

GE Security

NX-10 series



GE imagination at work

NX-10 from GE Security

1. Overview
2. Control Panel
3. User Interface
4. Expansion Modules
5. Wireless Components
6. Communication
7. Reporting
8. PremisesConnect™



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Overview

1



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NetworX Series – at a glance

- > 4-192 **Hybrid** Panel range with integrated dialler
- > Full range of **wireless 868/433** components
- > Same **programming philosophy** across range
- > 30 zone types allowing **tailored** installation
- > **Connectivity** for PSTN/GSM/ IP/GPRS networks
- > **Modular** philosophy; easy add - on for expandability
- > New Remote Control via Home Portal **PremisesConnect**



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NX-10 Security System

Panel

- NetworkX Family Member
- 2 supervised on-board zones
- 3 outputs on-board (2 relay and BELL)
- 4 partitions
- Up to 48 zones
- 512 events log
- EN50131 - Grade 2

Communication

- On-board PSTN dialer
- On-board GSM/GPRS optional
- IP Module available

Wireless

- Dual Transceiver / Frequency
- True wireless LCD Keypad
- True wireless sirens (In- & Outdoor)
- EN50131-5-3

Expandable

- Compatible with current NX expanders
- User Interface / Installer Interface
- Menu and Location-driven Keypad
- Proximity reader
- Video Verification Module (VMIQ)
- Web Access through Broadband (PremisesConnect)



Control Panel

2



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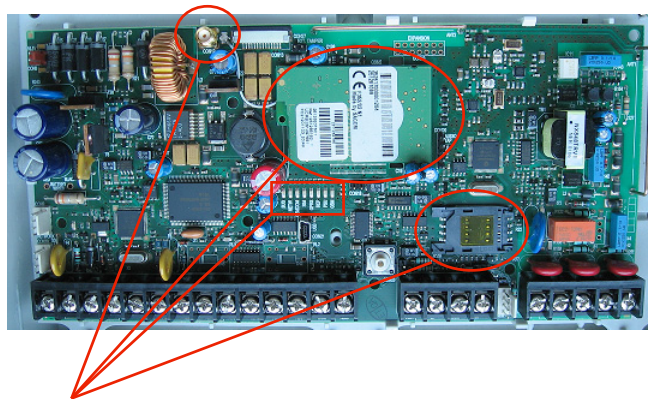
NX-10 Control Panel

- ⇒ Available in different versions :
 - NX-10-EUR : Compact polycarbonate housing w/o GSM/GPRS
 - NX-10-LB-EUR : Large polycarbonate housing w/o GSM/GPRS
 - NX-10-GSM-EUR : Compact polycarbonate housing with GSM/GPRS
 - NX-10-GSM-LB-EUR : Large polycarbonate housing with GSM/GPRS
- ⇒ 48 Wireless Zones out-of-the-box
- ⇒ 2 Supervised inputs on-board
- ⇒ 3 outputs on-board (2 relays and BELL output)
- ⇒ 4 Partitions
- ⇒ 99 user codes (4 digits) or 66 user codes (6 digits)
- ⇒ Maximum 4 Wireless keypads
- ⇒ Maximum 8 keypads per partition



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NX-10 Control Panel

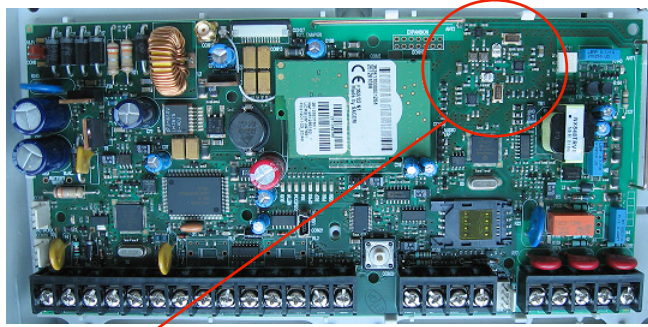


GSM/GPRS Module on-board



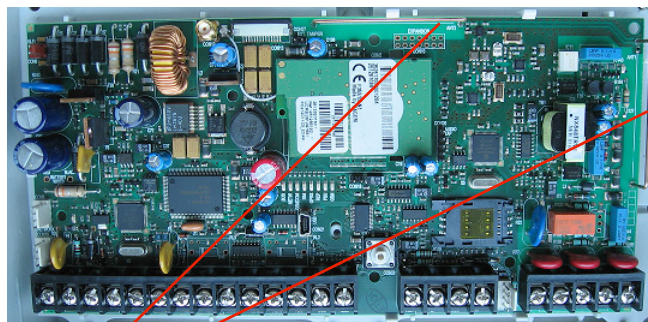
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NX-10 Control Panel



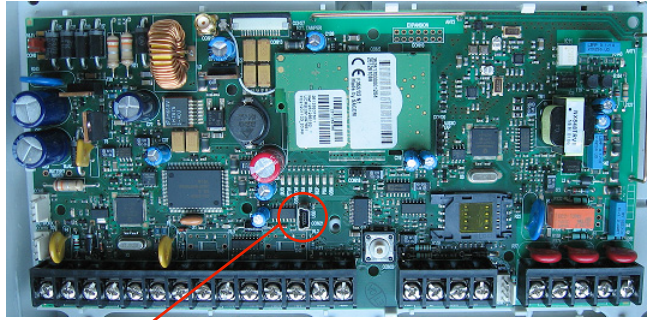
Dual transceiver 868MHz

NX-10 Control Panel



Auto diversity with 2 antennas, cross switched

NX-10 Control Panel

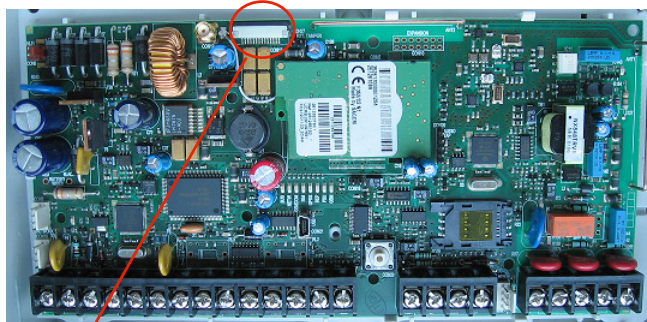


On-board USB port for flash upgrade of any panel component (Main Processor, GSM, Transceiver)



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NX-10 Control Panel

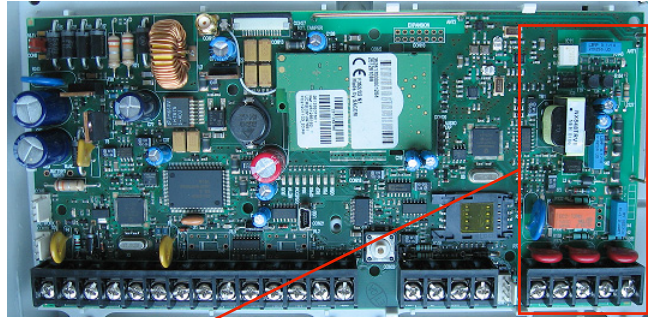


Feature Connector for Intelligent on-site verification module (VVMIQ)



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NX-10 Control Panel

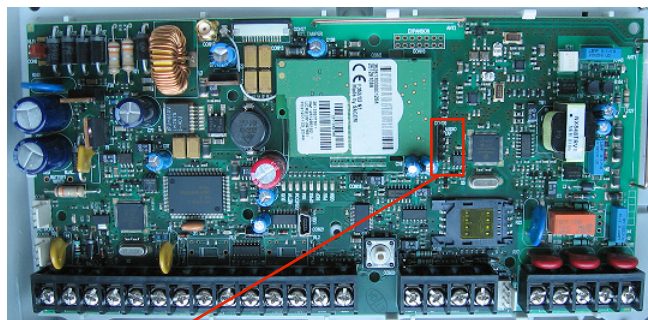


On-board PSTN dialer for backup reporting



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NX-10 Control Panel

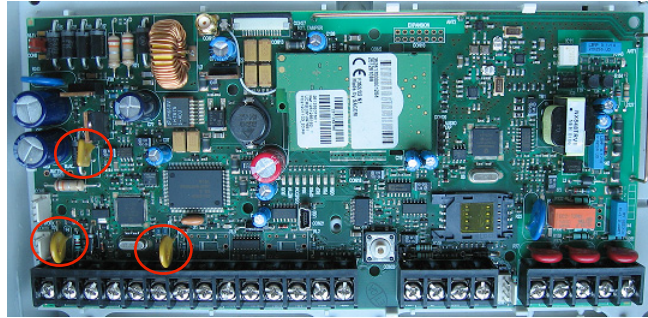


Audio tap connector for Listen-In or Voice Message Module



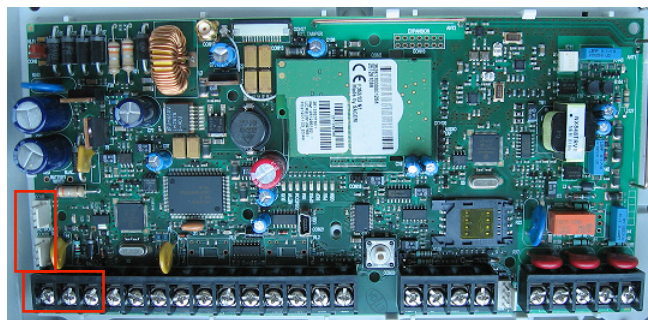
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NX-10 Control Panel



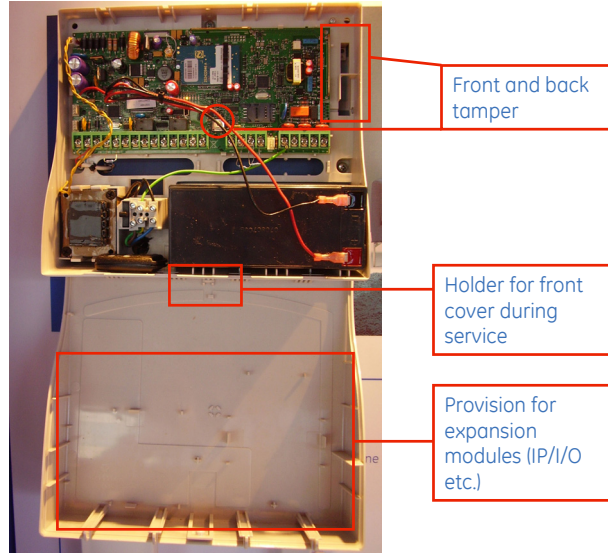
Polyfuses – Overcurrent protection with automatic reset

NX-10 Control Panel



Bus Interface connections

NX-10 Control Panel

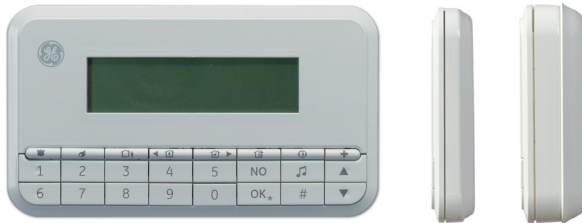


NX-1048

User Interfaces

3

NX-1048 series



- ⇒ Designer Housing
- ⇒ NX-1048-W : wired
- ⇒ NX-1048-R-W : 2 way wireless, always ON
- ⇒ Menu and Location Programming
- ⇒ 2 Line 16 Large Character LCD
- ⇒ 1 Line Icon information display
- ⇒ Replaceable keycaps for emergency, police or Medical Buttons



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NX-1048-R-W



- ⇒ Independent Backlight Battery set
- ⇒ 6 "AA" Batteries, Lifetime 3 Years
- ⇒ Operational Batteries protected with Tamper switch and Screws



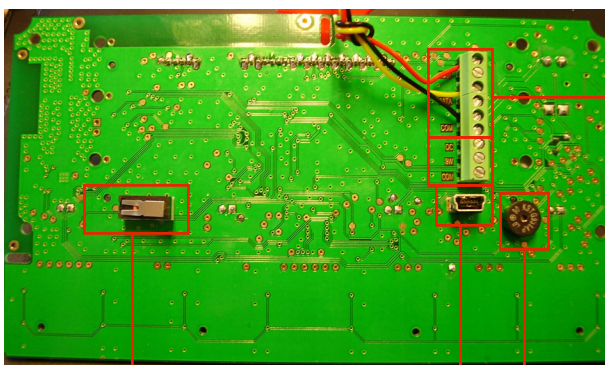
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NX-1048-R-W



⇒ Level Glas in mounting bracket

NX-1048 series



Connector Block
2 x BUS

Tamper Switch

USB Upgrade

Buzzer

No codes, no keys NX-17xx series Proximity Reader



- ⇒ Up to 15 proximity readers can be installed per panel
- ⇒ "Single", "Double" and "Single Hold" badge mode
- ⇒ Includes low current output, which can be used to control a door strike relay
- ⇒ LED can be programmed to follow the output and/or status of the system
- ⇒ Buzzer on reader can follow buzzer on keypad, ding-dong chime
- ⇒ Optical tamper switch
- ⇒ Suitable for outdoor applications



- ⇒ Elegant design
- ⇒ Service indication and system status
- ⇒ 8 zones status LEDs for open zones, alarm, tamper and bypass
- ⇒ Single beep, double beep and triple beep scan functions
- ⇒ Tamper and pry-off protection
- ⇒ Removable terminal block for easy wiring
- ⇒ 1Amp/24Vdc on-board relay output with normally closed/normally open state
- ⇒ Designed for indoor usage



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NX-10

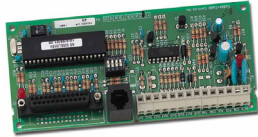
Expansion Modules

4

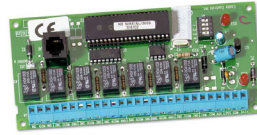


Expansion Modules

NX-507E/508E Output expanders



- ⇒ 8 open collectors max. 100 mA
- ⇒ Distributed configuration, can be mounted up to 800 m from the control panel
- ⇒ X-10 compatible
- ⇒ Parallel printer output
- ⇒ Box tamper input
- ⇒ Separate auxiliary power supervision
- ⇒ Auxiliary power output of 100 mA
- ⇒ 8 programmable schedules



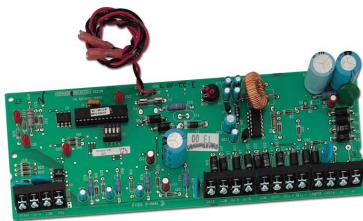
- ⇒ 7 programmable relay outputs and 1 open collector
- ⇒ Distributed configuration, can be mounted up to 800 m from the control panel
- ⇒ X-10 compatible
- ⇒ Box tamper input
- ⇒ Separate auxiliary power supervision
- ⇒ Auxiliary power output of 100 mA
- ⇒ 8 programmable schedules



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Expansion Modules

NX-320-I Smart Power supply



- ⇒ 2 amp continuous power supply
- ⇒ Remotely locatable, can be mounted up to 800 m from the control panel
- ⇒ Extends the bus range with 800 m up to 1600 m
- ⇒ Two stage battery charging
- ⇒ Low battery disconnect
- ⇒ Isolation and buffering of data bus
- ⇒ Three 1.5 amp switched outputs
- ⇒ 2.0 amp fully supervised bell outputs
- ⇒ All outputs short circuit protected
- ⇒ Box tamper input



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NX-10

Wireless Components

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Detector Range 868MHz AM



TX-2211-03-1

PIR Motion Sensor with mirror optics



TX-1011-03-1



TX-1211-03-1



Door/Window Sensor
⇒ Slim line & Long life version
⇒ Supervised external loop to connect hardwired contacts
⇒ Protection against reverse polarity of battery
⇒ LL DWS up to 5 years battery life (2 x CR123A Batteries)



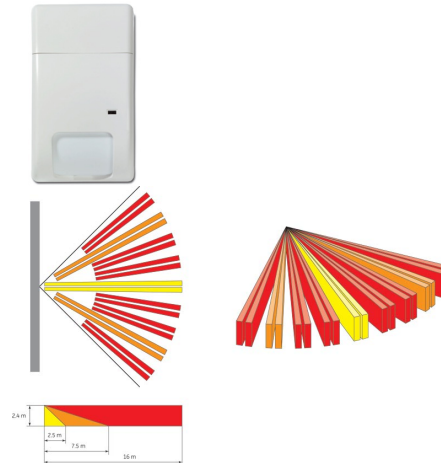
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Detector Range 868MHz AM Mirror Optics PIR

- ⇒ 9 curtains of 16 m
- ⇒ Learn-Mode Technology
- ⇒ Complies with EN50131-5-3
- ⇒ 3 Years Battery life
- ⇒ 1 x CR123A Battery
- ⇒ Step & Gliding Focus Multi Curtain" mirror optic
- ⇒ ASIC with "4D" processing
- ⇒ Additional Bi-curtain processing for harsh environment
- ⇒ No adjustment required for different mounting heights



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Detector Range 868MHz AM



TX-6211-03-1
Optical Smoke and Heat



TX-2411-03-1
Dual Motion Sensor (PIR and MW)



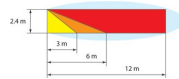
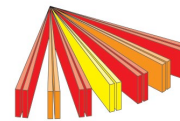
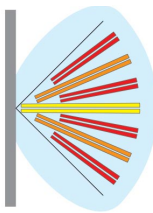
TX-4131-03-2
4 Button Keyfob



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Detector Range 868MHz AM Dual PIR/MW

- ⇒ Learn-Mode Technology
- ⇒ Complies with EN50131-5-3
- ⇒ 3 Years Battery life
- ⇒ Supervised external Loop to connect hardwired contacts
- ⇒ Protection against reverse polarity of battery
- ⇒ 1 x CR123A Battery
- ⇒ 12m RF dual motion sensor
- ⇒ Maximum coverage of human target with no IR signal loss
- ⇒ Tolerate wall angle deviation and different mounting height without any adjustment
- ⇒ Higher immunity to non-professional RF devices using C-band uW
- ⇒ Much lower chance for nuisance alarm by precise detection pattern (RCR) uW circuit, which ignores false alarm sources
- ⇒ Easy installation and service by having batteries in the back of the base
- ⇒ Works with one, two or three batteries



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Siren Range 868MHz FM

- ⇒ 2-way wireless
- ⇒ Low battery Supervision
- ⇒ Wireless I/O used as driver
- ⇒ Separate Siren / Transceiver Battery packs
- ⇒ Tamper switch
- ⇒ 3 Years Battery life



TX-7001-05-1
Indoor Siren



TX-7201-05-1
Outdoor Siren



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NX-10

Communication

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Communication NX-590E IP Gateway (optional)

Alarm Reporting via TCP/IP
(Broadband)
Provide split, dual & back-up reporting
Works with a fixed IP address/DHCP
Encrypted messages (3-DES)
Supervised connection
PremisesConnect™



Economical reporting in absence of
PSTN
Flexible reporting
Suitable for Home Networks
Safe, secure messaging
Assures system integrity
System access via internet



- ⇒ Alarm reporting to Osborne-Hoffman Network receiver (OH-NetRec)
- ⇒ Up to 10,000 accounts per receiver
- ⇒ Uses SIA or Contact ID
- ⇒ User selectable supervision window



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Communication GSM/GPRS

GSM/GPRS can provide back-up reporting for PSTN



PSTN can provide back-up reporting for GSM/GPRS

Provides subscription bundling opportunities

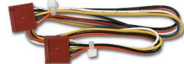


- ⇒ On-board availability
- ⇒ Reporting via GSM audio channel (protocols supported by panel)
- ⇒ Contact ID and/or SIA reporting using TCP/IP over GPRS
- ⇒ Four programmable report destinations
- ⇒ Wireless upload/download via GSM data channel or GPRS
- ⇒ SIA and Contact ID reporting formats via SMS
- ⇒ Plain text SMS messaging
- ⇒ End-User SMS Control

Communication NX-534E Listen-In Module



NX-534



3510

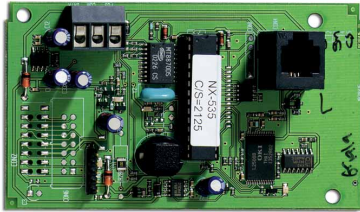


3520

- ⇒ line hold or call back mode
- ⇒ call-in mode
- ⇒ listen-in and talk mode
- ⇒ speaker lockout when a duress signal is sent to central station
- ⇒ 2 microphone inputs, separately selectable for the connection of max. 4 microphones
- ⇒ 1 speaker output

Communication

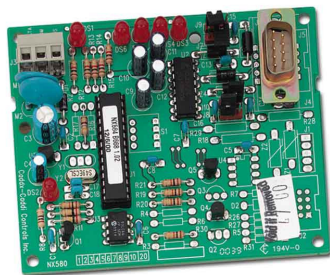
NX-535 Voice Message Module



- ⇒ Introduction and Address messages of 20 seconds each
- ⇒ Up to 15 voice messages of 7.5 seconds
- ⇒ Kiss-off message
- ⇒ Easy to record with any normal handset
- ⇒ Supports DTMF

Communication

NX-584 Home Automation Module



- ⇒ Several programmable security levels determine how much information is passed to the host system
- ⇒ Possibility to limit the number of commands accepted from the host system
- ⇒ Easily configurable for communication in ASCII or Binary protocol
- ⇒ Selectable baud rate
- ⇒ Fast response because information of selectable events/conditions is sent to host without polling

NX-10

Reporting & Downloader

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GE imagination at work

Up/Downloading – DL900

The screenshot shows the DL900 Download Software interface. The title bar reads "DL900 Download Software - 123456". The menu bar includes "Program", "View", "Control Panel", "Expanders", "Back-up", "Download", "Tools", "Wizards", and "Help". The toolbar contains various icons for file operations and help. The main window is titled "Customer - 123456" and contains several input fields and buttons. The "Name" field is set to "Customer" and has a "Goto..." button and a "Save" button. The "Address" field is empty. The "City" field is empty. The "Account number" field is set to "123456" and has a "Goto..." button. The "Panel" dropdown menu is set to "NX-8 V2". The "Contact phone" field is empty and has a "Goto..." button. The "Panel phone" field is empty and has a "Goto..." button. There is a "Delete" button. Below these fields is an "Additional items <<" button. The "Contact phone 2" field is empty and has a "Password (keyword)" field next to it. The "Contact phone 3" field is empty. The "Installation date" dropdown menu is set to "4/ 4/2007". The "Contact phone 4/TCP/IP" field is set to "10.0.0.48" and has a "Goto..." button. The "Last diagnostic date" field is set to "4/30/2007 11:06:51 AM". The "Contact phone 5/GSM" field is empty. The "Branch office" field is empty. The "Central station phone" field is empty. Below these fields is a "Recent accessed information" table with three rows. Each row has a date and time, a "Downloaded" checkbox, and a "None" button.

Date/Time	Downloaded	Action
4/30/2007 11:05:30 AM	<input checked="" type="checkbox"/>	None
4/25/2007 12:08:11 PM	<input checked="" type="checkbox"/>	None
4/25/2007 12:01:43 PM	<input checked="" type="checkbox"/>	None

- ⇒ Easy to install and configure
- ⇒ Upload/download via PSTN modem, TCP/IP or RS-232 serial connection
- ⇒ Unattended upload/download
- ⇒ Multiple levels of authorities for users
- ⇒ Copy settings for panels, keypads and modules
- ⇒ Remote Interactive keypad mode
- ⇒ Load and save configurations
- ⇒ Allows up to 10 default configurations



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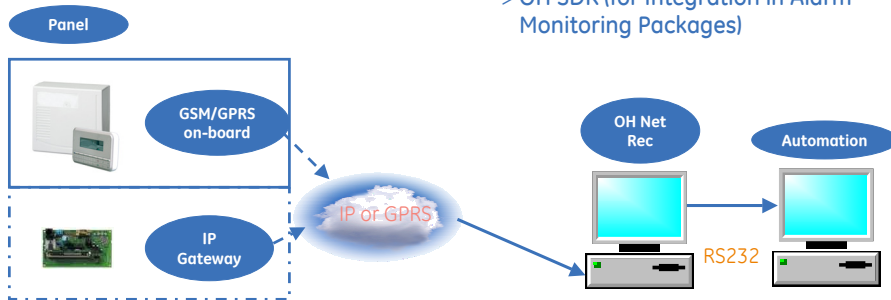
'Alarm over IP'

NX-10 Security Panel with on-board GSM/GPRS Module or optional IP Module or both for backup reporting

IP Receiver (PC Based) in combination with IP Transmitter, based on GE Security Proprietary IP Protocol

Receiver End

- > OH Net Rec (Net Receiving Software) installed on PC Platform
- > OH SDK (for Integration in Alarm Monitoring Packages)



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NX-10

Premises Connect
Customer Portal
& Remote Interaction
with the Panel



PremisesConnect

- Panel
- X-10 Home Control
- IP/WiFi Cameras



Panel connected to the internet (ex. Via ADSL) Dynamic matching of external IP Address

--- Virtual Dataflow
 — Network Connection

Panel communication is encrypted, but port 80 (http) is used.



GE Server farm which delivers the user interface & Data of the panel the panel.

Servers are located in a Datacenter and setup for load- balancing and failover

https secured



Consumers can control their system via the internet with their Internet browser 24/7 & receive event notifications via e-mail

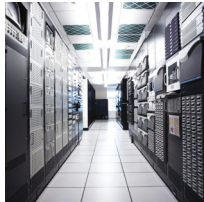


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Messaging & Information



--- Virtual Dataflow
 — Network Connection



- Deliver automatically 24/7 :
- Actual status of the system
 - Infinite Panel history log
 - Get notification emails on selected events



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GE Security PremisesConnect

Welcome Back
 Jerry Fisher!
 6:40 PM Wednesday
 No new messages

High: 35 °F
 Low: 15 °F
 Scattered snow showers in... More

Home & Control | Cameras | Home Control | Reports | Family Center | Configuration | Service | Applications | Help | Logout

System Information

Part1	Part2	Part3	Part4
Part5	Part6	Part7	Part8

System Status

Family Calendar

- 3/20 8:00 AM Simpson Breakfast
- 3/20 2:30 PM Dentist Appt
- 3/20 6:30 PM Sarah's Recital
- 3/20 6:45 PM Dan at Karate
- 3/21 8:00 AM Pizza Party

[Go to Calendar](#)

Family Messages

- Kate Don't forget dry cleaning!
- Sarah Please pick up some tuna
- Sarah Mom, I'll be at Dave's ...
- Dave I'll be running late tonight.
- Dan I hope we're having spaghetti!

[Go to Message Board](#)

Event History

- 9:15 AM Panel Armed Stay
- 9:45 AM Panel Disarmed
- 10:06 AM Panic Alarm detected
- 12:40 PM Panel Armed
- 12:45 PM Light 1 switched
- 1:09 PM Panel Armed
- 4:01 PM Panel Disarmed
- 6:15 PM Panel Armed

[More events](#)

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NX-10

Appendix

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GE imagination at work

Variety of System components

Panels :

- NX-10-EUR : 48 Zone wireless panel in polycarbonate housing
- NX-10-LB-EUR : same as NX-10-EUR but large housing
- NX-10-GSM-EUR : 48 Zone wireless panel in polycarbonate housing with GSM/GPRS
- NX-10-GSM-LB-EUR : same as NX-10-GSM-EUR but large housing

User Interfaces

- NX-1048-W : Keypad with menu LCD, multilingual, white
- NX-1048-R-W : Keypad with menu LCD, multilingual, 868 GEN2, white
- NX-1701E : Proxreader
- NX-1750 : Proxpad

Communication

- NX-590E : IP communication for reporting/download and Premises Connect
- NX-535 : Voice reporting module in combination with PSTN / GSM
- NX-534 : 2 way listen in module and DTMF user interface
- NX-584 : Home automation module with RS232 output

Expanders

- NX-507 : Output expander with 7 relay outputs / X10 Interface
- NX-508 : Output expander with 8 open collector outputs/printer port/X10
- NX-320 : Smart power supply / bus repeater , also in housing
- NX-1710E : Single Door interface module with wiegand interface



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