Ness iComms App

D8X / D16X IPHONE INTERFACE

SETUP GUIDE

Revision 1.0.0

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1. Important Information

Ness D8x / D16x Versions
The Ness iComms App only works with version **5.6** and above of the D8x and D16x.

NOTE:
To control the AUX outputs in the Ness iComms App you must be using a D8x/D16x PCB version **7.8** or above.

To check what software version you are running in the D8x/D16x enter installer programming mode and enter P 99999999 E (eight 9's), it will then flash back the software version installed in the D8x/D16x.

Or if you are running a D8x / D16x with a Navigator keypad, you can view the version number by pressing the **Info** button on the main screen, and it will display the D8x/D16x version number at the bottom of the screen.

D8x / D16x Two way communications settings

The two way communications on the D8x / D16x will only work if the following programming locations are enabled on the panel:

P 199 E
1E ON: Send Address.
2E ON: Send Time Stamp
3E ON: Send Alarms.
4E ON: Send Warnings.
5E ON: Send Access Events.
6E ON: Send Zone Seal State. (D8x/D16x V6 and later.)

2. Wiring Diagram

2.1 RS232 Wiring Setup

The Ness iComms app requires the D8x / D16x to be on a TCP/IP network.

Although the panel doesn't have a TCP/IP connection you are required to use an Ethernet to serial bridge (Ness Part Number 101-244).

Hardware / Parts Required:
- 1 x D8x-D16x SERIAL LEAD 3 WAY - PANEL TO DB9 (Ness Part Number: 450-185)
- 1 x IP232 ETHERNET TO SERIAL BRIDGE (Ness Part Number: 101-244)

You need to connect the white serial plug into the D8x/D16x and connect the other end into the IP232 Ethernet to serial bridge as shown in the image above, and then you need to connect the IP232 Ethernet to serial bridge into a wireless router/switch.

D8x/D16x Panel	IP232 Ethernet to Serial Bridge
Black	PIN5
Blue	PIN2
White	PIN3

2.2 IP232 Ethernet to Serial Bridge Settings

Before any connection can be made, you need to make a few changes in the IP232 Ethernet to serial bridge.

To do this you need to open the **IP232 Config Utility** program which is available from the Ness download page on the website.

You must be running at least version 1.1.0 or above of the IP232 Config Utility software.
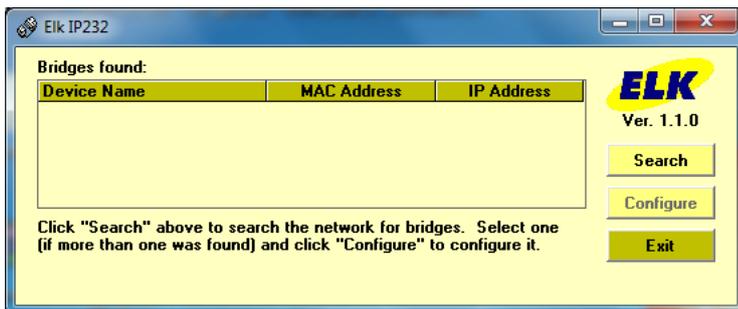
You need to make sure that you have your network cable plugged into the IP232 Ethernet to serial bridge and make sure that it's connected to the same network your computer is plugged into before continuing.

Now you need to click on the **Search** button, this will go and search for these IP232 Ethernet to serial bridges on your network.

Once it finds an IP232 Ethernet to serial bridge it will display down the bottom how many was found, as well as showing it in the dialog along with its MAC address and IP address.
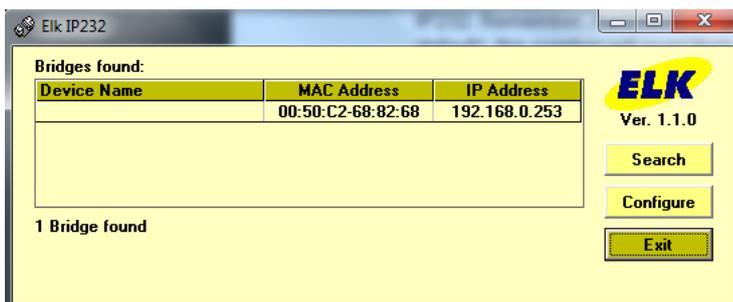
If it fails to find any IP232 Ethernet to serial bridges it will come up with the following error:

Once it finds your IP232 Ethernet to serial bridge, click on it and select **Configure**.

You now need to enter / change some settings in the configure screen.

1. You need to make sure you set the IP address to a static IP address.

2. You need to enter in an IP address for this RS232 Ethernet to serial bridge.
   This should be on the same network range as your iDevice. (e.g. 192.168.0.xx)
   If you are unsure what IP settings to use you might need to contact the network administrator.

3. You need to set the Baud rate to **9600** as that is what the D8x/D16x communicates on.

4. The TCP Port to accept connections should be set to **2401.**
    This port number can be anything, but recommended to use the default 2401.

5. Once the settings have been entered, click on the 'Send Settings (to IP232)' button.
   This will apply all the settings to the IP232 Ethernet to serial bridge.
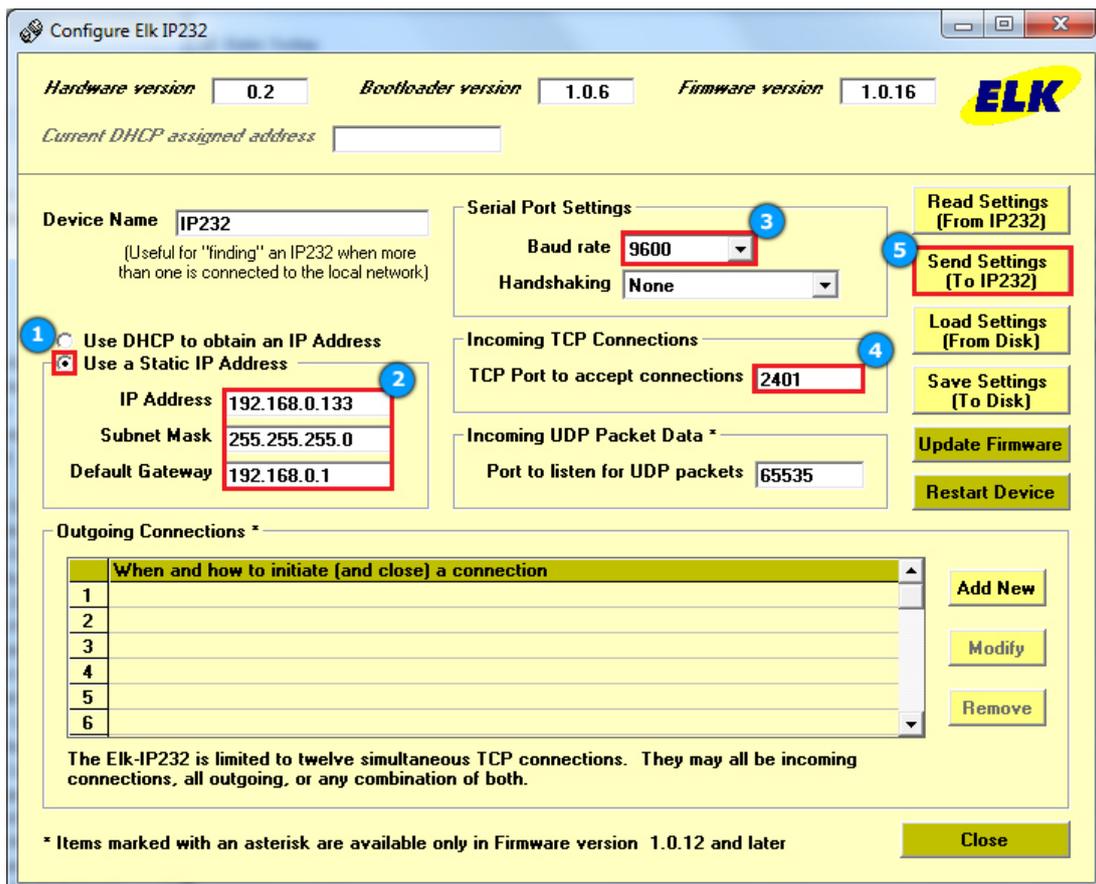
3. Ness iComms Configuration Setup

When you open the Ness iComms app for the first time it will display the configuration screen.

Otherwise you can press and hold the D8x / D16x logo for approximately 3 seconds, to change the settings at any time.

Once the configuration screen displays you need to enter in your panels connection settings.

1. Network Address, needs to be the IP address you set in the IP232 Ethernet to serial bridge.

2. Port, needs to be **2401** (or the port number you setup in the IP232 Ethernet to serial bridge)

3. Panel Type, select the panel type you are using. If you are using a 8 zone panel select **D8**, if your panel is a 16 zone panel then choose **D16**.

Once you have entered your settings in press the Ness logo up the top and the App will try and make connection you're your panel.

4. Using the App

When sending commands from the Ness iComms App, there might be a small delay in sending the data and receiving the data.

4.1 Understanding the icons

	Low Battery		AC Mains Lost
	Normal Operation		Fire Alarm Activated
	Panic Alarm Activated		Medical Alarm Activated
	Display activation Alarms screen (Panic, Fire, Medical)		Area 1 Disarmed
	Display zones		Area 1 Armed
	Control Outputs		Area 2 Disarmed
	Outputs not available with current PCB		Area 2 Armed

4.2 Arming / Disarming the panel

To arm or disarm the panel you need to bring up the on screen keypad. To do this you need to press the shield in the middle of screen. (No matter what icon is in the middle of the shield, it will always display the keypad on the screen).

Arm to away mode

To arm the panel, you need to press the **Arm** button followed by your user code then press the **E** button.

The keypad will then disappear and the panel will then arm. (It may take serval seconds before the panel arms).

Arm Home / Monitor mode

To arm the panel to home/monitor mode, you need to press the **Home / Monitor** button followed by your user code then press the **E** button.

The keypad will then disappear and the panel will then arm. (It may take serval seconds before the panel arms).

Disarm the panel from away mode or Home / Monitor mode

To disarm the panel, you just need to enter in your user code followed by the **E** button. (It may take serval seconds before the panel disarms).

4.3 Activating Emergency Alarms

To activate an emergency alarm, you need to press the panic button, which is located down the bottom left of the screen.

You then have 3 different alarms to choose from:

 Fire

 Panic

 Medical

You need to slide the icon to the right to activate the alarm, and you will hear a beep sound to confirm the activation of the alarm.

4.4 Viewing Zone Status

You can view the zone status from the panel by clicking on the Zones icon down the bottom of the screen.

On an 8 Zone panel each zone is displayed on the screen.
On a 16 zone panel, you will need to scroll down the list to view the other zones.

There are 2 different states

  Zone Normal

  Zone Violated

Each zone status is updated automatically when a zone is violated or become back to normal.

4.5 Controlling Outputs

NOTE:

To control the AUX outputs in the Ness iComms App you must be using a D8x/D16x PCB version **7.8** or above.

If you find that your outputs icon is grayed out then you are using an older version board that is not supported. You will need to update the PCB.

If your panel is supported you should see the icon like below which isn't grayed out.

You can tap the on/off toggle button to activate/deactivate the output at any time.

5. Troubleshooting

It won't display the version number when I press P99999999E on the keypad.

Make sure you have programming location P 126 E 8 E turned OFF and try again.
If you are using a Navigator keypad, you need to press the **info** button on the main screen and it will display the version number of the board at the bottom of the screen.

Why is the 'outputs icon' grayed out?

The outputs can only be controlled by version 7.8 and above on the D8x / D16x. Although you can use the outputs on the keypads (such as the navigator keypad or KPX), there is no serial protocols in earlier boards to use outputs via the serial port.

I can't control anything on the panel using the app?

The Ness iComms app will only work if the following is enabled on the panel:
P 199 E
1E: ON   (Send Address.)
2E: ON   (Send Time Stamp)
3E: ON   (Send Alarms.)
4E: ON   (Send Warnings.)
5E: ON   (Send Access Events.)
6E: ON   (Send Zone Seal State. (D8x/D16x V6 and later.))

Make sure your IP address isn't being used by another device on your network, and make sure you iDevice is connected to the same network as the panel.

Why doesn't the Panic, Fire or Medical buttons work?

Make sure you have programming location
P 126 E
1E: ON   (Double key PANIC)
2E: ON   (Double key FIRE)
3E: ON   (Double key MEDICAL)

Can I control my D8x / D16x over the internet using 3G?

Yes, however you will need to enable Port Forwarding in your router.
For more information on how to enable port forwarding please visit www.portforwarding.com for detailed step-by-steps on port forwarding.

Notes