Overview

exacqVision can be integrated with DSC PowerSeries Neo intrusion systems. Configuration controls and real-time feedback have been added into the exacqVision client giving the user control and monitoring capabilities of the system.

NOTE: This integration applies only the **DSC PowerSeries Neo** line of equipment when used with the **TL280E or TL280RE** Communicator and **firmware version 5.0** or greater.

For more information about PowerSeries Neo equipment, please visit these DSC websites.
http://www.dsc.com/dsc-product-families/Neo/1
http://www.dsc.com/dsc-product-families/neo/alarm-verification-solutions/5
http://www.dsc.com/index.php?n=library (for looking up manuals)

Purpose

The purpose of this document is to provide guidance for integrating DSC intrusion system equipment with exacqVision and using the exacqVision client for connecting, controlling and monitoring the PowerSeries Neo equipment.

NOTE: This guide does not cover the installation and configuration of DSC PowerSeries Neo security equipment in general.

Requirements

Exacq software requirements

- exacqVision client/server version: 7.4.x (or greater)
- Enhanced interface controls exacqVision client/server 21.09.x

Enhancements

- **Intrusion Panel**
  - Supports multiple DSC Partitions
  - Alarm state or fault - **red**
  - Loss of panel comms - **amber**
  - Available but disarmed/unset – **green**
  - Arming with bypass zone – flash **amber** and **blue**
  - System in exit time flashes between - **green** and **blue**
  - System armed/set - **blue**
- **Zone Inputs/PIR (Passive Infrared)**
  - A disarmed panel with motion on a zone - **amber**
  - An armed panel with a detector in fault or alarm - **red**

License Requirements

- exacqVision license: Professional or Enterprise

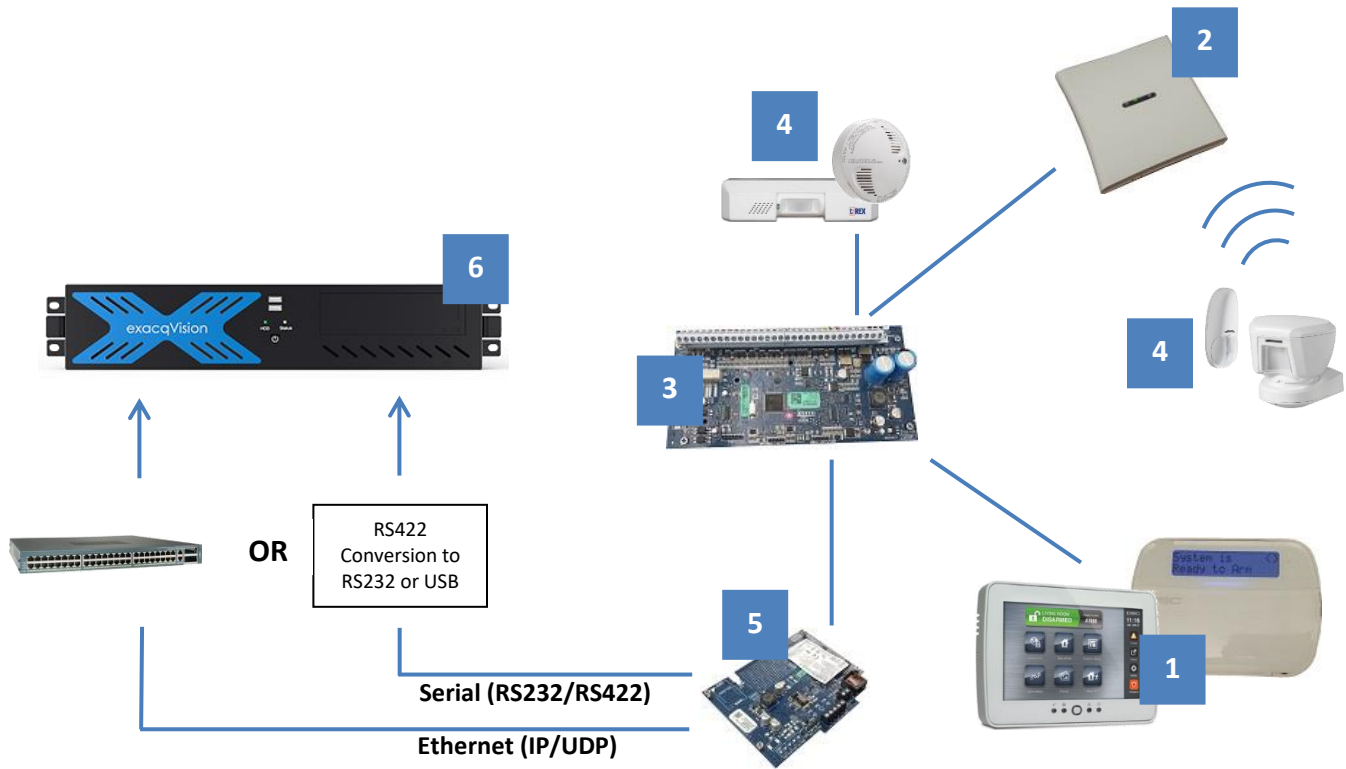### DSC Requirements or As Tested Specifications

- One of the following Communicators:
  - TL280(R)E   (see **COMPONENTS** section below, item 5 in the list)
  - TL2803G(R)E (**NOTE**: SIM card activation must be configured for IP communication to be enabled with exacq)
  - 3G2080(R)E (**NOTE**: SIM card activation must be configured for IP communication to be enabled with exacq)
- Firmware version 5.x (or greater)
- No licensing required

IMPORTANT HARDWARE NOTE: Please ensure the TL280 Network Interface Port is **not** connected to PoE enabled port on a switch.

---

www.exacq.com

+1.317.845.5710
+5255.56080817
+44.1438.310163
+31.485.324.347

USA (Corporate Headquarters)
Mexico
Europe/Middle East/Asia
Central Europe

Page 1 of 11
Updated 4/2022

Components

The PowerSeries Neo components that were tested and integrated with Exacq were the following:

1. Keypad: **HSLCD**
2. Sensors: **PowerG & Wired**
3. Control Panels: **HS2TCHP LDC TouchPad & HS2128 Keypad**
   - Compatible- HS2016, HS2032, HS2064 & HS2018
4. PowerG Transceiver: **HSM2HOST9**
5. Communicator module: **TL280E, TL280RE/3G**
   - One of the listed TL280 range is required for this integration
6. Any model of exacqVision recorder (required)

The security system communicates with the exacqVision recorder via the TL280x interface communicator module.

Communications between the exacqVision recorder and the interface module can be established via Ethernet using TCP with UDP or via Serial (RS232/RS244). Systems requiring a wired serial integration, please ensure a serial port is available.

The security intrusion system must be configured by the keypad or Touch Screen Display to enable communications link to exacqVision.

Please speak to a DSC representative for further options.

www.exacq.com

+1.317.845.5710
+5255.56080817
+44.1438.310163
+31.485.324.347

USA (Corporate Headquarters)
Mexico
Europe/Middle East/Asia
Central Europe

Page 2 of 11
Updated 4/2022

Configuration - DSC PowerSeries Neo & Pro

With the exacqVision system connected to the communicator module (**TL280**) via Ethernet (IP/UDP) or Serial (RS232/RS422), use the keypad (**HSLCD**) to configure the security system to communicate with the exacqVision recorder.

Here are some general guidelines to follow when navigating the display panel's menus.
- Use the arrows "<>" to scroll through options.
- Use the "*" key to change options.
- Use the "#" to go back one menu level.
- In the following steps a comma "," will be used to separate segments of user input where the user should wait for the keypad to respond.
- The default operator Code is 1234
- An installer's code of 5555 (default value) is used throughout these instructions. Substitute your own Installer's code if programmed.

    Wherever you see a bolded statement such as "**Note these characters…**", please do so because you will need these pieces of information in the exacqVision configuration.

- Reference NEO Communicator V5.0 Installation Manual which can be obtained here http://www.dsc.com/index.php?n=library You may need an account to access manuals.
- Please refer to the "**NEO Communicator V5.0 Manual**" (sections in parenthesis).

IMPORTANT NOTE: The Newer DSC NEO software **v5.x** communicators use alternate codes to previous version **4.x** DSC Communicators. Please refer to the website for historic documentation

4x TCP/UDP Connections – Referred to as Sessions

The DSC Neo TL280 v5.x & DSC Pro support four simulations integrations via Ethernet.
DSC refers to each of these connections as Sessions.

Session 1 and Session 2 are defined in the document providing two Ethernet connectivity options.

E.G. - Use Integration Option - DSC Session 2 for exacqVision and Integration Option - DSC Session 1 for Kantech Entrapass (Please refer to the application notes provided by Kantech) .
    Note:- The two options listed on the next page are supported by exacqVision.

www.exacq.com

+1.317.845.5710
+5255.56080817
+44.1438.310163
+31.485.324.347

USA (Corporate Headquarters)
Mexico
Europe/Middle East/Asia
Central Europe

Page 3 of 11
Updated 4/2022

Global DSC Settings

Enroll Keypads
*8, 5555, 902, press * to auto enroll all keypads. Once finished press **#** three times to exit the menu.

DSC Neo Zone Panel Factory Reset
To reset the zone input panel, fit a wire link between connections PGM-1 & Z1 (zone 1).
Ensure the Battery connections are removed and the power to the communicator prior to adding the link.
Once the wire is linked, power up the transformer.
Wait 1 minute. After 1 minute, power down the transformer and remove the jumper link. The add the battery and transformer connections again.

DSC Neo TL280x Communicator Reset
*8, 5555, 999, follow the on-screen display instructions.

Time & Date
*6, 1234, press the right arrow **>**, press *, enter HHMM (hour then minutes) followed by MMDDYY (month, day year) and pressing **#** twice to exit the menu.

Communication Module Settings
*8, 5555, 382, scroll to option 5 - Alt Comm. Set value to "Y" by pressing *
*8, 5555, 401, scroll to option 7 - Alt Comm DLS. Set the value to "Y" by pressing *
*8, 5555, 851, 992 - To verify the DSC Neo IP address. This in a non-editable view.

Obtaining the DSC Neo Panel Integration Key and Panel Application Keys required for integration

Defining zone inputs for use with Partitions
*8, 5555, 201, this enters the Partition 1 mask to define zones 1-8. Press ***** to enter the menu and use the **< & >** keys to set the zone for use with Partition 1 by pressing ***** to set **Y** (yes=on) or **N** (no=off). Once assigning the zone press **#**. Using the > arrow you can navigate to zones 9-16 to set the zone for use in Partition 1.

Press **#** once finished defining Partition1, the display will show Part.1 Zone Mask, press the **>** arow to navigate to Partition 2 labelled Part.2 Zone Mask to select which zones apply to Partition 2. The same process applied to all Partitions available. Once finished press **#** until all menus are exited.

www.exacq.com

+1.317.845.5710
+5255.56080817
+44.1438.310163
+31.485.324.347

USA (Corporate Headquarters)
Mexico
Europe/Middle East/Asia
Central Europe

Page **4** of **11**
Updated 4/2022

DSC Neo Communicator Integration Option – Session 1 - Type 1 Encryption

DSC Panel Integration Key

*8,5555, 851, 422, DSC panel Integration ID Number. **Enter Value** _____

      Please note for use in the Exacq DSC Integrations setup **Panel Init Key:** field.

*8,5555, 851, **423**, to view **Type 1** Integration Access Code. **Enter Value** _____

      Please note Use this data in the Exacq DSC Integrations setup **Application Init Key:** field.

To edited the Access Code to an alternate number **e.g.** 1111 1111, pressing 1 eight times followed by pressing # twice to exit.

Defining Ethernet for use with UDP

*8, 5555, 851, 425, ensure bits 3 and 5 are set

*8, 5555, 851, 426, ensure bits 1, 3 and 4 are set

*8, 5555, 851, 427, set to 0005 (This increases response times from 10 to 5 seconds)

*8, 5555, 851, 428, (Enter IP of the exacqVision recorder)

*8, 5555, 851, 430, to view or set Session 1 Integration Polling port (default = 0C01). **Note for Local Port in exacq**

      0C01 = Port 3073 for use in the Exacq DSC Integrations setup **Local Port Number** 3073

*8, 5555, 851, 432, to view / set Session 1 Integration Outgoing port (default = 0C04).

      0C04 = Port 3076 for use in the Exacq DSC Integrations setup **Panel Port Number** 3076

*8, 5555, 851, 001, DSC IP Address **Enter Value** _____

*8, 5555, 851, 002, DSC Subnet mask, default 255.255.255.0. **Enter Value** _____

*8, 5555, 851, 003, d default gateway. **Enter Value** _____

*8, 5555,851, 999, 55 - To restart the communicator, **please wait for approx. 60 seconds.**

DSC Neo Communicator Integration Option – Session 1 - Type 2 Encryption

DSC Panel Integration Key

*8,5555, 851, 422, DSC panel Integration ID Number. **Enter Value** _____

      Please note for use in the Exacq DSC Integrations setup **Panel Init Key:** field.

*8,5555, 851, **700**, To view the **Type2, 32 Character** Integration Access Code.

Enter Value _____

      Please note Use this data in the Exacq DSC Integrations setup **Application Init Key:** field.

To edited the Access Code to an alternate number **e.g.** 11111111111111111111111111111111, pressing '1' 32 times followed by pressing # twice to exit.

Defining Ethernet for use with UDP

*8, 5555, 851, 425, ensure bits 3, **4** and 5 are set - (**Note:**- **bit 4** is the Type2 Encryption)

*8, 5555, 851, 426, ensure bits 1, 3 and 4 are set

*8, 5555, 851, 427, set to 0005 (This increases response times from 10 to 5 seconds)

*8, 5555, 851, 428, (Enter IP of the exacqVision recorder)

*8, 5555, 851, 430, to view or set Session 1 Integration Polling port (default = 0C01). **Note for Local Port in exacq**

      0C01 = Port 3073 for use in the Exacq DSC Integrations setup **Local Port Number** 3073

*8, 5555, 851, 432, to view / set Session 1 Integration Outgoing port (default = 0C04).

      0C04 = Port 3076 for use in the Exacq DSC Integrations setup **Panel Port Number** 3076

*8, 5555, 851, 001, DSC IP Address **Enter Value** _____

*8, 5555, 851, 002, DSC Subnet mask, default 255.255.255.0. **Enter Value** _____

*8, 5555, 851, 003, d default gateway. **Enter Value** _____

*8, 5555,851, 999, 55 - To restart the communicator, **please wait for approx. 60 seconds.**

www.exacq.com

+1.317.845.5710
+5255.56080817
+44.1438.310163
+31.485.324.347

USA (Corporate Headquarters)
Mexico
Europe/Middle East/Asia
Central Europe

Page 5 of 11
Updated 4/2022

DSC Neo Communicator Integration Option – Session 2- Type 1 Encryption

DSC Panel Integration Key

*8,5555, 851, 422, DSC panel Integration ID Number.   **Enter Value** _____

Please note for use in the Exacq DSC Integrations setup **Panel Init Key:** field.

*8,5555, 851, **450**, to view **Type 1** Integration Access Code.   **Enter Value** _____

Please note for use in the Exacq DSC Integrations setup **Application Init Key:** field.

To edited the Access Code to an alternate number **e.g.** 1111 1111, pressing 1 eight times followed by pressing # twice to exit.

Defining Ethernet for use with UDP

*8, 5555, 851, 452, ensure bits 3 and 5 are set

*8, 5555, 851, 453, ensure bits 1, 3 and 4 are set

*8, 5555, 851, 454, set to 0005 (This increases response times from 10 to 5 seconds)

*8, 5555, 851, 455, (Enter IP of the exacqVision recorder)

*8, 5555, 851, 457, to view or set Session 2 Integration Polling port (default = 0C1A). **Note for Local Port in exacq**

0C1A = Port 3098 for use in the Exacq DSC Integrations setup **Local Port Number** 3098

*8, 5555, 851, 459, to view / set Session 2 Integration Outgoing port (default = 0C17).

0C17 = Port 3095 for use in the Exacq DSC Integrations setup **Panel Port Number** 3095

*8, 5555, 851, 001, DSC IP Address   **Enter Value** _____

*8, 5555, 851, 002, DSC Subnet mask, default 255.255.255.0.   **Enter Value** _____

*8, 5555, 851, 003, d default gateway.   **Enter Value** _____

*8, 5555,851, 999, 55 - To restart the communicator, **please wait for approx. 60 seconds.**

DSC Neo Communicator Integration Option – Session 2- Type 2 Encryption

DSC Panel Integration Key

*8,5555, 851, 422, DSC panel Integration ID Number.   **Enter Value** _____

Please note for use in the Exacq DSC Integrations setup **Panel Init Key:** field.

*8,5555, 851, **701**, to view the **Type2, 32 Character** Integration Access Code.

Enter Value _____

Please note for use in the Exacq DSC Integrations setup **Application Init Key:** field.

To edited the Access Code to an alternate number **e.g.** 11111111111111111111111111111111, pressing '1' 32 times followed by pressing # twice to exit.

Defining Ethernet for use with UDP

*8, 5555, 851, 452, ensure bits 3, 4 and 5 are set - (Note:- **bit 4** is the Type2 Encryption)

*8, 5555, 851, 453, ensure bits 1, 3 and 4 are set

*8, 5555, 851, 454, set to 0005 (This increases response times from 10 to 5 seconds)

*8, 5555, 851, 455, (Enter IP of the exacqVision recorder)

*8, 5555, 851, 457, to view or set Session 2 Integration Polling port (default = 0C1A). **Note for Local Port in exacq**

0C1A = Port 3098 for use in the Exacq DSC Integrations setup **Local Port Number** 3098

*8, 5555, 851, 459, to view / set Session 2 Integration Outgoing port (default = 0C17).

0C17 = Port 3095 for use in the Exacq DSC Integrations setup **Panel Port Number** 3095

*8, 5555, 851, 001, DSC IP Address   **Enter Value** _____

*8, 5555, 851, 002, DSC Subnet mask, default 255.255.255.0.   **Enter Value** _____

*8, 5555, 851, 003, d default gateway.   **Enter Value** _____

*8, 5555,851, 999, 55 - To restart the communicator, **please wait for approx. 60 seconds.**

www.exacq.com

+1.317.845.5710
+5255.56080817
+44.1438.310163
+31.485.324.347

USA (Corporate Headquarters)
Mexico
Europe/Middle East/Asia
Central Europe

Page 6 of 11
Updated 4/2022

DSC Power Series Pro Integration Option – Session 1
Only Type 2 Encryption Supported

Initial Setup Notes
Ensure zones are not enable that do not exist as the Power Series Pro will continually try to poll for the zone PCBs and prevent connectivity to exacqVision.

DSC Panel Integration Key
*8,5555, 851, 422, DSC panel Integration ID Number.   **Enter Value** _____

          Please note for use in the Exacq DSC Integrations setup **Panel Init Key:** field.

*8,5555, 382, select option 5 and set to N – Sets the ADC Enable to off (this disabled the www.alarm.com if no account is enabled).
*8,5555, 851, **700**, To view the **Type2, 32 Character** Integration Access Code.

Enter Value _____
          Please note Use this data in the Exacq DSC Integrations setup **Application Init Key:** field.
To edited the Access Code to an alternate number **e.g.** 11111111111111111111111111111111, pressing '1' 32 times followed by pressing # twice to exit.

Defining Ethernet for use with UDP
*8, 5555, 851, 425, ensure bits 3, **4** and 5 are set - (**Note:**- **bit 4** is the Type2 Encryption)
*8, 5555, 851, 426, ensure bits 1, 3 and 4 are set
*8, 5555, 851, 427, set to 0005 (This increases response times from 10 to 5 seconds)
*8, 5555, 851, 428, (Enter IP of the exacqVision recorder)
*8, 5555, 851, 430, to view or set Session 1 Integration Polling port (default = 0C01). **Note for Local Port in exacq**
          0C01 = Port 3073 for use in the Exacq DSC Integrations setup **Local Port Number** 3073
*8, 5555, 851, 432, to view / set Session 1 Integration Outgoing port (default = 0C04).
          0C04 = Port 3076 for use in the Exacq DSC Integrations setup **Panel Port Number** 3076

*8, 5555, 851, 001, DSC IP Address   **Enter Value** _____

*8, 5555, 851, 002, DSC Subnet mask, default 255.255.255.0.   **Enter Value** _____

*8, 5555, 851, 003, d default gateway.   **Enter Value** _____
*8, 5555,851, 999, 55 - To restart the communicator, **please wait for approx. 60 seconds.**

www.exacq.com

+1.317.845.5710
+5255.56080817
+44.1438.310163
+31.485.324.347

USA (Corporate Headquarters)
Mexico
Europe/Middle East/Asia
Central Europe

Page 7 of 11
Updated 4/2022

Configuration – exacqVision Type 1 Encryption Session 1 on the DSC Neo TL280 Communicator

Add Security Integration
Launch the exacqVision client and perform the following steps.
Please refer to the "**NEO Communicator V5.0 Manual**" (sections in parenthesis).

1. Click on the **Config(Setup)Page**
2. Click on **"Add Security Integration"**
3. Click **New**
4. Select **"DSC PowerSeries NEO"**
5. *New Feature* - A user definable description
6. Select **"UDP Port Configuration"**
7. Panel IP Address - Enter IP address of the security system (from above)
8. Local Port Number - Enter 3073 (0C01h hex = 3073dec, from above)
9. Panel Port Number - Enter 3076 (0C04 hex = 3073dec, from above)

   To quickly convert hexadecimal to decimal, go here:

Example integration using the DSC Neo Session 1 Option listed previously.

10. Panel Init (Integration) Key - (from above)
    a. Enter the first 8 characters of this code 4 times in a row. For example, if the first 8 characters of your code are "15102105" then enter "**15102105**15102105**15102105**15102105".
11. Encryption Type to **Type 1**
12. Application Init Key - (from above) – The DSC Type1 Integration Access Code using *851 423
    a. Enter the first 8 characters of this code **4 times in a row**. For example, if the first 8 characters of your code are "11111111" then enter "11111111111111111111111111111111".
13. Enter the 4-digit Installer Access Code. We have been using "5555". Exacq encrypts this data so it appears as more characters than four after being entered and accepted.
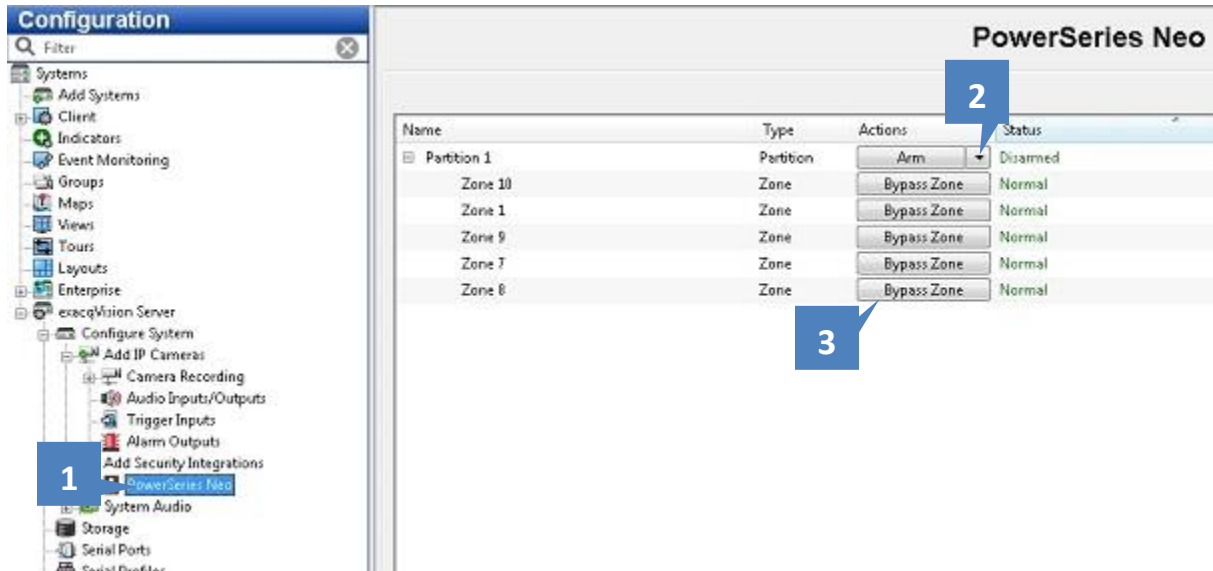14. Click Apply
15. Ensure that the status reports "Connected"
16. This is the Status information, currently showing a Health warning of No Battery.

www.exacq.com

+1.317.845.5710
+5255.56080817
+44.1438.310163
+31.485.324.347

USA (Corporate Headquarters)
Mexico
Europe/Middle East/Asia
Central Europe

Page 8 of 11
Updated 4/2022

Configuration – exacqVision Type 2 Encryption
Session 2 on the DSC TL280 Communicator and DSC Pro

Add Security Integration
Launch the exacqVision client and perform the following steps.
Please refer to the "**NEO Communicator V5.0 Manual**" (sections in parenthesis).

1. Click on the **Config(Setup)Page**
2. Click on **"Add Security Integration"**
3. Click **New**
4. Select **"DSC PowerSeries NEO"**
5. *New Feature* - A user definable description
6. Select **"UDP Port Configuration"**
7. Panel IP Address - Enter IP address of the security system (from above)
8. Local Port Number - Enter 3098 (0C1A hex = 3073dec, from above)
9. Panel Port Number - Enter 3095 (0C17 hex = 3073dec, from above)

   To quickly convert hexadecimal to decimal, go here:

Example integration using the DSC Neo Session 2 Option listed previously.

10. Panel Init Key - (from above)
    a. Enter the first 8 characters of this code 4 times in a row. For example, if the first 8 characters of your code are "15102105" then enter "15102105151021051510210515102105".
11. Encryption Type to **Type 2**
12. Application Init Key - (from above) – The DSC Type2 Integration Access Code using *851 450
    a. Enter the first 8 characters of this code **4 times in a row**. For example, if the first 8 characters of your code are "11111111" then enter "11111111111111111111111111111111".
13. Enter the 4-digit Installer Access Code. We have been using "5555". Exacq encrypts this data so it appears as more characters than four after being entered and accepted.
14. Click Apply
15. Ensure that the status reports "Connected"
16. This is the Status information, currently showing a Health warning of No Battery.

www.exacq.com

+1.317.845.5710
+5255.56080817
+44.1438.310163
+31.485.324.347

USA (Corporate Headquarters)
Mexico
Europe/Middle East/Asia
Central Europe

Page 9 of 11
Updated 4/2022

Supported controls now appear when you click on the PowerSeries Neo entry in the configuration tree.

1. Click on PowerSeries Neo.
2. Arming and Disarming can be performed here with the following options:
    a. Arm - State when user arms the panel at the keypad using their personal access code
    b. Arm Away - provides an exit and entry delay, includes all zones
    c. Arm Stay - provides an exit delay, bypasses interior zones
    d. Arm (No Delay) - Arms immediately, triggers immediately
3. Zones can be bypassed.

The DSC PowerSeries Neo security is now integrated with exacqVision. For more information, please see your DSC Neo Panel User information. Visit http://www.dsc.com/index.php?n=library to look up DSC documents.

RS232/422 Connection

You can connect the DSC system via RS232/422 to an exacq system. You may need a serial to USB adapter. If so ensure the driver for the adapter is installed in the Windows or Linux operating system and the COM port shows up properly in the Serial Ports page, UART section, of exacqVision. Configure the serial port with a meaningful name and proper attributes for connecting to the DSC hardware. Those attributes can be configured for the DSC equipment in Step 3 (outlined below)

Enable (RS232/422) (Ethernet/Cellular Programming Options | SMS Event Notification/Command and Control Options)
1. *8, 5555, 851, 425, ensure bits 1 and 5 are set
2. *8, 5555, 851, 420, set or check baud rate
3. *8, 5555, 851, 421, set or check parity, stop bits, flow control, etc. (See **NEO Communicator V5.0 Manual**)

Follow the same steps as in the Configuration - exacqVision section except make the following selections:

1. Panel Connection Type: Select Serial Port Configuration
2. Serial Port Name: Select name of serial port you configured on Serial Ports page, UART section

www.exacq.com

+1.317.845.5710 USA (Corporate Headquarters)
+5255.56080817 Mexico
+44.1438.310163 Europe/Middle East/Asia
+31.485.324.347 Central Europe

Page 10 of 11
Updated 4/2022

Troubleshooting

When using IP/UDP to connect and the status in the "Add Security Integration" is not showing connected, you may have to delete and allow the integration to re-create the serial port. Follow these steps.

1. Navigate to the Serial Ports page
2. Select the itv2 serial port (this was created automatically)
3. Click Delete

You should notice that the port is re-created almost immediately. Now go back to the "Add Security Integrations" area and check the status again.

Contact info and Support

Support (Technical Support, Customer Service, Sales, and more)
https://www.dsc.com/index.php?o=contact

Exacq Support (Technical Support, Training tools, and more)
https://exacq.com/support/

+1.317.845.5710
+5255.56080817
+44.1438.310163
+31.485.324.347

USA (Corporate Headquarters)
Mexico
Europe/Middle East/Asia
Central Europe