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XaveNet™ ToughPad User Manual

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List of Abbreviations

H

HMI Human Machine Interface

L

LOS Line of Sight

Chapter 1 - Introduction

1-1 General

This manual provides operation and maintenance instructions for the XaverNet™.

1-2 System Overview

The XaverNet™ is a wireless network that includes a handheld ToughPad which interfaces with Xaver™ 100 and/or 400 systems.

The XaverNet™ links to the Xaver™ systems via wireless ZigBee protocol.

1-2.1 XaverNet™ Key Features

- Interfaces with up to four Xaver™ 100 and/or 400 systems using a friendly HMI.
- All options controllable by a finger touch (a stylus pen is not required).
- Supports full viewing and control of all modes and ranges of the Xaver™ systems.
- Provides user configuration for adding an alias to each system.
- Record mode documenting systems field of view.
- The wireless link provides communication up-to 200m LOS.
- The XaverNet™ is based on a commercial Panasonic© FZ-M1 model, running Windows 7©.

1-2.2 XaverNet™ Main Components

The XaverNet™ ToughPad comprises the following main components (see Figure 1):

- Panasonic© FZ-M1 ToughPad.
- Carrying strap.
- USB dongle.
- Antenna.
- Battery charger/power supply and cable.

Figure 1. XaverNet™ Main Components

1-2.3 XaverNet™ Controls and Indicators

A. The controls and indicators for the tablet are detailed in the Panasonic© FZ-M1 Operating Instructions manual.

B. The XaverNet™ User Interface is detailed

in paragraph 2-2.

Chapter 2 - System Operation

2-1 System Power-Up

A. Turn the tablet ON and wait until Windows stabilizes and icons for login of two users are displayed:
   1) ADMIN.
   2) Camero.

NOTE

Select ADMIN to login without loading the Camero software. The default password is "ADMIN".

B. Select the Camero user to activate the XaverNet™ software.

C. Enter the password. The default password is "1234".

NOTE

If the system doesn't run automatically, refer to paragraph 3-1.2.

D. The XaverNet™ software runs automatically and searches for Xaver™ systems to link to.

E. After the XaverNet™ links to the Xaver™ systems, the Main screen is displayed and a link for each linked Xaver™ system is displayed.

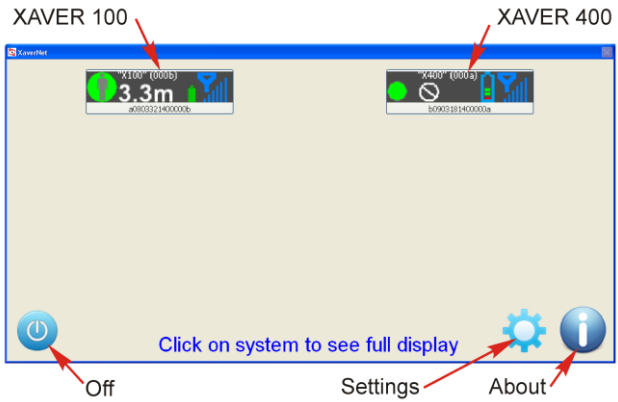
F. The XaverNet™ is now ready for use.

2-2 User Interface

2-2.1 Main Screen

The following is a description of the controls on the Main screen (see Figure 2).

- Off button - Turns off the XaverNet™ software. Clicking the off button opens a confirmation pop-up screen to close the software.
- Settings button - Opens the Settings pop-up screen (see paragraph 2-2.2).
- About button - Opens the About pop-up screen detailing information about the XaverNet™ unit and software.
- XAVER 100 button - Allows zooming in to the linked Xaver™ 100 system (see paragraphs 2-2.3 and 0).
- XAVER 400 button - Allows zooming in to the linked Xaver™ 400 system (see paragraphs 0 and 2-2.6).



NOTE: This example shows the Main screen with a Xaver 100 and a Xaver 400 connected.

Figure 2. Main Screen (Typical)

2-2.2 Settings Pop-Up Screen

The following is a description of the controls on the Settings Pop-Up screen (see Figure 3).

- Name button - Opens the Names pop-up screen and allows replacing the default serial number of the unit with a human readable name (alias) for the XaverNet™ unit and for each linked Xaver™ (up to four linked Xaver™) using the tablet virtual keyboard.
- Networking button - Opens the Networking setting pop-up screen and allows selecting an available communication channel.
- Back button - Allows returning to the Main screen.

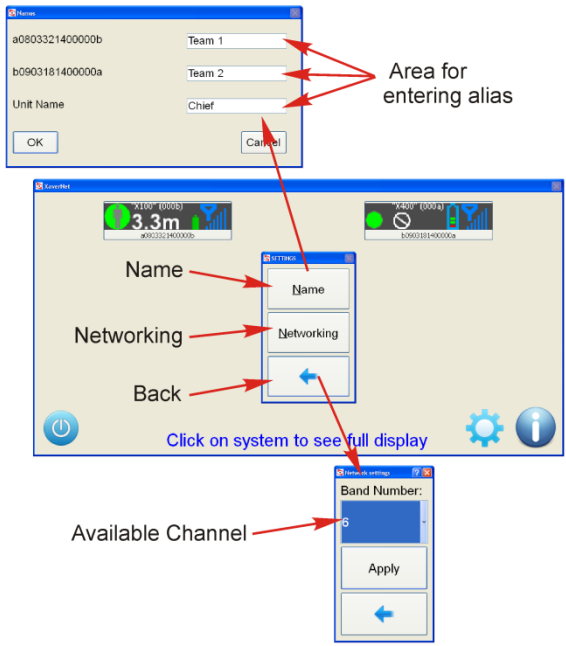


Figure 3. Settings Pop-Up Screen

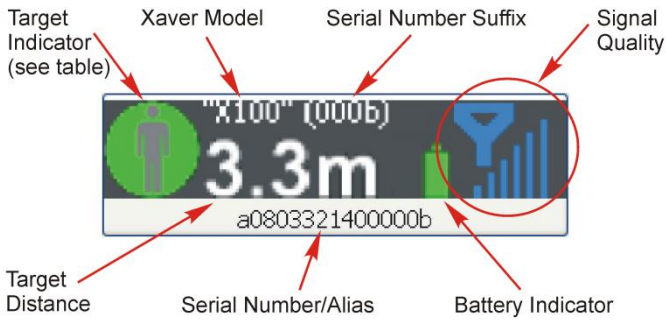
2-2.3 XAVER 100 Button

The following is a description of the indicators on the XAVER 100 Button (see Figure 4):

- ❖ Target indicator - Indicates the target statuses: Searching, No Detection, Device Unstable or Moving Target.
- ❖ Xaver model indicator - Indicates the Xaver model.
- ❖ Serial number suffix indicator - Indicates the four last digits of the serial number for the linked Xaver system.
- ❖ Signal quality - Indicates the communication signal quality.
- ❖ Battery indicator - Indicates the battery status

of the linked Xaver system. Green - battery charged, Red - replace batteries.

- Alias - Displays the alias assigned to the linked Xaver system (by default displays the unit serial number).
- Target distance indicator - Indicates the distance of the target from the Xaver system.



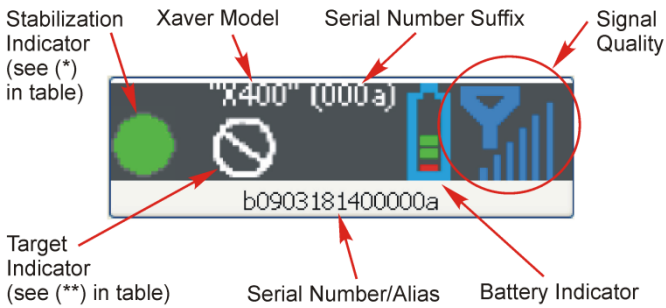
Icon	Description
	Searching
	No Detection
	Device Unstable
	Moving Target

Figure 4. XAVER 100 Button

2-2.4 XAVER 400 Button

The following is a description of the indicators on the XAVER 400 Button (see Figure 5):

- Xaver type indicator - Indicates the Xaver model.
- Serial number suffix indicator - Indicates the four last digits of the serial number for the linked Xaver system.
- Signal quality indicator - Indicates the communication signal quality.
- Battery indicator - Indicates the battery status of the linked Xaver system.
- Alias - Displays the alias assigned to the linked Xaver system.
- Stabilization indicator - Indicates the stabilization status: Searching, Stabilized (locked) or Not stabilized.
- Target indicator - Indicates the target statuses: No Detection /No Indication (due to Xaver High Penetration mode of operation), Quantity of Targets.



	Icon	Description
*		Searching
*		Stabilized
*		Not stabilized
**		No Detection /No Indication
**		Quantity of Targets

Figure 5. XAVER 400 Button

2-2.5 XAVER 100 Screen

The XAVER 100 screen allows to fully operate the remote XAVER™ 100 system. For XAVER™ 100 system complete operation instructions refer to the user manual, document part number UM0017A.

The following is a description of the controls and indicators on the XAVER 100 screen (see Figure 6):

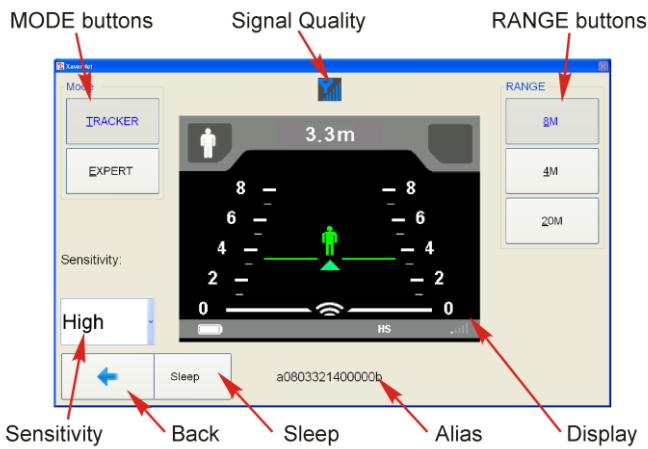


Figure 6. XAVER 100 Screen (Ver. 1.1 and up)

- Mode buttons - Allows changing the display mode between TRACKER and EXPERT. To select a mode, double click the required button.
- Signal quality indicator - Indicates the wireless communication signal quality.
- Range buttons - Allows changing the range between 8, 4 and 20 m. The selected range turns light blue. To change the range, double click the required range button.
- Display - Displays the detection screen.
- Alias – Displays the alias assigned to the XAVER™ 100 system.
- Sleep button - Allows activating the sleep option on the remote XAVER™ 100 system. Refer to paragraph 2-2.5.1.
- Back button - Allows zooming out and returning to the Main screen.
- Sensitivity drop-down menu - Allows selecting the scanning sensitivity.

2-2.5.1 Sleep Mode

WARNING

Prior to clicking the Sleep button, make sure that the channel set and saved in the XaverNet™ is identical to the channel set in the XAVER™ 100 system. Failure to comply will disconnect the systems when the XAVER™ 100 system awakens.

After the Sleep button is clicked, the XAVER™ 100 system sleeps, the XAVER 100 zooms out and the Sleeping button is displayed for that system (see Figure 7).

NOTE

The dimming level set in the XAVER™ 100 is not kept after clicking the Sleeping button to awaken the unit.

Click the Sleeping button to awaken the XAVER™ 100 system. The button turns to WAKING during the system awaking.

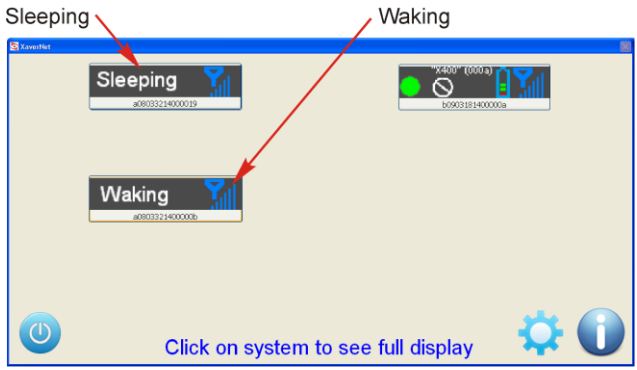


Figure 7. Sleeping/Waking Buttons

2-2.6 XAVER 400 Screen

The XAVER 400 screen allows to fully operate the remote XAVER™ 400 system. For XAVER™ 400 system complete operation instructions refer to the user manual, document part number UM0008.

The following is a description of the controls and indicators on the XAVER 400 screen (see Figure 8):

- Mode buttons - Allows changing the display mode between TRACKER, EXPERT and High Penetration (HP). To select the mode, double click the required button.
- Signal quality indicator - Indicates the wireless communication signal quality.
- Range buttons - Allows changing the range between 8, 4 and 20 m. The selected range turns light blue. To change the range, double click the required range button.
- Display - Displays the detection/imaging screen.
- Alias - Displays the alias assigned to the XAVER™ 400 system.
- Back button - Allows zooming out and returning to the Main screen.

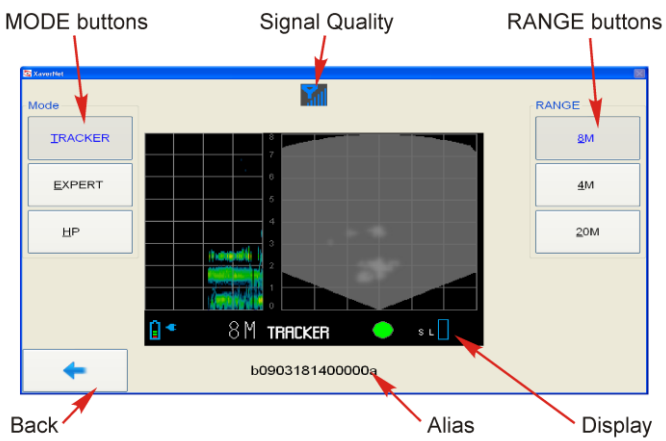


Figure 8. XAVER 400 Screen

Chapter 3 - Maintenance

3-1 General

The XaverNet™ ToughPad requires only basic maintenance.

3-1.1 Cleaning

WARNING

Do not use benzene, thinner or rubbing alcohol since it may damage the surface causing discoloration, etc. Do not use commercially-available household cleaners and cosmetics, as they may contain components harmful to the surface.

Do not apply water of detergent directly to the tablet, since liquid may penetrate the tablet and cause malfunction or damage.

A. LCD panel - Use a soft cloth to wipe out any drops of water or stains. Failure to do so may result in staining.
B. Other areas other than the LCD panel - Wipe with a soft cloth such as gauze. When using detergent, dip a soft cloth in water-diluted detergent and wring it thoroughly.

3-1.2 Troubleshooting

Table 1 details basic malfunction symptoms and solutions.

Table 1. Troubleshooting

Symptom	Solution
Poor wireless communication signal quality	• Change position by getting closer/higher. • Do not stand under interference sources, e.g. high power lines.
Cannot connect two XaverNet™ ToughPad to same system	Only one XaverNet™ ToughPad can be connected at a time, to a specific system.
At power up, the XaverNet™ software doesn't run automatically	The XaverNet™ ToughPad awakens from hibernate state. Click the software icon to run the software.
XAVER™ 100 Communication failure after wake up	Verify channel on XaverNet™ according to setting in specific XAVER™ 100.
XAVER™ 400 WAITING FOR DATA message	The XAVER™ 400 operates on a civil frequency. Interference may cause loss of data.
Controls displayed but are inoperative (stabilization indicator is red)	The XAVER™ 400 is not stabilized.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS.

(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more

of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver isconnected.

—Consult the dealer or an experienced radio/TV technician for help.

This equipment uses the following Antenna and may not be used with other antenna types of higher gain:

Mfg.: SAMWOO electronics P/N SMAP-900-1

Type: a ¼-wavelength monopole helical antenna with 0dB gain

Gain: 0dBi

This Antenna is permanently attached with glue by Camero-Tech Ltd. before being shipped to customers.

* Note: The Normal frequencies of the wireless remote viewing for the US Market will be between 906MHz - 920MHz.