Installing AxtraxNG Creating Networks and Finding Panels

Technical Support Engineering Rosslare Security NA For more information please see

www.axtraxng.com

- This document will guide you through creating a network and "finding" or connecting to an access control panel.
- The first example will be for a simple 1 panel serial network utilizing the MD14 (U) cable directly from the PC to the panel.
- The MD14 (U) cable provides an RS-232 to RS-485 interface adapter in a cable form, the MD14U version combines a USB to serial adapter and the RS485 converter hardware all into a single cable assembly.
- The MD14(U) connects directly to the panel on the small white 4 pin connector labeled MD14.
- Insure the RS-232/RS-485 switch is in the RS-485 position.

Network Connections and Indicators



RS-232

RS-485

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Trouble Shooting Issues with Finding Panels

If Find Panels fails do the following;

- 1. Try to find the panel again, up to three times.
- 2. Set the baud rate to 9600 (If not already),
 - 1. Insure the dipswitches are set to 9600 as well as the network configuration in AxtraxNG.
- 3. Observe the panel while trying to find it;
 - 1. Is the RX LED flashing every 2 to 3 seconds?
 - 1. If not,
 - 1. check the MD14U cable connection,
 - 2. check the position of the RS232/RS485 switch, switch it back and forth twice leaving it in the RS485 position and try to find again.
- 4. Close AxtraxNG client, restart the PC, power cycle the panel and try to find the panel again , up to three times.
- 5. Move the MD14U (or serial adapter) to another USB port.
- 6. Go into Device Manager and find the new COM port, change the network setting in AxtraxNG to the new COM port and try to find the panel again, three times if required.
- 7. If all of these steps fail please contact Rosslare Tech Support for further help.

Firmware Update

The next step is to update the firmware in the panel. The firmware must match the software being used, each version of software contains the correct firmware files for all panels supported by that version of software.

When installing a new panel into an older system you will need to perform the firmware update to "roll back" the firmware in the panel to match the software, using mismatched firmware/software can and will result in abnormal behavior.

AxtraxNG will select the correct firmware file for the panel type being updated. If the type identified does not match the actual panel then delete the panel from the network and repeat the find panel operation. If it still misidentifies the panel contact tech support.

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Trouble Shooting Firmware Update Issues

If the firmware update fails do the following;

- 1. Try to update the firmware again.
- 2. Set the baud rate to 9600 (If not already).
- 3. Close AxtraxNG client and restart the PC, power cycle the panel and try to update firmware again.
- 4. Move the MD14U (or serial adapter) to another USB port.
- 5. Go into Device Manager and find the new COM port, change the network setting in AxtraxNG to the new COM port and retry the firmware download.
- 6. If all of these steps fail please contact Rosslare Tech Support for further help.

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The second example is for a TCP/IP network . In this scenario we will create a TCP/IP network with 2 panels, one connected to the LAN and the second connected via RS-485.

The steps are;

- 1. Create the TCP/IP network
- 2. Find both panels.
- 3. Update Firmware

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Refer to the previous slide, on the Network Configuration screen check or complete the following items;

1. Gateway Type; should be MD-IP32 Onboard for IP panels, MD-N32 for the MD-N32 serial to ethernet gateway.

2. Serial Speed; set to match the dipswitch setting on the panel, 9600 is recommended for the most reliable operation.

3. Local IP Address; If the customer IT department has provided an IP address input it here.

4. Subnet; enter the subnet mask provided by the customer, usually 255.255.255.0.

5. Gateway; Enter the gateway address for the local LAN, this should have been provided by the IT department, it can also be determined by running ipconfig.exe on the PC.

6. Local Port; leave at the default of 1000.

7. Click Apply to program the network interface.

8. Click OK to save the information, this will go back to the Network Properties screen, click OK again to create the network.

9. The network status should now show connected. If utilizing an AC-215IP or AC-225 panel the connected LED should now come on in a few seconds.

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If the customer has not provided an IP address a relatively safe IP address may be determined as follows;

Open a command prompt in windows and run "ipconfig".

The IP address of the PC, subnet mask and local gateway address are listed as shown.

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The IP address should be in the same subnet (192.168.1.xxx) as the PC unless the network is a remote configuration which will be discussed later. If no IP address has been provided a relatively safe address can be determined by taking the IP address of the PC being used and adding 10 to the last portion of the address, (192.168.1.11 plus 10 would give 192.168.1.21). You should check the new address by pinging it before programming the panel to insure no other device responds, from a command prompt in windows, type "ping 192.168.1.21" without the quotes, you should receive a message "Destination Host Unreachable".



If the ping results in a reply, add 10 to the IP address try again. The last octet or last 3 digits of the IP address must be in the range of 2 to 249, the network interface of the panel will not function at addresses over 249.

Complete the network configuration as follows;

1. Gateway; Enter the gateway address for the local LAN, this should have been provided by the IT department, it can also be determined by running ipconfig.exe on the PC.

2. Local Port; leave at the default of 1000.

3. Click Apply to program the network interface.

4. Click OK to save the information, this will go back to the Network Properties screen, click OK again to create the network.

5. The network status should now show connected. If utilizing an AC-215IP

or AC-225 panel the connected LED should now come on in a few seconds.

Trouble Shooting Network Configuration issues

If the network status displays "Network Problem" or Disconnected" there is a problem with the network configuration. This may be in the steps just performed, a firewall or intrusion detection system on the LAN blocking traffic, a misconfigured switch or router or a problem with panel itself.

- 1. Run ipconfig again and compare the output to the settings in the network configuration screen once again. Insure that not only is the IP address set correctly but also that the subnet and gateway match the PC.
- 2. If the address was provided by the customer, power down the panel and ping the IP address to insure no other device is at the same IP address, you should get the message "Destination Host Unreachable". If a reply is received then another device is using the address and either it needs to be changed or the IP address of the panel does, consult the customer if in doubt.
- 3. Rarely does the Windows firewall on the PC affect the network however third party security packages may. Consult the customer to see if they can temporarily any third party security software to see if it is the cause of the problem.
- 4. Another frequent cause of problems is port security on managed switches or routers blocking traffic, have the LAN administrator insure there is no port security enabled on the panels network port.

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Trouble Shooting Issues with Finding Panels

If Find Panels fails do the following;

- 1. Try to find the panel again, up to three times.
- 2. Set the baud rate to 9600 (If not already),
 - 1. Insure the dipswitches are set to 9600 as well as the network configuration in AxtraxNG.
- 3. Observe the panel while trying to find it; Is the RX LED flashing every 2 to 3 seconds, if not;
 - 1. Check the position of the RS232/RS485 switch, switch it back and forth twice leaving it in the RS485 position and try to find again.
 - 2. Close AxtraxNG client, restart the PC, power cycle the panel and try to find the panel again , up to three times.
 - 3. Try to PING the panel, if the Ping fails troubleshoot the network configuration.
- 4. If the RX LED is flashing do the following;
 - 1. Go back to the network configuration, change the port from the default 1000 to 2000, click apply, then OK and OK again to save the changes, try to find the panel again.
 - 2. Go back to the network configuration screen again, this time change the baud rate to 115200, click apply, then OK and OK to save the changes. Power down the panel, move dipswitch 1 to the up or ON position, power the panel back up, try to find again.
 - 3. (AC 215IP or 225IP only) are the RDR1 & 2 LEDs in the top right on solid, if not try to flash firmware again.
- 5. If all of these steps fail please contact Rosslare Tech Support for further help.

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