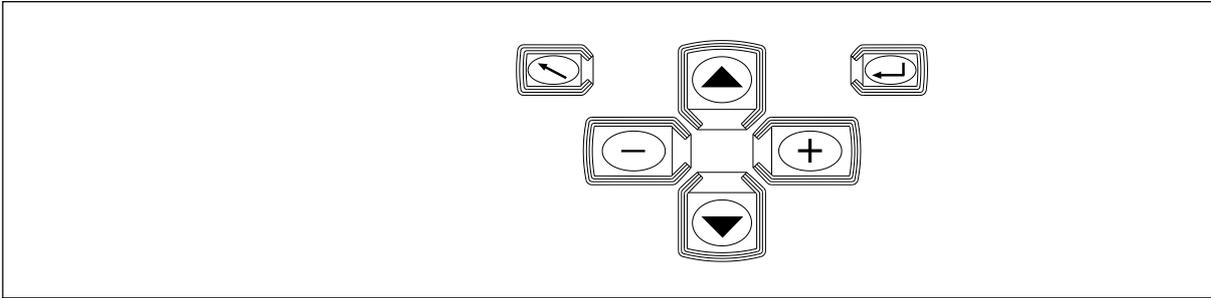
TAC Xenta OP connectors and contrast potentiometer

The contrast of the display can be adjusted with the potentiometer on the rear of the operator panel.

(The Service pin is available from the rear if, in special cases, the network configuration procedure requires this. When the pin is pressed, a unique hardware identity code is sent on the network.)

2.4 Keys

The TAC Xenta OP keys:



is used to step up one level in the directory hierarchy (“Home”). There may be several levels in the hierarchy. The cursor will return to the line selected the last time this level was active. This button does not by itself make changes effective.



is used to decrease values. If this button is kept depressed, the stepping speed increases.



is used to increase values. If this button is kept depressed, the stepping speed increases.



is used to move the cursor upwards in a menu list or to move to previous alarm or logged record.



is used to move the cursor downwards in a menu list or to move to previous alarm or logged record.



is used to select a line, indicated by the cursor (“Enter”) or to move between the different adjustable values.

This button also makes changes effective.

2.5 Local functions of the OP Service menu

For simple hardware check of the OP and for certain system parameters there is a local Service menu in the operator panel. The OP functions are quite independent of the other TAC Xenta units and only require that the operator panel is connected to the network and that the panel has *not* been set in the TAC Xenta 100 communication mode (see below).

The Service menu appears if both the keys  and  are pressed for about three seconds *simultaneously*.

```

OP Service menu
1. Exit service mode
2. Keyboard test
3. Display test
4. LON address
5. National text
6. SW version
7. LonTalk status
8. Display backlight
9. Service pin
10. OP mode

```

Select the required function and press .

Two hardware tests

2. Keyboard test is a simple test of the keyboard functions:

```

Keyboard test
* * * Press keys!
* * Double-press
* for QUIT

```

Each asterisk corresponds to a key. Double pressing on any key means leaving the test.

3. Display test will test all display positions in a number of steps. Each step is initiated by pressing any key.

System information

- 4. LON address shows the current Domain/Subnet/Node address for the operator panel.
- 6. SW version lists the current version of the operator panel version and
- 7. LonTalk status shows statistics from the network communication.
- 9. Service pin is a way to send the unique Neuron ID on the network. Mainly used for testing purposes.

Selecting the language of the OP messages

5. National text means that the operator can switch between different languages for those messages that are generated in the OP.

```
Select language
No reply ...
Wait ...
Press Enter to save!
```

If you press  or  the language will change, for example into German:

```
Select language
Keine Antwort ...
Bitte warten ...
Press Enter to save!
```

When you have selected a suitable language you press  (“Enter”) and then leave the menu.

Controlling the display light

8. Display backlight controls the background light of the OP display. There are three modes: OFF, ON and AUTO.

OFF means that the backlight is always turned off,
 ON means that the light is turned on permanently and
 AUTO means that the light is turned on as soon as a button is pressed, but goes off about 30 minutes after the last key has been pressed.

Use  and  to select the required mode.

As the display light may cause loss of contrast if turned on permanently, we recommend the AUTO or OFF mode.

Leaving the OP Service menu

1. Exit service mode means leaving the local OP service menu.

This will also happen if no key has been used during about 40 seconds.

Selecting the OP mode

10. OP mode In TAC Xenta networks the OP may work in one of two communication modes:

- for communication with Base units, TAC Xenta 300 and 400
- for communication with TAC Xenta 100

Furthermore, the OP can be more or less mobile, depending on the way the OP is connected to the network.

Please refer to the next section!

2.6 Selecting the OP communication mode

Xenta 100: ON/OFF When delivered, the OP is set for Base unit (TAC Xenta 300, 400) communication. To change the communication mode, you have to call up the OP Service menu and go to the 10 . OP mode menu, where the TAC Xenta 100 mode can be turned on/off.

```
Change OP mode
Xenta 100  : OFF
Bindable   : TAC
```

Use  or  to change the Xenta 100 mode and press .

When the OP is set to allow the Xenta 100 mode, the operator is given a choice to access TAC Xenta 100 (in stead of TAC Xenta 300/400) by pressing “Enter”, each time an OP is connected.

The OP Service menu *cannot* be reached when the OP is in the Xenta 100 mode.

If you want to turn OFF the Xenta 100 mode, once you are in this mode, you must temporarily disconnect the OP and let the OP revert to the Base unit communication mode in order to be able to reach the Service menu and from there select the 10 . Change OP mode menu.

The TAC Xenta 100 OP communication is described in the next chapter.

“Bindable” is explained after the Summary below.

Summary

To turn ON the Xenta 100 mode

```
Connecting to
Xenta Base unit

OP Service menu
1. Exit service mode
2. Keyboard test
3. Display test
.
10 OP mode

Change OP mode
Xenta 100  : ON
Bindable   : TAC

Press enter to
access Xenta 100

Connecting to
Xenta 100 ...
```

- 1 Connect the OP and wait for message on display.
- 2 Press both keys  and  for about three seconds *simultaneously*.
- 3 Select 10 . OP mode menu.
- 4 Press  or  to set the Xenta 100 mode ON and press .
- 5 Temporarily disconnect the OP and wait for message on display.
- 6 Press  to access Xenta 100.
- 7 Wait for message on display.

To turn OFF the Xenta 100 mode	
<pre> Press enter to access Xenta 100 (wait) ↓ Connecting to Xenta Base unit OP Service menu 1. Exit service mode 2. Keyboard test 3. Display test . 10 OP mode Change OP mode Xenta 100 : OFF Bindable : TAC 1. Exit service mode </pre>	<ol style="list-style-type: none"> 1 (Disconnect and then) connect the OP; wait for a couple of seconds for the <i>Base unit message</i> to appear. 2 Press both keys  and  for about three seconds <i>simultaneously</i>. 3 Select 10.OP mode menu. 4 Press  or  to set the Xenta 100 mode OFF and press . 5 Select the 1.Exit service mode menu and press .

Bindable “Bindable” is a LonWorks term, describing how the OP is connected and addressed in the network. This, in turn, affects the mobility of the OP.

Use  or  to select Bindable mode from the following.

- TAC OP movable. Two available addresses following each TAC Xenta Base unit.
- INST OP permanently electrically connected to the network; installed with a binding tool.
- MAN OP movable, the domain ID of the network has to be programmed via OP Service menu - **4.LON address** (communication is here limited to Base units on the same channel).

For OP version 3.11 and earlier the following modes can be chosen.

- OFF OP movable. Two available addresses following each TAC Xenta Base unit.
- ON OP permanently electrically connected to the network; installed with a binding tool.

Confirm your choice by pressing .

2.7 De-installing the OP

If the OP is to be *de-installed* from the network, it should be restored to the original factory setting to avoid problems, if used in another network.

Depending on which binding tool has been used, the de-installation is made according to one of the methods shown below.

2.7.1 Tool: MetraVision

- 1 Select OP Service menu – **10. OP mode** and set **Bindable** to “**TAC**” or, in OP version ≤ 3.11 , “**OFF**”.
- 2 Disconnect the OP electrically from the network.
- 3 “**Remove**” the OP node from the data base.

Factory setting If the OP has been labelled “*Unconfig*”, which may happen if step 3 above was executed before step 2, or for any other reason; the OP may be restored to the factory setting in one of two ways:

- A Reconnect the OP to the network, reinstall it and perform the steps above in the correct order,

or,

- B use the **Nodutil** program and do the following.

- 1 Select OP Service menu – **10. OP mode** and set **Bindable** to “**TAC**” or, in OP version ≤ 3.11 , “**OFF**”.
- 2 Start Nodutil.
- 3 Press the **Service pin** of the OP.
- 4 Type “**G**”.
- 5 Type “**1**”, press Enter.
- 6 Type “**M**”.
- 7 Type “**S**”.
- 8 Type “**C**”.

2.7.2 Tool: LonMaker

Please note!

- 1 Check in the OP Service menu – **10. OP mode** that **Bindable** is set to “**TAC**” or, in OP version ≤ 3.11 to “**OFF**”.
- 2 Start the LonMaker Browser.
- 3 Click right, choose **Properties**.
Restore **SNVT_config_src** from **cfg_external** (1) to **cfg_local** (0).
SNVT_config_src is called **var_2** in the Browser.
- 4 Disconnect the OP electrically from the network.
- 5 Remove the OP from the data base of LonMaker.

Factory setting If the OP has been de-installed in an incorrect way, it may be restored to the factory setting in one of two ways:

- A Reconnect the OP to the network, reinstall it and perform the steps above in the correct order,
or,
- B use the **Nodutil** program and perform the following.
 - 1 Select OP Service menu – **10. OP mode** and set **Bindable** to “**TAC**” or, in OP version ≤ 3.11 , “**OFF**”.
 - 2 Start Nodutil.
 - 3 Press the **Service pin** of the OP.
 - 4 Type “**G**”.
 - 5 Type “**1**”, press Enter.
 - 6 Type “**M**”.
 - 7 Type “**S**”.
 - 8 Type “**C**”.
 - 9 Type “**U**”.
 - 10 Type “**2**”, press Enter.
 - 11 Type “**00**”, press Enter.

3 Dialogs with TAC Xenta 100

3.1 General

TAC Xenta OP can be used as a service and limited commissioning tool for the TAC Xenta 100 Zone Controllers. These controllers use Network Variables of the LonWorks standard type (“SNVT”, Standard Network Variable Type) for all data communication on the network. All Network Variables, including the configuration parameters can be accessed via the keypad and the LCD display.

In order to separate this general kind of communication from the dedicated communication used with TAC Xenta 300 and 401 controllers, the TAC Xenta OP has two different communication modes.

3.2 Connecting to TAC Xenta 100

Note! The very first time a TAC Xenta OP is connected to a Xenta network, the TAC Xenta 100 communication mode is, by default, in the Off state. Please refer to the end of chapter 2 for the necessary procedures to change the communication mode. When this has been done, the operator is given a choice to access TAC Xenta 100 (in stead of the Base units, TAC Xenta 300 or 401):

```
Press enter to
access Xenta 100
```

Press the key  to get the display

```
Connecting to
Xenta 100 ...
```

Check that the LED on the Wall Module will flash for some 10 seconds or that the red Service LED turns on and then off after a couple of seconds, on the connected controller.

If contact is established without the LED flashing, Xenta OP has connected to another node in the network. In this case disconnect Xenta OP and then reconnect.

Wait for the display

```
Xenta 100 is:  
Configured  
Press <DOWN> to  
continue
```

Press the key  and wait for a display looking like:

```
Xenta 103v1.00-10  
103/A/v10003  
units as SI [^]  
NV index? 000
```

The first two lines, showing software versions, are displayed the first time only.

The third line shows which unit system is used, when SNVT values are presented in the OP menus.

The  key toggles between **SI** (metric) and **US** Imperial (Inch-Pound) units.

From this display (normally only lines 3-4 appear) the different Network Variables can be selected.

3.3 Setting the Node state in TAC Xenta 100

When the display

```
Xenta 100 is:
Configured
Press <DOWN> to
continue
```

is shown, the second line can be switched between Configured and Unconfigured, using the  and  keys.

When **Configured** the TAC Xenta 100 can send and receive Network Variables.

When **Unconfigured** the TAC Xenta 100 *cannot* communicate on the network.

In normal operation on a network, the TAC Xenta 100 should always be set to Configured.

Configured/Unconfigured are normally set by a binding tool, in a network configuration and by TAC Xenta OP in a stand-alone configuration. See also the TAC Xenta Network guide.

3.4 Reading/checking NVs in TAC Xenta 100

When connection has been established (section 3.2) a NV (Network Variable) index can be selected by the use of the  and  keys.

Keep the key pressed to increase the toggling speed. Press the  key to display the selected variable.

Example: Select NV 004 to get the Effective Setpoint:

```
4 nvoEffectSetpt
21.00 °C
```

nvo indicates that this is an output value and cannot be changed from the OP.

Use the key  to return to NV index selection.

Input variables appear further down in the list:

Example: Select NV 013 to get the Application Mode:

```
13 nviApplicMode
Auto      -
```

`nvi` indicates that this is an input value. The cursor is visible and allows the value to be changed from the OP.

Use  and  to change the value. Keep the key pressed to increase the toggling speed.

Press  to enter the new value.

If  or  or  is pressed before , no change will take place.

The keys  and  will take you to the adjoining NVs in the list.

3.5 Initiate Service pin message

When the NV index selection is displayed

```
units as SI [^]
NV index? 000
```

a Service pin message is sent from the Xenta 100, initiated from the OP, each time the  key is pressed.

4 *Dialogs with TAC Xenta 300 and 401*

4.1 *The menus*

The menus of the operator panel and the order in which they are presented are designed by an application programmer, using the TAC Menta design tool.

Thus, the menus shown below are only examples. The principles showing how to select among the menus and how to change the values are, however, general.

Cyrillic characters

The TAC Xenta OP/RU model has the capability of displaying Cyrillic characters.

The TAC Menta User's manual describes how you switch the character files of the OP.

24 hour clock vs. AM/PM clock

In those menus that allow time (clock) entries, like the *Time Schedule*, the *Holiday chart* (Time channels) and the *Daylight saving* menus, you may choose to present time with a 24 hour clock or with a 12 hour clock, also called an AM/PM clock. The choice is made already during the menu design phase in TAC Menta.

To translate between the two modes of display the following table can be used.

<i>24 hour clock</i>	<i>AM/PM clock</i>
01.00	01.00 AM
06.00	06.00 AM
11.59	11.59 AM
12.00	12.00 PM
12.59	12.59 PM
13.00	01.00 PM
18.00	06.00 PM
23.59	11.59 PM
00.00	12.00 AM
00.59	12.59 AM

When the AM/PM clock is used, the time in the OP menus are compressed to hhAmm and hhPmm for hh.mm AM and hh.mm PM respectively.

4.2 Find and change a setpoint

This example starts with the first screen showing all TAC Xenta 300/401 controllers in the network and shows how to find and change the supply air setpoint in “AH02 West”:

```

AH01 East
AH02 West
HEAT-1 North
HEAT-2 South

```

Press  once and then 

```

AH02: West
_STATUS
TEMPERATURES
ALARMS

```

Press  once and then 

```

AH02: Temperatures
Outdoor temp:
Now: 16.5 C
Max:22.5 Min:11.3

```

Press  until the required screen is found

```

AH02: Temperatures
Supply air
Measured: 17.1 C
Set value: 27.5 C

```

As there is only one value that could be changed in this screen the cursor is already in the right position and the setpoint could be set with  and .

Changes will be effective as soon as  is pressed.

4.3 View/acknowledge alarms

To make the operator aware of unacknowledged alarms in the alarm list the abbreviated application/base unit name (“AH02” in our examples) will flash. When the item “Alarms” has been found and selected with Enter, a screen like the following will appear:

```

AH02  ALARMS:  6 / 6
P1
PUMP STOPPED
99-JAN-15  14:05 ON
    
```

On the top row there is an indication that this is alarm number six of six in the list. To see the other alarms in the list use  or . The text “ON” in the above alarm example indicates that the alarm has *tripped* but not been acknowledged.

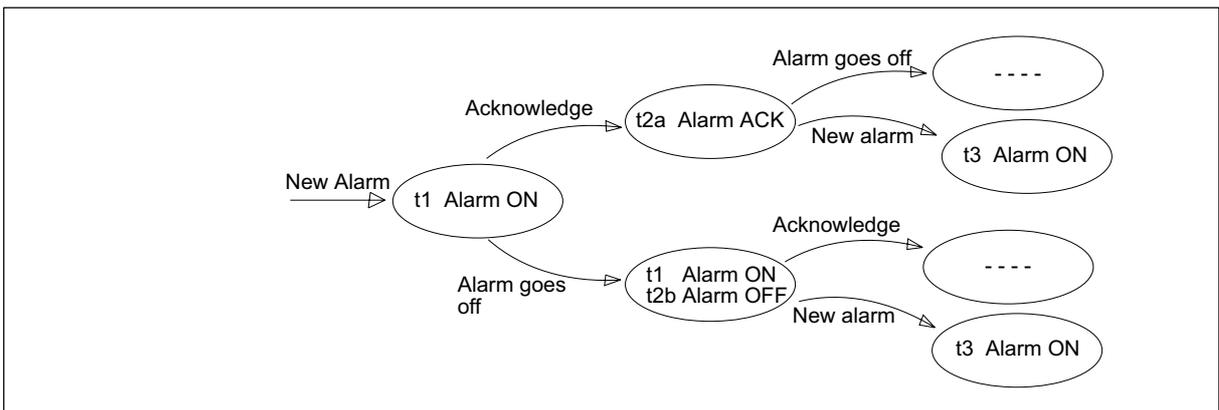
A selected alarm is *acknowledged* when the operator presses  (Enter). The text “ON” will change to, for example, “ACK”.

Alarms which have tripped and then *returned* to normal state are indicated with “OFF”.

On the Operator panel, for each point at any given moment, at most one of the three alternatives below can appear:

ON	ON OFF	ACK
----	-----------	-----

Transitions between these three states at moments in time t1, t2 etc., and the disappearance from the list, may occur in the way shown in the diagram below.



Possible events at alarms and the way they are presented in the alarm list: time, Alarm text, status

The alarm list is sorted in chronological order with the oldest event displayed at the top. The alarm list is dimensioned to allow all points of alarm to appear at the same time.

If a TAC Xenta controller is connected to a supervisory system like TAC Vista, another indication may appear in the alarm list. An asterisk (*) in front of the signal name means that the alarm is blocked, that is, information about changes between alarm on and alarm off will not be sent to TAC Vista.

The alarms will, however, be listed on the OP as usual.

The blocking request is set/removed from TAC Vista.

Example:

```
AH02   ALARMS: 2 / 6
*SF1
SUPPLY FAN STOPPED
99-JAN-15  13:50 OFF
```

Note! Starting with TAC Xenta System program v 3.4 this blocking function has been changed. The alarm information will be sent to TAC Vista, as any normal alarm, but it will not be displayed on the OP.

Please note that TAC Vista will store the alarm event in the historical log, even if alarms of priority 0 are not displayed in the alarm list.

4.4 Change the Time channels

The operating hours for a selected object can be adjusted by altering one or more time channels. This can be done from the operator panel. The number of week schedules available for a specific time schedule is defined in the application program.

The following is an example of an object (AH02) controlled by three different schedules. The object is active 08:00–12:00 and 13:00–17:00 on weekdays and 08:00–12:00 on Saturdays. The example shows how to change operating hours on Saturdays to be 08:00–13:30.

Example:

Week schedule Go to the week schedule for AH02.

```
AH02: Time schedule
      1234567
08:00-12:00 MTWTF
13:00-17:00 MTWTF
```

To get to the next schedule controlling AH02 press  once.

```
AH02: Time schedule
           1234567
08:00-12:00      S
```

As the cursor is positioned under “08”,  must be pressed twice to move the cursor to “12”. Use  and  to change the off hour to “13”. Press  once and adjust the minutes.

When finished, press  after the last entry and then use  to return to the previous menu level.

Holiday chart The week schedule can be modified by a Holiday chart which defines conditions for certain dates, for example when Christmas Eve occurs on a workday:

```
AH02: Holiday chart
           1234567
14:00-17:00 MTWTF
**-12-24 : **-12-24
```

The asterisks (**) act as “wild card”, that is, the date will in this case be valid each year.

Use  and  to change the time and date values. Use  to move the cursor between the fields. To obtain asterisks in the date fields, toggle the month value past 12. To obtain asterisks for the year value, you must toggle *backwards* from the value 94.

When finished, press  after the last entry and then use  to return to the previous menu level.

The Holiday chart is valid throughout the 24 hours.

Note, for example the following case:

Week schedule says active 08:00-18:00

Holiday chart says active 00:00-00:01

The object will be active for the one minute only.

Special cases

If you want the time channel to be *turned off* for the whole day and night and use the 24 hour clock, you indicate this by

00:00-00:00

and with the AM/PM clock (please refer to section 4.1)

12A00-12A00

If, in stead, you want the time channel to be *turned on* for the whole day and night and use the 24 hour clock, you indicate this by

00:00-24:00

and with the AM/PM clock

12A00-00P00

In the latter case the end time (24:00 respective 00P00) is a normally 'nonexistent' time value.

4.5 Access Code

Every item that is displayed in a menu on the operator panel has an access level, which can be low, medium or high. An item with low access level will always be visible on the display of the operator panel.

To show items, with access level medium or high, a correct access code has to be given. There is one code giving access to low *and* medium level items and one to give access to *all* levels.

The default codes are

Medium level: 1111

High level: 2222

To change access level go to the following menu:

```
AH02: ACCESS CODE
CODE: 0000
Change code to
extend menu
```

Use  to move the cursor between the digits and use  and  to change their value. When finished, leave the menu with .

If the correct code has been entered, some more items will now be visible in the list, for example "Edit Access code":

4.6 Edit access code

To change the code that gives the operator access to the medium or high level items, the access level code for the level to be changed must first be entered as described above. Then go to the Edit Access Code screen:

```
A2: EDIT ACCESS CODE
EDIT CODE: 0000
Change code for
the active level (no.)
```

Use  to move the cursor between the digits and use  and  to change their value. When finished, press  and leave the menu with . As the access code is changed only the standard (low level) items will be shown. To show the medium or high level menu items the new access code has to be entered as described in the previous example.

After the download of an application from TAC Menta, the access code *will revert* to the default value.

4.7 Overriding inputs/outputs

For access code *high*, it is possible to override the input and output values in the Status displays of the OP.

For example, to override a digital output you must indicate “manual override” in the field just in front of the displayed value:

```
A2: Fan status
SF_out  _0
```

With the cursor in the position just to the left of the 0 value, use  or  **twice** to toggle up the manual override indicator (->). Press  to confirm and to move the cursor to the value itself. It is now possible to change the value, a value that will override the value set by the controller.

The override indicator will remain visible (for all access levels) until it is reset to normal, automatic mode.

Network Variables (please refer to the TAC Menta User’s manual) can also be overridden in this way.

4.8 Daylight saving

TAC Xenta 300 has built-in support for the European standard daylight saving. However, the OP can be used to set other conditions.

To change the Daylight saving period, the following menu is used.

L2: DAYLIGHT SAVING
MODE: 1 HOURS: 1
FROM: MM:DD HH:MM
TO : MM:DD HH:MM

As long as MODE: is **1**, the European standard changeover prevails (one hour on the night before the last Sunday of March at 02:00 and October at 03:00).

If MODE: is toggled to **2** the displayed (entered) values will govern the changeover from/to the Daylight saving time.

MODE: equal to **0** means that there will be no change.

Press  to move the cursor between the figures and use  and  to change the values. When you are finished, press  a last time and leave the menu with .

If an AM/PM clock is used, the time is entered according to the instructions given in section 4.1

Note! During the first hour after the automatic changeover from daylight saving time (MODE:1, 03:00 to 02:00) you must not set the time manually. Should this happen, the clock will once again move back to 02:00 when the time reaches 03:00.

4.9 Log off

If no changes have been made within 5 minutes, the operator will be logged off and the access level returned to the default access level low.

Values that have been modified in the menu, but not “Entered”, will *not* be saved at Log off.

5 *Technical data*

Supply voltage (from TAC Xenta or external source)	
.....	24 V AC $\pm 20\%$, 50/60 Hz
.....	or 24 (20–30) V DC
Power consumption	max 0,5 W
With the display backlight on, in total	max 1,2 W
Ambient temperature:	
Storage	$-20\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$
Operating	$\pm 0\text{ }^{\circ}\text{C}$ to $50\text{ }^{\circ}\text{C}$
Humidity	max. 90% RH non-condensing
Display	4×20 characters, alphanumeric
Mechanical:	
Enclosure	ABS/PC
Dimensions (mm)	144×96×32
Weight	0,4 kg
Panel cutout (mm)	$136 \pm 0,5 \times 91,5 \pm 0,5$
Enclosure rating:	
Hand-held panel	IP 20
Network communication:	
Protocol	FTT-10, LONTALK™
Communication speed	78 kbit/s
Unit connection:	
TAC Xenta 100	via modular jack on Wall Module
TAC Xenta 300	modular jack or screw terminal
TAC Xenta 401	modular jack or screw terminal
TAC Xenta 901	modular jack or screw terminal
Standards:	
Emission	EN 50081-1
Immunity	EN 50082-1
Part number:	
Operator terminal TAC Xenta OP	0-073-0907
Operator terminal TAC Xenta OP/RU	0-073-0923
Mounting kit panel TAC Xenta OP	0-073-0904

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Index

Special characters

* 26
 ** 27
 -> 29
 24 hour clock 23, 28

A

access code 28
 ACK 25
 acknowledge alarms 25
 acknowledged 25
 alarm list 25
 AM/PM clock 23, 28, 30
 asterisk 26
 asterisks 27

B

background light 14
 Base unit 15, 16
 Bindable 16
 blocked 26

C

channel 16
 communication modes 14, 19
 Configured 21
 contrast potentiometer 11
 cursor 12
 Cyrillic characters 23

D

de-install 17
 default codes 28
 Display backlight 14
 Display test 13

E

Edit access code 29
 Enter 12
 Exit service mode 14

F

Factory setting 17, 18
 factory setting 17
 Forcing inputs/outputs 29

H

hhAmm 23
 hhPmm 23
 Holiday chart 27

I

Inch-Pound 20

K

Keyboard test 13
 keys 12

L

Log off 30
 LON address 13
 LonMaker 18
 LonTalk status 13

M

menu list 12
 MetraVision 17
 metric 20
 mobility 16
 Modular socket 10, 11
 Modularjack 10
 Mounting kit 31

N

National text 14
 Network
 Variables 19, 21, 29
 Neuron ID 13
 Node state 21
 Nodutil 17, 18
 nvi 22
 nvo 21

O

OFF 25
 ON 25
 OP mode 14
 OP Service menu 13
 OP version 3.11 and
 earlier 16
 operating hours 26
 operator panel 11

override 29
 override indicator (->) 29

P

push buttons 12

R

returned 25

S

Service LED 19
 Service menu 13
 Service pin 11, 13, 17, 18
 Service pin message 22
 SI 20
 SNVT 19
 SNVT_config_src 18
 SW version 13

T

TAC Xenta 100 19
 TAC Xenta 300, 400 15
 TAC Xenta OP 7
 TAC Xenta OP 9
 TAC Xenta OP/RU 23
 Technical data 31
 time channels 26
 tripped 25

U

Unconfig 17
 Unconfigured 21
 unit system 20
 US 20

V

Wall Module 10
 Week schedule 26
 wild card 27

X

Xenta 100: ON/OFF 15
 Xenta OP 31

Z

Zone Controllers 19

Blank page.



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TAC develops, manufactures and markets system solutions, products and software for the control and supervision of building services systems via open integrated systems, intended for use by customers looking for optimum indoor comfort, safety and operating costs. TAC has about 2000 employees, with subsidiary companies in the Nordic countries, the UK, Germany, Poland and Singapore, complemented by partners in some 70 countries.

