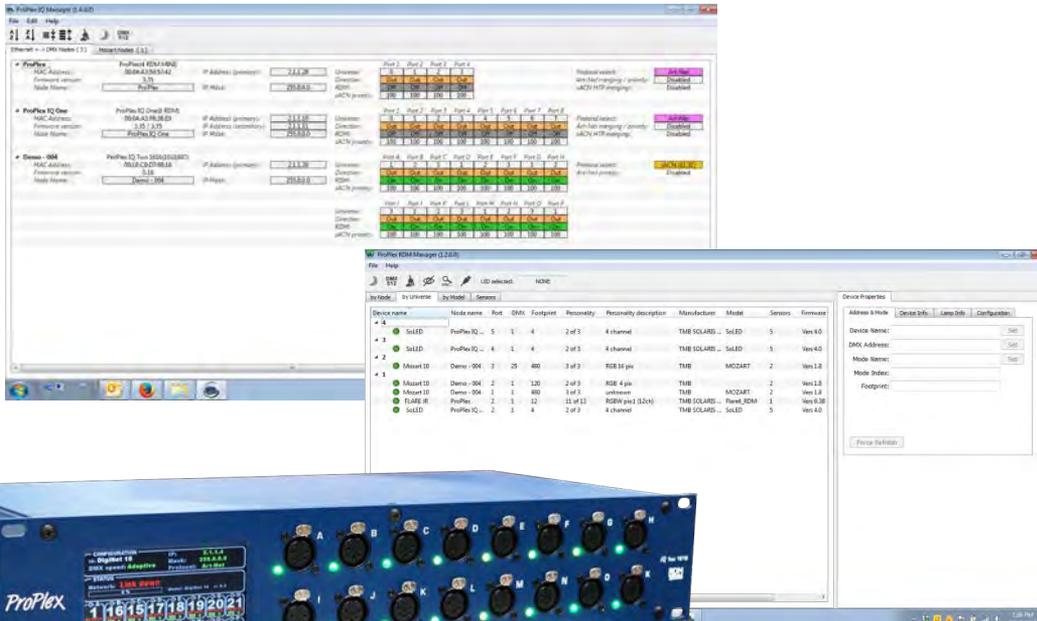


ProPlex[®]

DATA DISTRIBUTION

ProPlex Software

USER MANUAL



TMB 24/7 Technical Support

US/Canada: +1 818.794.1286
 Toll Free: 1 877.862.3833 (877.TMB.DUDE)
 UK: +44 (0)20.8574.9739
 Toll Free: 0800.652.5418
 e-mail: techsupport@tmb.com

v.1.4.4 rev. 070319

Innovative, Performance-Driven Show Technology Since 1983

tmb.com

Los Angeles

London

New York

Beijing

Toronto

+1 818-899-8818

+44 (0)20-8574-9700

+1 201-896-8600

+86 10-8492-1587

+1 519-538-0888



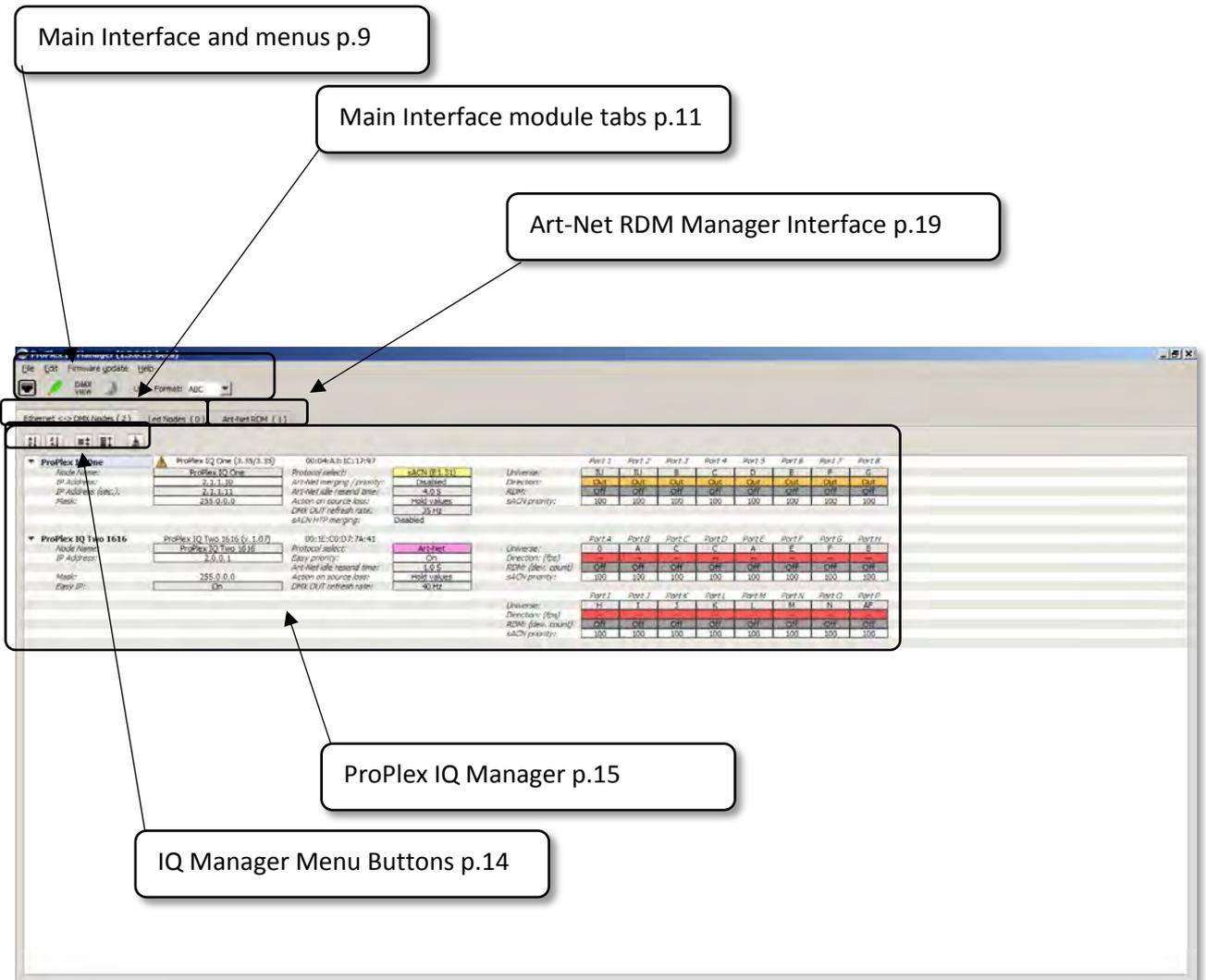
Table of Contents

1. INTRODUCTION	3
QUICK-START VISUAL CROSS-REFERENCE	3
INSTALLING AND INITIAL STARTUP	4
CONFIGURATION	4
2. UPDATING PROPLEX SOFTWARE.....	5
UPDATING CONNECTED PROPLEX DEVICE	7
MAIN HOME-SCREEN INTERFACE	8
MAIN INTERFACE CONTROLS AND MENUS	8
MAIN TOOLBAR MENU BUTTONS	10
MAIN INTERFACE MODULE TABS	12
3. IQ MANAGER INTERFACE.....	13
IQ ETHERNET TO DMX NODE CONTROL WITH IQ MANAGER	14
NODE SETTINGS	15
POST SETTINGS.....	16
IQ SUB-MENUS VIA RIGHT-CLICK	17
4. RDM MANAGER.....	18
RDM TOOLBAR.....	18
RDM DEVICES AND SETTINGS WINDOWS.....	19
USB NODE PROPERTIES AND PROPLEX RDMIGO CABLE	22
PROPLEX SOFTWARE "LATEST BETA"	23

Frequently Asked Questions

- 1) *Is ProPlex Software compatible with Windows 10? Yes.*
- 2) *What is RAM requirement? 2Gb minimum.*
- 3) *What required hard drive space? 1Gb minimum.*

Quick-Start Visual Cross-Reference



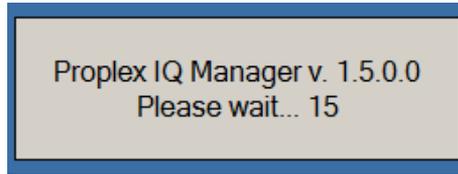
ProFlex Software is used to manage and update ProFlex IQ Ethernet to DMX converters, and perform RDM functions when using a ProFlex IQ or ProFlex RDMigo cable connected to RDM devices.

Note: Ensure all devices support RDM. Some DMX receiving chips are not able to process an RDM signal, causing the device to behave erratically. If a problem occurs contact the device manufacturer.

Installing and Initial Startup

ProPlex Software can be downloaded from <http://pub.tmb.com/ProPlex/Devices/IQ/software/ProPlexIQManager.zip>

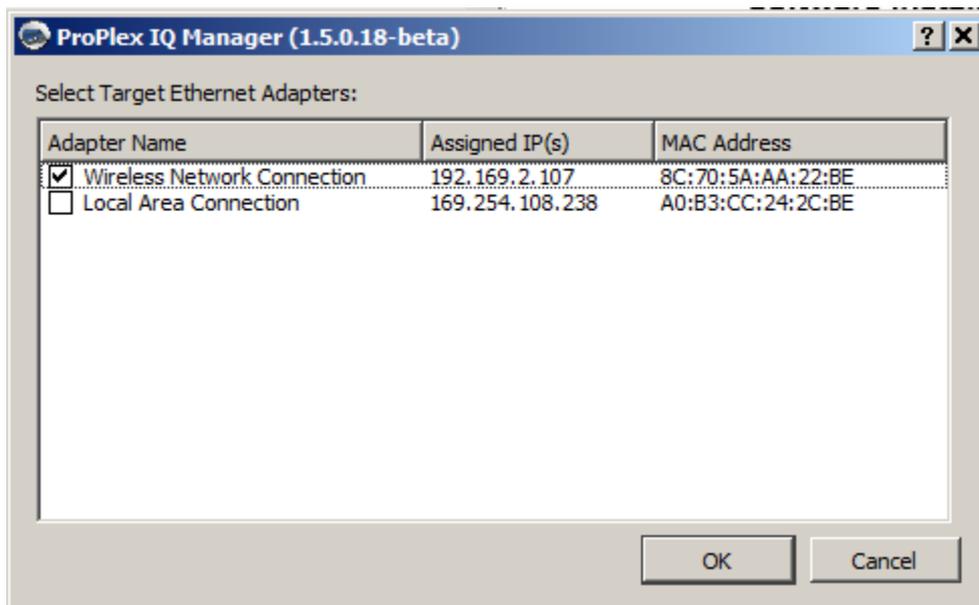
Once downloaded, unzip the folder and run the PropPlexIQmanager.exe file.



Configuration

Note: If Windows™ requests access to the various blocking options of Windows Firewall, please choose all available options to not be blocked.

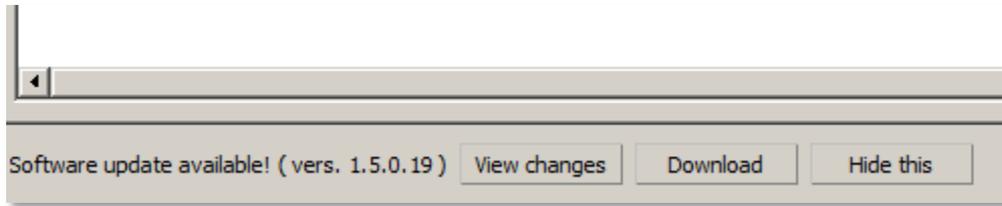
When starting ProPlex Software, a popup window will appear to select the NIC (Network Interface Card) being used with the ProPlex Ethernet to DMX node. If using the ProPlex RDMigo Cable, please choose any of the options as it does not require a network connection.



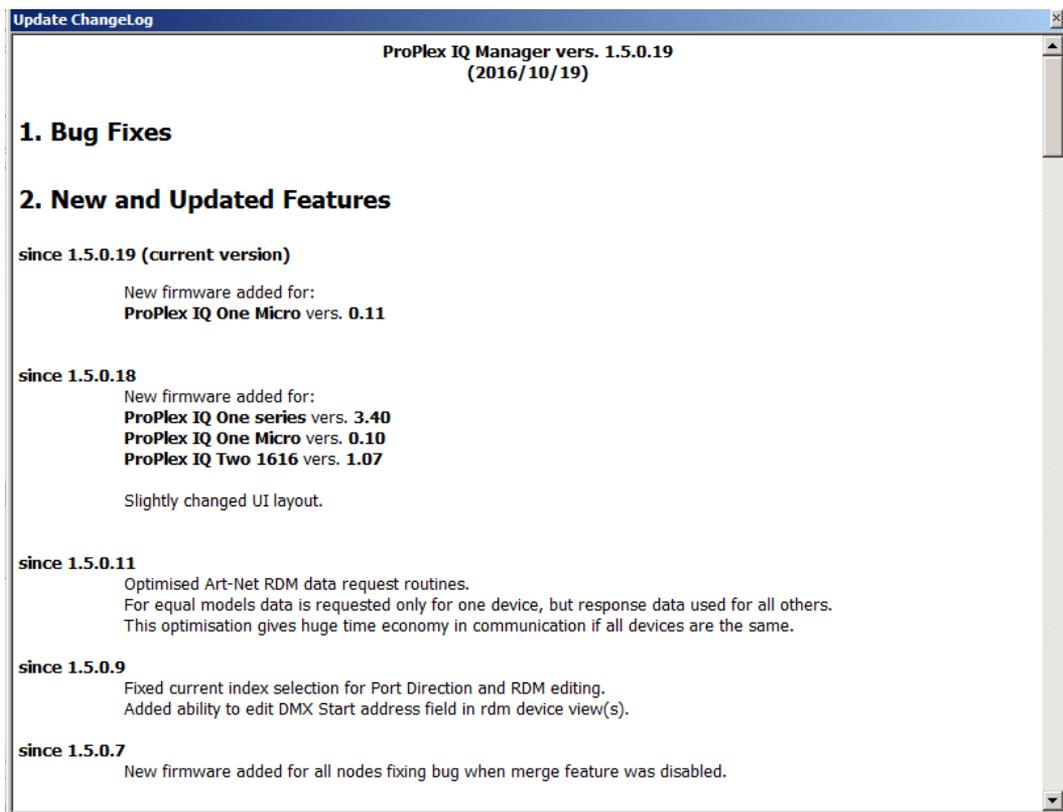
Once the network setting has been chosen, the main ProPlex Software home-screen interface will appear.

Updating ProPlex Software

Occasionally, new updates to the ProPlex Software will be released. The ProPlex Software will notify the user that there is an update.

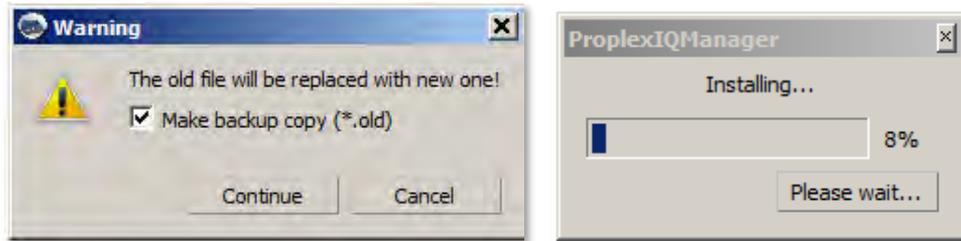
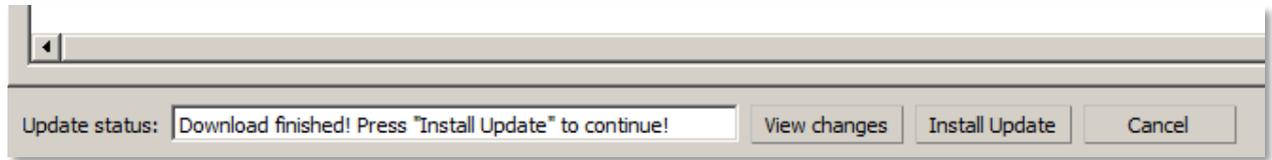


View the changelog for the update by clicking on the “**View changes**” button

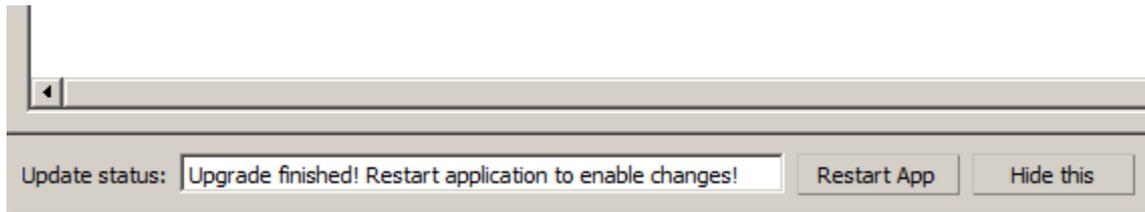


To proceed with the update, click on the “**Download**” button. A progress indicator bar will advise on the download’s progression until it’s finished.

Once the download is finished, click on the **“Install Update”** button to install the latest version of ProPlex Software. The software will make a backup of the existing version of ProPlex Software in case it’s needed again.



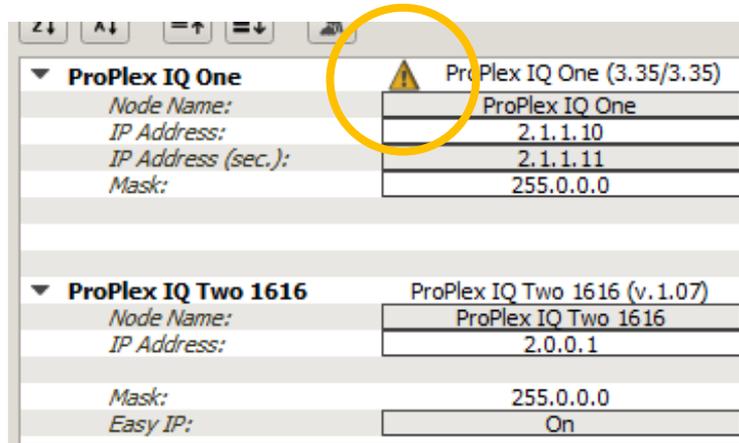
Once the update is installed, the software will prompt a restart. Press the **“Restart App”** button to restart the software.



As the Software restarts, choose the desired network again to open the main home-screen interface.

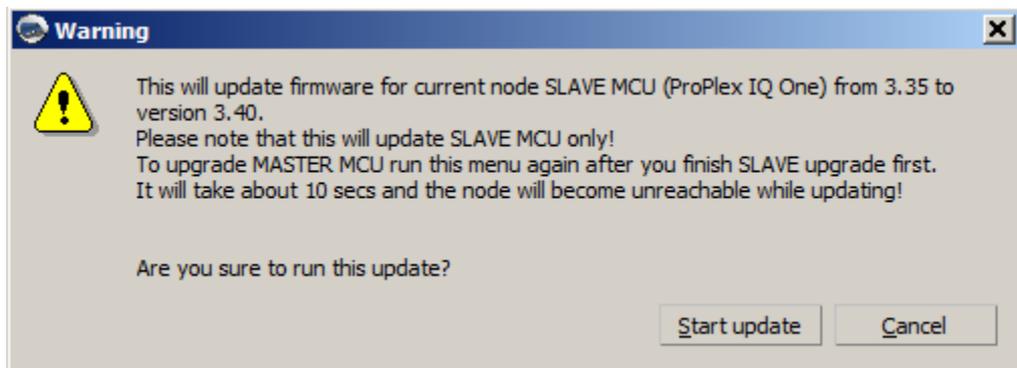
Updating Connected ProPlex IQ Ethernet to DMX Devices using ProPlex Software

As new versions of firmware for the ProPlex IQ Ethernet to DMX nodes become available, ProPlex Software will indicate if a new version of firmware is available for any of the attached nodes. The yellow triangle on the node's name-bar indicates there is an update for the attached node. By right-clicking on the triangle or the node's name, a pop-up menu will appear. Choosing "update firmware" will start the update process.

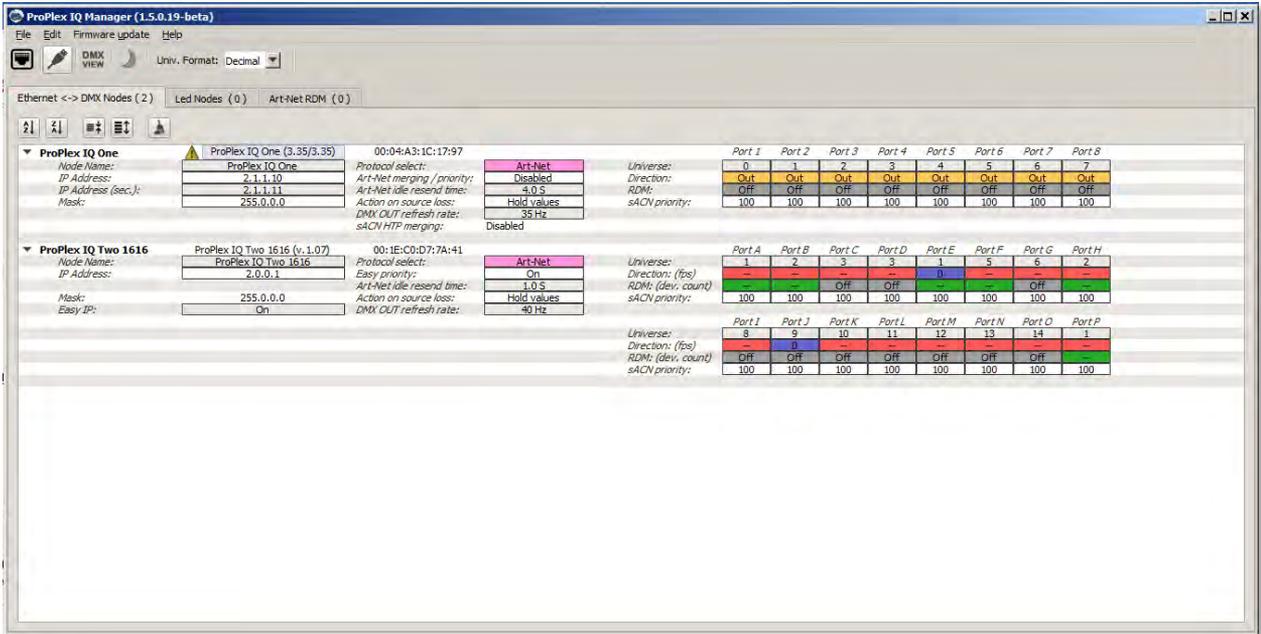


An update window will pop up and clicking the "Start update" button will initiate the update.

Note, IQ ONE 8-port Ethernet to DMX nodes will have a two-step update procedure due to the node having two separate MCU's, master and slave. Follow the instructions onscreen to update both the master and slave MCU in the correct order.



Main ProPlex Software Home-Screen Interface



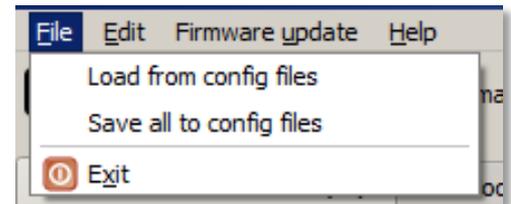
Main Interface Controls and Menus

File Edit Firmware update Help

Main menu dropdowns for common menu items

File:

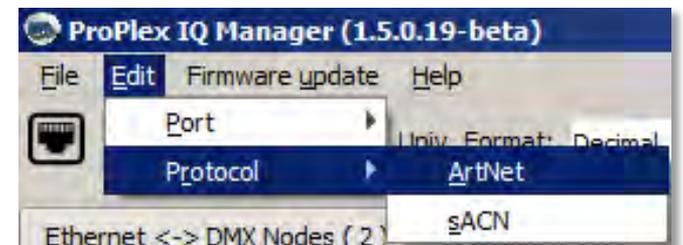
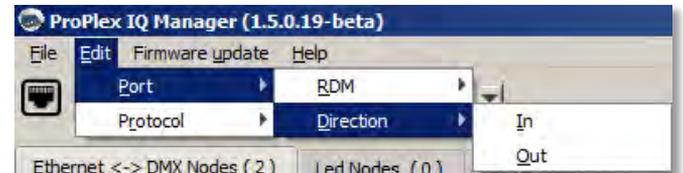
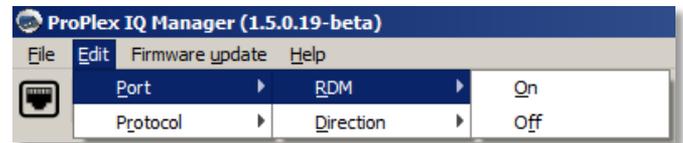
- **Load from Config files:** Loads the previously saved snapshot of config files taken from all attached nodes. Also used in troubleshooting with tech support.
- **Save all to config files:** Save all settings for all attached IQ Nodes. Handy for resetting an entire system back to default or to a saved state.
- **Exit:** Shut down ProPlex Software



Edit:

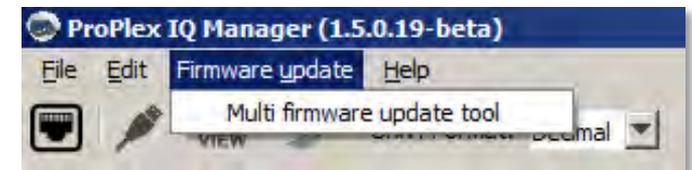
All attached nodes can have changes made to all ports with these settings. For example, change all node protocols to Art-Net: Choose Edit -> Protocol -> Art-Net

- **Port -> RDM (ON/OFF):** Quickly change RDM to ON or OFF for attached nodes.
-
- **Port -> Direction -> (In or Out):** Change all port directions between In and Out (Not available in IQ TWO 416)
- **Protocol -> (Art-Net or sACN):** Change all node protocols between Art-Net and sACN



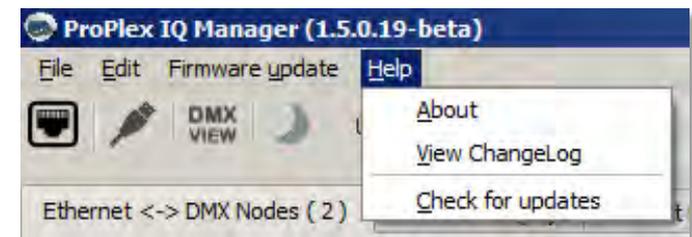
Firmware Update:

- **Multi firmware update tool:** Running this tool will allow sequential updates on all nodes in a system. This is especially handy on large systems due to the staggered timing of node updating to ensure nodes reboot and not leave the system dark all at once.



Help:

- **About:** Shows the current version of software, the currently supported devices list, and the contact information for technical support
- **View ChangeLog:** Shows the list of changes of recent releases of ProPlex Software and supported devices firmware.
- **Check for updates:** – Initiates a manual check for updates to ProPlex Software



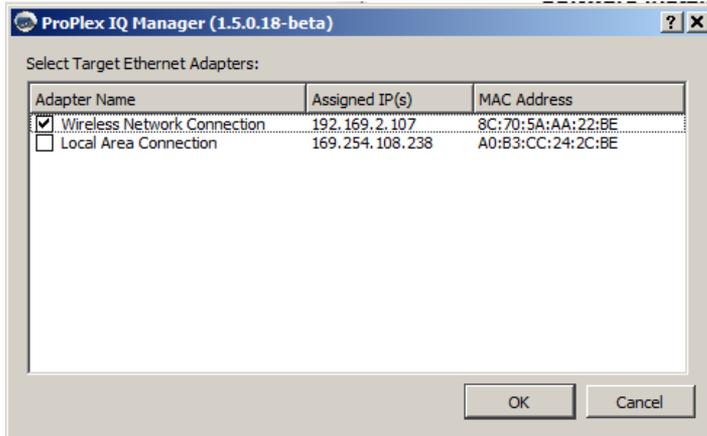
Main Toolbar Menu Buttons



Target Ethernet Adapter Button:



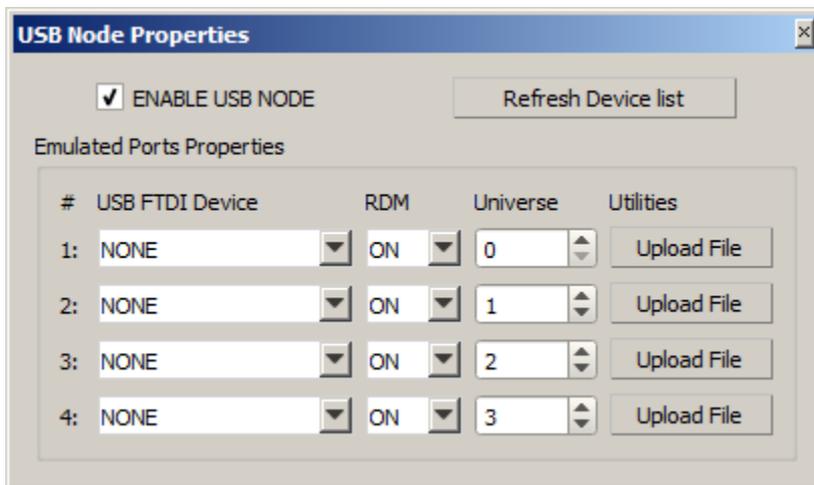
- Allows for selection of NIC (Network Interface Card)



USB Node Properties Button:



- When using the ProPlex RDMigo Cable for RDM device management, toggles the USB Node properties window, and shows green when a ProPlex RDMigo Cable is attached and enabled.

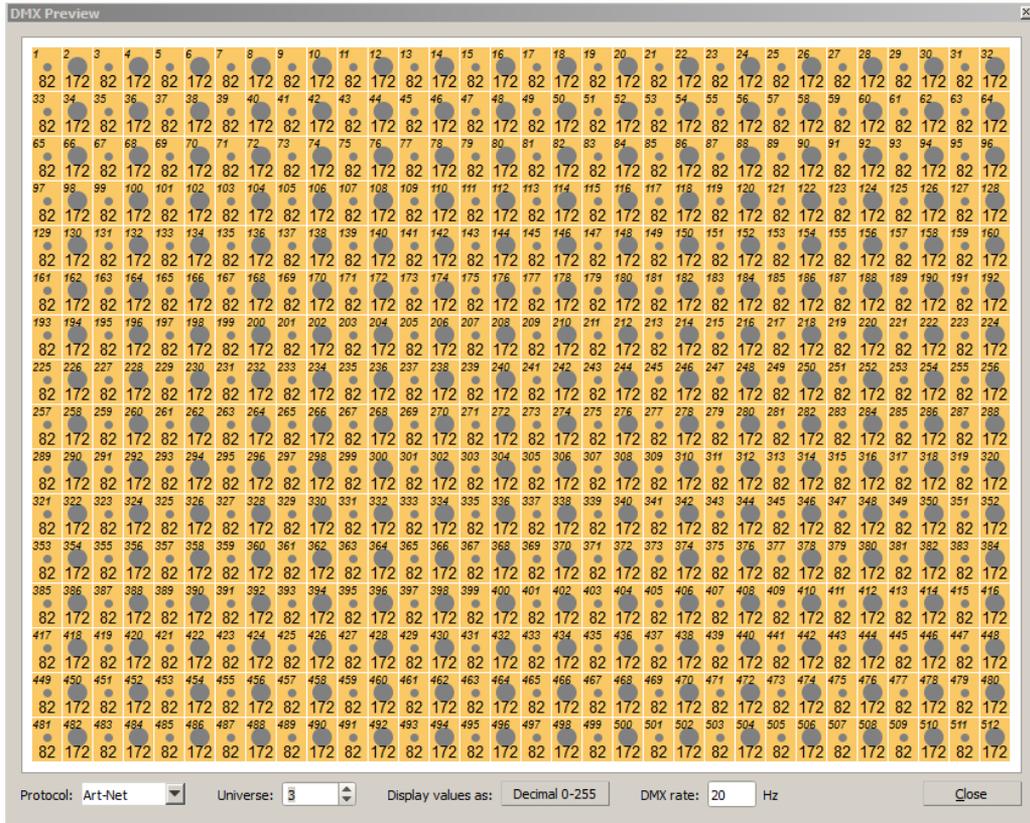


Note: Refer to page p.22 for ProPlex RDMigo Cable and RDM Management.

DMX VIEW Properties Button:



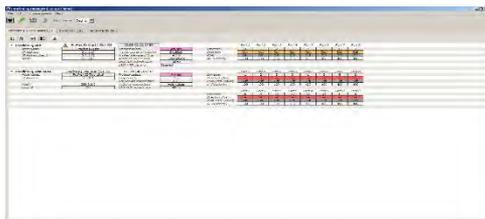
- This button opens the DMX Preview window. In this window there is the option to display the Art-Net or sACN data on for a selected universe, and the levels of the channels in the universe. DMX levels can be displayed in percentage (0-100%) or decimal (0-255). Incoming DMX refresh rate will also be displayed here.



Change Skin Button:



- This button toggles the Main interface color between a lighter and darker theme.



White Background Skin



Dark Grey Background Skin

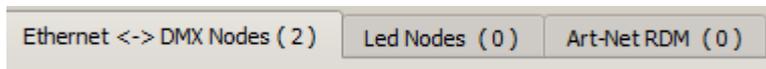
Change Universe

Univ. Format:

Format:

- This dropdown menu changes the way ProPlex Software displays universe information.
 - HEX
 - Art-Net (0, 0.0.1 – 0.0.9, 0.0.A - 0.0.F, 0.1.0 – 0.1.F – F.F.F)
 - sACN (0.0.1-0.0.9, 0.0.A - 0.0.F, 0.1.0 - F.F.F)
 - BASE16
 - Art-Net (0, 0.0.1 – 0.0.15, 0.1.0 – 0.1.15... 127.15.15)
 - sACN (0.0.1 – 0.0.15, 0.1.0 – 0.1.15... 127.15.15)
 - Decimal
 - Art-Net (0 – 32767)
 - sACN (1 – 32767)
 - ABC (Alphanumeric)
 - Art-Net (0, A - Z, AA – AZ, BA... AVLG)
 - sACN (A - Z, AA – AZ, BA... AVLG)

Main Interface Module Tabs

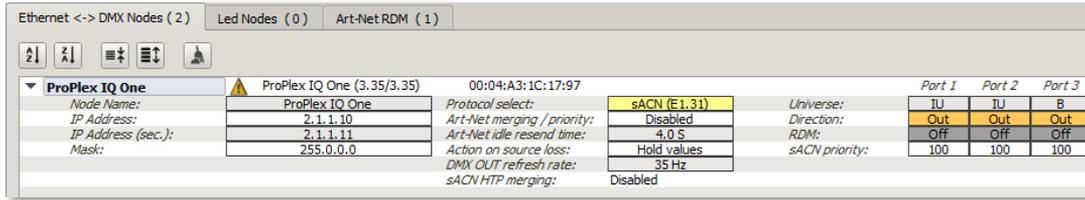


Located in the main interface are tabs for choosing which module to work in: Ethernet to DMX node module, LED Nodes Module, and RDM over Art-Net module.

- **“Ethernet <-> DMX Nodes”**: ProPlex Software can be used to remotely manage ProPlex IQ ONE, IQ TWO, DIN RAIL IQ, and IQ MICRO Ethernet to DMX Nodes
- **“Led Nodes”**: ProPlex Software can be used to remotely manage Solaris Mozart 40-way Power supplies.
- **“Art-Net RDM”**: ProPlex Software can be used to remotely configure RDM devices attached to ProPlex IQ Ethernet to DMX Nodes, or in conjunction with the ProPlex RDMigo Cable attached directly to a PC, can manage RDM Devices over an attached DMX link.

Note: Currently as the sACN E1.31 standard awaits inclusion of the RDM protocol, ProPlex IQ’s must be in Art-Net protocol mode to display connected RDM fixtures.

IQ Manager Interface



“Ethernet <-> DMX Nodes” Menu buttons



Sort ascending by name

The "Sort ascending by name" button organizes all attached IQ Nodes ascending by name.



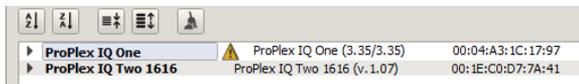
Sort descending by name

The "Sort descending by name" button organizes all attached IQ Nodes descending by name.



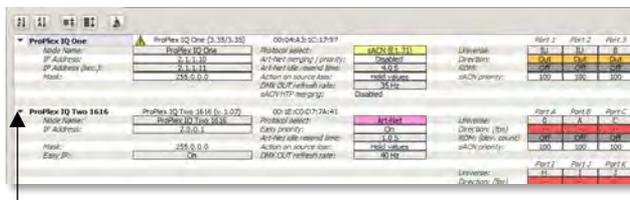
Collapse list (all)

By pressing the "Collapse list" button, the list will collapse to only show the node names.



Expand list (all)

By pressing the "Expand list" button, the list will expand to reveal all of the IQ Node's settings. (see the example below)



Note: Individual Nodes can be Expanded and Collapsed using the Small Black arrows to the left of their name



Remove absent nodes

By pressing the "**remove absent nodes**" button, all of the absent nodes (nodes that are not active/connected anymore) will be removed from the list.

When a node is detected as absent, all of its attributes will change to "red".

▼ ProPlex IQ Two 1616	ProPlex IQ Two 1616 (v. 1.06)	00:1E:C0:D7:A2:0D	
Node Name:	ProPlex IQ Two 1616	Protocol select:	Art-Net
IP Address:	2.215.192.205	Easy priority:	Off
Mask:	255.0.0.0	Art-Net idle resend time:	4.0 S
Easy IP:	On	Action on source loss:	Blackout after: 5 S
		DMX OUT refresh rate:	Adaptive

ProPlex IQ Ethernet to DMX Node Feature Control using IQ Manager

General Node information

- Node Type:** Node Type/ Software version
- Node Name:** (click in this field to change)
- IP Address:** (click in this field to change)
- Mask:** (click in this field to change)
- Easy IP:** (click to change on/off)

▼ ProPlex IQ Two 1616	ProPlex IQ Two 1616 (v. 1.07)
Node Name:	ProPlex IQ Two 1616
IP Address:	2.0.0.1
Mask:	255.0.0.0
Easy IP:	On

Node Name

- Change the name of the node to the desired name

IP Address

- Change the IP Address to the desired address. *Note: IQs that require a software update must be in the same subnet as ProPlex Software.*

Mask

- Commonly referred to as "subnet mask". *Note: When EASY IP is set to ON, no changes to Mask are available*

EASY IP

- When EASY IP is set to ON, IQs automatically find Art-Net and sACN traffic without the need to be in the same IP address subnet. The IQ software searches all masks, not just the current IP range.

Node Settings

- Node Mac Address:** (fixed and unchangeable)
- Protocol Select1:** (Art-Net or sACN)
- Easy Priority:** (ON or OFF)
- Art-Net idle resend time:** (0.5s, 1s, 2s, 4s)
- Action on source loss:** (HOLD After, Blackout After, Dis. Out After)
- DMX OUT refresh rate:** (20hz,30hz,40hz, Adaptive)

00:1E:C0:D7:7A:41	
Protocol select:	Art-Net
Easy priority:	On
Art-Net idle resend time:	1.0 S
Action on source loss:	Hold values
DMX OUT refresh rate:	40 Hz

Node Mac Address:

- Fixed mac address that ships with the node

Protocol Select:

- Choose between Art-Net or sACN. This setting applies to all ports of the node

Easy Priority:

- When Easy Priority is ON, when two or more of the same Art-Net/ sACN universes from different sources exist on the network and are used by a ProPlex IQ output port, the source with the higher channel 512 value for that universe will have control over that universe. This is especially handy when 2 DMX consoles of different Manufacturers are desired to share parts of the same lighting rig. Using simple submasters with channel 512 recorded to full, one console can easily take over control of a universe from another without any form of complex HTP/LTP merging in the system.

Art-Net idle resend time:

- The amount of time between packets a ProPlex will resend if it detects no change in packets coming from the source. Some older devices require constant Art-Net packets even though there were no changes.

Action on source Loss:

- When the ProPlex IQ loses its source of Art-Net or sACN; **HOLD Values**, holds the last values the ProPlex IQ received, **Blackout After** takes all channels to 0% after a set amount of time, and **Dis.Out After**, disables the DMX output altogether after a set amount of time. (See additional Window below)

Action on source loss:	Blackout after:	5 S	Action on source loss:	Dis. out after:	5 S
------------------------	-----------------	-----	------------------------	-----------------	-----

DMX OUT refresh rate:

- Changes the DMX out refresh rate between 20Hz, 30Hz, 40Hz, and Adaptive. Adaptive mode (High Speed Video Adaptive Mode), is best used when a media server or lighting console is sending DMX over Ethernet at a higher rate than typical, for the purposes of having DMX Fixtures (LEDs) behave like low-res video. *Note: Some devices may not work with this setting*

Port Settings

- Universe:** (click in this field to change))
- Direction: (fps):** (IN or OUT)
- RDM: (dev. Count):** (ON or OFF)
- sACN Priority:** (0-200)

	Port A	Port B	Port C
Universe:	0	A	C
Direction: (fps)	--	0	--
RDM: (dev. count)	Off	--	Off
sACN priority:	100	200	100

Universe:

- Change the universe number for the port (the value in the field is displayed according to the Universe Number format (see p.13). If the number entered is in a different format than the selected format, the entered number will be converted to the selected Universe Number format (e.g., Node is in Alpha-Numeric mode, and "17" typed, the field will show "P").

Note – When the Node is in sACN mode, setting a value of universe 0 will show an error as sACN begins at universe 1.



Direction:

- Change the direction of the port between IN (Input) and OUT (Output). Once changed, the field in IQ Manager will show the DMX refresh rate of the port. The color of the field in the IQ Manager interface display RED for Output and Blue for Input (not available in the IQ Two 416).

RDM:

- Turn RDM ON or OFF by port. When set to on, the number of connected RDM devices is shown in the field in IQ Manager. When RDM is turned ON, the field in IQ Manager turns green, and flashes light-green each time the RDM protocol is sent.

Port G
F
--
1
100

sACN Priority:

- Change the sACN priority of the port when it's set to INPUT. Also used to assign priority to a port for DMX merging and priority. Zero "0" is the lowest priority and "200" is the highest.

IQ Sub-Menus via Right-Click

The IQ Manager also offers so extra features available via right-click.

Right-clicking on the Node Type, Node Name, or IP Address fields reveals the IQ submenus.

Identify: (ON/OFF)

- Flashes the screen and connectors (IQ Two/Micro).

Open in Browser:

- Opens the node in the default web browser web interface.

Additional Config: (IQ Two and IQ Micro)

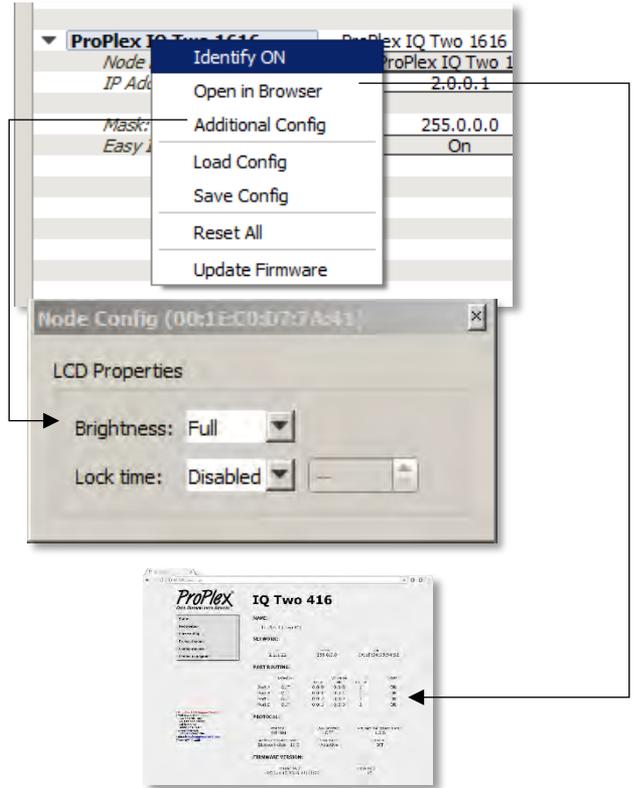
- Brings up a new window allowing control of the LCD/LED brightness and Screen Lock time (1-300s).

Load / Save Config:

- Load / Save the current configuration of the node.

Reset All / Update Firmware

- Resets the configuration back to factory default
- Checks the internet for latest node updates (usually happens automatically) Requires and internet connection (see p. 18).



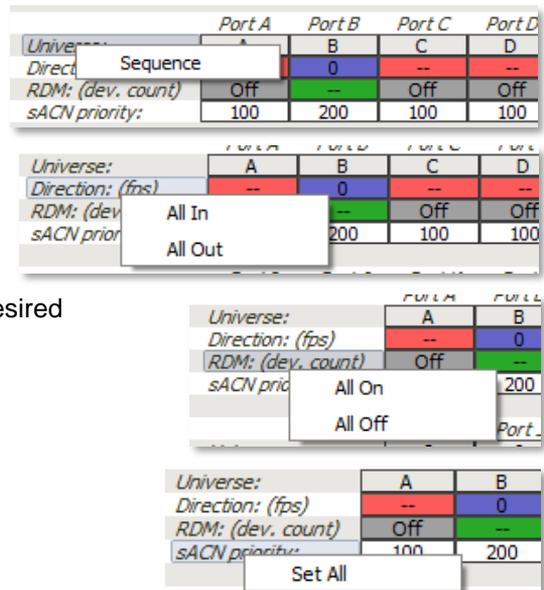
Right-Clicking on:

Universe/Sequence: Allows a sequential renumbering of ports

Direction: Allows change of all port to ALL In or ALL Out

RDM: Allows change of all ports to RDM All On or All Off

SACN Priority: Allows change of all ports to the same desired priority level



RDM Manager

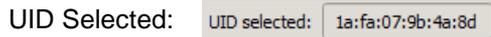
RDM Toolbar



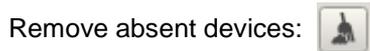
The top bar of the RDM window has the following information and tools.



- “RDM First IN, First Out” – When configured multiple RDM fixtures at the same time, packets need to be sent sequentially, and this window shows the number of packets remaining in line to get processed.



- Shows which RDM Device is selected by its embedded UID (Unique Identifier). All RDM devices have a unique identifier (UID) that consists of a manufacturer ID and serial number.



- ProPlex Software detects and “memorizes” which fixtures and IQ Ethernet to DMX nodes it last saw. If the device is present on the DMX link, it’s shown with a green circle next to it. If a RDM device is disconnected, powered down, or becomes undiscoverable due to failure, the software will still show it in its RDM device list but will show a red circle instead.

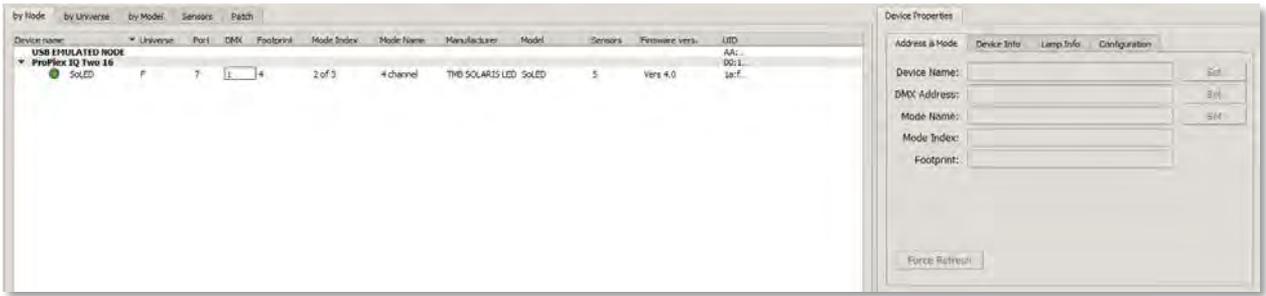


- While a RDM device is selected, pressing the “identify” button will cause the device to identify itself. (This is usually a flashing of the intensity parameter, or the device’s menu screen.)



- The Force Discovery button, ProPlex Software will search for any new devices. ProPlex Software automatically checks for new devices periodically, but this feature forces an immediate check for new devices.

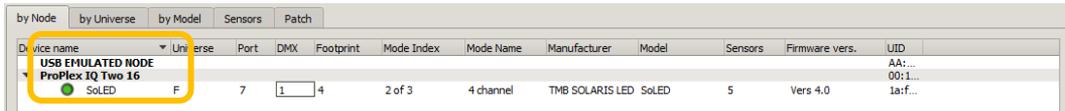
RDM Devices and Settings Windows



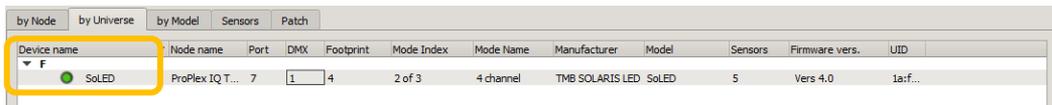
View tabs:



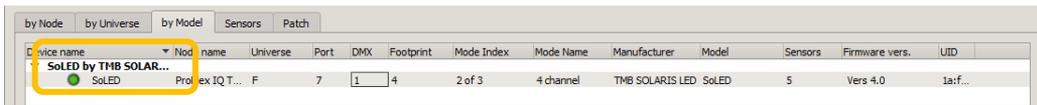
- **“by Node”**: RDM Devices are organized and listed under the Ethernet to DMX Node (or RDMigo Cable) they’re are attached to. Below, the SoLED is shown as connected to the ProFlex IQ Two 1616.



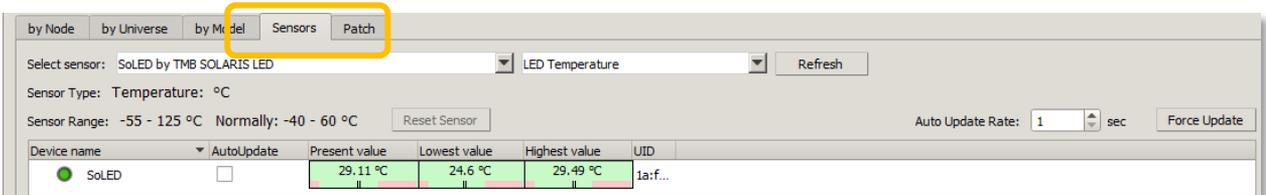
- **“by Universe”**: RDM Devices are organized and listed under the Universe they exist on. Below, the SoLED is listed as connected to Universe “F”.



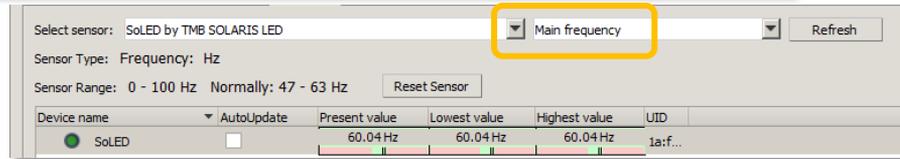
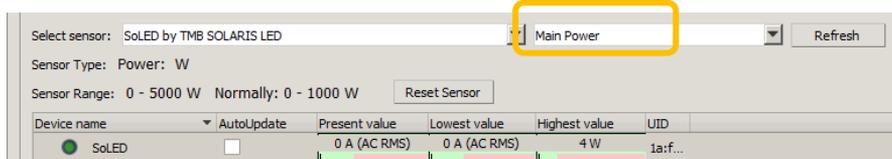
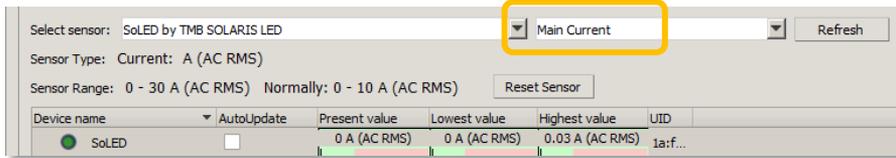
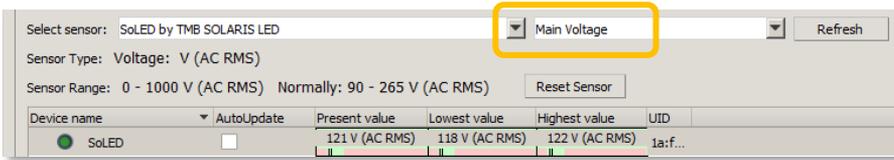
- **“by Model”**: RDM Devices are listed by type.



- **“Sensors”**: The “Sensors” tab shows the various sensor statuses and information that a device is capable of reporting. The dropdown to the left of the “refresh button” shows the available sensors. Temperature, Voltage (supplied), Current Draw, Power Consumption, and mains frequency are some of the options a device can report.

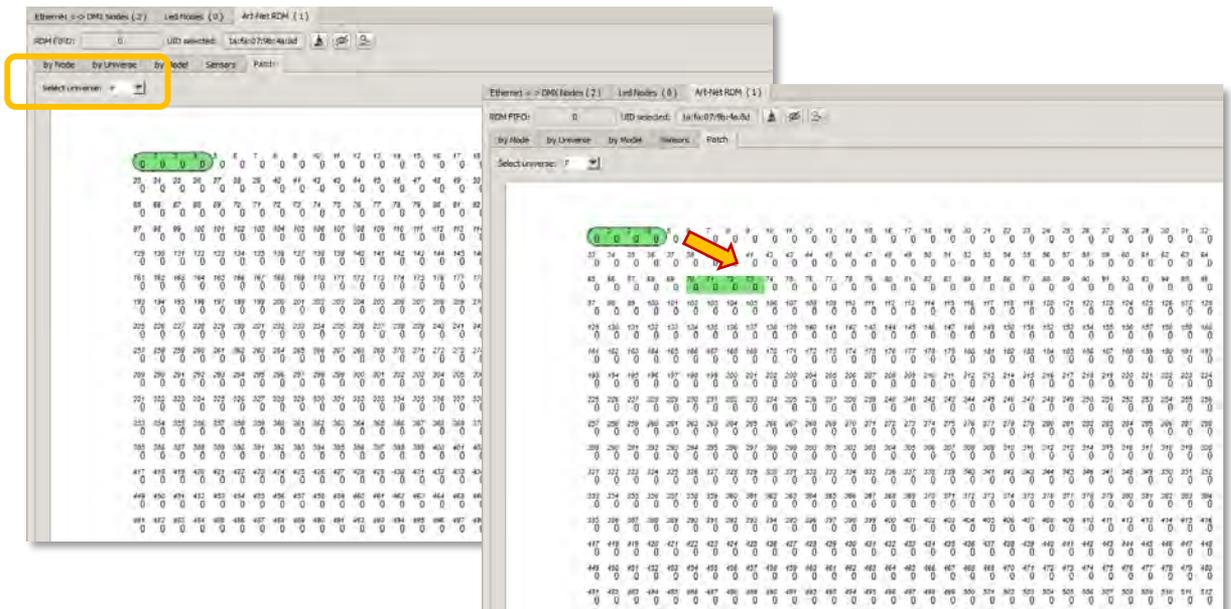


Some examples of Sensor options:



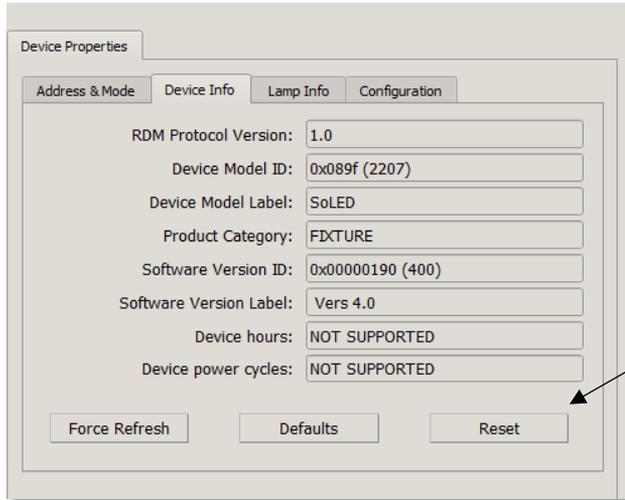
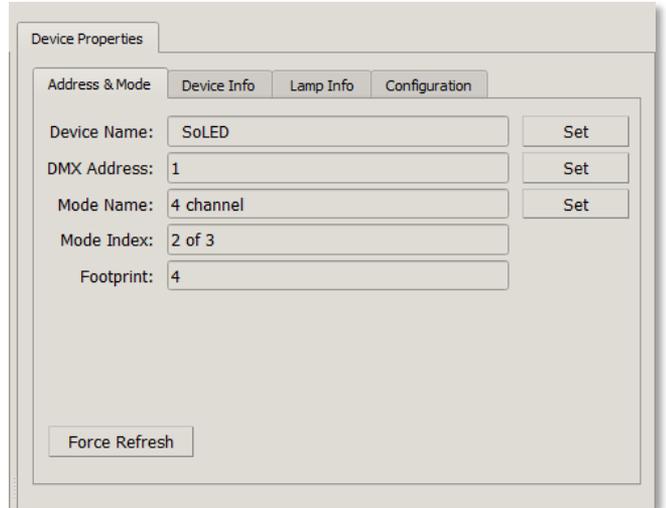
The “Reset Sensor” button is very handy for troubleshooting, as some sensors will report the lowest and highest values the devices have been in contact with. Example, on a festival, it’s suspected that a brown-out condition exists. The Main Voltage sensor on the TMB Solaris SoLED will report the lowest voltage it has seen since its sensor has been reset.

- “Patch”: The Patch tab shows DMX channels 1-512 for the universe currently selected in the dropdown in the upper left corner. A fixture’s address can also be quickly changed by clicking and dragging on the fixture footprint (the green bar) from one section of the universe to another.

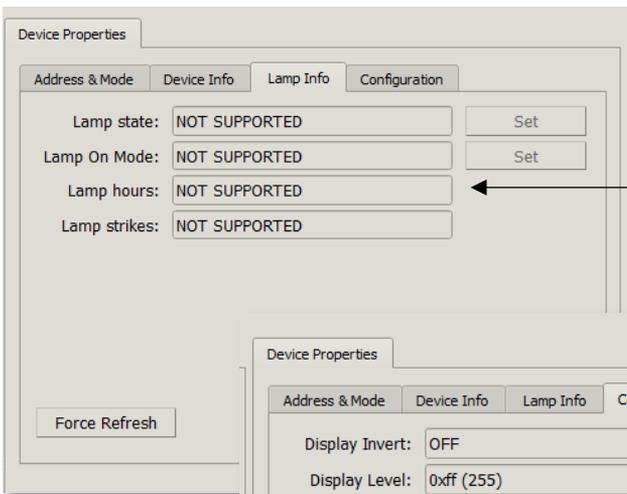


Device Properties:

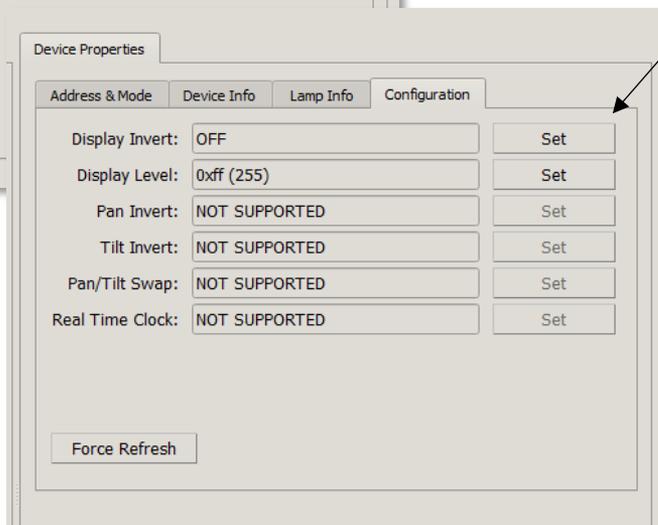
The Device Properties Tab shows all of the common RDM PIDs found in most entertainment lighting devices. The Address and Mode tab, Device Info tab, Lamp Info tab, and Configuration tab have various fields which can be changed by hitting the “set” button next to the field that is to be changed.



Device Hours and Power Cycles Counts can be reset here



Device Menu Attributes, and Moving Light RDM functions can be accessed on the third and fourth tabs.



USB Node Properties and ProPlex RDMigo Cable

The ProPlex RDMigo Cable allows for easy management of RDM devices from a PC using ProPlex Software. The RDMigo Cable connects to a pc via USB, and attaches to a DMX link. All fixtures on the DMX link that are RDM compatible will be displayed in the IQ RDM Software.

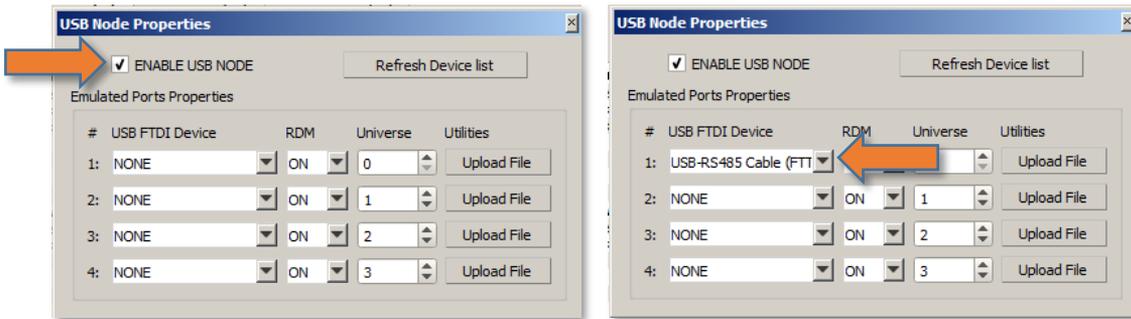
Warning: To eliminate risk of damage to the computer, we recommend connecting through an opto-splitter.



To use the ProPlex RDMigo cable, connect the cable to a PC and open ProPlex Software. After choosing the network interface card (any choice will do when using just the RDMigo Cable,) click on the USB Node Properties Button.



In the USB Node Properties window, click the checkbox to ENABLE USB NODE. Next, click on the first drop-down window under the USB FTDI Device list and select the “USB-RS485 Cable” option.



The RDM ON/OFF drop down allows for temporary RDM disabling for troubleshooting purposes, and the Universe selection window allows for simple organization in the Art-Net/RDM window when also using ProPlex IQ Ethernet to DMX nodes.

ProPlex Software “Latest Beta”

In some instances, the latest Beta of ProPlex Software may need to be used to run new products or try new functionality slated for an upcoming software release. In order test the latest Beta of ProPlex Software, a custom “short-cut” needs to be made to the program’s .exe file. The method below describes how to create the beta shortcut and backup the standard ProPlex Software

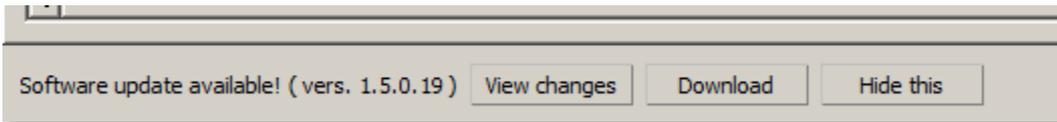
Note: Running a beta piece of software may produce undesirable results. Please test prior to using in a show environment. In some cases a beta will not be available. Please contact Tech Support if there’s a technical issue.

1. Locate the ProPlexIQManager.exe file on the PC.
2. Right-Click on the file and select “Create Shortcut”
3. Right-Click on the new Shortcut and Choose “Properties”
4. In the Properties tab, locate the “Target” field, and change the target from:

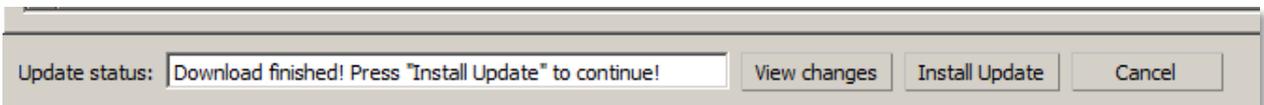
“.....\ProPlexIQManager.exe” to “.....\ProPlexIQManager.exe -beta”

*Note, there is a space after .exe, followed by a “-” (hyphen)

5. Once finished, run the new shortcut.
6. Once the software has opened, wait 20 second for a message along the bottom bar to appear similar to the image below. Choose the Download button to initiate the process.



7. Once finished, follow the instructions on screen to install and backup the original file. This will restart the app.



8. Once the app is restarted the most current beta will be installed. In some cases, the software will not advise that there’s a newer version of software because it hasn’t been released for public use.