

NX-596E Installation Manual

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Installation in accordance with these manual, applicable codes, and the instructions of the authority having jurisdiction is mandatory.

While every precaution has been taken during the preparation of this manual to ensure the accuracy of its contents, UTCFS assumes no responsibility for errors or omissions.

Disclaimers

A level of TCP IP knowledge is required by the installer/s to set up some of the NX-596E functionality. UTCFS limits its support to NX-596E setup only, and is unable to offer further assistance on your client's DSL modem, router, firewall or any other 3rd party software. Please consult your customer's IT department or qualified IT professional about implementing this product onto your client's network.

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Advisory Messages

Advisory messages alert you to conditions or practices that can cause unwanted results. The advisory messages used in this document are shown and described below.

WARNING: Warning messages advise you of hazards that could result in injury or loss of life. They tell you which actions to take or to avoid in order to prevent the injury or loss of life.

Caution: Caution messages advise you of possible equipment damage. They tell you which actions to take or to avoid in order to prevent the damage.

Note: Note messages advise you of the possible loss of time or effort. They describe how to avoid the loss. Notes are also used to point out important information that you should read.

Specifications

Compatibility	NetworX security panels NX-4v2, NX-6v2, NX-8v2, NX-7-EUR, NX-9-LB-EUR, NX-10-V3-EUR, NX-11-LB-EUR, NX-8E
Operating Voltage	12 VDC, supplied from security panel
Current Draw	80 mA average, 150 mA max.
Battery type and max. capacity	See the appropriate control panel installation manual
SPT Type	EN 50131-10:2014 Type Y. NX-596E only meets the EN 50131-10:2014 requirements when it is installed in a EN 50131-3:2009 or EN 50131-6:2008 compliant housing.
Operating Temperature	0°C to +49°C
Storage Temperature	-34°C to +49°C
Maximum Power Output	3G 24 dBm, 2G 33 dBm
Maximum Operating Frequency	3G 900/2100 MHz, 2G 900/1800 MHz
Maximum Humidity	90% relative humidity non-condensing
Weight	70 g
Dimensions (L x W x H)	152 x 81 x 20 mm

Note: NX-596E only meets the EN 50136:2012 requirements when it is installed in a EN 50131:2013 compliant housing.

WARNING: THE EQUIPMENT SHOULD ONLY BE OPERATED WITH AN APPROVED POWER ADAPTER WITH INSULATED LIVE PINS. OPERATION OF THE EQUIPMENT WITH A POWER ADAPTER THAT DOES NOT MEET THESE STANDARDS COULD POSE AN ELECTRICAL HAZARD THAT MIGHT RESULT IN SERIOUS INJURY OR DEATH.

EN Compliance

Certification with NX series control panels	<p>This product was tested and certified to EN 50136-2:2013 for Alarm transmission system performance SP3 and SP4 for reporting over IP(LAN) to the UltraSync.</p> <p>This product was tested and certified to EN 50136-2:2013 for Alarm transmission system performance SP3 and SP4 for reporting over GPRS to the UltraSync.</p> <p>This product was tested and certified to EN 50136-2:2013 for Alarm transmission system performance DP2 and DP3 for reporting over IP(LAN) and GPRS to the UltraSync.</p> <p>Tested and certified by Telefication B.V.</p>
Alarm System (AS)	For EN grade installations, the NX-596E must be installed with a EN certified alarm panel to maintain certification. Compliance labelling should be removed or adjusted if non-compliant configurations are selected.
Smartphone App	The UltraSync+ app is not subject to EN certification.
Environmental Class	Environmental Class II, Security Grade 2
AS Interface	The NX-596E provides a serial interface between AS and SPT according to EN50136-2:2013.
Description of the method of operation by which the SPT signals ATP failures to the AS;	<p>The NX-596E will poll for server connectivity periodically, if no response, then the NX-596E will generate a communication fail alarm. This will appear on the local keypad and be communicated on the 3G backup path.</p> <p>The UltraSync server will poll the NX-596E periodically, if no response is received within the requirements of the relevant Class, then the server will generate a communication fail alarm and communicate this to the control room over IP.</p>
Monitoring of the transmission network interface	<p>The ATS is available when at least one ATP exists between one interface at the AS and one interface at the AE, the AS shall report messages to the AE using UltraSync. Messages are transmitted and received on one primary interface at each end. Heart beat failure determines ATP failure and the system automatically changes to an alternative interface.</p> <p>The AS displays “Remote: Fail To Communicate” to indicate ATS unavailability when all ATPs prevent an alarm from being transmitted to its intended ARC(s) within the requirements of Class 2.</p> <p>The AS displays “Remote: Trouble” to indicate ATS unavailability when the ATS is undergoing maintenance, or when AS to SPT interface is unavailable.</p>
Methodology to achieve compliance with EN 50136-1:2012;	ATP failures are reported by the AS “Remote: Fail To Communicate”.
Declaration of operation mode (store-and-forward and/or pass-through);	The NX-596E while connected to the UltraSync web server operates in store-and-forward mode. Messages are cached in the NX-596E until delivered to the server. The server will cache messages until acknowledged by the control room.

Description of how monitoring of the transmission network interface is implemented;	<p>If required by the ATS category, the SPT shall be configured to detect the failure of a transmission network interface and generate an ATP fault to the AS.</p> <p>The NX-596E must be provisioned on the UltraSync portal, the SIM card should be activated.</p> <p>Both the server and the NX-596E poll each other through a heartbeat system to monitor the transmission network.</p> <p>Single or total path failure is communicated using event codes according to the table “SIA and CID reporting code descriptions”.</p>
Description of SPT polling times	SPT polling times are set by the service grade selected on the UltraSync portal. Service grades on the UltraSync portal comply with EN 50136-1:2012 for SP3, SP4, DP2, and DP3. Contact your ARC to change the service grade.
Methodology to achieve compliance with EN 50136-2:2013, 6.7.2 and 6.7.3	AES Symmetric encryption algorithms are used with key length 128 bits. Regular automatic key changes are used with machine generated randomized keys.
Firmware Upgrade	Remote firmware upgrade was tested according to EN 50136-2:2013 via DL900.
Installer Remote Access	This must be disabled on the Systems page to maintain EN 50136-2:2013 compliance.
Installer PIN	Default installer PIN must be changed on the alarm panel for EN 50136-2:2013 compliance.

Note: Compliance labelling should be removed or adjusted if non-compliant configurations are selected.

SIA and CID reporting code descriptions

SIA code	CID code	Function	Note	Reporting priority
YC	E356	Failure AS – SPT Link	Zone 997 Panel Connection	Low
YK	R356	Restore AS – SPT Link	Zone 997 Panel Connection Restore	Low
YC	E351	Ethernet Alarm Transmission Path (ATP) – Failure	Zone 999 Path IP	Low
YK	R351	Ethernet Alarm Transmission Path (ATP) – Restore	Zone 999 Path IP Restore	Low
YC	E351	GPRS Alarm Transmission Path (ATP) – Failure	Zone 998 Path GPRS	Low
YW	R305	NX-596E System Reset	Zone 995	Low
YK	R351	GPRS Alarm Transmission Path (ATP) - Restore	Zone 998 Path GPRS Restore	Low
NT	E350	Alarm Transmission System (ATS) Fail	Zone 999 System Connection	Low

SIA code	CID code	Function	Note	Reporting priority
NR	R350	Alarm Transmission System (ATS) Restore	Zone 999 System Connection Restore	Low

Enabling EN50136 Configuration

For EN50136 compliance, the NX-596E configuration must be set to EN mode:

1. Complete wiring to NX panel (see "Wiring the NX-596E" on page 14).
2. Complete enrolment to NX panel (see "Enrolling the NX-596E" on page 17).
3. Set panel into Program Mode.
4. Log in to web page using installer account (see "Accessing the NX-596E via the Web pages" on page 21).
5. Click Settings.
6. Click System.
7. Select EN Mode – Enabled.
8. Click Save.

Compliance labelling should be removed or adjusted if EN Mode is Disabled.

Introduction

The NX-596E is a dual-path IP communicator with 3G cellular backup for NetworX panels NX-4v2, NX-6v2, NX-8v2, NX-7-EUR, NX-9-LB-EUR, NX-10-V3-EUR, NX-11-LB-EUR, NX-8E

More Value

By switching from PSTN to a broadband IP internet connection, your customers will have a more responsive alarm system with the ability to receive smartphone push notifications and view live cameras from the same app.

The UltraSync+ app also allows users to arm/disarm, bypass zones, view event history, manage users, edit partition and zone names, and send email reports.

More Secure

IP reporting is more secure than unencrypted analogue PSTN and provides a range of additional features including faster communication of alarm messages, encrypted communications, path monitoring, and IP-based 3G backup.

Many web-connected cameras have low-security allowing unauthorised access to camera footage by 3rd parties. The NX-596E supports adding selected UltraSync IP cameras which have multi-layered credentials (username, password, web access passcode). Unlike most other cameras and web services, these credentials are not stored online in a central database. Instead these remain inside the NX-596E. You control the keys to access the cameras.

Simple Installation

This manual requires that the installer is familiar with the NetworX family of security products and is capable of programming the security system. The installer should be familiar with basic IP networking and Apple iOS or Android smart devices.

Setup is a simple process:

1. Control room must provision the NX-596E service in Web Portal. This is essential as the NX-596E is a managed service.
2. Connect the NX-596E to the alarm panel.
3. Connect the Ethernet cable to provide Internet access for the primary path.
4. Connect the antenna to provide cellular reception for the secondary path.
5. Configure minimum settings:
 - a. GMT time zone and daylight savings under Settings - System.
 - b. Enable UltraSync+ app by entering a Web Access Passcode under Settings - Network.

Note: After connecting the NX-596E to the alarm panel, the PSTN module must be physically removed from the panel if it is not connected to the analogue telephone line.

Installing the NX-596E into the enclosure

Inside the NetworX enclosure, several 2-holed insertion points have been constructed. This allows for either vertical or horizontal placement of the modules. **Notice that the insertion points have two sizes of holes - a larger hole and a smaller hole. Diagrams are representational of product only.**

Figure 1: The black plastic PCB guides are grooved on one edge where the PC Board will be seated. The end with the half-moon protrusion fits into the larger hole. The smaller hole is for the screw.

Figure 2: Place the *first* black plastic PCB guide in the top insertion point, grooved edge downward. The half-moon protrusion will be in the large hole. It does not require force. Insert one of the provided screws into the smaller hole (from inside the box) to secure it in place. A screwdriver should reach through the notch that runs the length of the guide to tighten the screw. The *second* PCB guide should be positioned opposite of the first (grooved edge up) and placed in the lower insertion point, using the same procedures described above. Once mounted, screw it in securely.

Figure 3: The PC board should slide freely in the grooves of both guides.

Figure 1

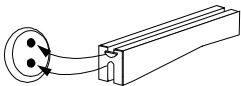


Figure 2

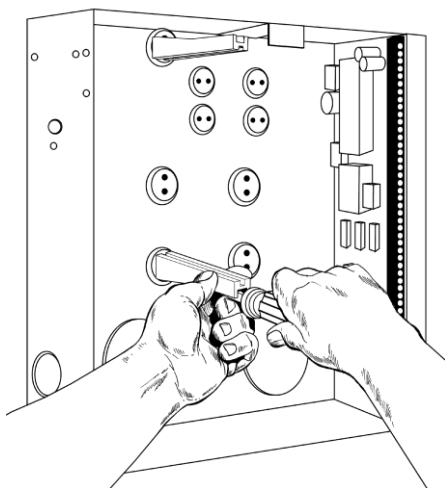
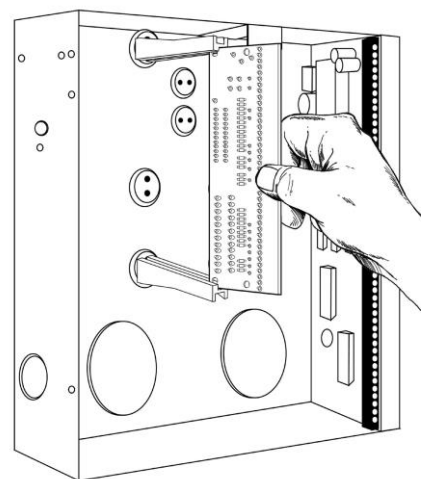


Figure 3



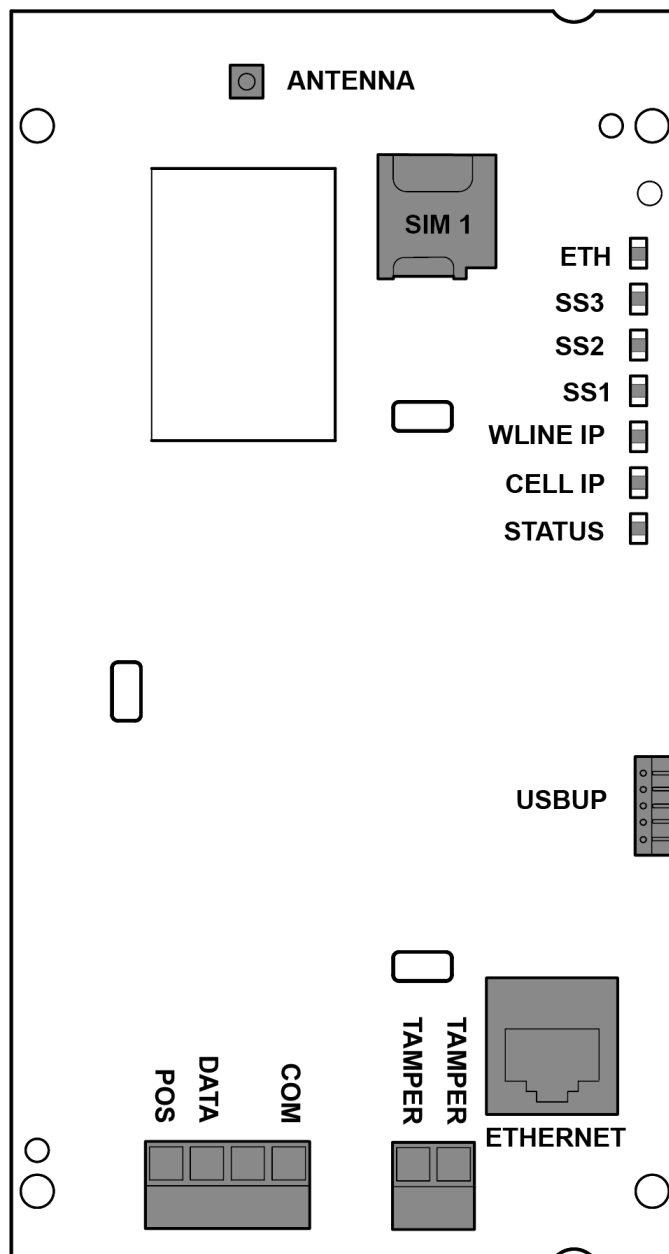
Wiring the NX-596E

Caution: Remove all power (AC and battery) to the security system before proceeding. Failing to do so could result in possible damage to the product.

WARNING: DO NOT CONNECT MAINS VOLTAGE TO THE NX-596E. DOING SO COULD DAMAGE THE MODULE OR NETWORK PANEL AND POSE AN ELECTRICAL HAZARD THAT COULD RESULT IN A FIRE OR CAUSE SERIOUS ELECTRICAL SHOCK OR LOSS OF LIFE.

1. Disconnect AC power and battery to the security system.
2. If the NX-595E is installed, completely remove it. You cannot have both the NX-595E and the NX-596E on the same system.
3. Connect the NX-596E's terminals (POS, DATA, COM) to the NetworX bus (POS, DATA, COM). Use shielded cable only. Additionally, connect the shielding to the COM terminal on both cable ends.
4. Connect an Ethernet cable to the NX-596E. Connect the other side to the customer's internet connection, typically an ADSL/Cable WiFi Modem Router. Ensure you connect to an available LAN port on their router and not the WAN port.
5. Connect AC power and battery then turn on.

Terminal Descriptions



Terminal	Description
POS	Connect to NX alarm panel bus POS
DATA	Connect to NX alarm panel bus DATA
COM	Connect to NX alarm panel bus COM
TAMPER	Connect to box tamper
ANTENNA	Connect cellular antenna (MMCX)
ETHERNET	Connect to Internet
USBUP	Connect USBUP to perform firmware upgrades

LED Diagnostics

The LEDs on the top right of the board indicate unit status:

LED	Description
ETH	Off means the unit has no Ethernet cable connected. Flashing means data is being sent/received via Ethernet. Solid means the unit has Ethernet cable is connected.
SS1, SS2, SS3	Wireless signal strength indicators. Refer to table below.
WLINE IP	Off means the unit does not have IP connectivity over the Ethernet network. Slow Flashing means the unit has an IP address but is not connected to the UltraSync server. Fast Flashing means the unit has connected to the UltraSync server, either UltraSync Portal settings or channel settings are incorrect. Solid means the unit has established a secure connection with the UltraSync server.
CELL IP	Off means the unit does not have IP connectivity over the Wireless network (GPRS or 3G). Slow Flashing means the unit has an IP address but is not connected to the UltraSync server. Fast Flashing means the unit has connected to the UltraSync server, either UltraSync Portal settings or channel settings are incorrect. Solid means the unit has established a secure connection with the UltraSync server.
STATUS	Off means the unit is not connected to power. Slow Flashing means the unit is powered but panel bus is not detected. Fast Flashing means the panel bus is connected but the unit is not enrolled with the security panel. Solid means the unit has power and is enrolled with the security panel.

The SSx LEDs indicate wireless signal strength as shown below:

SS3	SS2	SS1	Signal Strength
Off	Off	Off	No reading available (e.g., modem is being reset)
Off	Off	FLASH	Attempting to register on network
Off	Off	On	<-95 dBm Unacceptable
Off	FLASH	On	-90dBm to -94 dBm Poor
Off	On	On	-85dBm to -89 dbm Good
FLASH	On	On	-80dBm to -84 dBm Very Good
On	On	On	> -80 dBm Excellent

Enrolling the NX-596E

To add the NX-596E:

1. Enrol the NX-596E into the Alarm panel: enter program mode using installer code, then exit program mode. The NX-596E will be set to device address 191. **Note:** You cannot use a NX-595E on the same system.
2. Default the NX-596E using Feature 910.
3. Retrieve the IP address from the NX-596E in Feature 21.

You can accomplish these three steps via any LCD (NX-148xx, NX-1048), Voice (NX-181xx), or NX-1820 keypad.

Using a NX-1048 keypad

Step	Keypad Displays:	Press	Description
1.	System ready	[OK]	Press the OK button.
2.	To Start Menu Enter Code or ▲ ▼	[?]-[?]-[?]-[?]	Enter your 4 or 6 digit Programming code.
3.	Select Menu + Installer Menu	[OK]	Press the OK button.
4.	Installer Menu OK=LOC ▲ ▼=MENU	[OK]	Press the OK button.
5.	Enter the device address then #	[1][9][1] [OK]	Enter device 191 to select the NX-596E module.
6.	Enter location then # (0)	[9][1][0] [OK]	Defaults the device. Note: only required once.
7.	Enter location then # (910)	[2][1][OK]	Display the IP address.
8.	Loc 21 Seg 1 192	[OK] [OK] [OK]	Each press of the OK button will show the next segment of the IP address.
9.	Loc 21 Seg 1 2	[Back] [Back] [Back] [Back] [Back] [OK]	Press the Back/No button five times, then OK button to exit program mode.

Using a NX-181xx Voice keypad

Step	Keypad Displays:	Description
1.	[MENU]-[0]	Selects main menu - Option 0, Advanced system configuration. ◀ <i>Enter your code, touch Menu to exit.</i>
2.	[?]-[?]-[?]-[?]	Enter your 4 or 6 digit Programming code <i>Touch 1 for keypad configuration</i> ◀ <i>Touch 2 for panel and device configuration</i> <i>Touch 3 to configure service provider phone number</i> <i>Touch menu to exit.</i>
3.	[2]	Selects Panel and Device configuration.

- ◀ *Select a device number followed by Enter
Touch menu to go back.*
4. [1][9][1]
[ENTER] Connects to device 191 (NX-596E)
 - ◀ *Selected device 191 is connected.
Select a Location number followed by Enter
Touch menu to go back.*
 5. [9][1][0]
[ENTER] Defaults the device. **Note:** only required once.
 6. [2][1] [ENTER] This keypad will announce the first number of the IP address.
 7. [MENU] This keypad will announce the second number of the IP address.
 8. [MENU] This keypad will announce the third number of the IP address.
 9. [MENU] This keypad will announce the fourth number of the IP address.
 - 10.. [MENU] Moves back to step 4, select a device number.
 11. [MENU] Moves back to step 3, Advanced system configuration selection.
 12. [MENU] Exits from Advanced system configuration (exiting program mode automatically enrolls the NX-596E).

Using a NX-1820 keypad

Step

1. [MENU] Press the Menu button.
2. [Settings] Press the Settings button.
3. [?]-[?]-[?]-[?] Enter your 4 or 6 digit Programming code.
4. [Program] Press the Program button.
5. [1][9][1]
[ENTER] Connects to device 191 (NX-596E).
6. [9][1][0]
[ENTER] Defaults the device. **Note:** only required once.
7. [2][1]
[ENTER] Access location 21 to retrieve the IP address of the NX-596E. Scroll through the segments with the ► button and record the IP address (e.g. 192.168.1.2).
8. [Exit] Press the Exit button (exiting program mode automatically enrolls the NX-596E).

Using a Standard Keypad (Icon or LCD)

Step

1. [*] [8] Selects Panel and Device programming.
2. [?]-[?]-[?]-[?] Enter your 4 or 6 digit Programming code.
3. [1][9][1] - [#] Connects to device 191 (NX-596E).
4. [9][1][0] - [#] Defaults the device. **Note:** only required once.

5. **[2][1][#]** To discover the IP address of the NX-596E (Press * to scroll through each segment of the IP address. Record the IP address (e.g. 192.168.1.2).
6. **[Exit]** Moves back to step 3.
7. **[Exit]** Exits programming (exiting program mode automatically enrolls the NX-596E).

Start-up Sequence

Once enrolled, the expected start-up sequence is as follows:

1. Within 30 s, the CELL IP or ETH LED should start to flash slowly, attempting to connect to UltraSync server.
2. Within 60 s, the CELL IP or ETH LED should go solid, connection to UltraSync server established.

Once connected, the normal LED status is:

- STATUS: Solid when powered
- CELL IP: Solid once connected to UltraSync via cellular
- WLINE IP: Solid once connected to UltraSync via wireline
- SS1, SS2, SS3: Indicates cellular signal strength
- ETH: Solid or flashing once connected to Internet

Start-up Troubleshooting

Condition	Cause	Action
All LEDs off	Inadequate power supplied to NX-596E.	Check 12VDC @ 150mA is available on PWR+ and 0V terminals on NX-596E.
CELL IP LED off	No network coverage, SIM not activated or wireless authentication failed.	Escalate to your nominated support contact.
CELL IP LED flashing	Network connectivity good, but account is not activated in UltraSync server.	Escalate to your nominated support contact.
SS1 flashing	The SIM card has not been activated.	Escalate to your nominated support contact.
SS2 off	The signal strength is inadequate for reliable wireless communications.	Move the antenna until SS2 is flashing or solid. An antenna with higher gain may be needed.
SS2 solid or flashing	Acceptable wireless signal strength.	No action needs to be taken.
SS3 solid or flashing	Excellent wireless signal strength.	No action needs to be taken.
ETH LED off	Ethernet cable is not plugged in.	Check Ethernet cabling.
WLINE LED off	Cannot connect to network server. IP address not obtained from DHCP server.	Check DHCP is functioning. Check network access and routing is allowed for network server on port 443 TCP.
WLINE LED flash	Ethernet connectivity good, but account is not activated in UltraSync server.	Escalate to your nominated support contact

Accessing the NX-596E via the Web pages

Finding the IP Address

DHCP is enabled by default which means an IP address will automatically be assigned to the NX-596E if your network supports DHCP. To discover the IP address:

1. Enter program mode on a keypad.
2. Enter device 191.
3. Enter location 21.
4. Navigate through the segments to view the IP address.
5. Stay in program mode to allow programming from the web pages (next section).

Setting the IP Address

If the IP address is empty then Location 21, Segment 1 will be 0. Check the network is functioning and that other devices can connect.

Alternatively, to allocate the NX-596E a static IP address:

1. Enter program mode on a keypad.
2. Enter device 191.
3. Program the following locations:
 - Location 19 – Option 1 is enabled to allow DHCP which will request your router to assign the NX-596E and IP address automatically. **Disable option 1 to manually assign a static IP address.**
 - Location 20 – Ethernet Gateway IP. Enter the IP address of the broadband internet router.
 - Location 21 – NX-596E Ethernet IP Address. Enter a static IP address for the NX-596E.
 - Location 22 – NX-596E Ethernet Subnet Mask. Enter the subnet mask for the network.
 - Location 23 – NX-596E Ethernet DNS Server 1. Enter the primary DNS Server IP address.
 - Location 24 – NX-596E Ethernet DNS Server 2. Enter the secondary DNS Server IP address.

Logging in to the NX-596E

1. Ensure the NX is in program mode.
2. Connect your laptop or smartphone to the same network.

3. Enter the IP address of your NX-596E into a compatible web browser.



Sign in Page

A screenshot of a web page titled "LAN Sign in". The page has a light gray background. At the top, it says "LAN Sign in" in bold. Below that, there are two input fields. The first is labeled "Enter your username:" and contains the text "installer". The second is labeled "Enter your password:" and contains four black dots. Below the password field is a blue button with the text "Sign In" in white.

When successfully connected, the NX-596E will display the "Sign in Page".

Installer Login

- Set the panel in program mode to allow the installer account to log in.
- Use the **existing PIN** for the **installer** user to log in to the NX-596E:

Default Installer Username: **installer** (username is case sensitive)

Default Password: **9713** (the panel Go To Program code)

- The username can be changed in the Users menu under user 255.

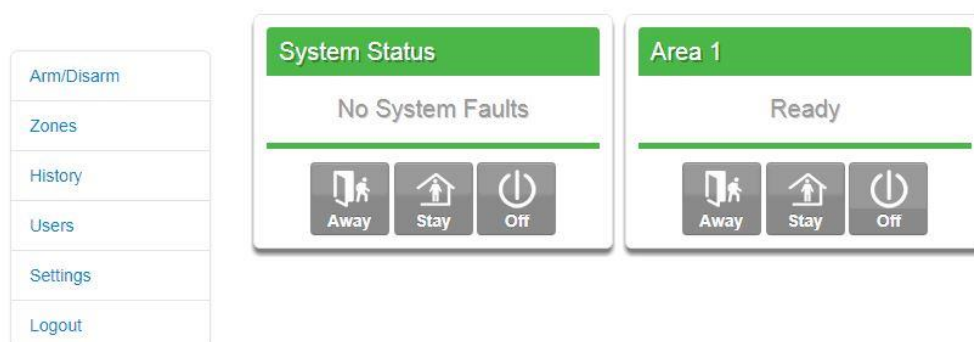
User Login

Access to the NX-596E is with existing user accounts stored in the alarm panel. Master Users can add and remove other users, Standard Users can only change their own PIN code.

Default Master Username: **User 1** (username is case sensitive, there is a space between "User" and "1")

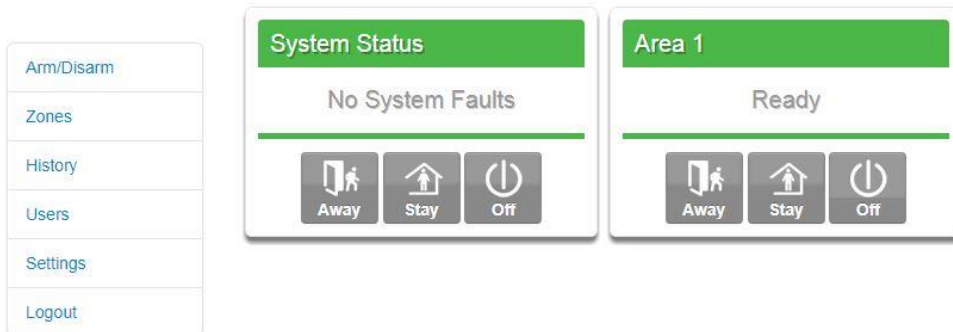
Default Password: **1234** (PIN code of the first user)

Main Menu – Installer Code



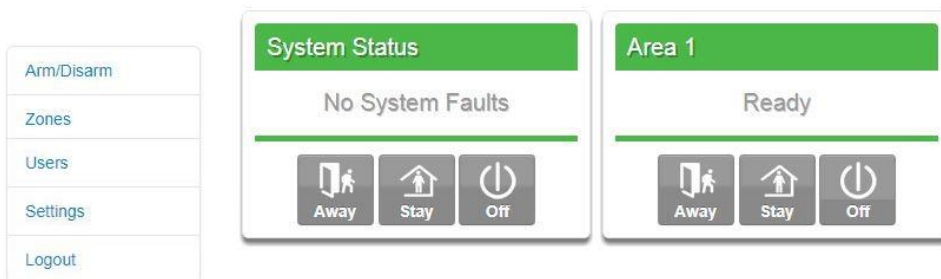
The screen shot above shows the NX-596E's menu when accessed via the default installer code when the main panel is in program mode and when the installer code is set with master user authorities. Installer code can access status, arm/disarm partitions, edit users, and access all settings menus.

Main Menu – Master Code



The screen shot above shows the NX-596E's menu when accessed via the default master user code. Master user code can access status, arm/disarm partitions, edit users, edit names, add cameras, and create scenes.

Main Menu – Standard Code



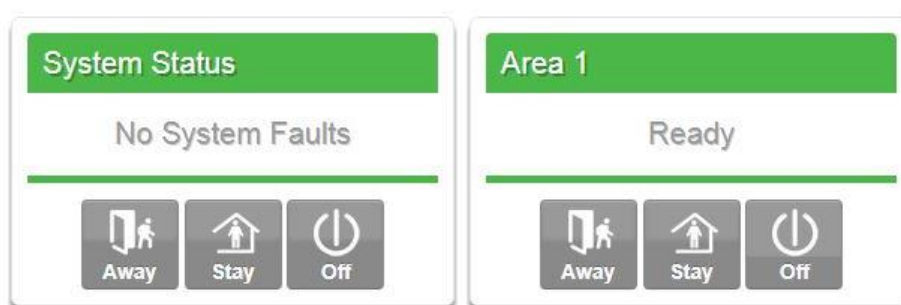
The screen shot above shows the NX-596E's menu when accessed via a standard user code. Standard codes can access status, and arm/disarm partitions they have access to.

Programming the NX-596E via the Web Pages

Record the following information during the installation process:

- NX-596E serial number (12 characters)
- Web Access Passcode (8 digits)
- Username / Password

Arming/Disarming



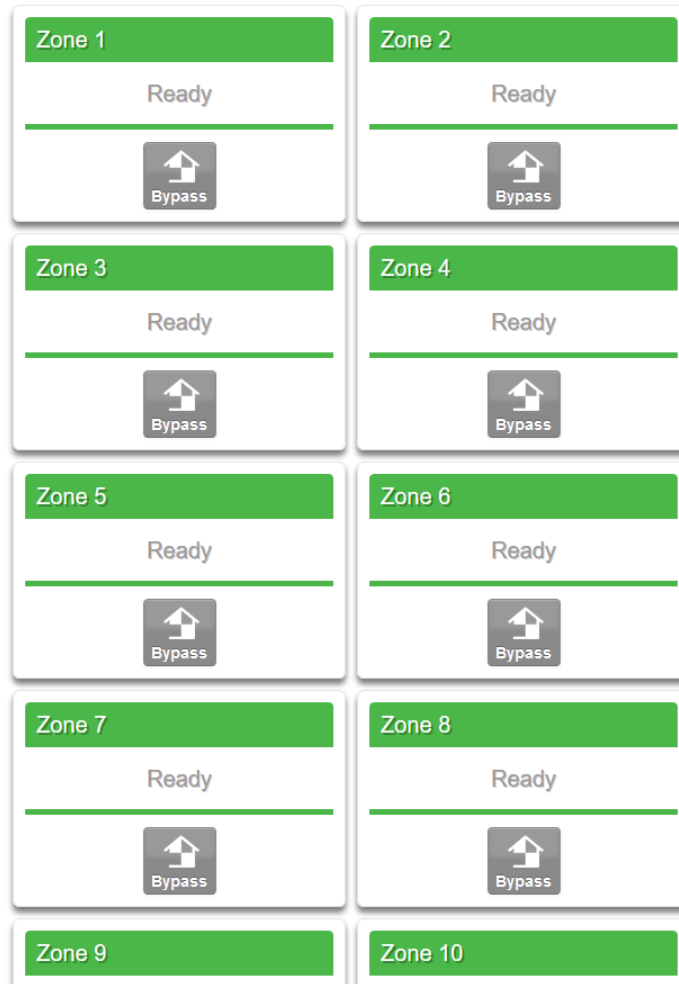
Partition Colour	Status
Green	Partition is active, and all zones are secure.
Yellow	Partition is armed in the stay mode, or zone is bypassed.
Red	Partition is armed in the away mode, or alarm condition is present.
Blue	System fault condition is present.
Grey	Partition not ready, zone(s) open.

Up to 8 active partitions can be displayed and controlled. This is determined by the panel model and programming.

To arm (turn on) an individual partition, click Away or Stay button for that partition.

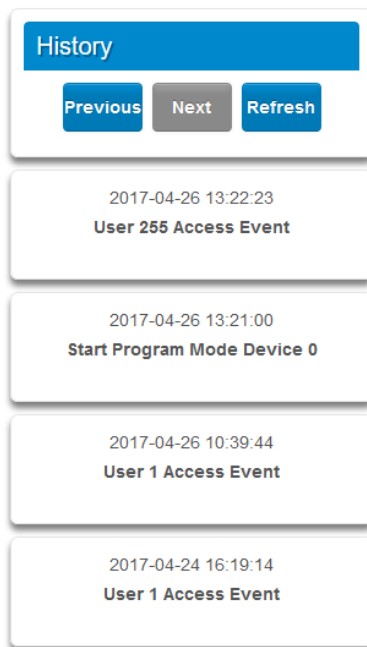
To disarm a partition or to acknowledge an alarm, click the Off button.

Zones



From the Zones menu, you can view zone status and bypass zones. Maximum zone count for the connected alarm panel will be displayed.

Event History



Current system faults are displayed on the Arm/Disarm page. The NX-596E stores up to 2047 events and are displayed on the History menu.

The newest event is at the top.

Previous – Will display the previous consecutive event from the internal event log to what is currently displayed.

Next – Will display the next consecutive event from the internal event log to what is currently displayed.

Refresh – Will retrieve the latest events from the internal event log.

Users

Configure Users

Delete Save

Edit an Existing User

User User 1 (1) v

User Name
User 1

Password
••••

User Authority

Arm Only
 Schedule
 Master
 Arm/Disarm
 Bypass
 Report

User Areas

Area 1
 Area 2
 Area 3
 Area 4
 Area 5
 Area 6
 Area 7
 Area 8

Users on the security panel can be assigned a User Name on this page to permit them to log in via the web pages or the UltraSync+ smartphone app. If the username is blank, then that user will not be able to use the app.

Panel PIN codes can also be changed or added from this web page. A user code allows arming and disarming of partitions.

PIN codes are by default four digits in length, but can be configured to be six digits in length. Refer to the security panel installation manual to change PIN length.

PIN codes must be unique and no duplicates are allowed.

The User Authority determines the options available to that user:

- Arm Only – allows the user to only arm partitions and prevents disarming
- Schedule – allows disarm only during Open Window and arming after Close Window (see security panel installation manual)
- Master – allows this user to create delete or modify user codes. Master access always allows arming and disarming. Users can only assign partitions to users they have access to.
- Arm/Disarm – allows this user to arm and disarm partitions they have access to.
- Bypass – allows this user to bypass zones.

- Report – send open and close reports when this user arms and disarms partitions.
- User Partitions – select the partitions the user will be allowed to access and control. If no partitions are selected, the user will not have access

You must create a user name for your customer to enable them to log in to the NX-596E. Write the user name and PIN code on the back page of the Quick Reference Guide. Enable the Master User Authority to permit them to create additional users.

Note: The installer account is for installer access only and allows panel programming. It is not recommended to provide this code to the end-user.

Synchronising User Names

Each NX-1048 keypad has an independent list of text labels such as User Names in different languages. The NX-596E only supports English.

Each NX-1820 touchscreen keypad has an independent list of text labels such as User Names. These can be viewed from Menu – Settings – Text – Users.

The NX-596E also has an independent list of text labels. You should synchronise these between the NX-596E and the NX-1048 / NX-1820 for consistency.

Note: Text copying between NX-1820 and NX-1048 is not supported. Ensure that only one of these keypad models is connected to the bus. If both NX-1048 and NX-1820 keypads are simultaneously on the same bus, only the NX-1820 keypads will be updated.

To copy **from** the NX-596E **to** NX-1048 keypads:

1. Log in to the webpage.
2. Click Settings – Name Editor.
3. Click Copy All.
4. Keypad will display Copying...

To copy **from** the NX-596E **to** NX-1820 keypads:

1. Log in to the webpage.
2. Click Settings – Name Editor.
3. Click Copy All.
4. The NX-596E will copy all text labels to connected keypads.

To copy **from** a NX-1820 keypad **to** the NX-596E (and all other NX-1820 keypads):

1. Ensure all partitions are disarmed.

2. On the keypad press Menu – Settings.
3. Enter a valid master code.
4. Press Text – Copy – Copy All.
5. This will take a few minutes.

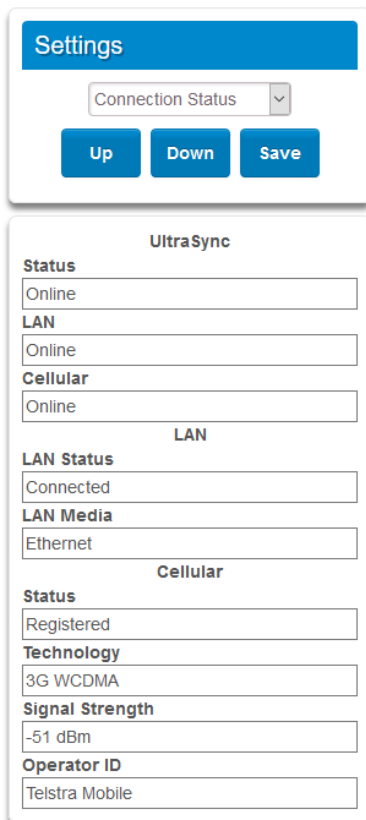
Details

The screenshot shows a web interface with a blue header bar labeled "Settings". Below the header is a dropdown menu currently set to "Device Details". Underneath the dropdown are three blue buttons: "Up", "Down", and "Save". Below this is a section titled "Device Details" containing several fields with their respective values:

Device Details	
Serial Number	197477261570
Ethernet MAC Address	00:0D:16:38:B7:50
Firmware Version	A44P000001-04
Hardware Version	207274 IX 05
Bootloader Version	B4411
Web Pages Version	0.211
Device Region	Americas

Serial Number, Ethernet MAC Address, Firmware Version, Hardware Version, Bootloader Version, Web Pages Version, Device Region – Displays current versions loaded on the connected NX-596E, and is required for troubleshooting.

Connection Status



Settings

Connection Status

Up Down Save

UltraSync

Status
Online

LAN
Online

Cellular
Online

LAN

LAN Status
Connected

LAN Media
Ethernet

Cellular

Status
Registered

Technology
3G WCDMA

Signal Strength
-51 dBm

Operator ID
Telstra Mobile

UltraSync

Status – Shows connection status to the UltraSync servers. This must show connected for the UltraSync app, Push Notifications, Email Reporting, and IP reporting to function. If not, check the next two fields are “Online”.

LAN – Shows if the Ethernet connection to the Internet is functioning and “Online”. If it shows “Offline”, check the Ethernet cable and the broadband router it is connected to.

Cellular – Shows if the 3G cellular radio connection to the Internet is functioning and “Online”. If “Offline”, check the SIM card settings and cellular reception.

LAN

LAN Status – Shows “Connected” if the Ethernet cable is plugged in.

LAN Media – Shows “Ethernet” if the Ethernet connection is enabled.

Cellular

Status – Shows connection status of the SIM card. Should show “Registered”.

Technology – Shows 3G/4G data connection.

Signal Strength – Shows signal strength once connected to a cellular network.

Operator ID – Shows the ID code or name of the telecommunications provider.

System

Settings

System

Up Down Save

Installer Name

installer

System Time

GMT Offset

+1 Brussels 0

Daylight Saving Time Start

Oct First Sunday

Daylight Saving Time End

Apr First Sunday

Language

English

EN 50136 Mode

Disabled

Installer Remote Access

Enabled

Box Tamper

Disabled

Installer Name – Set the login name for the installer (default “installer”).

System Time – Set the GMT offset and Daylight Savings settings to ensure event reporting and event history display correctly.

Language – Select language to display.

EN 50136 Mode – Sets the behaviour of a device to meet EN 50136 compliance. Select Enabled if required in EMEA regions. Select Disabled for all other regions.

Installer Remote Access – Select enabled to allow the installer to login to the web pages to perform configuration without requiring the panel to be in program mode. Select Disabled to maintain EN 50136 compliance, panel must be in program mode to allow installer account access from the login screen.

Box Tamper – Enable or disable the box tamper input. If enabled, the tamper terminal on the NX-596E needs to be wired to the normally closed tamper switch of the enclosure (optional).

Network

The screenshot shows a web interface for network settings. At the top is a blue header with the word "Settings". Below it is a dropdown menu labeled "Network Settings". Underneath are three buttons: "Up", "Down", and "Save". The main content area is divided into two sections. The first section is titled "LAN configuration" and contains two dropdown menus: "Ethernet" (set to "Enabled") and "Method" (set to "DHCP"). The second section is titled "Remote Access" and contains a text input field labeled "Web Access Passcode" with the value "00000000".

Ethernet – Enable or disable the Ethernet path.

Method – Select DHCP to obtain IP address configuration automatically from the router or network it is connected to. Select Static to manually assign a static IP address to the NX-596E.

Web Access Passcode – This code is set by the installer and allows the UltraSync app to connect to this NX-596E. When set to 00000000 the app will not function. The web access passcode can also be set by programming the NX-596E via an NX keypad locally (device 191, location 18).

Cellular

The screenshot shows a mobile settings interface. At the top is a blue header labeled 'Settings'. Below it is a dropdown menu currently set to 'Cellular'. Underneath are three blue buttons: 'Up', 'Down', and 'Save'. The next section is titled 'Cellular' and contains a dropdown menu set to 'Enabled'. The following section is titled 'SIM1' and contains several fields: 'Smart Roaming' (dropdown set to 'Enabled'), 'PIN' (text field), 'APN*' (text field with 'telstra.internet'), 'User Name*' (text field with 'User Name'), and 'Password*' (text field with 'Password'). At the bottom of the SIM1 section is a note: '* Optional'.

Cellular

Cellular – Enable or disable the 3G cellular backup.

SIM1

Smart Roaming – Enable or disable smart data roaming on the SIM card. Standard roaming will still occur automatically.

PIN – Enter the PIN code to unlock the SIM card if required.

APN – Enter the Access Point Name provided by the telecommunications provider to allow the SIM card to connect to the internet.

User Name – Enter the details given to you by your telecommunications provider if required.

Password – Enter the details given to you by your telecommunications provider if required.

If your device is equipped with dual SIMs (NX-596-AU COMNAV 3G only) then the following will be displayed:

SIM2

Smart Roaming – Enable or disable smart data roaming on the SIM card. Standard roaming will still occur automatically.

PIN – Enter the PIN code to unlock the SIM card if required.

APN – Enter the Access Point Name provided by the telecommunications provider to allow the SIM card to connect to the internet.

User Name – Enter the details given to you by your telecommunications provider if required.

Password – Enter the details given to you by your telecommunications provider if required.

UltraSync

The screenshot displays the UltraSync settings interface. At the top, there is a blue header with the word "Settings". Below the header is a dropdown menu currently set to "UltraSync". Underneath the dropdown are three blue buttons labeled "Up", "Down", and "Save".

The interface is divided into two main sections: "LAN" and "Cellular".

LAN Section:

- URL 1:** eu1.ultraconnect.com
- URL 2:** eu1.zerowire.com
- URL 3:** (empty text box)
- URL 4:** (empty text box)

Cellular Section:

- URL 1:** eu1w.ultraconnect.com:8081
- URL 2:** eu1w.zerowire.com:8081
- URL 3:** (empty text box)
- URL 4:** (empty text box)

LAN

URL 1 – This is the UltraSync server address for the wireline Ethernet and should not be changed. It enables the remote web access, smartphone app and

email services without requiring port forwarding. It requires the Primary DNS and Secondary DNS servers to be functioning.

URL 2 – This server address should not be changed.

URL 3 – This server address should not be changed.

URL 4 – This server address should not be changed.

Cellular

URL 1 – This is the UltraSync server address for the wireless 3G connection and should not be changed. It enables the remote web access, smartphone app and email services without requiring port forwarding. The SIM card must be activated and allow data access to the internet.

URL 2 – This server address should not be changed.

URL 3 – This server address should not be changed.

URL 4 – This server address should not be changed.

Name Editor

A built-in Name Editor allows you to enter custom names for partitions and zones which will appear on the webpage, UltraSync app, NX-1048, and NX-1820 screen.

The screenshot displays the Name Editor interface, which is organized into three main sections:

- Settings:** A blue header bar with the title "Settings". Below it is a dropdown menu labeled "Name Editor" with a downward arrow. At the bottom of this section are three blue buttons: "Up", "Down", and "Save".
- Copy:** A section containing two blue buttons: "Copy" and "Copy All".
- Areas:** A section titled "Areas" containing eight text input fields, each labeled "Area 1" through "Area 8".
- Zones:** A section titled "Zones" containing four text input fields, each labeled "Zone 1" through "Zone 4".

To load text labels **from** a NX-1820, go to that keypad:

1. Touch Menu.
2. Touch Settings.
3. Enter an authorised PIN code.
4. Touch Text.
5. Touch Copy.
6. Touch Copy All – all text labels (including user names) will be copied from this NX-1820 to other NX-1820 keypads and the NX-596E.

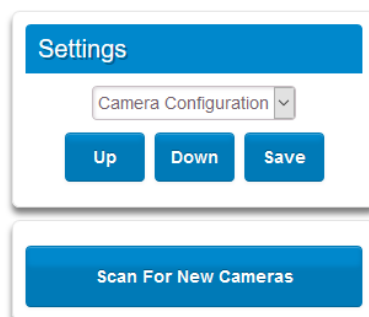
After making changes on the Name Editor, you must copy the updates **to** connected NX-1820 keypads:

1. Click Save.

2. Click Copy All to send all text labels to NX-1820 keypads, or Copy to send only changed items (faster).

Copy and Copy All commands include all User Names entered on the Users Menu.

Cameras



1. Install the supported UltraSync IP Camera following the camera installation manual.
2. The camera(s) must be on the same LAN as the NX-596E. Typically this means both the NX-596E and the camera are connected to the same router.
3. Allow 3 min for the camera to initialize and authenticate to the UltraSync servers.
4. Enter program mode on the security panel.
5. Log in to the NX-596E web page or UltraSync+ app as installer.
6. Click Settings – System.
7. Set System Time. This must be set to correctly record event and camera video clip times.
8. Click Settings – Camera Configuration.
9. Click “Scan for New Cameras”. The NX-596E will clear the camera list, then automatically discover and add up to 16 supported cameras. The MAC address of each will be displayed here.
10. Enter a name for each camera to identify it. This name will appear in the app.
11. Click Save to store the camera settings.

MAC Address - Media Access Control address (MAC address) is a unique identifier assigned to the camera by the manufacturer for identification. It should match the MAC address printed on the camera packaging and on a label on the underside of the camera.

Status – Displayed camera connection status to the NX-596E. “Connected” status indicates the NX-596E can communicate with the camera and view / trigger / retrieve video clips. “Not Connected” status indicates the camera can be

detected on the LAN, however incomplete settings prevent the connection, check time zone settings and camera configuration.

IP Address – Displays the IP address of the camera on the LAN.

Camera Scene Programming

The system is event-based and does not store video 24/7 like a DVR. Event-based recording of short video clips allows faster retrieval and review of video footage, saving time scrolling through hours of DVR footage.

Cameras are always recording to provide pre-alarm video verification. An installer or master user must program a scene to save a video clip to the micro-SD card inside the camera. Video clips can be retrieved at a later date from the camera or history menus inside the UltraSync+ app.

The screenshot shows the 'Settings' screen in the UltraSync+ app. At the top, there is a blue header with the word 'Settings'. Below it is a dropdown menu labeled 'Scenes'. Underneath are three blue buttons: 'Up', 'Down', and 'Save'. Below these buttons is another dropdown menu labeled 'Scene 1'. The screen is divided into several sections, each with a title and a text input field or dropdown menu:

- Scene Name**: A text input field containing 'Record Movement'.
- Scene Trigger Type**: A dropdown menu with 'Sensor Open' selected.
- Scene Trigger Item**: A dropdown menu with 'Zone 1' selected.
- Device 1**: A section containing two dropdown menus:
 - Type**: A dropdown menu with 'Camera Record' selected.
 - Name**: A dropdown menu with 'TruVision' selected.

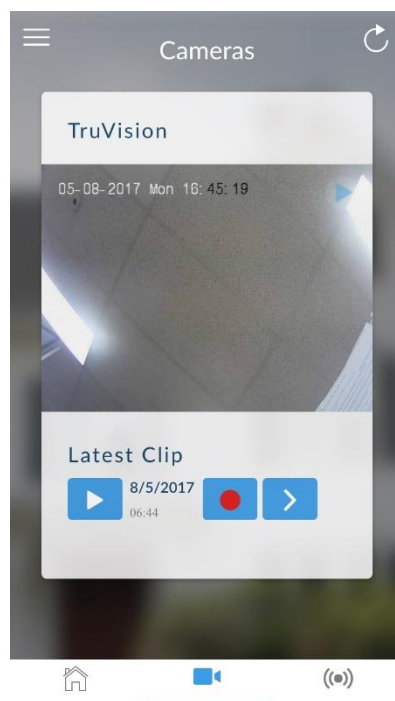
The installer or master user must program one or more scenes to store video clips:

1. Open the UltraSync+ app.
2. Tap the site name to connect.
3. Tap Camera icon.
4. Tap the play icon on a snapshot to verify the camera is functioning. A live video feed will be displayed full screen.
5. Tap Back.
6. Tap Menu.

7. Tap Scenes.
8. Select the Scene Trigger Type. This is the input that will cause the camera clip to be recorded.
9. Select the Scene Trigger Item.
10. Select Device 1 - Type - Camera Record.
11. Select the camera that should record a video clip when the Scene Trigger occurs.
12. Tap Save.

Verify the scene functions correctly:

1. Perform the action required to activate the Scene Trigger. E.g. if you have selected "Sensor Open", unseal that sensor by walking past or opening the door/window.
2. Wait 15 seconds for the video to be recorded. This time is set by the installer when programming the camera.
3. In the app, tap the top right icon on the camera screen to refresh the screen. The time and date of the last video clip will be shown.
4. Tap History.
5. There should be "Video Event" stored in the Event History with a link to the video clip.
6. Tap the link and it will download from the camera to your device. The time this takes is dependent on the upload speed from the customer's broadband internet, and the download speed of your mobile device. Note that video is unavailable if the NX-596E is running on backup cellular, the Ethernet Internet connection must be functioning.



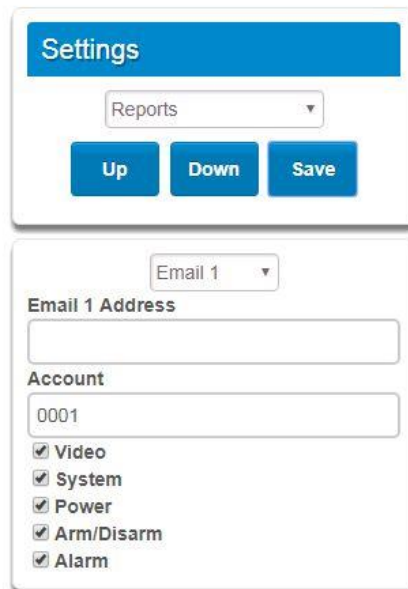
Reports

When selected events occur on your system, you can be notified via Email or Push Notifications to the UltraSync+ app.

The monitoring room will also be notified using one of two IP paths via UltraSync or Osborne-Hoffman. Check with your monitoring room what settings are required.

Email Reporting via UltraSync

In the dropdown menu, select an Email address slot:



The screenshot shows a web interface for configuring email reports. It is divided into two main sections. The top section, titled "Settings", has a blue header and contains a "Reports" dropdown menu, and three buttons: "Up", "Down", and "Save". The bottom section, titled "Email 1", has a white background and contains an "Email 1" dropdown menu, an "Email 1 Address" text input field, an "Account" text input field with "0001" entered, and a list of five checkboxes: "Video", "System", "Power", "Arm/Disarm", and "Alarm", all of which are checked.

Email Address – Enter an email address to receive emails when the selected event(s) are activated.

Account – Enter the account number for the site.

Email Report Example

User Arming: Security Report From Account 0001
Turn on
Partition 1
Fred
Time: 11:55 AM
Date: 19 Jun

Push Notifications via UltraSync

Push Notifications can be enabled\disabled from the UltraSync+ app. Each device you register will use up one of the email slots and display as [device name]@[user number] on this screen.

To disable notifications for a device, open the app, click the (i) icon next to the site, and turn off notifications. Alternatively delete the corresponding email address from this list.

Note: If this is the first time you are using notifications on the phone, it may take the Apple / Google servers up to 24 hours before notifications will be delivered to you.

IP Reporting via UltraSync

Select IP Report 1 or IP Report 2 in the dropdown menu to configure IP reporting formats. When UltraSync format is selected, the IP receiver addresses in Settings – UltraSync are used.

The screenshot shows two overlapping settings windows. The top window is titled 'Settings' and has a 'Reports' dropdown menu with 'Reports' selected. Below it are three buttons: 'Up', 'Down', and 'Save'. The bottom window is titled 'IP Report 1' and has a 'Receiver 1 Format' dropdown menu with 'UltraSync' selected. Below this is a list of checkboxes for various events, all of which are checked by default:

- Use PSTN for Failover
- Alarms
- Restores
- Opening/Closing
- Bypass
- Zone Trouble
- Power Trouble
- Tamper
- Test Reports
- System Trouble
- Failure To Report
- Sensor Trouble
- Start/End Program
- Cancel
- Recent Close

Receiver 1 / 2 Format – Select UltraSync as the IP reporting format.

Use PSTN for Failover – Enable this option to report events over the security panel's PSTN dialer if IP reporting via the NX-596E is unsuccessful.

Note: The PSTN module must be physically removed from the panel if it is not connected to the analogue telephone line, and the "Use PSTN for Failover" option is not enabled.

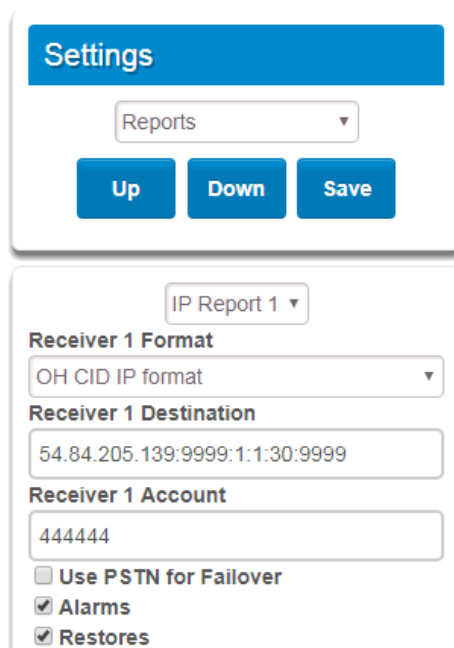
Events – Select the events to report to this receiver. All events are enabled by default.

Non-Provisioned OH Reporting

In certain applications, the panel can be configured to support non-provisioned Osborne-Hoffman Reporting. This is done by entering specially formatted text in Destination field.

1. The panel must not be provisioned in the UltraSync Servers.
2. Login to the NX-596E as installer.
3. Click Settings - Reports.
4. Select IP Report 1 or IP Report 2 in the drop down menu.
5. Select one the OH reporting options in the Receiver 1 Format field: OH CID IP Format, OH SIA IP Format, or OH XSIA IP Format.
6. In the Receiver 1 Destination field, enter the OH Configuration using the format *ip_address:ip_port:R:L:Reporting_period:Supervision_port:LAN_Fault_Delay:Cell_fault_Delay*

See below for details.



Settings

Reports

Up Down Save

IP Report 1

Receiver 1 Format
OH CID IP format

Receiver 1 Destination
54.84.205.139:9999:1:1:30:9999

Receiver 1 Account
444444

Use PSTN for Failover
 Alarms
 Restores

OH Configuration

Only *ip_address:ip_port* are mandatory to switch this feature on. Consult your central station for the correct values.

ip_address:ip_port:R:L:Reporting_period:Supervision_port:LAN_Fault_Delay:Cell_fault_Delay

Field Description:

- *ip_address* – public IP address of the OH Net Receiver.
- *ip_port* - IP port of OH Net Receiver.
- *R* - Receiver number in the OH message (optional), may be one or two hexadecimal characters (0-9, A-F), default is one (1) if left blank.

- L - Line number in the OH message (optional), must be single hexadecimal character (0-9, A-F), default is one (1) if left blank.
- Reporting_period - The number of seconds between OH heartbeat messages (optional). This will be initiated on the server on behalf of the panel. If specified it must be set between 90 (= 90 seconds) and 1800 (= 30 minutes).
- Supervision_port - IP port of the OH Net Receiver Supervision port (optional). OH heartbeat messages will be sent to this port at the specified reporting period.
- LAN_Fault_Delay - The number of seconds for the LAN failure delay reporting to OH. If set, it must be a number between 90 and 255. The minimum delay is 90 seconds. If the path is restored within this time window, no fault event will be reported to OH.
- Cell_Fault_Delay - The number of seconds for the Cellular failure delay reporting to OH. If set, it must be a number between 90 and 255. The minimum delay is 90 seconds. If the path is restored within this time window, no fault event will be reported to OH.

Each field is separated by a colon “.”

Examples

All fields specified 11.22.33.44:9999:20:1:1800:8799:90:180

If you configure the Destination as "11.22.33.44:4099", the OH receiver will receive the alarm events and the “R&L” will be 1:1.

Similarly, if the Destination is set to "11.22.33.44:4099:2", the "R&L" will be 2:1.

The heartbeat interval is set to 1800 seconds (30 minutes) and is sent to OH, port 8799.

The LAN fault delay is set to 90 seconds. In case a LAN failure occurs and is restored within 90 seconds, the LAN fault message will not be reported to OH. If the fault remains present for a longer period, the LAN fault message will be reported after 90 seconds.

The Cellular fault delay is set to 180 seconds. In case a cellular failure occurs and is restored within 180 seconds, the cellular fault message will not be reported to OH. If the fault remains present for a longer period, the LAN fault message will be reported after 180 seconds.

Scenes

The screenshot shows a vertical stack of settings panels. At the top is a blue 'Settings' header. Below it is a 'Scenes' dropdown menu and three buttons: 'Up', 'Down', and 'Save'. The next panel shows 'Scene 1' selected in a dropdown. The 'Scene Name' panel has an empty text input field. The 'Scene Trigger Type' panel has a dropdown menu with 'Area Alarm' selected. The 'Scene Trigger Item' panel has a dropdown menu with 'Area 1' selected. The 'Device 1' panel has three fields: 'Type' (Output), 'Number' (1), and 'Mode' (On). The 'Device 2' panel has one field: 'Type' (Disabled). The 'Device 3' panel has one field: 'Type' (Disabled).

Scenes allow home automation events to be programmed. For example, to record video footage when a motion sensor is triggered, or to turn on a light, or both.

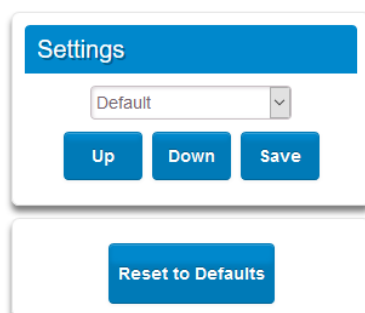
When installed with NX-507/508 modules, scenes can perform functions such as turning on lights when you arrive home and turning them off when you leave.

Each scene is made up of:

- **Scene Number** – up to 8 scenes can be programmed.
- **Scene Name** – a user friendly name describing what the scene will do.
- **Show In App** – tick this box to display a button on the home screen of the UltraSync+ app, pressing this buttons will trigger this scene.
- **Scene Trigger Type** – the input that causes the scene to “run”. Options include:
 - None – scene is disabled
 - Partition Armed Away

- Partition Armed Stay
- Partition Alarm
- Sensor Open
- Sensor Not Open
- Sensor Alarm
- Geo-Fence Entry – when the user’s phone enters the location programmed in the UltraSync+ app, this scene will be triggered.
- Geo-Fence Exit – when the user’s phone leaves the location programmed in the UltraSync+ app, this scene will be triggered.
- **Scene Trigger Item** – The partition or zone number if applicable.
- **Device** – when the scene is triggered, it can control up to 16 outputs or cameras. Options include:
 - Disabled – the scene will not perform any function.
 - Output – select an output number and the state (on or off) to set. Outputs are typically provided by optional NX-507 and NX-508 modules installed on the security system.
 - Camera Record – select a camera name to record a video clip. Note that the video clip is stored on the microSD card inside that specific camera.

Defaulting



Click “Reset to Defaults” to restore the NX-596E back to factory settings.

Programming the NX-596E via locations

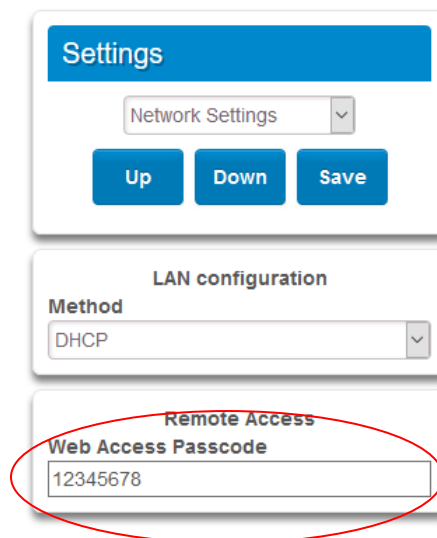
Below features are accessible via programming locations in device 191:

- Location 18 Web Access Passcode
- Location 19:
 - Option 1 On: DHCP enabled; Off: static IP address
 - Option 2 On: Enable EN50136 mode
 - Option 3 On: Enable Box Tamper
 - Option 6 On: Enable Installer Remote access
- Location 20 Gateway IP address
- Location 21 IP Address. Enter the static IP address for the NX-596E if location 19 option 1 is set to Off.
- Location 22 Subnet Mask.
- Location 23 DNS Server 1. Enter the primary DNS Server IP address.
- Location 24 DNS Server 2. Enter the secondary DNS Server IP address.

Enabling Remote Access and UltraSync+ App

To enable remote access for you (DL900 in case of the NX-596E, or DLX900 in case of the NX-596-AU COMNAV 3G) and your customer (UltraSync+ app):

1. Look for the serial number label on the NX-596E.
WRITE THIS SERIAL NUMBER ON THE QUICK REFERENCE GUIDE.
2. Find the IP address of your NX-596E. This is stored in Device **191**, Location **21**. Stay in program mode on the keypad.
3. Enter the IP address into a web browser then log in:
Username: **installer** Password: **9713**
Make sure your computer is on the same network as the NX-596E.
4. Click **Settings – Network Settings** and change the **Web Access Passcode**. This 8 digit passcode grants remote access.
WRITE THIS CODE ON THE BACK OF THE USER MANUAL.
The default passcode is 00000000 and it disables remote access. If you do not change this then end-users will not be able to use the app.



The image shows a screenshot of a device's settings interface. At the top is a blue header labeled 'Settings'. Below it is a dropdown menu currently set to 'Network Settings', with 'Up', 'Down', and 'Save' buttons underneath. The next section is 'LAN configuration', with a 'Method' dropdown set to 'DHCP'. The final section is 'Remote Access', which contains a 'Web Access Passcode' field with the value '12345678'. This field is circled in red.

5. Click **Users** and add a username. In this example we've entered "User 1".
WRITE THIS USERNAME AND PIN CODE ON THE BACK OF THE QUICK REFERENCE GUIDE.

Configure Users

Delete
Save

Edit an Existing User

User User 1 (1) ▾

User Name User 1

Password ••••

User Authority

Arm Only

Schedule

Master

Arm/Disarm

Bypass

Report

User Areas

Area 1

Area 2

Area 3

Area 4

Area 5

Area 6

Area 7

Area 8

6. Check STATUS, CELL IP, and WLINE IP LEDs on NX-596E are lit solid to indicate it is connected to the cloud servers. If CELL IP and WLINE IP LEDs are blinking then it is still trying to connect. Allow up to 3 min.

Installing UltraSync+ app

UltraSync+ is an app that allows you to control system from an Apple® iPhone/iPad, or Google Android device. Carrier charges may apply and an Apple iTunes or Google account is required.

1. On your smartphone go to the Apple® App Store™ or Google Play™ store.



2. Search for UltraSync.
3. Install the app.
4. Click the Smart Home icon on your device to launch it.
5. Click + on the top right to add a new site, or the (i) icon to edit an existing site.
6. Enter the details of your security system.

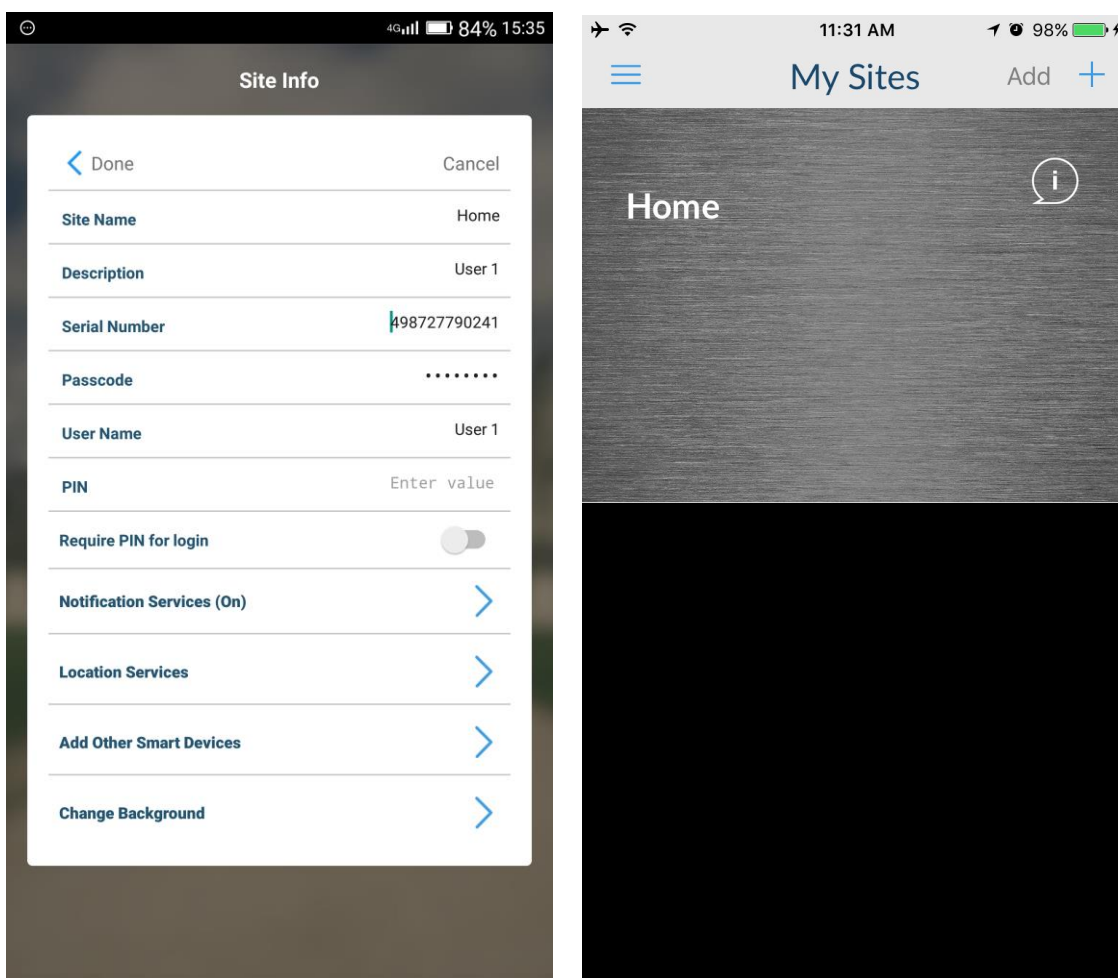
The serial number is printed on the NX-596E unit. Alternatively, log in to NX-

596E Web Server and go to Settings – Device Details to view it.

Set the Web Access Code under Settings – Network Settings.

The default username and PIN code is “User 1” 1234. Please note that there is a space between “User” and “1”. You may also use any other valid user account. Only menus a user has access to will be displayed.

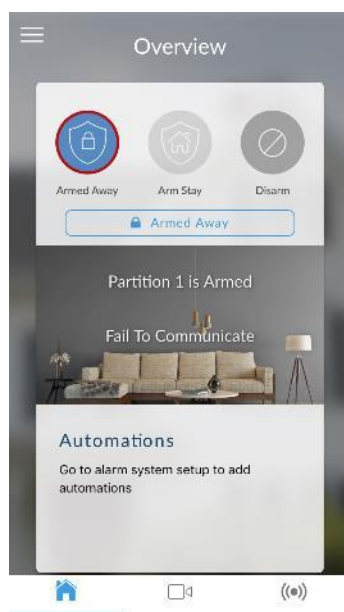
7. Click Done button to save the details, then Sites to go back.
8. Click the name of the site, the app will now connect you to NX-596E.



Using the App

Arming/Disarming

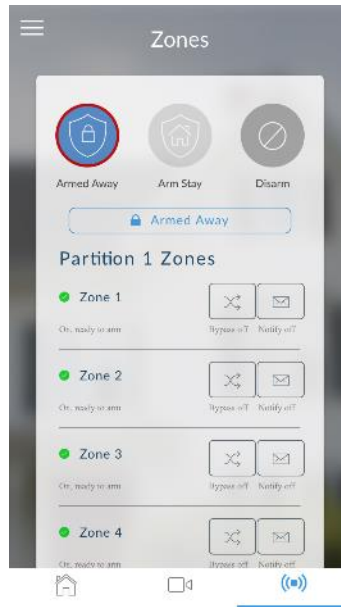
The first screen that will appear once you connect is the Overview screen. This will display the status of your system and allows you to arm or disarm partitions by touching Arm Away, Arm Stay, or Disarm. It also allows you to activate programmed automation scenes.



Zones, Bypassing, Notifications

The menu bar is located along the bottom of the app. Touch the Zones icon (last icon with a dot and wireless signals) to view zone status.

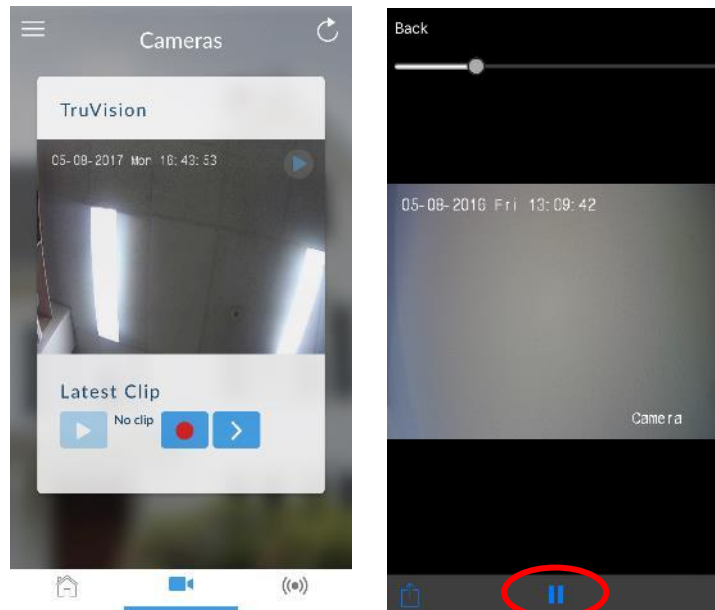
- Touch Bypass to ignore a zone or touch it again to restore it to normal operation.
- Touch Notify to receive push notifications when there is activity from that zone.




Cameras

Touch the Camera icon to view cameras connected to your system.

- Live snapshots from each camera will be shown. Touch the snapshot to open the live stream in full screen. Rotate your device to make the image bigger. Touch the screen then Back to return to the Camera screen.
- Touch the Play button under each camera to view the last recorded clip by that camera. Touch the Share button to save or forward the clip.
- Touch the Record button to request that camera record a short clip which can be retrieved at a later date.



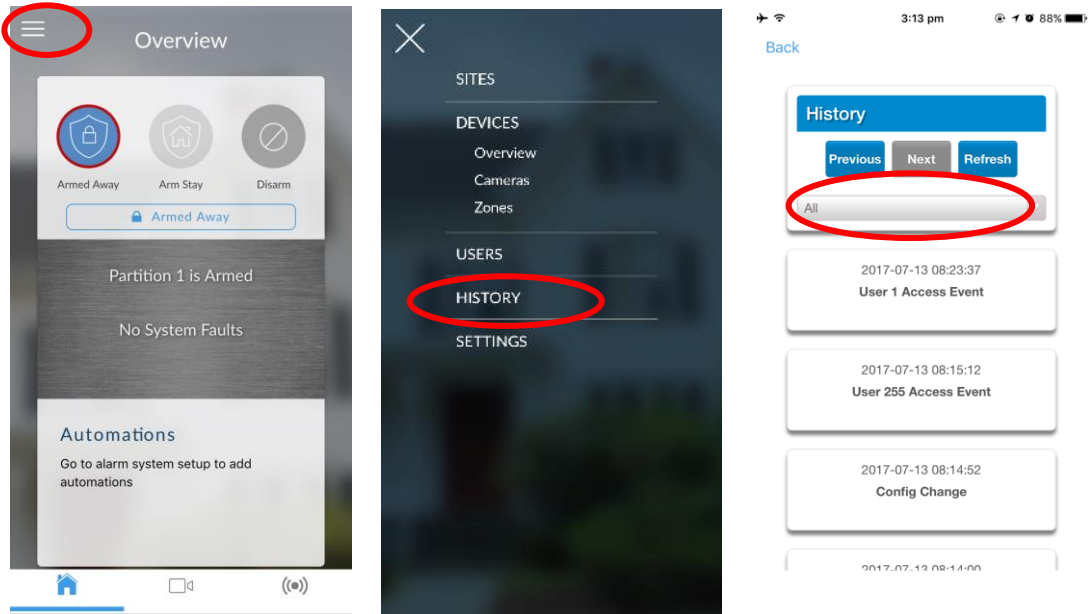
Video clips can also be accessed from the History screen. Touch Menu , HISTORY, then change Selected Events to Video.

Touch “Press to Play Video” to retrieve the clip from the camera.


History

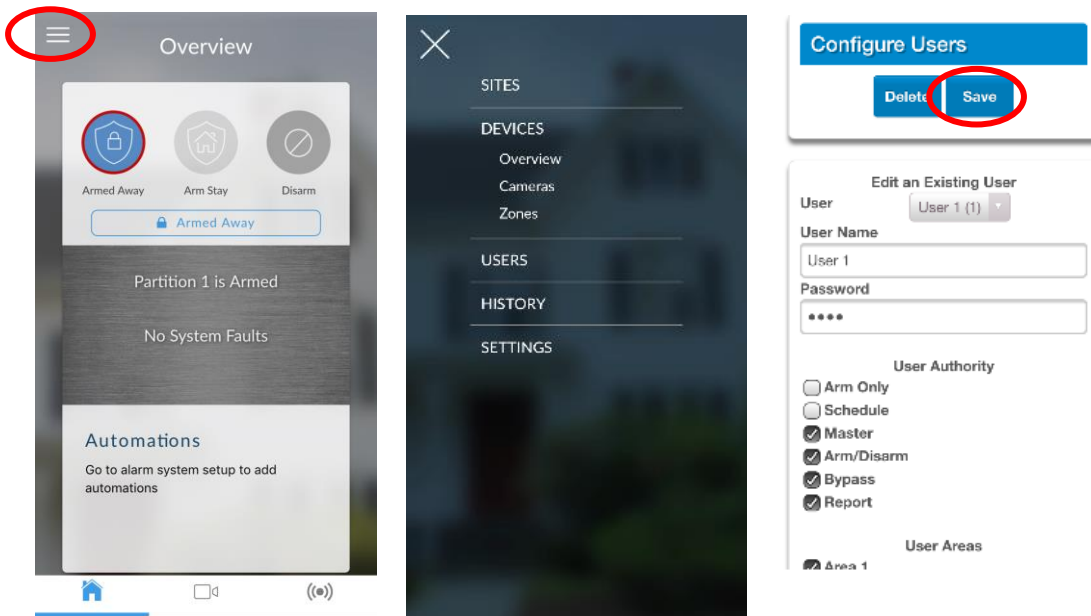
This History screen displays the event log of the NX-596E, recording important events and allowing authorized users the ability to audit the system. Tap the drop down to change the filter. "Alarms" filter will display the Mandatory Event Log.


Events followed with an ** are for events not intending to be reported to a control room.



Users

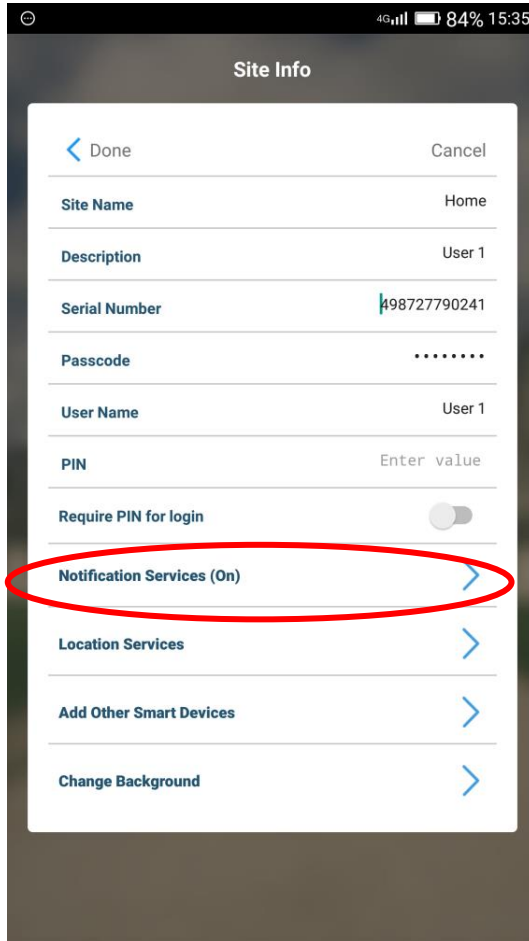
Master users will have access to the full Users menu for creating and managing users. Touch Menu , USERS. After making any changes remember to click Save.



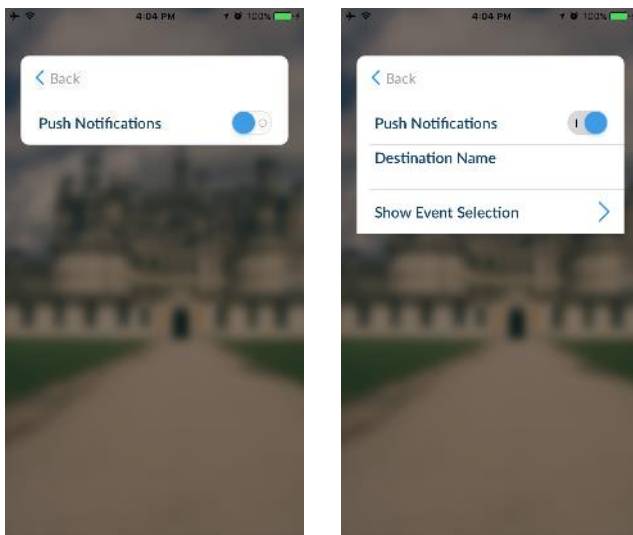
All users can change their PIN code by touching Menu , USERS.

Enabling Smartphone Push Notifications

1. Open the app on your smartphone.
2. Click the (i) symbol next to the site name you wish to receive push notifications from.
3. Scroll down and click “Notification Services”.



4. Click the slider button to activate Push Notifications for the current user. This will display the Destination Name when it is activated.



5. Click Back.

6. Click Done.
7. Close the app. Your NX-596E will now send push notification messages to your smartphone. Note: it may take up to 24 – 48 hours for the Apple or Google servers to process your request if you have not used this feature before.
8. Arm/Disarm your security system using the standard keypad (not from the app).
9. Your smartphone should receive push notification messages.

Changing Destination Name

Each smartphone must have a unique name so that the NX-596E can direct push notifications to it. To change your smartphone name:

1. Open the app.
2. Click the Menu button on the top left.
3. Click Global Settings.
4. Click Notification Services.
5. The device name is displayed. Click it to change it.
6. Click Save.
7. Click Settings.
8. Click Back to return to the home screen.

Troubleshooting the smartphone app

- If you change the user name after activating notifications, disable and re-enable notifications to update the Destination Name. Then follow the instructions above to enable Smartphone Push Notifications with this new Destination Name.
- Check the STATUS, CELL IP, and WLINE IP LEDs on the NX-596E are lit solid. This indicates it is successfully connected to the cloud servers to provide remote access via the app. If they are off then check your cables and access to the internet. For example, unplug the Ethernet cable from the NX-596E and connect it to a laptop and verify the laptop can access the internet. If the internet connection is functioning correctly, power cycle the NX-596E and wait 5 min. Alternatively default the NX-596E.
- Check you can connect to the NX-596E while on the same network. For this trouble shooting step you will first put the security panel into program mode. Then connect your device (smartphone / laptop) to their network via Ethernet or WiFi. Enter the IP address of the NX-596E into a web browser. The NX-596E login page should appear. This confirms if the NX-596E is powered on and functioning correctly.

- Log in to the web page of the NX-596E, and check the Connection Status page. UltraSync status must be online.
- NX-596E may not work on corporate network due to firewalls, proxy servers, and other security settings. Connect it to a network port that can provide direct access to the internet.
- Confirm that other devices on the same network can connect to the internet.
- Check all access codes are correct (serial number, Web Access Passcode is not 00000000, username, PIN). Note the installer account only functions when the NX-596E is in program mode.
- Check that port forwarding is NOT configured on the network for the NX-596E.
- When performing troubleshooting, ensure your device (smart phone, laptop, tablet, etc.) is connected to the same network as the NX-596E.
- Turn off WiFi on your mobile device and try using the app again while on 3G/4G mobile data.
- Restart your phone. Ensure you are signed in with your Apple ID or Google Account to cloud services.

Upgrading Firmware

Firmware upgrades can only be performed by authorised Dealers / Central Stations using the UltraSync Portal.

Refer to UltraSync Portal Manual for detailed instructions on firmware upgrade procedures and batch upgrading units.

System Status Messages

Zone Number / Zone Name

Burg Alarm – This zone has triggered a burglary alarm condition

Zone Bypassed – This zone is isolated (disabled) and will not activate an alarm

Not Ready – A zone is not closed

Ready – A zone is closed

Fire – This zone has triggered a fire alarm

Fire – This fire zone has an open circuit

Zone Tamper – This zone has triggered a tamper alarm

Zone Trouble – This zone has an open circuit

Zone Supervision – This zone is a wireless device and has lost its communication link with the security panel

Zone Low Battery – This zone is a wireless device and needs its battery changed

Partition Number / Partition Name

Armed Away – This partition is armed in the away mode

Armed Stay – This partition is armed in the stay mode

Ready – This partition is secure and ready to be armed

Not Ready – This partition is NOT ready to be armed, a zone is not secure

Exit Delay – This partition is being armed and exit timer 1 is counting down.
Leave the protected area.

Exit Delay – This partition is being armed and exit timer 2 is counting down.
Leave the protected area.

Entry Delay – An entry/exit type zone has been unsealed and the entry delay timer is counting down. Enter your PIN code or disarm the partition to cancel the timer, otherwise an alarm will occur.

Night Mode – This partition is armed in the night mode. It must be disarmed from within the protected area. Entry/Exit zones are instant with no entry time.

System

AC power fail – The security system has lost its electricity power

Low battery – The security systems back up battery requires charging

Battery test fail – The security systems back up battery requires changing

Box tamper – The security systems cabinet tamper input has activated

Siren trouble – The security systems external siren has a problem

Over current – The security system is drawing too much current

Time and date loss The security system time and date need resetting

Communication fault – The security system has detected a problem with the Alarm Transmission Path (ATP). On the NX-1048 keypad:

- Alarm Transmission Path (ATP) Fail will display “Remote, Fail To Communicate”.
- Alarm Transmission System (ATS) Fail will display “Remote, Trouble”.

Expander

Low battery – A remote power supply’s back up battery requires charging

AC power fail – A remote power supply has lost its electricity power

Box tamper – An expanders cabinet tamper input has activated

Keypad

Fire alarm – A fire alarm has been activated at the keypad

Panic – A panic alarm has been activated at the keypad

Medical – A medical alarm has been activated at the keypad

FAQ - Frequently Asked Questions

If I am upgrading from an NX-595E what do I need to do?

Remove any NX-595E that is connected. If that unit was installed prior to 2014, check the router and remove any port forwarding settings for the NX-595E.

Do I need port forwarding?

Port forwarding should NOT be programmed.

Do I need an email server?

You do NOT need an email account to send emails as the NX-596E will send emails using a secure cloud service.

What if I cannot connect to NX-596E with my computer?

1. Check that the router has DHCP enabled; refer to the router manual for details.
2. Default the NX-596E. This will ensure DHCP is enabled.
3. Check that the customer’s router has allocated an IP address to the NX-596E in Location 21 of the NX-596E. If it is 0.0.0.0 then DHCP is not working correctly. You should manually assign the NX-596E a static IP address in

Location 21. Make sure that it is on the same subnet as your computer and that the IP address is not used by another device.

4. Put the NX-596E into program mode by using a keypad and enter device 191. This is an extra layer of security to prevent unauthorised remote access. Then try again from a web browser.
5. While the NX-596E is in program mode: On a windows computer, click Run, type `cmd`, press Enter, then `ping [ip address]`. If there is an error it will show "timed out" and you should check your network. If you see a time then your computer can talk to the NX-596E.

I'm not receiving any emails!

1. Perform testing using a standard user PIN, the installer account by default does not send all reports.
2. Check that the emails are not being captured in your SPAM folder or blocked by a firewall.
3. Check the email address is correct.
4. Check that the event is ticked in the NX-596E settings.
5. Check that you are receiving other emails.
6. Check that the relevant reporting options are enabled in the panel programming.
7. Check you can arm/disarm using the UltraSync+ app. This verifies the NX-596E is connected to the servers.

I'm not receiving any push notifications!

1. Check the NX-596E has been provisioned by the Dealer/Central Station (unless your NX-596E is specifically a non-provisioned model).
2. Check the phone settings allow push notifications.
3. Enable push notifications in the UltraSync+ app. A destination name will appear when the request is successful.
4. Check you have events ticked for the Push Notification. This can be done from the UltraSync+ app under Site Info – Notification Services – Show Event Selection. Or connect to the site then Menu – Settings – Reports – Email.
5. Change the Device Name in the UltraSync+ app from Menu - Global Settings – Notification Services. Then disable and enable Push Notifications. A destination name will appear when the request is successful.
6. Retrieve the smartphone destination name from Site Info – Notification Services – Destination Name. An example is *smartphone@u1*. Manually type this into Menu – Settings – Reports – Email.
7. The destination name / email address is case sensitive.