

Overview

The RMS IP Link™ Interface module enables the monitoring of Extron "IP Link" controllers via RMS solutions. Once the module is loaded in a NetLinX master, each connected IP Link device reports as a "room" within RMS.

- The RMS IP Link Interface module was designed for the 64MB NI-700 (FG2105-70). Other masters with at least 64MB of SDRAM memory can also be used.
- A NetLinX master supports 12 Extron IP Link devices.

Before You Begin

- Confirm your Extron devices are properly installed per their documentation.
- Configure your Extron devices with the latest version of *Global Configurator*, the file is available from Extron.
- Connect your NetLinX master and confirm you are running firmware version 320 or higher.
- Install the RMS server. Refer to the application documentation for details.
- Download the RMS IP Link Interface .TKN file from: <http://amx.com/products/categoryEnterpriseTools.asp>.
- If you do not currently have FileTransfer 2.0, download the application from www.amx.com.

1) Load The Extron .TKN File to Your NetLinX Master

- Launch FileTransfer 2.0, click the **Add** command button to open the *Select Files For File Transfer* dialog.
- Open the **Other** tab. This tab consists of the different types of files that can be transferred to the Master or System devices on the bus.
- Select the file type **.TKN**.
- Click the **Add** button. This invokes the *Open* dialog, with the *Files of Type* selection already set to .TKN.
- In the *Open* dialog, locate and select the .TKN file that you want to add.
- Click **Open** to add the selected file to the *Files To Send* queue.
- Configure the communication settings for the file in the list. Consult the FileTransfer 2.0 Help file for your specific settings.
- Specify the device-file mapping information for the file in the list. Consult the FileTransfer 2.0 Help file for setting device information.
- Click the **Send** command button. This initiates the transfer of every file listed in the Transfer (Send) List, in the order in which they are listed (top to bottom).
- The progress and status of each file transfer is indicated in the *Transfer Status Window*.

Note: If you are running a Telnet session the error, "Could not validate the module license" appears. This error is expected and appropriate at this time.

2) Obtain An RMS IP Link Interface Module License

Contact AMX customer support to receive your RMS IP Link Interface module license. You need to provide the serial number for the NetLinX master where the module will reside.

To obtain the serial number, Telnet to the NetLinX master and enter **show devices** at the prompt.

3) Activate the RMS IP Link Interface Module on Your NetLinX Master

- Using your web browser, open the web interface for the NetLinX master by typing in the IP address for the master in the address field.
- Click **Manage License** under *System Settings* in the navigation menu to open the *Manage License* window (FIG. 1).

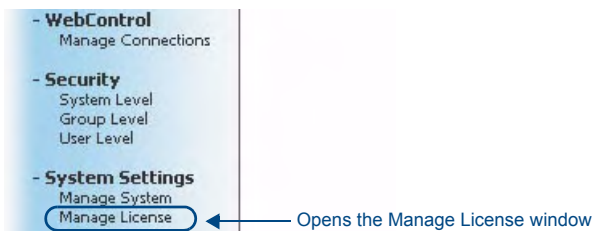


FIG. 1 NetLinX Master Navigation Menu

- Type in the *Product ID* number and Key provided to you by AMX in the *Add New License Key* section.

Note: Do not include dashes when typing, they are already provided (FIG. 2).

FIG. 2 Manage License Window - Add New License Key Section

- Click **Update**.
- Click on **Manage License** in the navigation menu to verify the license is registered with the NetLinX master.
- Reboot the NetLinX master.
- Return to the web interface for the NetLinX master after the reboot is complete.
- Click **Manage Other Devices** under *System Settings* to open the *Manage Other Devices* page.
- Within the *Device Configuration Pages* section, click the plus (+) next to *Extron* to list all available Extron devices (FIG. 3).

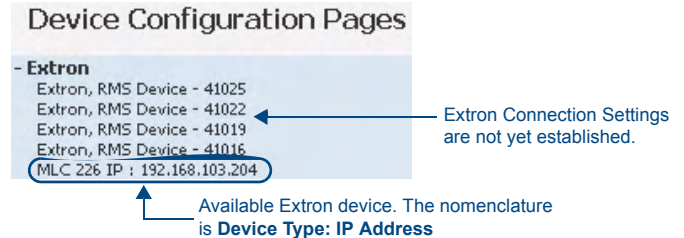


FIG. 3 NetLinX Master Navigation Menu with Extron Device

Note: The first default link name is *Extron, RMS Device - 41001*.

Extron Device Links

Also provided on this page are links to Extron's *Default Web Page* and *Global Viewer* (FIG. 4).

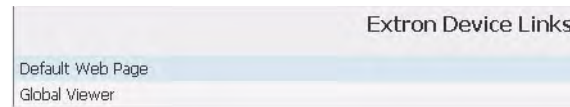


FIG. 4 Extron Device Links

- Default Web Page** - The setup and info pages for the Extron device. IP and MAC address for the Extron device is available on this page. You can also set the date and time for the device.
- Global Viewer** - This is the device control page. You can turn a projector on or off, see lamp hours, and other administrative features. *Global Viewer* can only be viewed by Internet Explorer on a PC. Click either to open.

4) Establish Extron Connection Settings

- Click on **Extron, RMS Device - 41001** to open the *Extron Connection Settings* window.
- Enter the information within the *Modify Extron Connection Settings* section (FIG. 5):

FIG. 5 Extron Connection Settings Window

Extron Connection Settings	
Status (display-only):	The current status of the Extron device module is listed here. In the example shown in FIG. 5, the device is not connected.
Server IP Address:	Enter the IP Address of the RMS Server.
Server Port:	Enter the Port Number for the RMS Server (default = 3839).
IP Address:	Enter the IP Address of the Extron device.
HTTP Port:	Enter the HTTP Port for the Extron device (default = 23). Note: Changing the HTTP port assignment here will not change what is set on the Extron device.

Extron Connection Settings (Cont.)

Telnet Port:	Enter the Telnet Port for the Extron device (default = 80). Note: Changing the Telnet port assignment here will not change what is set on the Extron device.
Password:	If a password is set at the Extron device, it must be entered here.
Password Confirm:	If a password is set at the Extron device, it must be re-entered for confirmation here.

- Click **Save** and the web interface window closes. In the event you receive an error, return to the *Extron Connection Settings* window and confirm your settings.
- To verify the connection status, return to the *Extron Connection Settings* window and check within the *Modify Extron Connection Settings* section.

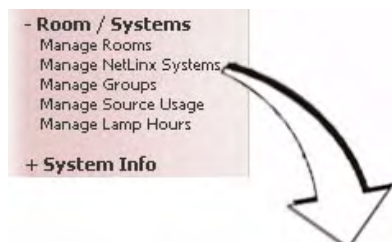
5) Working with RMS Applications

Open an Administrator session in RMS. If the Extron Device does not immediately appear as an unassigned room, click **Hot List** within the RMS navigation menu and select the Extron device.

RMS detects and populates based on what is attached to the Extron device. The room name is designated by the Extron device. Neither RMS applications offer control features to items attached to Extron devices, monitoring only.

One module license per Extron device and each device constitutes a room within RMS.

Click on **Manage NetLinx Systems** to view your Extron device, as shown in FIG. 6.



IP Address	Host Name	MAC Address	System Number	Module Name
10.0.0.6 Static	MLC-226-IP-00-89-03	00-05-A6-00-89-03	1	Conf Room A

FIG. 6 Manage NetLinx Systems

Note: Although it appears as a NetLinx device, the fields shown in FIG. 6 are populated by the Extron device.

Viewing the Extron Device Room (FIG. 7) displays everything you have connected to the Extron device and its status information.

	Device Name	Manufacturer	Model	Device Number	Syslog	Internal Log	Windows Log		
	DVD	Tascam	DV-D6500	211:1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	View Log	View
	Name	Current Value	Status	Status Type					
	Run Time	210 Hours	<input checked="" type="checkbox"/>	Maintenance					
	Transport State	Play	<input checked="" type="checkbox"/>	Not Assigned					
	MediaLink Controller	Extron	MLC 226 IP	011:1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	View Log	View
	Name	Current Value	Status	Status Type					
	Current Input	2	<input checked="" type="checkbox"/>	Not Assigned					
	Power	On	<input checked="" type="checkbox"/>	Not Assigned					
	Service Mode	Normal	<input checked="" type="checkbox"/>	Maintenance					
	System Online	Online	<input checked="" type="checkbox"/>	Room Communication Error					
	Temperature	45 F	<input checked="" type="checkbox"/>	Not Assigned					
	Source Usage	Extron	MLC 226 IP	010:1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	View Log	View
	Name	Current Value	Status	Status Type					
	Current Source	DVD	<input checked="" type="checkbox"/>	Not Assigned					
	DVD	12 Hours	<input checked="" type="checkbox"/>	Equipment Usage					
	PC	1400 Hours	<input checked="" type="checkbox"/>	Equipment Usage					
	Video Projector	Cannon	SX50	111:1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	View Log	View
	Name	Current Value	Status	Status Type					
	Device Communicating	No	<input checked="" type="checkbox"/>	Maintenance					
	Lamp Hours	400 Hours	<input checked="" type="checkbox"/>	Maintenance					
	Power	On	<input checked="" type="checkbox"/>	Not Assigned					

FIG. 7 Extron Device Room

Monitored Functions by Device Type

Device Type	Interface	Monitored Functions
Audio Processor	Serial	<ul style="list-style-type: none"> Connection Status Power Status
Camera	Serial	<ul style="list-style-type: none"> Connection Status Power Status
Computer Video Interface	Serial	<ul style="list-style-type: none"> Connection Status Power Status
Controller	Serial	<ul style="list-style-type: none"> Connection Status Power Status
Display	Serial	<ul style="list-style-type: none"> Connection Status Power Status Lamp Usage
DVD	Serial	<ul style="list-style-type: none"> Device Status Connection Status Power Status
Lighting	Serial	<ul style="list-style-type: none"> Connection Status Device Status
Switcher	Serial	<ul style="list-style-type: none"> Connection Status Power Status Source Select
TV Tuner	Serial	<ul style="list-style-type: none"> Connection Status Power Status
VCR	Serial	<ul style="list-style-type: none"> Connection Status Device Status
Video Conference	Serial	<ul style="list-style-type: none"> Connection Status Power Status
Video Processor	Serial	<ul style="list-style-type: none"> Connection Status Power Status
Video Projector	Serial	<ul style="list-style-type: none"> Connection Status Power Status Lamp Usage
System	IP	<ul style="list-style-type: none"> Connection Status Power Status

- Connection Status** - Indicates whether IP Link can communicate with the device or not.
- Power Status** - Indicates whether the device power is off (0), on (1), cooling (2), or warming (3). Note that warming and cooling states are not tracked for displays and projectors.
- Source Select** - Indicates the currently selected source for the main display (i.e.: "DVD", "VCR", "Computer", or the name of the active source).
- Input** - Indicates the currently selected input for the device, using the device terminology (i.e.: "Input A", "RGB 1", "Video 1", or the name of the active input).
- Lamp Usage** - Indicates the current lamp usage for the device. If it is not available, it is calculated it using the power status. Lamp hours are tracked only for displays with lamps; one lamp usage parameter is supported for each device.
- DVD/VCR Device Status** - Indicates if the device is in play, stop, pause, etc... RMS tracks transport state for display purposes. We also track run time in VCR's (by counting the time the unit is not in stop) to determine when the heads need to be cleaned.

Additional Documentation

For more information concerning configuration and device management, consult either the *RMS Administrator's Guide*, available for download from www.amx.com.