GE Security

NetworX™ Series

NX-534E 2-way listen-in audio

Installation manual

CONTENTS

GENERAL INFORMATION

The NX-534E is a two-way audio (voice) communicator that may be added to new or existing NetworX control panels. Once the control panel has communicated an alarm, the NX-534E will allow a monitoring service operator the ability to monitor a customer's premise for "listen-in" purposes or basic two-way voice communication (half duplex). This procedure is controlled from the central station by use of a touch tone telephone (see "general operating instructions" and "control levels" on pages 4-5).

ORDERING INFORMATION

For detailed ordering information and part numbers, please refer to the SLC Distribution price list for the Caddx product range.

FEATURE DEFINITIONS

Anti-Lockup Tone

If enabled, a tone will be heard at the Central Station during a two-way session every few seconds (programmable). During this tone the NX-534E disables the microphones so that it can detect a keypress from the Central Station. This is useful in a noisy environment to prevent a loss of Central Station control. If this occurs, press and hold the [**1**] key to engage the "Talk" mode. (Location 3)

Callback Mode

If programmed for this mode, the NX-534E will start a timer when the control panel releases the line. (Location 0,Segment 1 and Location 3, Segment 3) During this time, the Central Station can call the premise and begin the two-way session by entering the callback access code (Location 1).

Call-In Mode

If programmed for this mode, the homeowner can call the premise and listen to the audible conditions within the home. The number of rings programmed in location 4, segment 4 instructs the NX-534E when to pick up the line. A zero "0" disables for this function. A master code is required within 20 seconds after pickup to operate this function.

Call-In Mode Answering Machine Defeat

If this feature is enabled, the NX-534-E will listen for 4 seconds for a master code after an answering machine or some other device has answered the premise telephone. The user will have 30 seconds to enter the code. Call-In must be enabled in Location 4, Segment 4. (Location 0, Segment 6)

High Gain and Low Gain Listen-in Mode

When Central Station selects one of these two modes, they can only Listen-in. "High Gain" Listen-in will generally be used in environments that produce very low noise. "Low Gain" Listen-in would be used in environments where background noise may distort the audio while they listen-in. (Location 4, Segments 1&2)

Line Hold Mode

If programmed for this mode, the NX-534E will seize the line immediately after the control panel releases the line. The two-way session will begin instantly or when the Line Hold digit is entered, if programmed. (Location 0, Segment 1, Location 2, and Location 3, Segment 1)

Speaker Lockout

If this feature is enabled and the NX8 / NX8-E reports a Duress, Silent Panic, or Holdup alarm, the NX-534E will not
allow the Central Station to turn the speaker on at the site.

GENERAL OPERATING INSTRUCTIONS

The system will operate in the following manner, regardless of how a two-way session is started.

- The session timer is started (see location 3)

- All microphones are on (see location 0)

- Low gain listen-in audio mode is selected (automatic)

- Level 0 command set is active (automatic)

Once programmed, the NX-534E will operate in one of two modes, which are programmable in location 0, segment 1: (1) LINE HOLD or (2) CALL BACK. The following explains how the NX-534E will operate in these two modes:

LINE HOLD MODE

1. An alarm is recognised.
2. The phone line is seized from the control panel and all premise phones.
3. The NX-534E sends a tone indicator to the central station (see "tones" on page 7).
4. If a line hold digit (location 2) has been programmed, the system will wait for the digit to be received before a two-way session is started. If the digit is not received before the time-out period (location 3, segment 1) then the system will return to the stand-by mode and wait for a new trip.
5. If the line hold digit is received or not programmed, the system will start a two-way session.

CALLBACK MODE

1. An alarm is recognised.
2. The phone line is seized from the control panel and all premise phones.
3. The NX-534E starts the callback window timer (see location 3, segment 3). If the time runs out before the number of rings has been reached, the system will return to the stand-by mode and wait for a new trip.
4. Waits to receive the callback, up to the selected number of minutes programmed in location 3, segment 3 for the first ring.
5. Sends a continuous indicator tone to the central station until the access digit is received, or the maximum number of attempts in location 3, segment 4 is exhausted. When a digit is received, the indicator tone is silenced.
6. Wait for the access digit (see location 1) to match. The reset (#) key may be used during pin entry to clear the PIN buffer. If the access digit does not match after a set number of attempts (see location 3, segment 4) the system will return to the stand-by mode and wait for a new trip. If the digit is validated, the system will silence the siren and start a two-way session.

CONTROL LEVELS

The following is a description of the levels and how they may be used. Levels of the modes may be changed at any time by pressing [*] followed by the level number you wish to access. If no key is pressed for three seconds, then the buffer is automatically cleared. You may press [*]-[0] to return to the beginning.

Note: levels 1, 2 and 4 are not supported. Any other attempt will revert to level 0.

	DIGIT	BASIC CONTROL LEVEL
LEVEL 0	0	Returns to the initial session settings when it is tripped. This includes the microphone selection and audio mode.
	1	High-gain talk to the premises and extends session time (= with time programmed in location 3, segment 5: factory default 90 seconds).
	3	High-gain listen-in from the premises and extends session time (= with time programmed in location 3, segment 5: factory default 90 seconds).
	2,4,5,7,8,9	Extends session time (= with time programmed in location 3, segment 5: factory default 90 seconds).
	6	Low-gain listen-in from the premises and extends session time (= with time programmed in location 3, segment 5: factory default 90 seconds).
	88	Terminates session and starts the call back mode.
	99	Terminates session and returns to the stand-by mode and waits for a new trip.

	DIGIT	MICROPHONE CONTROL (ZONING)
LEVEL 3	0	Returns to the initial session settings when it was tripped. This includes the microphone selection and audio mode.
	1	Turns microphone 1 on, microphone 2 off, and extends session time (= with time programmed in location 3, segment 5: factory default 90 seconds).
	2	Turns microphone 2 on, microphone 1 off and extends session time (= with time programmed in location 3, segment 5: factory default 90 seconds).
	3,4,5,7,8	Extends the session time (= with time programmed in location 3, segment 5: factory default 90 seconds).
	9	Turns both microphones on and extends the session time (= with time programmed in location 3, segment 5: factory default 90 seconds).

	DIGIT	OUTPUT/RELAY CONTROL LEVEL (NEG. - TURN OFF)
LEVEL 5	0	Returns to the initial session settings when it was tripped. This includes the microphone selection and audio mode.
	1-9	Turns the corresponding output/relay OFF. A negative confirmation tone (two low beeps) will be heard. Refer to tone chart.

	DIGIT	OUTPUT/RELAY CONTROL LEVEL (POS. - TURN ON)
LEVEL 6	0	Returns to the initial session settings when it was tripped. This includes the microphone selection and audio mode.
	1-9	Turns the corresponding output/relay ON. A positive tone will be heard.

	DIGIT	STATUS CHECK
LEVEL 7	0	Returns to the initial session settings when it was tripped. This includes the microphone selection and audio mode.
	1	"Armed" status: If partition 1 is armed, a positive tone will be heard. If disarmed, a negative tone will be heard.
	2	"Ready" status: If partition 1 is ready, a positive tone will be heard. If not ready, a negative tone will be heard.
	3	"Power" status: If AC and battery are good, a positive tone will be heard. If either AC or battery is bad, a negative tone will be heard.
	4-9	Extends the session time.

	DIGIT	ARMING/DISARMING PARTITION 1
LEVEL 8	0-9	Enter your PIN user code to arm or disarm the system. If partition 1 is armed, a positive tone will be heard. If partition 1 is disarmed, a negative tone will be heard.

REMARK:

If a new alarm in the *same partition* is activated during a two-way session, pressing a key during the time period programmed in location 3, segment 2 (default 20 seconds), can extend the session timer. If a new alarm trigger in a *different partition* is activated during a two-way session, the time will be reduced to 20 seconds, and cannot be extended.

TONES

Indicator tones may be heard at the central station during a two-way session. The definition of these indicator tones is as follows:

LOW = 400 Hz   **MID = 1000 Hz**   **HIGH = 1600 Hz**

TONE	DESCRIPTION
One high tone for 100 msec	Time remaining indicator "A"
One mid tone for 100 msec	Time remaining indicator "B"
One mid tone for 100 msec Off for 100 msec One high tone for 100 msec	New alarm alerts for same partition
One high tone for 100 msec Off for 100 msec One mid tone for 100 msec Off for 100 msec One high tone for 100 msec	New alarm alerts for different partition
Continuous on/off high tone every 100 msec, will stop after a digit is received	System waiting for access pin
One low tone for 200 msec (if enabled)	Anti lock-up
One mid tone for 500 msec	Acknowledgement to level change command
One mid tone for 250 msec Off for 250 msec One mid tone for 250 msec Off for 250 msec One mid tone for 250 msec	Error tone
One low tone for 100 msec	Relay / output turned ON, or Positive "status" response, or Partition 1 armed
One low tone for 100 msec Off for 200 msec One low tone for 100 msec	Relay / output turned OFF, or Negative "status" response, or Partition 1 disarmed

PROGRAMMING THE NX-534E AUDIO MODULE

Programming the NX-534E via the LED keypad

ENTERING THE PROGRAM MODE

To enter the program mode, press [*]-[8]. At this time, the five functions LED's (Stay, Chime, Exit, Bypass and Cancel) will begin to flash. Next, enter the "Go To Program Code" (factory default is [9]-[7]-[1]-[3]). If the "Go To Program Code" is valid, the "Service" LED will flash and the five function LED's will illuminate steady. You are now in the program mode and ready to select the module to program.

Note: it is impossible to enter program mode if any partition or the system is armed.

SELECTING THE MODULE TO PROGRAM

Since all modules connected to the NetworX are programmed through the keypad, the module you are programming should be the first entry. To program the NX-534E module, enter [6]-[4]-[#]. The [6]-[4] is the module number of the NX-534E and the [#] is the entry key.

PROGRAMMING A LOCATION

Once the number of the module to be programmed has been entered, the "Armed" LED will illuminate, indicating it is waiting for a programming location to be entered. Any location can be accessed by directly entering the desired programming location followed by the pound [#] key. If the location entered is a valid location, the "Armed" LED will extinguish, the "Ready" LED will illuminate, and the zone LED's will show the binary data for the first segment of this location. While entering new data, the "Ready" LED will begin flashing to indicate a data change in process. The flashing will continue until the new data is stored by pressing the [*] key. Upon pressing the [*] key, the keypad will advance to the next segment and display its data. This procedure is repeated until the last segment is reached. Pressing the [#] key will exit from this location and the "Armed" LED will illuminate again waiting for a new programming location to be entered. If the desired location is the next sequential location, press the [Police] key. If the previous location is desired press the [Fire] key. If the same location is desired press the [Medic] key. To review the data in a location, repeat the above procedure, pressing the [*] key without any numeric data entry. Each time the [*] key is pressed, the programming data of the next segment will be displayed for review.

EXITING A LOCATION

After the last segment of a location is programmed, pressing the [*] key will exit that location, turn the "Ready" LED off and the "Armed" LED on. As before, you are now ready to enter another programming location. If an attempt is made to program an invalid entry for a particular segment, the keypad sounder will emit a triple error beep (beep, beep, beep) and remain in that segment awaiting a valid entry.

EXITING THE PROGRAM MODE

When all the desired changes in programming have been made, it is time to exit the program mode. Pressing the [Exit] key will exit this programming level and then return to the "Select a Module to Program" level. If no additional modules are to be programmed, pressing the [Exit] key again will exit the program mode. If there is a module to be programmed, it may be selected by entering its address followed by the [#] key (see "Selecting the Module To Program" above). The procedure for programming these devices is the same as for the control panel, except the locations will be for the module selected.

Note: the timeout for the program mode is 15 minutes.

Programming the NX-534E via the LCD keypad

All steps required for programming are the same as the aforementioned LED keypad. The LCD keypad display will prompt you for the data required. While in the programming mode, and not in a location, the number in parenthesis is the location you were previously changing.

For example: if the display reads "Enter location, then # (5)", it is reminding you that location 5 was the last location you programmed. Refer also to "Programming Data" which follows.

Programming data

Programming data is always one of two types. One type of data is numerical, which can have values from 0-15 or 0-255 depending on the segment size. The other type of data, feature selection data, is used to turn features on or off. Use the following procedures with these two data types:

NUMERICAL DATA: Numerical data is programmed by using the numeric keys of the system keypad to enter a number from 0-255. To view the data in a location, a binary process is used. With this process, the LED's for zones 1 through 8 are utilized, and the numeric equivalents of their illuminated LED's are added together to determine the data in a programming location. The numeric equivalents of these LED's are as follows:

Zone 1 LED = 1	Zone 2 LED = 2	Zone 3 LED = 4	Zone 4 LED = 8
Zone 5 LED = 16	Zone 6 LED = 32	Zone 7 LED = 64	Zone 8 LED = 128

Example:

If the numerical data to be programmed in a location is "66", press [6] - [6] on the keypad. The LED's for zone 2 and zone 7 will become illuminated indicating 66 is in that location (2 + 64 = 66).

Once the data is programmed, press the [*] key to enter the data and advance to the next segment of that location. After the last segment of a location is programmed, pressing the [*] key will exit that location, turn the "Ready" LED off and the "Armed" LED on. As before, you are now ready to enter another programming location. If an attempt is made to program a number too large for a particular segment, the keypad sounder will emit a triple beep, indicating an error, and remain in that segment awaiting a valid entry.

Remark: on the LCD keypad, the number in the location will be displayed. For locations with a maximum of 15, the hexadecimal equivalent will be displayed in parenthesis. Example: 11 (B) or 14 (E).

FEATURE SELECTION DATA: Feature selection data will display the current condition (on or off) of eight features associated with the programming location and segment selected. Pressing a button on the keypad (1 through 8) that corresponds to the "feature number" within a segment will toggle (on/off) that feature. Pressing any numeric key between [1] and [8] for selection of a feature will make the corresponding LED illuminate (feature ON). Press the number again, and the LED will extinguish (feature OFF). You will see that numerous features can be selected from within one segment. For instance, if all eight features of a segment are desired, pressing [1] - [2] - [3] - [4] - [5] - [6] - [7] - [8] will turn on LED's 1 through 8 as you press the keys, indicating that those features are enabled.

LCD keypad users note: the numbers of the enabled features will be displayed. However, the features not enabled will display a hyphen (-).

After the desired setting of features is selected for this segment, press the [*] key. This will enter the data and automatically advance to the next segment of the location. When you are in the last segment of a location and press the [*] to enter the data, you will exit that location. This will now turn the "Ready" LED off and the "Armed" LED on. As before, you are now ready to enter another programming location.

PROGRAMMING THE LOCATIONS

LOCATION 0 - PROGRAMMING FEATURES (8 segments, numerical data)

Segment 1 - Line hold mode or callback mode (default = line hold mode)

This option determines if the NX-534E will operate in the line hold or callback mode when a listen-in trigger is received. If it is programmed "OFF", the NX-534E will not release the line after any communication, which causes a listen-in session to be triggered. The listen-in session will start immediately. If this option is programmed "ON", the NX-534E will release the line and wait for the central station to call it back before starting a listen-in session. Default is "OFF", line hold mode.

Segment 2 - Normal two-way or listen-in only (default = normal two-way)

This feature determines if the NX-534E will operate in the normal two-way mode or listen-in only mode. The listen-in only mode will allow the central station to listen to the activity at the premise. If this option is programmed "OFF", the NX-534E will function in the normal two-way mode, and allows the central station to communicate with the person(s) at the premise. The procedure is controlled from the central station by use of keypresses on a touch tone telephone. When an alarm occurs during a two-way session, the session timer is set (refer to location 3, segment 2). If this option is programmed "ON", the listen-in only mode will be functioning.

Segment 3 - Speaker lockout condition (default = off)

This feature is used to determine the speaker lockout condition. When this option is "OFF" the automatic speaker lockout is enabled. If this feature is "ON", the speaker lockout will be disabled (refer to feature definitions on page 4).

Segment 4 - Microphone "A" start-up selection (default = ON)

This option is used to determine if microphone "A" will be active when the session is started. Enabling this feature will turn on microphone "A" at start-up. At default, this feature is enabled.

Segment 5 - Microphone "B" start-up selection (default = ON)

This option is used to determine if microphone "B" will be active when the session is started. Enabling this feature will turn on microphone "B" at start-up. At default, this feature is enabled.

Segment 6 - Call in feature answering machine defeat enabled (default = OFF)

This feature will enable the answering machine defeat. When a call-in is made, at least one ring must be received. The line is picked up and the NX-534E is listening for the PIN to be entered within the 20-second time limit. If the answering machine defeat is enabled, even if someone picks up the phone, the NX-534E is still looking for the code. If this feature is not enabled, the NX-534E will wait for the number of rings programmed in location 4, segment 4.

Segment 7 – Enable control levels 7 and 8 (default = OFF)

This feature will enable level 7 – status check and level 8 – arming/disarming partition 1.

Segment 8 - Reserved

LOCATION 1 - CALLBACK ACCESS CODE (default = 123456) (6 segments, feature selection data)

Location 1 contains the access code used to start a listen-in session when the NX-534E is in a callback mode. The callback access code can be up to a maximum of 6 digits. The valid entries are 0-15 (10 = *, 11 = _, 12 = none, 13 thru 15 = any digit). If less than six digits are desired, program a "15" at the end of the desired code. If location 1 contains a "15", any digit will access the NX-534E. If segment 1 contains a "12", no access code is required.

LOCATION 2 - LINE HOLD MODE ACCESS DIGIT (default = 15(F)) (1 segment, numerical data)

Location 2 is used to determine the line-hold access digit. This digit is required to start a two-way session if line-hold mode is used. Valid entries are: 0 - 15 (10 = *, 11 = #, 12 = none, 13 thru 15 = any digit). If location 2 contains a "15", any digit will access the NX-534E. If location 2 contains a "12", no access digit is required.

LOCATION 3 - TIMING OPTIONS (8 segments, numerical data)

Segment 1 - Line hold timeout (default = 60 seconds)

Location 3, segment 1 determines how long the NX-534E will wait for the line-hold digit programmed in location 2 while in the line-hold mode. After a digit is pressed, the timer will reset. If the digit is not received during this time, the NX-534E will hang-up (disconnect). This time is programmable from 10 to 255 seconds for each digit.

Segment 2 - New trip hang-up time (default = 20 seconds)

Location 3, segment 2 is used to determine where the NX-534E will set the session timer when a new trip is received on the same partition during a two-way session. This time is programmed from 1 to 255 seconds, and will be extended if there is any activity from the central station. If an alarm occurs in the same partition, pressing a key in this time period will extend the session timer. If the alarm is in a different partition, the timer will be reduced automatically and will now allow the timer to be restarted.

Segment 3 - Callback window timer (default = 5 minutes)

Location 3, segment 3 will determine the amount of time, in 1-minute increments, the NX-534E will wait for a callback when enabled in location 0, segment 1 or initiated by the central station (see also "control levels" on page 6). Possible increments are 1 to 255 minutes.

Segment 4 - Wrong pin entries (default = 12)

Location 3, segment 4 determines the maximum number of attempts that can be made to enter valid access codes for callback and call-in features. Refer to location 0, segments 1 and 6. Valid entries are 6 - 255 attempts. Default is set for 12 attempts.

Segment 5 - Session inactivity hang-up time (default = 90 seconds)

Location 3, segment 5 is used to determine how long the NX-534E will remain on the phone line with no activity from the central station. This time can be programmed from 30 to 255 seconds.

Segment 6 - Time remaining tone indicator "A" (default = 20 seconds)

Location 3, segment 6 is used to determine how many seconds will remain when the NX-534E sends tone indicator "A" to the central station. This time is used to alert the central station that the two-way session will be terminated if there is no further activity from the central station. Valid entries are 1 to 255 seconds.

Segment 7 - Time remaining tone indicator "B" (default = 10 seconds)

Location 3, segment 7 is used to determine how many seconds will remain when the NX-534E sends tone indicator "B" to the central station. This time is used to alert the central station that the two-way session will be terminated if there is no further activity from the central station. Valid entries are 1 to 255 seconds.

Segment 8 - Anti-lock-up tone time (default = 0 seconds)

Location 3, segment 8 is used to determine at what interval the anti-lock-up tone will be heard at the central station. This tone is used to prevent noise in an exceptionally loud environment from interfering with central station's control of the two-way session. The possible values are 0-255 seconds. If a 0 is programmed (default), it is disabled and no tone will be generated.

LOCATION 4 - VOLUME / RING CONTROL (4 segments, numerical data)

Segment 1 - Low gain listen-in mode microphone volume (default = 5)

Location 4, segment 1 controls the volume of the microphones when the central station selects low-gain listen-in mode. The possible value for this location is 0 to 9 (maximum volume is 9 and minimum is 0).

Segment 2 - High gain listen-in mode microphone volume (default = 9)

Location 4, segment 2 controls the volume of the microphones when the central station selects high-gain listen-in mode. The possible value for this location is 0 to 9 (maximum volume is 9, minimum volume is 0).

Segment 3 - Speaker volume (default = 9)

Location 4, segment 3 governs the volume of the speaker when talk is selected by central station. The possible value for location 4 is 0 to 9 (maximum volume is 9, minimum volume is 0).

Segment 4 - Number of rings to answer for call-in feature (default = 0)

Location 4, segment 4 determines the number of rings the NX-534E must see before answering the call while in the call-in mode (refer to location 0, segment 6). Valid entries are 0 - 9. If a 0 is programmed, it will pick up immediately. A master code is required within 20 seconds of the line pickup or the line will be disconnected.

LOCATION 5 – PROGRAMMING X-10 ADDRESS FOR OUTPUT 1 (2 segments, numerical data)

IMPORTANT NOTICE: An X-10 interface module, i.e. NX-507, NX-508 or NX-540 must be present for this feature to work properly.

Segment 1 – Module number (default = 0)

Location 5, segment 1 contains the X-10 module number. Program a number from 0-15 to represent the corresponding X-10 module number from the following table.

Module	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Segm. 1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Segment 2 – House code (default = 0)

Location 5, segment 2 contains the X-10 house code. Program a number 0-15 to represent the corresponding X-10 house code from the following table.

X-10 ADDRESS CODES	0 = A	4 = E	8 = I	12 = M
	1 = B	5 = F	9 = J	13 = N
	2 = C	6 = G	10 = K	14 = O
	3 = D	7 = H	11 = L	15 = P

LOCATION 6-13 - PROGRAMMING X-10 ADDRESS FOR OUTPUTS 2-9 (2 segments, numerical data)

Locations 6 through 13 are used to program the X-10 address for outputs 2-9. Each location has 2 segments. Segment 1 contains the module number and segment 2 contains the house code. Refer to the instructions in location 5, as well as the charts shown above and the programming worksheets.
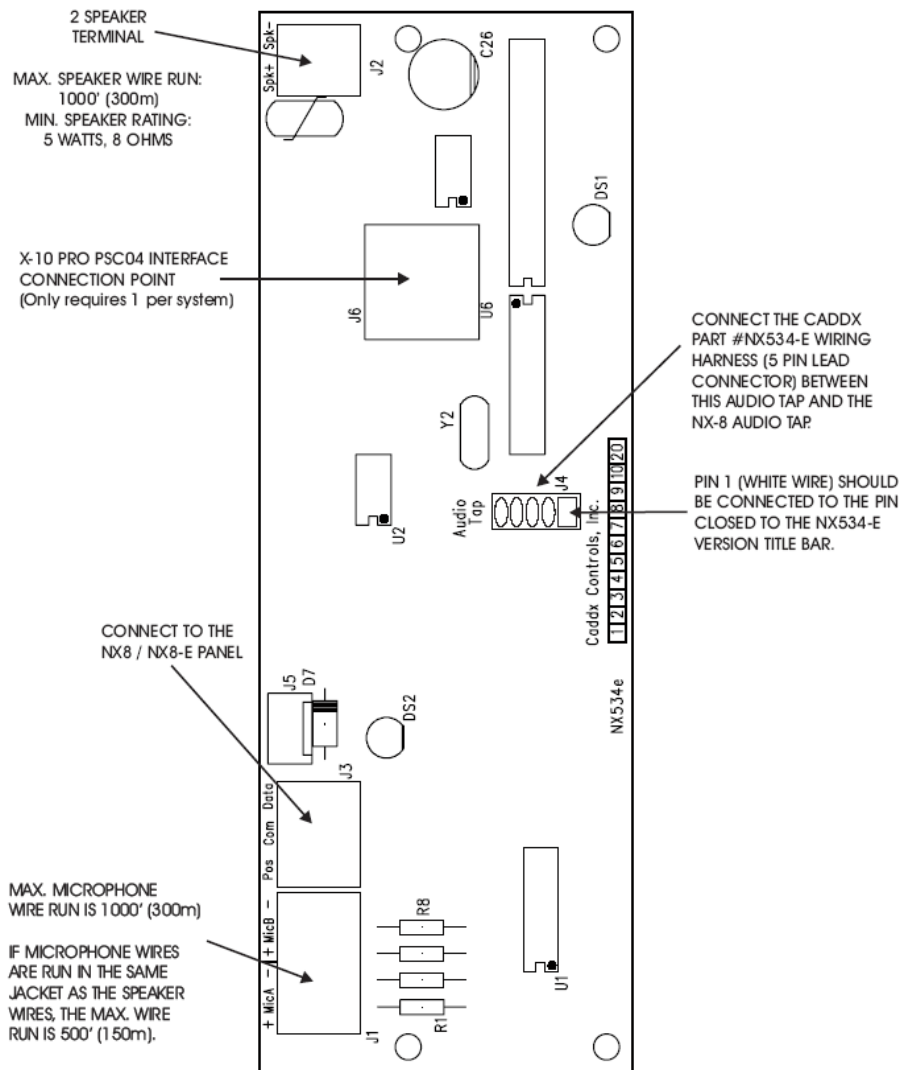
NX-534E PROGRAMMING WORKSHEETS

(Defaults are in **_bold italic_** text)

LOC	PG	DESCRIPTION		DEFAULT	PROGRAMMING DATA
0	11	OPTION FLAGS (Circle numbers to program)			
		1	OFF: Line hold mode. ON: Call-back mode		
		2	OFF: Normal two-way. ON: Listen-in only		
		3	OFF: Automatic speaker lockout. ON: Speaker lockout disabled		
		_4_	**_Microphone A condition at start-up_**		
		_5_	**_Microphone B condition at start-up_**		
		6	ON: Call-in feature answering machine defeat enabled		
		7	ON: Enable levels 7 & 8		
		8	Reserved		
1	12	CALL-BACK ACCESS CODE 10 = *, 11 = #, 12 = none, 13 thru 15 = any digit		**_1 2 3 4 5 6_**	
2	12	LINE HOLD DIGIT 10 = *, 11 = #, 12 = none, 13 thru 15 = any digit		**_15 (F)_**	
3	12	TIMING OPTIONS			
		1	Line hold timeout (10-255 seconds)	**_60_**	
		2	New trip hang-up time (1-255 seconds)	**_20_**	
		3	Call-back window (1-255 minutes)	**_5_**	
		4	Maximum number of digits during code entry (2-255)	**_12_**	
		5	Session inactivity hang-up time (30-255 seconds)	**_90_**	
		6	Point for time remaining tone "A" (1-255 seconds)	**_20_**	
		7	Point for time remaining tone "B" (1-255 seconds)	**_10_**	
		8	Anti-lockup tone time (0-255 seconds, 0 = disable)	**_0_**	
4	13	VOLUME / RING CONTROL			
		1	Low gain microphone volume (0-9)	**_5_**	
		2	High gain microphone volume (0-9)	**_9_**	
		3	Speaker volume (0-9)	**_9_**	
		4	Number of rings for call-in feature (0-9, 0 = disable)	**_0_**	

LOC	PG	DESCRIPTION		DEFAULT	PROGRAMMING DATA
5	14	X-10 ADDRESS FOR OUTPUT 1			
		1	Module number	*0*	
		2	House code	*0*	
6	14	X-10 ADDRESS FOR OUTPUT 2			
		1	Module number	*0*	
		2	House code	*0*	
7	14	X-10 ADDRESS FOR OUTPUT 3			
		1	Module number	*0*	
		2	House code	*0*	
8	14	X-10 ADDRESS FOR OUTPUT 4			
		1	Module number	*0*	
		2	House code	*0*	
9	14	X-10 ADDRESS FOR OUTPUT 5			
		1	Module number	*0*	
		2	House code	*0*	
10	14	X-10 ADDRESS FOR OUTPUT 6			
		1	Module number	*0*	
		2	House code	*0*	
11	14	X-10 ADDRESS FOR OUTPUT 7			
		1	Module number	*0*	
		2	House code	*0*	
12	14	X-10 ADDRESS FOR OUTPUT 8			
		1	Module number	*0*	
		2	House code	*0*	
13	14	X-10 ADDRESS FOR OUTPUT 9			
		1	Module number	*0*	
		2	House code	*0*	

TERMINAL DESCRIPTIONS AND LAYOUT

Terminal	Description
1	Connect positive side of microphone #A
2	Connect negative side of microphone #A
3	Connect positive side of microphone #B
4	Connect negative side of microphone #B
POS	Connect to the POSITIVE keypad terminal of NetworX control panel
COM	Connect to the COM keypad terminal of the NetworX control panel
DATA	Connect to the DATA keypad terminal of the NetworX control panel
SPK+	Connect to the speaker(s). Maximum speaker wire run is 300m. Minimum speaker rating 5 Watts, 8 Ohms. **Do not go below 4 Ohms.**
SPK-	
AUDIO TAP	Connect to the audio tap connector on the control panel with the included 5-wires wiring harness.

2 SPEAKER TERMINAL

MAX. SPEAKER WIRE RUN: 1000' (300m)
MIN. SPEAKER RATING: 5 WATTS, 8 OHMS

X-10 PRO PSC04 INTERFACE CONNECTION POINT (Only requires 1 per system)

CONNECT THE CADDX PART #NX534-E WIRING HARNESS (5 PIN LEAD CONNECTOR) BETWEEN THIS AUDIO TAP AND THE NX-8 AUDIO TAP.

PIN 1 (WHITE WIRE) SHOULD BE CONNECTED TO THE PIN CLOSED TO THE NX534-E VERSION TITLE BAR.

CONNECT TO THE NX8 / NX8-E PANEL

MAX. MICROPHONE WIRE RUN IS 1000' (300m)

IF MICROPHONE WIRES ARE RUN IN THE SAME JACKET AS THE SPEAKER WIRES, THE MAX. WIRE RUN IS 500' (150m).

CONNECTION DIAGRAM VS CONTROL PANEL
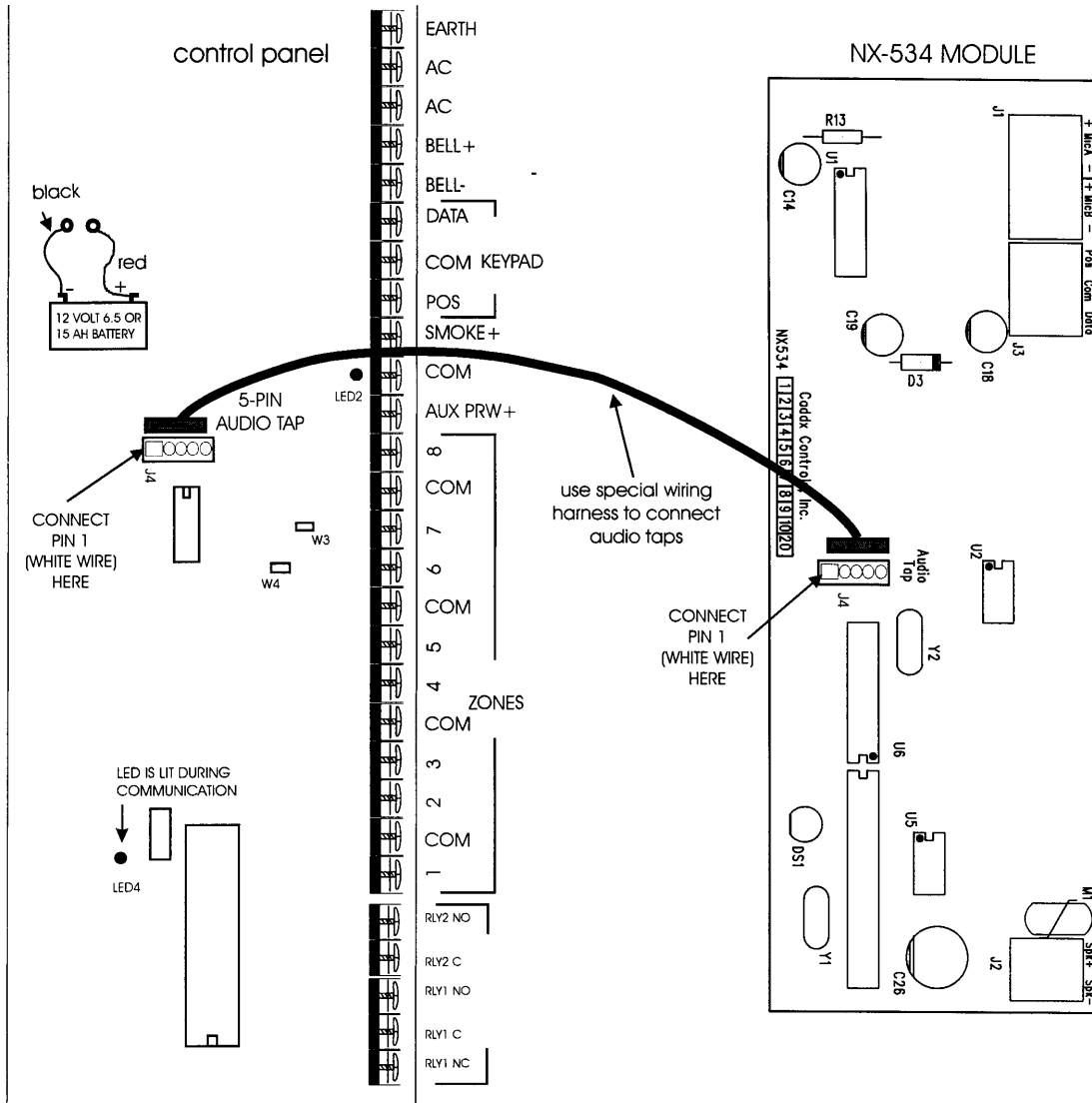
Check the correct position of PIN1 of the AUDIO TAP in the installation manual of the corresponding panel.

TECHNICAL SPECIFICATIONS

Power supply:
- nominal: 12 Vdc via NetworX control panel
- minimum/maximum: 9 Vdc - 14 Vdc

Current consumption:
- standby: 50 mA
- in session: 100 mA

Telephone: Touchtone
Operating temperature: 0 - 50° C
Dimensions (PCB):   54 x 152 x 18 mm
Weight (PCB):   58 g

MANUFACTURERS
DECLARATION OF CONFORMITY
For

Product identification:

Model/type	: See Model Listing BOM rev. level See Model Listing
Category (description)	: NX Alarm Control System
Brand	: GE-InterlogiX - Aritech/ITI/Caddx

Manufacturer:

GE Interlogix/Caddx
1420 N. Main, Gladewater
Texas 75647, USA

EU Representative:

GE Interlogix B.V.
Kelvinstraat 7
6003 DH Weert, The Netherlands

Concerning	RTTE		
	EMC	Safety	Telecom
A sample of the product has been tested by:	Compliance Engineering Ireland Ltd. RAYSTOWN, RATOATH ROAD, ASHBOURNE, CO. MEATH, IRELAND & GE Security Ireland Ltd. Unit 2008, Orchard Ave, City West Business Campus. Naas Road Dublin 24, Ireland	GE Security Ireland Ltd. Unit 2008, Orchard Ave, City West Business Campus. Naas Road Dublin 24, Ireland	Belcomlab
Test report reference	CE Qualification Plan: 04DRQP003		
	04DREMC001/006/007/008/009/010/011/012/013 & 04E1244-2	01DR575LVD-1	BCL/00-04
Applied standards	EN50130-4/A2(2003) EN55022/A2(2003) EN61000-3-2(2000) EN61000-3-3(1995) +A1(2001) EN61000-6-3(2001)	EN60950-1(2001)	CTR21(1998) +EG201121(1998)

Equipment class identifier *(RF products falling under the scope of R&TTE)*

$\boxed{X}$ *Not Applicable*   ☐ None (class 1 product)   ☐ ⓜ (class 2 product)

Means of conformity

We declare under our sole responsibility that this product is in conformity with Directive 93/68/EEC (Marking) and/or complies to the essential requirements and all other relevant provisions of the 1999/5/EC (R&TTE) based on test results using harmonized standards in accordance with the Directives mentioned.

Signature of representative/manufacturer: Raoul van Bergen
536   Manager Control & Communications GE Interlogix B.V.
Kelvinstraat 7
6003 DH Weert
The Netherlands

Place   : Weert
Date   : 29 April 2004

Page 1 of 4   Number: 46.01a

Model Listing:

Product	Product Description	BOM Revision Date
NX-216-AL	16 Zone Expander Module	December 2003
NX-216-FR	16 Zone Expander Module	December 2003
NX-216-UK	16 Zone Expander Module	December 2003
NX-216E	16 Zone Expander Module	December 2003
NX-216E-AL	16 Zone Expander Module	December 2003
NX-216E-FR	16 Zone Expander Module	December 2003
NX-320E	Auxiliary Power Supply	December 2003
NX-507-AL	Seven Port Relay Module	December 2003
NX-507-FR	Seven Port Relay Module	December 2003
NX-507E	Seven Port Relay Module	December 2003
NX-507E-AL	Seven Port Relay Module	December 2003
NX-507E-FR	Seven Port Relay Module	December 2003
NX-508-AL	Eight Port Output Module	December 2003
NX-508-FR	Eight Port Output Module	December 2003
NX-508-PL	Eight Port Output Module	December 2003
NX-508E-AL	Eight Port Output Module	December 2003
NX-508E-FR	Eight Port Output Module	December 2003
NX-508E-PL	Eight Port Output Module	December 2003
NX-534-AL	Two Way Listen-In Module	December 2003
NX-534-FR	Two Way Listen-In Module	December 2003
NX-534-WH	Two Way Listen-In Module	December 2003
NX-534E	Two Way Listen-In Module	December 2003
NX-534E-AL	Two Way Listen-In Module	December 2003
NX-534E-FR	Two Way Listen-In Module	December 2003
NX-584	Home Automation Module	December 2003
NX-540-ES	Operator. Telephone Interface Module	December 2003
NX-540E	Operator. Telephone Interface Module	December 2003
NX540E-ES	Operator. Telephone Interface Module	December 2003
NX-4	4 Zone Security Alarm Panel	December 2003
NX-4-BE	4 Zone Security Alarm Panel	December 2003
NX-4-BO-FG-BE	4 Zone Security Alarm Panel	December 2003
NX-4-BO-FG-IL	4 Zone Security Alarm Panel	December 2003
NX-4-BO-FG-NL	4 Zone Security Alarm Panel	December 2003
NX-4-BO-FG-PL	4 Zone Security Alarm Panel	December 2003
NX-4-BO-FG-SE	4 Zone Security Alarm Panel	December 2003
NX-4-CZ	4 Zone Security Alarm Panel	December 2003
NX-4-DK	4 Zone Security Alarm Panel	December 2003
NX-4-ES	4 Zone Security Alarm Panel	December 2003
NX-4-FR	4 Zone Security Alarm Panel	December 2003
NX-4-GR	4 Zone Security Alarm Panel	December 2003
NX-4-IL	4 Zone Security Alarm Panel	December 2003
NX-4-IT	4 Zone Security Alarm Panel	December 2003
NX-4-LX	4 Zone Security Alarm Panel	December 2003
NX-4-LX-IL	4 Zone Security Alarm Panel	December 2003
NX-4-LXT-ES	4 Zone Security Alarm Panel	December 2003
NX-4-LXT-GR	4 Zone Security Alarm Panel	December 2003
NX-4-LXT-IL	4 Zone Security Alarm Panel	December 2003
NX-4-LXT-TR	4 Zone Security Alarm Panel	December 2003
NX-4-LXT-UK	4 Zone Security Alarm Panel	December 2003
NX-4-NL	4 Zone Security Alarm Panel	December 2003
NX-4-NO	4 Zone Security Alarm Panel	December 2003
NX-4-PL	4 Zone Security Alarm Panel	December 2003
NX-4-PT	4 Zone Security Alarm Panel	December 2003
NX-4-RU	4 Zone Security Alarm Panel	December 2003
NX-4-SE	4 Zone Security Alarm Panel	December 2003
NX-4-TR	4 Zone Security Alarm Panel	December 2003
NX-4-UK	4 Zone Security Alarm Panel	December 2003
NX-4-LX-ZA	4 Zone Security Alarm Panel	December 2003
NX-6-BE	6 Zone Security Alarm Panel	December 2003
NX-6-BO-FG-BE	6 Zone Security Alarm Panel	December 2003
NX-6-BO-FG-GB	6 Zone Security Alarm Panel	December 2003
NX-6-BO-FG-IT	6 Zone Security Alarm Panel	December 2003
NX-6-BO-FG-NL	6 Zone Security Alarm Panel	December 2003
NX-6-BO-FG-PL	6 Zone Security Alarm Panel	December 2003
NX-6-BO-FG-RU	6 Zone Security Alarm Panel	December 2003
NX-6-BO-FG-UK	6 Zone Security Alarm Panel	December 2003
NX-6-CZ	6 Zone Security Alarm Panel	December 2003
NX-6-DK	6 Zone Security Alarm Panel	December 2003

Signature of representative/manufacturer:　　Raoul van Bergen
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Kelvinstraat 7
6003 DH Weert
The Netherlands

Place　: Weert
Date　: 29 April 2004

Product	Product Description	BOM Revision Date
NX-6-FR	6 Zone Security Alarm Panel	December 2003
NX-6-GR	6 Zone Security Alarm Panel	December 2003
NX-6-IL	6 Zone Security Alarm Panel	December 2003
NX-6-IT	6 Zone Security Alarm Panel	December 2003
NX-6-LX	6 Zone Security Alarm Panel	December 2003
NX-6-LX-CZ	6 Zone Security Alarm Panel	December 2003
NX-6-LXT-ES	6 Zone Security Alarm Panel	December 2003
NX-6-LXT-GB	6 Zone Security Alarm Panel	December 2003
NX-6-LXT-GR	6 Zone Security Alarm Panel	December 2003
NX-6-LXT-IL	6 Zone Security Alarm Panel	December 2003
NX-6-LXT-TR	6 Zone Security Alarm Panel	December 2003
NX-6-LXT-UK	6 Zone Security Alarm Panel	December 2003
NX-6-NL	6 Zone Security Alarm Panel	December 2003
NX-6-NO	6 Zone Security Alarm Panel	December 2003
NX-6-PL	6 Zone Security Alarm Panel	December 2003
NX-6-PT	6 Zone Security Alarm Panel	December 2003
NX-6-RU	6 Zone Security Alarm Panel	December 2003
NX-6-SE	6 Zone Security Alarm Panel	December 2003
NX-6-TR	6 Zone Security Alarm Panel	December 2003
NX-6-UK	6 Zone Security Alarm Panel	December 2003
NX-6-MAG	6 Zone Security Alarm Panel	December 2003
NX-6-LX-ZA	6 Zone Security Alarm Panel	December 2003
NX-8-BE	8 Zone Security Alarm Panel	December 2003
NX-8-BO-FG-BE	8 Zone Security Alarm Panel	December 2003
NX-8-BO-FG-GR	8 Zone Security Alarm Panel	December 2003
NX-8-BO-FG-IT	8 Zone Security Alarm Panel	December 2003
NX-8-BO-FG-NL	8 Zone Security Alarm Panel	December 2003
NX-8-BO-FG-PL	8 Zone Security Alarm Panel	December 2003
NX-8-BO-FG-RU	8 Zone Security Alarm Panel	December 2003
NX-8-BO-FG-SE	8 Zone Security Alarm Panel	December 2003
NX-8-BO-LR-FG	8 Zone Security Alarm Panel	December 2003
NX-8-BO-LR-FG-RU	8 Zone Security Alarm Panel	December 2003
NX-8-CB-BE	8 Zone Security Alarm Panel	December 2003
NX-8-CB-CZ	8 Zone Security Alarm Panel	December 2003
NX-8-CB-DK	8 Zone Security Alarm Panel	December 2003
NX-8-CB-ES	8 Zone Security Alarm Panel	December 2003
NX-8-CB-FR	8 Zone Security Alarm Panel	December 2003
NX-8-CB-GR	8 Zone Security Alarm Panel	December 2003
NX-8-CB-IL	8 Zone Security Alarm Panel	December 2003
NX-8-CB-IT	8 Zone Security Alarm Panel	December 2003
NX-8-CB-LX	8 Zone Security Alarm Panel	December 2003
NX-8-CB-LX-IT	8 Zone Security Alarm Panel	December 2003
NX-8-CB-LXR	8 Zone Security Alarm Panel	December 2003
NX-8-CB-LXTR	8 Zone Security Alarm Panel	December 2003
NX-8-CB-NL	8 Zone Security Alarm Panel	December 2003
NX-8-CB-NO	8 Zone Security Alarm Panel	December 2003
NX-8-CB-OT-DK	8 Zone Security Alarm Panel	December 2003
NX-8-CB-PL	8 Zone Security Alarm Panel	December 2003
NX-8-CB-PT	8 Zone Security Alarm Panel	December 2003
NX-8-CB-RU	8 Zone Security Alarm Panel	December 2003
NX-8-CB-SE	8 Zone Security Alarm Panel	December 2003
NX-8-CB-TR	8 Zone Security Alarm Panel	December 2003
NX-8-CZ	8 Zone Security Alarm Panel	December 2003
NX-8-DK	8 Zone Security Alarm Panel	December 2003
NX-8E	8 Zone Security Alarm Panel	December 2003
NX-8E-BE	8 Zone Security Alarm Panel	December 2003
NX-8E-BO-FG-BE	8 Zone Security Alarm Panel	December 2003
NX-8E-BO-FG-IL	8 Zone Security Alarm Panel	December 2003
NX-8E-BO-FG-NL	8 Zone Security Alarm Panel	December 2003
NX-8E-BO-FG-PL	8 Zone Security Alarm Panel	December 2003
NX-8E-BO-FG-SE	8 Zone Security Alarm Panel	December 2003
NX-8E-CB	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-BE	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-CZ	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-DK	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-ES	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-FR	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-GR	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-IL	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-IT	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-LX	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-LXT	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-NL	8 Zone Security Alarm Panel	December 2003

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Place : Weert
Date : 29 April 2004

Page 3 of 4   Number: 46.01a

Product	Product Description	BOM Revision Date
NX-8E-CB-NO	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-PL	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-PT	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-RU	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-SE	8 Zone Security Alarm Panel	December 2003
NX-8E-CB-TR	8 Zone Security Alarm Panel	December 2003
NX-8E-CZ	8 Zone Security Alarm Panel	December 2003
NX-8E-DK	8 Zone Security Alarm Panel	December 2003
NX-8E-ES	8 Zone Security Alarm Panel	December 2003
NX-8E-FR	8 Zone Security Alarm Panel	December 2003
NX-8E-GR	8 Zone Security Alarm Panel	December 2003
NX-8E-IL	8 Zone Security Alarm Panel	December 2003
NX-8E-IT	8 Zone Security Alarm Panel	December 2003
NX-8E-LX	8 Zone Security Alarm Panel	December 2003
NX-8E-LX-IL	8 Zone Security Alarm Panel	December 2003
NX-8E-LXT	8 Zone Security Alarm Panel	December 2003
NX-8E-LXT-ES	8 Zone Security Alarm Panel	December 2003
NX-8E-LXT-SE	8 Zone Security Alarm Panel	December 2003
NX-8E-NL	8 Zone Security Alarm Panel	December 2003
NX-8E-NO	8 Zone Security Alarm Panel	December 2003
NX-8E-PL	8 Zone Security Alarm Panel	December 2003
NX-8E-PT	8 Zone Security Alarm Panel	December 2003
NX-8E-RU	8 Zone Security Alarm Panel	December 2003
NX-8-ES	8 Zone Security Alarm Panel	December 2003
NX-8E-SE	8 Zone Security Alarm Panel	December 2003
NX-8E-TR	8 Zone Security Alarm Panel	December 2003
NX-8-FR	8 Zone Security Alarm Panel	December 2003
NX-8-GR	8 Zone Security Alarm Panel	December 2003
NX-8-IL	8 Zone Security Alarm Panel	December 2003
NX-8-IT	8 Zone Security Alarm Panel	December 2003
NX-8-LR-ES	8 Zone Security Alarm Panel	December 2003
NX-8-LX	8 Zone Security Alarm Panel	December 2003
NX-8-LX-CZ	8 Zone Security Alarm Panel	December 2003
NX-8-LX-IL	8 Zone Security Alarm Panel	December 2003
NX-8-LX-IT	8 Zone Security Alarm Panel	December 2003
NX-8-LXR	8 Zone Security Alarm Panel	December 2003
NX-8-LXTR-ES	8 Zone Security Alarm Panel	December 2003
NX-8-LXTR-GR	8 Zone Security Alarm Panel	December 2003
NX-8-LXTR-IL	8 Zone Security Alarm Panel	December 2003
NX-8-LXTR-TR	8 Zone Security Alarm Panel	December 2003
NX-8-LXTR-UK	8 Zone Security Alarm Panel	December 2003
NX-8-LXT-UK	8 Zone Security Alarm Panel	December 2003
NX-8-NL	8 Zone Security Alarm Panel	December 2003
NX-8-NO	8 Zone Security Alarm Panel	December 2003
NX-8-OT-DK	8 Zone Security Alarm Panel	December 2003
NX-8-PL	8 Zone Security Alarm Panel	December 2003
NX-8-PT	8 Zone Security Alarm Panel	December 2003
NX-8-RU	8 Zone Security Alarm Panel	December 2003
NX-8-SE	8 Zone Security Alarm Panel	December 2003
NX-8-TR	8 Zone Security Alarm Panel	December 2003
NX-8-UK	8 Zone Security Alarm Panel	December 2003
NX-8-CB-LXR-GR	8 Zone Security Alarm Panel	December 2003
NX-8-LX-ZA	8 Zone Security Alarm Panel	December 2003
NX-8E-LX-ZA	8 Zone Security Alarm Panel	December 2003
TD300-E101D	35VA Altair Transformer	December 2003

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The Netherlands

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Date : 29 April 2004

Page 4 of 4   Number: 46.01a