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United Technologies

NetworX Series™

NX-595E NetworX IP Communication Module

Installation Manual

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•   Increase the separation between the equipment and receiver.
•   Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
•   Consult the dealer or an experienced radio/TV technician for help.

You may also find helpful the following booklet, prepared by the FCC: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402.

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Content

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Keep in mind, the level of security you will obtain with this system relates specifically with two major factors:

- The quantity, quality, and placement of security devices attached to this security system.
- The knowledge you have of the security system and how that knowledge is utilized in a weekly test of the complete system.

This product is to be installed by qualified SERVICE PERSONNEL only.

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Introduction

The NX-595E is an IP communication module that can be added to a NetworX V2 family security product (NX-4, NX-6, NX-8, NX-8E) to provide remote access and alarm reporting via standard Internet connections (IP). The NX-595E can utilize two connection methods to your central monitoring station. It can connect directly to an Osborne Hoffman (OH) NetRec receiver. Alternatively, it can use UltraSync™ services. Contact your central monitoring station to determine their preferred connection method.

The security panel can be configured for alarm reporting exclusively over IP when PSTN connectivity is no longer available. Alternatively, it can utilize the PSTN for failover connectivity in the event the IP communications path is lost.

The NX-595E provides a web browser interface accessible via a local computer, smart phone or tablet to configure the device. Additionally, UltraSync™, an Apple® iOS® or Android® application, is available for remote configuration and end user control of the security system including control of two output relays. Up to four zones are also supported with zone doubling (not available on NX-4 panels). Three email addresses can be programmed into the NX-595E to allow alarm and trouble events to be emailed to the end user.

This manual assumes the installer is familiar with the NetworX V2 family of security products and is capable of programing the security system. It also assumes that the installer is familiar with basic computer networking and Apple iOS or Android smart devices.

Setup is a simple process:

1. Install the NX-595E into the NetworX panel.

2. Enroll the NX-595E into the NetworX panel.

3. Minimum configuration is required:

   a. Time and daylight savings setup (Feature Menu)

   b. IP Reporting (IP Reporting Menu)

   c. Enable remote UltraSync application support by setting the Web Access Passcode (Network Settings Menu)

Important notes before proceeding

- The PINs for accessing the NX-595E are stored in the NetworX panel. Make sure you are using the existing PIN for the Installer when configuring the NX-595E.

- Record the following information in the UltraSync Quick Reference Guide during the installation process:

  - NX-595E serial number (12-digits)

  - Web Access Passcode (8- numerical digits)

Installing the NX-595E 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 module.

Note: Notice that the insertion points have two sizes of holes - a larger hole and a smaller hole.

Figure 1: The black plastic PCB guides have slots along the straight edge where the PC Board will be seated. The curved side of the PCB guide fits into the larger hole. The smaller hole on the raised protrusion in the NetworX panel is for the screw.

Figure 2: Place the first black plastic PCB guide in the top insertion point with the PCB slot facing downward. It does not require force. Insert one of the screws into the smaller hole to secure it in place. The second PCB guide should be positioned opposite of the first guide 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 slots of both guides.
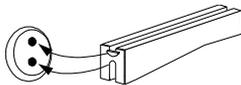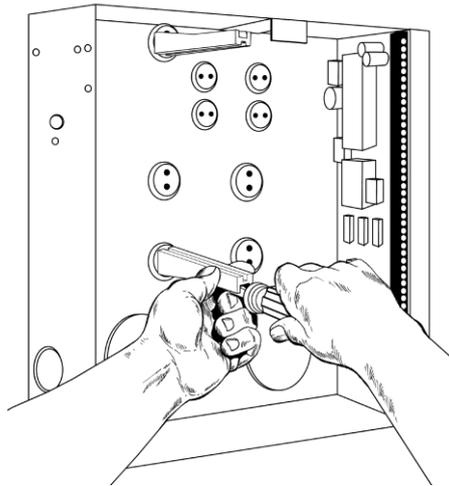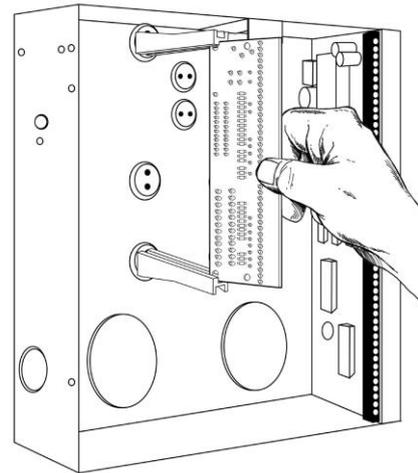
Figure 1

Figure 2

Figure 3

Note: Record the 12 digit serial number of the NX-595E on the back of the UltraSync Quick Reference Guide that is included in the product packaging. The serial number is located on NX-595E product label attached to the PCB.

Wiring the NX-595E

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

Terminal descriptions

Terminal		Description	
1 Pos		Positive terminal	
2 Com	Panel Bus	Common terminal	
3 Data		Data terminal on the NetworX panel	
14 Z1		1st / 3rd Zone	3.3K = Single EOLs
15 Com	Additional Zones	Common (-) return for Zone loop	3.7K = Low zones
16 Z2		2nd / 4th Zone	6.9K = High zones
20 NC1		Normally closed	
21 C1	Relay 1	Common	This relay can be controlled from the UltraSync application
22 NO1		Normally open	
23 NC2		Normally closed	
24 C2	Relay 2	Common	This relay can be controlled from the UltraSync application
25 NO2		Normally open	

1. Connect the NX-595E's terminals POS, COM & DATA to the NetworX bus.

2. Connect one end of an Ethernet cable to the RJ45/Ethernet connector on the NX-595E. Connect the other end of the Ethernet cable to an available Ethernet port on the Internet router. The router should automatically assign the NX-595E module an IP address when it is powered up.

3. If you are utilizing the output relay or additional zone functionality of the NX-595E, connect the wiring to the appropriate terminals. Additional instructions regarding output relay and zone functionality are included this manual.

4. Re-connect the power to the NetworX security system. You are now ready to configure the NX-595E.

Note: In the unlikely event that the Internet router is not configured to automatically assign an IP address, you will have to manually assign an IP address and network settings in the NX-595E. Instructions to manually assign the network settings are included in Appendix 1 at the end of this manual.

NX-595E Connector Layout

Figure 4
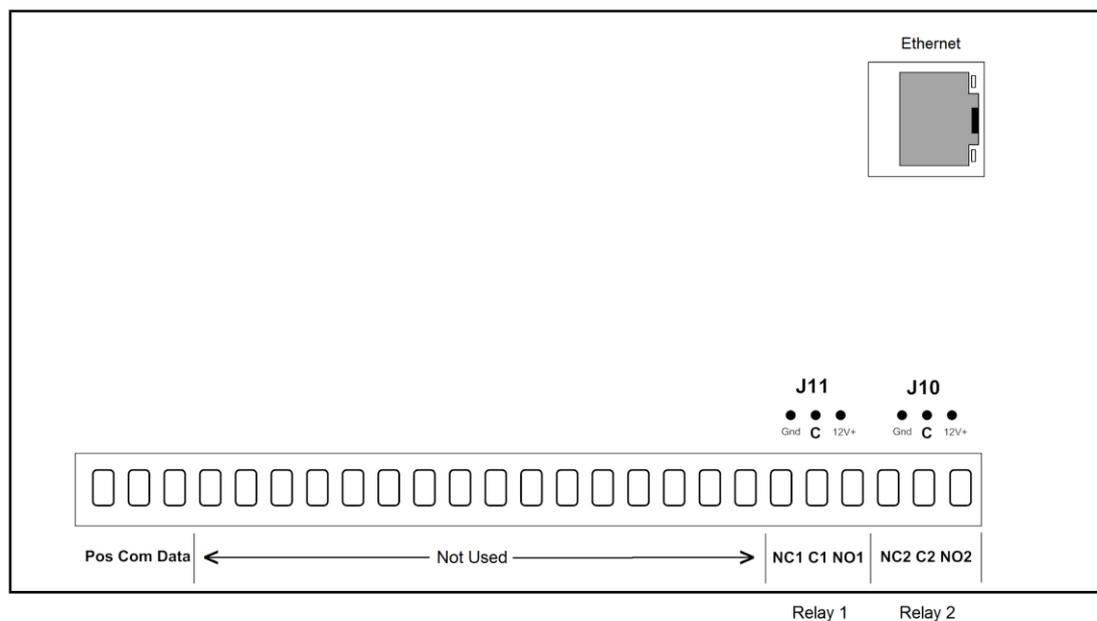
Preparing the NX-595E for Configuration

Before you can configure the device, you must:

1. Enroll the NX-595E in the NetworX panel.

2. Default the NX-595E.

3. Retrieve the IP address from the NX-595E.

You can accomplish these three steps via any LCD (NX-148xx), Voice (NX-181xx) or touchscreen (NX-182xx) keypad.

Enrolling, Defaulting and Retrieving the IP Address for the NX-595E

The NX-595E is automatically set to **device address 191** and programming is carried out like all other NetworX modules.

Default the NX-595E following these instructions depending on the type of keypad you are using. When you exit program mode, the NX-595E will be automatically enrolled.

Using a NX-181xx Voice keypad

Step		
1.	**[MENU]-[0]**	Selects main menu - Option 0, Advanced system configuration
		◀ *Enter your code, touch menu to exit.*
2.	**[?]-[?]-[?]-[?]**	Enter your 4 or 6 digit Programming code
		◀ *Touch 1 for keypad configuration* *Touch 2 for panel and device configuration* *Touch 3 to configure service provider phone number* *Touch menu to exit.*
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-595E)
		◀ *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-595E)

Using a NX-182xx touch screen 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-595E)
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-595E. 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-595E)

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-595E)
4.	**[9][1][0] - [#]**	Defaults the device, Note: only required once
5.	**[2][1][#]**	To discover the IP address of the NX-595E (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-595E)

Configuring the NX-595E

You have two options to configure the device.

• A direct connection with a web browser on a computer or mobile device

• Via the UltraSync application on an Apple iOS or Android device

Note: Before you can utilize the UltraSync application to configure the NX-595E, you must program in the Web Access Passcode in the Network Settings tab. It is recommended that the initial configuration of the device be completed with a web browser.

There is limited configuration capability with a connected keypad. Please see Appendix 1 – Advanced Setup for keypad worksheets for more information.

Configuring the NX-595E (Web browser or UltraSync)

Note: Configuration of the NX-595E with a web browser and the UltraSync application is virtually identical. The screenshots below show the Web browser view when configuring the device.

• If you are using a computer, you can connect your computer to the same router that the NX-595E is connected to with an Ethernet cable.

• If you are using WiFi to access the network (e.g. with a tablet, WiFi enabled computer or smart phone), make sure the WiFi router is connected to the same network that the NX-595E is connected to.

Enter the IP address of your NX-595E into the web browser to access the NX-595E. This is the IP address that was retrieved above in the Enrolling, Defaulting and Retrieving the IP Address section of this document.

Figure 5
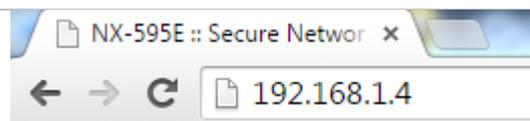
Note: The IP address that was retrieved from the device was most likely assigned by the network router. If the router or NX-595E is reset, power cycled, or a long period of time has expired since you retrieved the IP address, a new IP address might be assigned to the NX-595E. If the IP address you are using is not working, retrieve the IP address with the instruction in the Enrolling, Defaulting and Retrieving the IP Address section of this document. You do not need to perform the defaulting portion of these instructions when retrieving the IP address.

Sign in Page
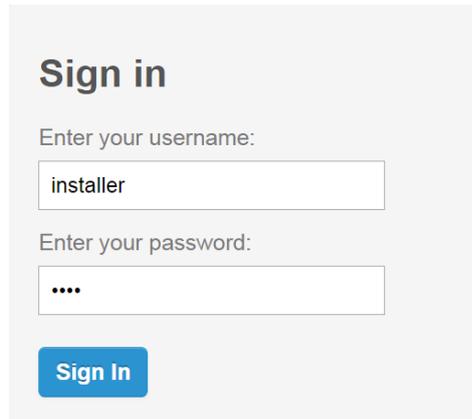
When successfully connected, the NX-595E will display the "Sign in" Page. Enter the correct username/password combination to login.

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

• Password: (enter the NetworX panel programming code)

Notes:

1. The password used to log into the NX-595E is the programming code that resides in the NetworX panel.

2. The Username used to log into the NX-595E is stored in the NX-595E. The default installer name can be changed on the Feature Setup menu after you have logged in.

Note: Logging in as the installer will not allow programming of the NetworX panel.

Main Menu (Accessed with Installer Credentials)
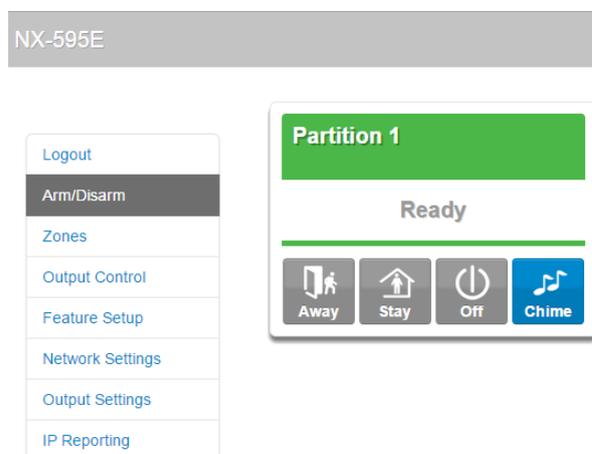
Feature Setup
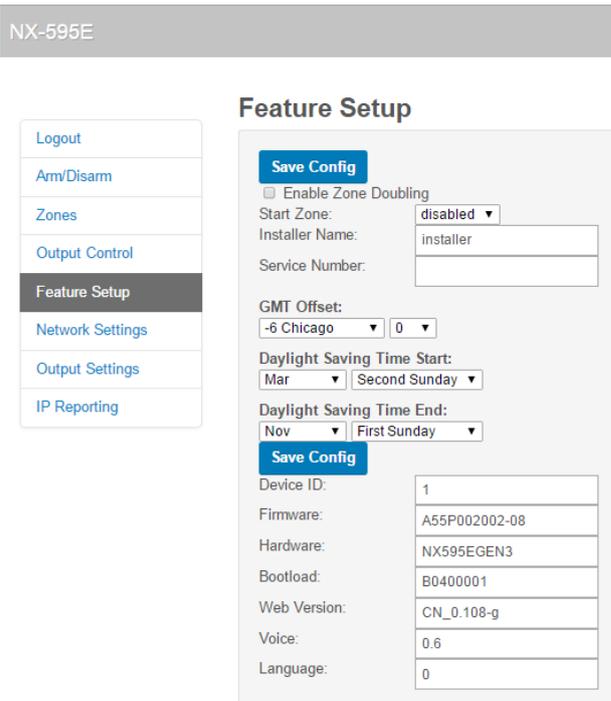
Enable Zone Doubling: Allow the two onboard zones to double to four zones (not available on NX-4 panels). These zones cannot be used for 2-wire smoke detectors.

	Zone	Lower Zone	Higher Zone
Single EOL resistors	3.3K	N/A	N/A
Zone Doubled EOL resistors	N/A	3.7K	6.9K

Start Zone: Used to enter the starting zone number of the additional zones on the NX-595E. Select from the drop down menu.

Installer Name: Default installer name is **installer** and is case sensitive**.** This is the username to sign in via a web browser or the UltraSync application.

Service Number: The system service number will be announced at NX-181xx Voice keypads when a system fault is present. Your customer service telephone number is the recommended setting.

GMT Offset Hours/Minutes: Sets local GMT (Greenwich Mean Time).

DST Start / End month: Selects the month daylight savings begins and ends for the particular installation region.

DST Start / End week: – Selects which Sunday daylight savings begins and ends for the particular installation region.

Firmware, Hardware, Web version, Voice and Language: Displays the current versions loaded on the connected NX-595E.

Network Settings

MAC Address: Media Access Control address (MAC address) is a unique identifier assigned to most network interface cards by the manufacturer for identification.

Host Name: Fixed as "NX595E."

Enable DHCP: When enabled, the NX-595E will automatically receive its IP address from the network router. If this segment is disabled, the NX-595E will need to have its IP address set manually. It is recommended that DHCP be enabled.

Enable Ping: The "Ping" command is always functional while the NX-595E is in program mode. Disable this option to allow the NX-595E to ignore "ping" commands in normal operation. For security reasons it is recommended this option be disabled.

Enable NTP Server Time Updates: The NX-595E will check its internal clock and use the internet to compare it against GMT time. This is done every 15min and will update itself if the variance is greater than 3 minutes.

Enable DLX900 Server: Allows remote configuration using DLX900 software. Disable to prevent DLX900 connections to the NX-595E. Enabled by default and for the first 5 minutes after power up. Note that this option does not prevent DLX900 connections to the panel via PSTN, disable this in panel programming if required.

Enable Web Access: When enabled, email and IP reporting will function. Alternatively, if the Web Access Passcode is set to a non-zero value, email and IP reporting will function.

IP Address: IP address of the NX-595E module. If Enable DHCP is unchecked, this field is editable and a static IP address can be assigned manually.

Gateway: IP address of the gateway device (e.g. WiFi router, DSL or cable modem). If Enable DHCP is unchecked, this field is editable and the IP address of the gateway can be assigned manually in the NX-595E.

Subnet Mask: Subnet mask of the local area network (LAN). If Enable DHCP is unchecked, this field is editable and the subnet mask can be assigned manually.
Primary DNS: IP address of the primary DNS server (editable if Enable DHCP is unchecked).

Secondary DNS: IP address of the secondary DNS server (editable if Enable DHCP is unchecked).

SSL Port: Not used.

Web Access Passcode: This code allows the UltraSync iPhone and Android applications to connect to the security system, and enables email and IP reporting. A value of 00000000 disables UltraSync application support. Enter a unique Web Access Passcode (<u>eight numerical digits only</u>) and click the Save Config button to enable UltraSync application support. Record the Web Access Passcode on the back of the UltraSync Quick Reference Guide.

Web Access Server 1: This server address should not be changed. It enables the remote web access, UltraSync iPhone and Android applications and email services.

Web Access Server 2: This server address should not be changed. It enables the remote web access, UltraSync iPhone and Android applications and email services.

DLX900 Port: Enter the port number for DLX900 access. Default value 41796.

Output Settings

The two onboard relays can be controlled through various system events or manually controlled by a user from the UltraSync application.

Relay trigger events are selectable and can be chosen from a drop down "Activation Event" list from within the web interface.

Activation Event: Select the required event from the drop down list that will activate the corresponding relay.

Activation Time: Time the relay will be active, options 0-255. Default value is in seconds unless Minutes option is checked.

Minutes: On if output should be timed in minutes; off if timed in seconds.

Latch: On if output should latch permanently until turned off; off if output should be timed.

Code Reset: On if output should stop timing upon code entry; off if output should follow timer.

Invert: On if output should be inverted.

Output Partitions: Is used to select the partition(s) the event must occur within before the output will activate.

Open Schedule: On if output should only activate between the opening and closing time.

Close Schedule: On if output should only activate between the closing and opening time**.**

Schedule Times: Sets the Opening / Closing hours and minutes (24 hour format) and the days of the week the event must occur in before the output will activate.

Output Schedule Days: Is used to select the days the event must occur within before the output will activate.

IP Reporting

Serial Number: This is the serial number for the NX-595E. This field is not editable.

Use PSTN for Failover: If IP reporting fails, switch to the alarm panel dialer for backup communication path (only valid when PSTN line is connected).

Note: In order to prevent dual reporting (IP and PSTN) when selecting the Use PSTN for Failover option, it will be necessary to change the panel configuration. This is accomplished by programming Location 4, segments 1 and 2 in the NetworX panel for Phone 1 Events Reported. Disable options 1-6 and 8 (option 7 must remain on) for Segment 1. Disable all options (1-8) for Location 4, Segment 2 also. If using phone 2 and 3 (locations 10 and 16) respectively, disable the corresponding options for segments 1 and 2 as described above.

Receiver Selectors: Select the events you want to report to the IP receiver.

Receiver Format: This is the signal format for the central monitoring station.

Receiver 1 Format:

disabled ▾
disabled
UltraSync
OH CID IP format
OH SIA IP format
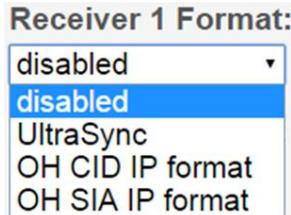
There are four options when selecting the receiver format, disabled, UltraSync, OH CID IP format and OH SIA IP format.

Disabled: IP Event reporting to the monitoring station is disabled, PSTN reporting is used. UltraSync capabilities are still available to the installer and end users.

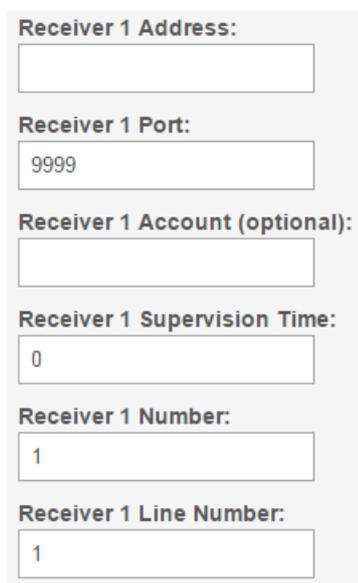**UltraSync:** When the UltraSync format is selected, reporting to the monitoring station is routed through the UltraSync cloud infrastructure. Once the NX-595E is installed and a connection is made to the Internet, the NX-595E must be provisioned in the UltraSync Portal before event reporting will be routed to the monitoring station. Integration of network routers in the monitoring station is required. Contact your Interlogix account representative or monitoring station for more details.

OH CID and SIA IP format: If your monitoring station already supports Osborne Hoffman (OH) NetRec software, the NX-595E can report immediately without any further integration. Select the appropriate format (CID or SIA) that is supported in the monitoring station. You will be presented with the following configuration options:

Receiver 1 Address:

Receiver 1 Port:

9999

Receiver 1 Account (optional):

Receiver 1 Supervision Time:

0

Receiver 1 Number:

1

Receiver 1 Line Number:

1

Receiver Address: The IP address of the Osborne Hoffman receiver.

Receiver Port: The port number of the Osborne Hoffman receiver.

Receiver Account (optional): This field accepts up to 6 Hex digits. If this field is programmed, all events sent to the receiver will use this account code. If this field is left blank, the 595E will use the account code that is programmed into the NetworX panel when reporting events. This field in generally used when PSTN for failover reporting is enabled and is used to differentiate event delivery via IP or PSTN.

Receiver Supervision Time: The desired time interval in seconds that the supervision heartbeat is sent to the receiver. A value of 0 disables supervision.

Receiver Number: The receiver number provided by the monitoring station.

Receiver Line Number: The receiver line number provided by the monitoring station.

Users

Note: The User configuration menu is only accessible when logged in as a Master User. The default username (Name) is "User 1". You must use the Master PIN that is programmed into the NetworX panel to access this menu.

Important: It is strongly recommended that you have the security panel owner change the default Name (User 1) for the Master User of the system at the time of installation.

Additional users on the NetworX panel must be assigned a name on this page to permit them access to the UltraSync application. By default User 1 is the only user that is pre-assigned a user name in the NX-595E.

PIN codes can also be changed or added from this page.

PIN codes are generally four digits in length, but can be configured to be six digits in length if this level of security is required. Refer to the NetworX panel installation manual for additional information.

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 NetworX installation manual)

• **Master** – allows this user to create, delete or modify users. 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.

Note: The "User 1" user name is programmed into the NX-595E by default for User 1 in the NetworX panel. A user name must be created for all other users if they are to have access to the panel via the UltraSync application. The Master user/User 1 should change their user name to something more user friendly after they log in.

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

Partition Removal via Panel Programming

Note: NetworX panel default configuration has all zones assigned to partition 1. The result of this default configuration is the GUI and UltraSync application displays all of these zones to the end user, even if they are not installed in the panel. It is recommended practice to "remove" unused zones from the NetworX panel. This is accomplished by removing the partition assignment from all unused zones. To accomplish this task, you will have to access the panel via the keypad. Deselect partition 1 for zones that are not installed in the panel. Access device 0, Location 26-36 (even locations only) to accomplish this task. See the table below for more information.

Zone Partition Assignment

Device	Zones	Location	Segment	Action
	1-8	26	1-8	
	9-16	28	1-8	
0	17-24	30	1-8	Deselect all partitions from each
	25-32	32	1-8	segment if zone is not installed in the panel
	33-40	34	1-8	
	41-48	36	1-8	

Example, Zone 26 would be programmed with Location 32, Segment 2.

Configuring the NX-595E with the UltraSync application

The configuration procedure with the UltraSync application is identical to the procedure described above for a web browser. Follow the instructions below to install and configure the UltraSync application.

Access via an iOS or Android Application

The NX-595E can also be accessed from a dedicated application. This application is available to download from the Apple App Store™ or Google Play™ store. Carrier charges may apply and an iTunes® or Google account is required.

All functionality available from the web server is available within the application.

1) On your smart device, go to the Apple App Store or Google Play store.

2) Search for **UltraSync.**

3) Install the UltraSync application.

4) Launch the UltraSync application.

5) Click + in the upper right corner of the screen to add a new site location.

6) Enter the details of the security system:

   • **Site Name:** Enter a unique name for the site.

   • **Description:** Enter a description for the site.

   • **Serial Number:** Enter the serial number of the NX-595E. This is a 12 digit number.

   • **Passcode:** Enter the Web Access Passcode that was programmed into the NX-595E. This is an eight digit numerical code.

   • **User Name:** Enter the username of the individual.

   • **PIN:** You can elect to remember the PIN or not. If you turn Remember PIN on, you can enter the individual's PIN into the application and the application will launch automatically without requiring the user to enter their PIN.

7) Select the Add Site button to save.

8) Click the name of the Site, the app will now connect you to the NX-595E.

Troubleshooting

- NX-595E may not work on a 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.

- Check that other devices on the same network can connect to the internet, if they are working then confirm all access codes are correct (serial number, Web Access Passcode, username and PIN)

FAQ - Frequently Asked Questions

1. What if I cannot connect to NX-595E with my computer?

   a. Check that the router has DHCP enabled. .

   b. Check that an IP address has been allocated in Location 21 of the NX-595E via the keypad. If it is 0.0.0.0 then DHCP is not working correctly. You may have to assign the NX-595E a static IP address in Location 21 if the network router does not have DHCP enabled. Make sure that the router is on the same subnet as your computer and that the IP address is not used by another device.

   c. While the NX-595E is in program mode: On a windows computer, click Run, type cmd to bring up a command line prompt. Type ping [ip address] then hit Enter. If there is an error you will see 100% packet loss or "Request timed out" responses, check your network and wiring and try again. If you see a "reply from" the IP address then your computer is communicating with the NX-595E.

2. I'm not receiving any emails

   a. Perform testing using a standard user PIN, the installer account by default does not send all reports.

   b. Check that the emails are not being captured in your SPAM folder or blocked by a firewall.

   c. Check that the email address is entered correct in Email Reporting settings (logged in as Master user).

   d. Check that the event is checked in Email Reporting settings (logged in as Master user).

   e. Check that you are receiving other emails.

   f. Check that the relevant reporting options are enabled in the panel programming.

   g. Try using the UltraSync app to verify your system is connecting to the servers.

Appendix 1 – Advanced Setup

This section contains advanced setup information that may be required depending on the network environment and feature utilization of the NX-595E.

Output Relay Setup

The NX-595E features two Single Pole Double Throw (SPDT) Form C relays that can be configured in 3 different modes to support different applications.
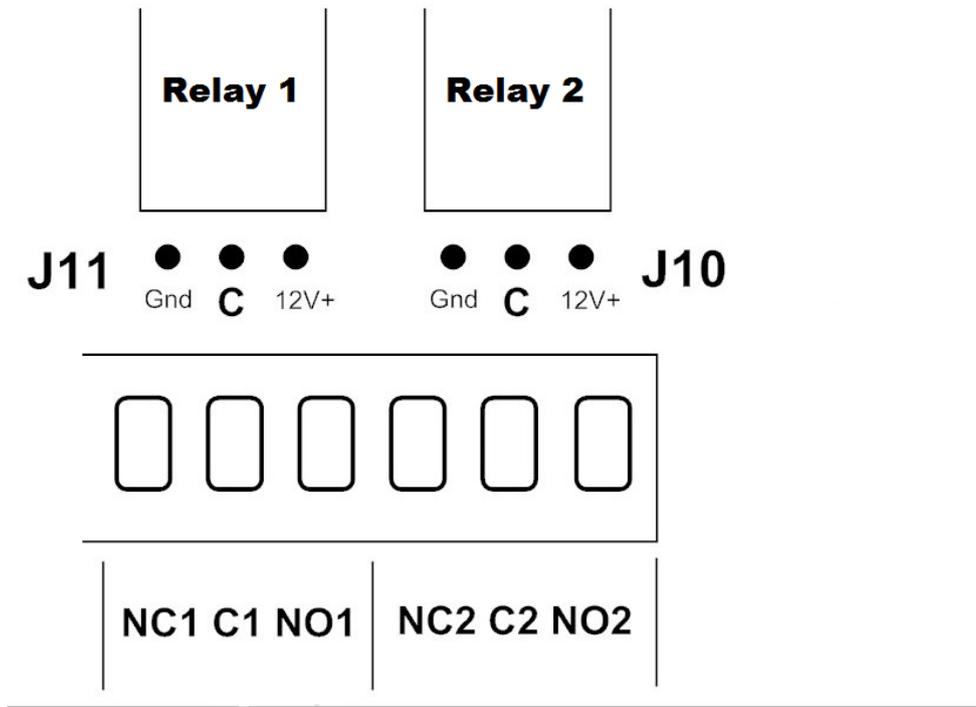
The relays are connected to the output terminals with Normally Open and Normally Closed connections for your convenience.

Use jumpers on J10 and J11 to select the mode suitable for your requirements.
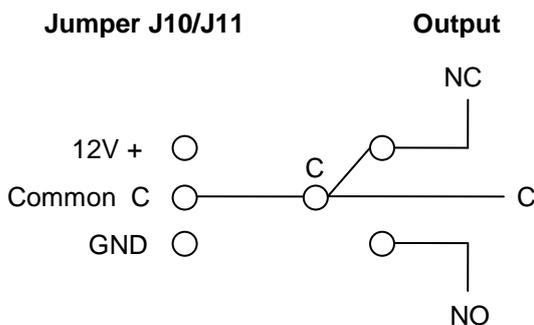
The NX-595E ships with no jumper installed. The Default relay position is in the NC (normally closed) position.

No Jumper (Dry Contact Switching)

Dry contact closure provided to output terminal. Maximum Load 30 VAC @ 1 A or 24 VDC @ 1 A. DO NOT exceed these ratings.

Jumper between GND and C (Negative Switching)

Bus Ground provided to output terminal @ typical 0V. Do not exceed relay rating which is maximum load 30 VAC @ 1 A or 24 VDC @ 1 A.

Jumper between C and 12 V + (Positive Switching)

Bus Voltage provided to output terminal @ typical 12-13 VDC. Maximum Load @ 12 V is total panel current; this includes all connected keypads and expansion modules. Consult your panel's specifications for maximum current rating. Do not exceed relay current rating of 1A.

Caution: Do not exceed the Maximum Load ratings above for the relay configuration. Exceeding the maximum rating could result in possible damage to the product.

WARNING: DO NOT CONNECT MAINS VOLTAGE TO THE NX-595E. DOING SO COULD DAMAGE THE MODULE OR NETWORX PANEL AND POSE AN ELECTRICAL HAZARD THAT COULD RESULT IN A FIRE OR CAUSE SERIOUS ELECTRICAL SHOCK OR LOSS OF LIFE.

Current Limit Caution: Check the current requirements of your load before connecting! There is no overcurrent protection on the relays when providing bus ground or bus voltage (jumper between GND and C, or C and 12 V +). You must ensure your load does not exceed the recommended limits above. Exceeding limits can damage the module. NetworX panels do have overcurrent protection on the bus and may disconnect the bus to provide temporary protection. If enabled, your panel will report "Overcurrent Fault" or "Expander Overcurrent". Repeated overcurrent conditions can result in permanent damage to the panel or connected devices.

Advanced Network Setup

If the IP address is empty (Location 21, Segment 1 will be 0 in the NetworX panel), then you will have to manually program the network settings into the NX-595E. This is an unlikely scenario as most routers are configured to automatically assign network settings with DHCP. Before you manually configure the NX-595E, verify with the network administrator or home owner that they have disabled DCHP in the router. You will need the following settings from the network administrator or home owner if they have DHCP disabled:

- IP Address: ____.____.____.____
- Gateway: ____.____.____.____
- Subnet Mask: ____.____.____.____
- Primary DNS (if applicable): ____.____.____.____
- Secondary DNS (if applicable): ____.____.____.____

You must enter these settings via the NetworX keypad. Enter program mode on the keypad and enter device address 191.

Step 1: Turn off DHCP.

1. Enter location 19.
2. Disable option 1.

Step 2: Manually enter network settings.

1. Enter location 20 (Gateway IP address).
    a. There are four segments associated with the Gateway IP address (Router IP address). Example address is shown below:
        i. Segment 1: 192
        ii. Segment 2: 168
        iii. Segment 3: 1
        iv. Segment 4: 1
2. Enter location 21 (IP address).
    a. There are four segments associated with the IP address (NX-595E IP address). Example address is shown below:
        i. Segment 1: 192
        ii. Segment 2: 168
        iii. Segment 3: 1
        iv. Segment 4: 100
3. Enter location 22 (Subnet Mask).
    a. There are four segments associated with the Subnet Mask. Example Subnet Mask is shown below:
        i. Segment 1: 255
        ii. Segment 2: 255
        iii. Segment 3: 255
        iv. Segment 4: 0
4. Enter location 23 (DNS Server 1).
    a. There are four segments associated with the DNS Server. Example DNS Server is shown below:
        i. Segment 1: 192

ii. Segment 2: 168

iii. Segment 3: 1

iv. Segment 4: 1

5. Enter location 24 (DNS Server 2).

a. Follow the same steps as setup for DNS Server 1.

Configuring the NX-595E with the NetworX panel keypad - Worksheets

Location 0: Reserved

Location 1:

Segment 1:

Option 1: Zone Doubling: When enabled, this feature will allow the two onboard zones to double to four zones. Please refer to feature 18 for starting zone number. If this feature is unselected, both onboard zones remain as single end of line zones and require 3.3K resistors. When Zone doubling is enabled, Lower zones = 3.7K, Higher zones = 6.9K (not available on NX-4 panels).

Options 2-8: Reserved

Segment 2-3: Reserved

Location 2-17: Reserved

Location 18: Zone Starting Number:

Location 18 is used to enter the starting zone number of the additional zones on the NX-595E. The two zones can also be zone doubled, please refer to feature 1 to enable the zone doubling feature. 0 = Disabled.

Data		Zones	Data		Zones	Data		Zones	Data		Zones
9	=	9 - 12	41	=	41 - 44	73	=	73 - 76	105	=	105 -108
17	=	17 - 20	49	=	49 - 52	81	=	81 - 84	113	=	113 - 116
25	=	25 - 28	57	=	57 - 60	89	=	89 - 92	121	=	121 - 124
33	=	33 - 36	65	=	65 - 68	97	=	97 - 100			

Location 19 - IP Feature Options

Location 19 is used to set required network settings.

Segment 1:

Option 1: Enable DHCP: When enabled, the NX-595E will automatically receive its IP address from the network router. If this Option is disabled, the NX-595E will need to have its IP address set manually. It is recommended that this Option be enabled.

Option 2: Reserved

Option 3: Enable Web Update: When enabled, allows updating of the NX-595E Configuration Server's web pages via FTP. Normally disabled.

Option 4: Enable Ping: The "Ping" command is always functional while the NX-595E is in program mode. Disable this option to allow the NX-595E to ignore "ping" commands in normal

operation. For security reasons it is recommended this option be disabled.

Option 5: Enable NTP Server Time Updates: The NX-595E will check its internal clock and use the internet to compare it against GMT time. This is done every 15min and will update itself if the variance is greater than 3 minutes.

Option 6: When enabled an installer will automatically have access to Feature Setup, Network settings, Output settings and IP reporting via the NX-595E's web pages. Otherwise the NX-595E will need to be in program mode to access these additional features. By default this is on.

Option 7: Enable DLX900 Server: Allows remote configuration using DLX900 software. Disable to prevent DLX900 connections to the NX-595E. Enabled by default and for the first 5 minutes after power up. Note this option does not prevent DLX900 connections to the panel via PSTN, disable this in panel programming if required.

Option 8: Enable Web Access: When enabled, email and IP reporting will function. If the Web Access Passcode is set to a non-zero value, email and IP reporting will function.

Segment 2: Reserved

Location 20 - IP Gateway

The 4 segments in Location 20 are used to view or set the IP address of the network gateway. If you have disabled DHCP, you must manually set the IP address of the NX-595E

In homes, the gateway is usually the Internet Service Provider (ISP) device that connects the user to the internet, such as a DSL or cable modem.

In an enterprise system, the gateway is the node that routes the traffic from a workstation to another network segment. The default gateway is commonly the node connecting the internal networks and the outside network (Internet).

Segments 1 - 4				

Location 21 - NX-595E IP Address

The 4 segments in Location 21 are used to view or set the IP address of the NX-595E.

Segments 1 - 4				

Location 22 - Subnet Mask

The 4 segments in Location 22 are used to view or set the Subnet mask.

Segments 1 - 4				

Location 23 - DNS Server 1

The 4 segments in Location 23 are used to view or set the networks DNS server address.

Segments 1 - 4				

Location 24 - DNS Server 2

The 4 segments in Location 24 are used to view or set the networks DNS server address.

Segments 1 - 4				

Location 25 - Reserved

Segments 1 - 4				

Location 26 - Reserved

Segments 1 - 4				

UltraSync System Status Messages

The following system status messages may appear in the UltraSync application.

Zone Number / Zone Name

In alarm – This zone has triggered a system alarm condition

Is bypassed – This zone is isolated (disabled) and will not activate an alarm

Chime is set – This zone is part of the chime group

Is not secure – This zone is not closed

Fire alarm – This zone has triggered a fire alarm

Tamper – This zone has triggered a tamper alarm

Trouble fault – This zone has an open circuit

Loss of wireless supervision – This zone is a wireless device and has lost its communication link with the control panel

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

Partition Number / Partition Name

Is on in the away mode – This partition is armed in the away mode

Is on in the stay mode – This partition is armed in the stay mode

Is ready – This partition is secure and ready to be armed

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

All partitions are on in the away mode – All partitions in this multi partition system are armed in the away mode

All partitions are on in the stay mode – All partitions in this multi partition system are armed in the stay mode

All partitions are ready – All partitions in this multi partition system are secure and ready to be armed

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 phone line

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

Specifications

Compatibility	Interlogix™ NetworX V2 control panels (NX-4, NX-6, NX-8, NX-8E)
Operating Voltage	12 VDC, supplied from control panel
Current Draw	250 mA nominal, 320 mA (both relays energized)
Maximum Relay Current	1 A (per relay)
Maximum Relay Voltage	24 VDC, 30 VAC
Operating Temperature	32°F~120°F (0°C~49°C)
Storage Temperature	-30°F~120°F (-34°C~49°C)
Maximum Humidity	90% relative humidity non-condensing
Dimensions	3.2 x 6.0 in. (81 x 152mm)

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