



# Contacting Support

Section Two

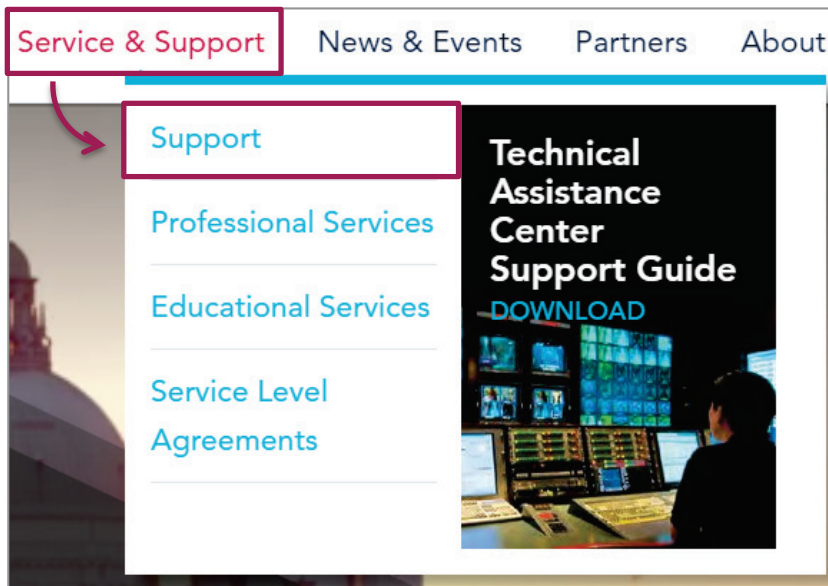
- Technical Assistance Center (TAC)
  - Operates 24 x 7
  - Consolidated single point of contact for all customer support questions and issues
  - Geographically dispersed with staff located at key strategic locations worldwide
  - Staffed by Harmonic Technical Support Engineers (TSEs) who provide multi-level technical support, case management, and problem resolution

## ■ Telephone and Email

Region	Telephone Support	Email Support
Americas	+1.888.673.4896 +1.408.490.6477	support@harmonicinc.com
Europe, Middle East, and Africa	+44.1252.555.450	emeasupport@harmonicinc.com
India	+91.120.498.3199	apacsupport@harmonicinc.com
Russia	+7.495.926.4608	rusupport@harmonicinc.com
Mainland China	+86.10.6569.5580	chinasupport@harmonicinc.com
Japan	+81.3.5565.6737	japansupport@harmonicinc.com
Asia Pacific – Other Territories	+852.3184.0045 +65.6542.0050	apacsupport@harmonicinc.com

## ■ Report an Issue Online

- [www.harmonicinc.com](http://www.harmonicinc.com)
- Click **Service & Support** > **Support**, and then click **Report A Product Issue**

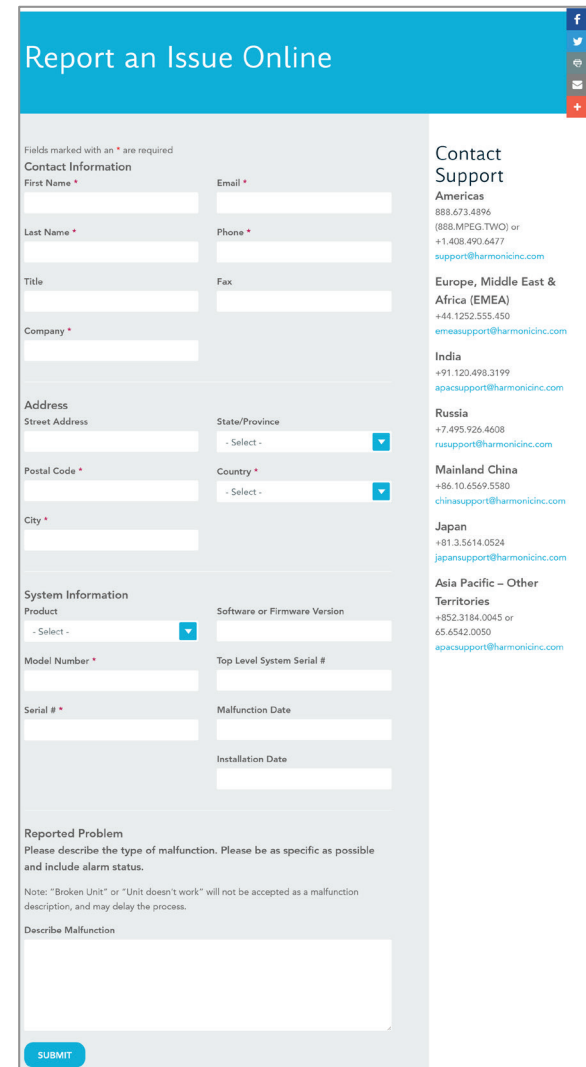


## Request Assistance

If you are currently a Harmonic customer in need of assistance, please use the contact information listed here to contact the TAC.

**REPORT A PRODUCT ISSUE**

- Report an Issue Online
  - Contact Information
  - Address
  - System Information
    - Product
    - Serial #
    - Software or Firmware Version
    - Top Level System Serial #
    - Malfunction Date
    - Installation Date
  - Description of Malfunction



The screenshot shows a web form titled "Report an Issue Online" with a blue header. The form is divided into several sections:

- Contact Information:** Fields for First Name, Last Name, Title, Company, Email, Phone, and Fax. Asterisks indicate required fields.
- Address:** Fields for Street Address, City, Postal Code, State/Province (dropdown), and Country (dropdown).
- System Information:** Fields for Product (dropdown), Model Number, Serial #, Software or Firmware Version, Top Level System Serial #, Malfunction Date, and Installation Date.
- Reported Problem:** A text area for describing the malfunction, with a note: "Note: 'Broken Unit' or 'Unit doesn't work' will not be accepted as a malfunction description, and may delay the process."
- Contact Support:** A sidebar on the right listing regional support contacts:
  - Americas:** 888.673.4896 (888.MPEG.TWO) or +1.408.490.6477, support@harmonicinc.com
  - Europe, Middle East & Africa (EMEA):** +44.1252.555.450, emeasupport@harmonicinc.com
  - India:** +91.120.499.3199, apacsupport@harmonicinc.com
  - Russia:** +7.495.926.4608, rusupport@harmonicinc.com
  - Mainland China:** +86.10.6569.5580, chinaspport@harmonicinc.com
  - Japan:** +81.3.5614.0524, japansupport@harmonicinc.com
  - Asia Pacific – Other Territories:** +852.3184.0045 or 65.6542.0050, apacsupport@harmonicinc.com

A "SUBMIT" button is located at the bottom left of the form.

## ■ Severity Levels

- Define the type of failure of a system or software application that is not functioning as designed

### Severity One

#### Emergency: Down System

- The product(s) or any part thereof is inoperative or performance of the product is so degraded that normal operations are prevented almost entirely
- Instability in the operation of one or more channels is causing intermittent on-air disturbances, and the outage could not be solved by switching to redundancy resources
- Examples include the cessation of operation of one or more channels resulting in any of the following on-air disturbances:
  - Unintentional black video or silence to air
  - Unintentional video and/or audio distortion
  - Unintentional video not synchronized to house reference
  - Unintentional viewer-noticeable lip-sync problems
  - Access to critical data is unavailable as a result of issues in the product(s) causing an impact to normal operations



## ■ Severity Levels Cont.

### Severity Two

#### Critical

- Performance of the product is so degraded that substantial disruption to normal business operations is occurring, or the problem is threatening to cause a critical system failure
- Examples include:
  - The operation of one or more channels on redundancy equipment
  - All redundancy resources being exhausted
  - Data access and transfer times are so high that normal business operations are prevented

### Severity Three

#### Major Impact

- The product or any part thereof is experiencing errors or problems that have no impact on normal operations
- An example includes the product being affected by minor problems such as a faulty redundant power supply in the backup video server while the server is still actively running using the main power supply

### Severity Four

#### Minor Impact

Minor problems, conditions, or documentation errors, which are easily avoided or circumvented by the customer. Also included are requests for new features defined as new functionality in existing products.



# Collecting Information

Section Three



## ■ General Information

- What date and time of the day was the problem first seen?
- How long has the issue been present?
- When was the most recent recurrence?
- What workflow is trying to be accomplished?
- What problem occurred when trying the workflow?
- How was this different from what was expected?
- What action, if any, was attempted to correct the issue and when?
- What equipment was affected and what were the results?
- Has there been any software/firmware upgrades recently?

## ■ Spectrum System Information

- What version of firmware is installed on your system?
- What is the model and serial number of the hardware involved?
- What version of SystemManager server software is installed?
- How much memory is installed on the SystemManager platform?
- Which Windows operating system is running on the SystemManager client PC?

# Collecting Information

Locate Firmware Version, Model Number, and Serial Number in SystemManager

1. From the **Page** bar, click the **Home** tab.
2. From the **Home** panel, click **Upgrade Firmware**.
3. From the **Upgrade Firmware** page, under **Spectrum**, scroll to the desired *section*.
4. The information for each component is displayed under the **Model Number**, **Serial #**, and **Current Firmware Version** columns.

Current user: administrator | LOG OFF | Device Monitoring State: monitoring

SYSTEMMANAGER | HOME | SECURITY | DIAGNOSTICS | HELP

Home | Upgrade Firmware

Options | Tool Installation | Character set

Firmware | Firmware Selection | Upgrade Firmware

Advanced | Environment Variables

**Spectrum**  
Currently selected upgrade version: omneon.release-7.3.0.0/2013.06.25.09.21.57-7.3.0.0.rc1  
(To select a firmware version for upgrade click the Firmware Selection Icon.)

Name	Model Number	Serial #	Status	Current Firmware Version	Select
A_D9_Training	MCP-2200	01071	Connected	SB Release 7.3.0.0-13061909 (release_7_3)	<input type="checkbox"/>
D11TACSSD	SMD-7002	01438	Connected	SB Release 7.4.0.0-13062515 (release_7_4)	<input type="checkbox"/>
D12TAC	MCP-2252-2XO	01624	Connected	SB Release 7.3.0.0-13062509 (release_7_3)	<input type="checkbox"/>
D8TAC1	MCP-2202-41C	1029	Connected	DIR8 Release 7.2.1.0-13022712 (release_7_2)	<input type="checkbox"/>
D9TAC	MCP-2200	01015	Connected	SB Release 7.2.1.0-13022712 (release_7_2)	<input type="checkbox"/>

Upgrade | Reboot | Select all | Clear

**MediaPorts / ChannelPorts / MediaDeck Modules**

Name	Model Number	Serial #	Status	Current Firmware Version	Host	Select
7301-M2H_03695	MIP-7301-M2H	03695	Connected	tap7mip Release 7.3.0.0-13061909 (release_7_3)	A_D9_Training	<input type="checkbox"/>
7601-APR_03615	MIP-7601-APR-VC3	03615	Connected	tap7mip Release 7.3.0.0-13061909 (release_7_3)	A_D9_Training	<input type="checkbox"/>
CPT-8100_01029	DMH-8100-DMH-AVC-VC3	01029	Connected	tap7icp Release 7.3.0.0-13061909 (release_7_3)	A_D9_Training	<input type="checkbox"/>
CPT-8100_01045	CPT-8100-DMH-AVC-VC3	01045	Connected	tap7icp Release 7.3.0.0-13061909 (release_7_3)	A_D9_Training	<input type="checkbox"/>
7301-DMH_04657	MIP-7301-DMH	04657	Connected	tap7mip Release 7.2.0.0-13013013 (release_7_2)	D11TACSSD	<input type="checkbox"/>
MIP-7XXX_01599	MIP-7600-APR	01599	Connected	tap7mip Release 7.2.0.0-13013013 (release_7_2)	D11TACSSD	<input type="checkbox"/>
7301-VC3P_05142	MIP-7301-DMH-VC3P	05142	Connected	tap7mip Release 7.3.0.0-13062509 (release_7_3)	D12TAC	<input type="checkbox"/>
MIP-5321_10691	MIP-5321	10691	Connected	tap4 Release 6.4.3.0-12110816 (release_6_4_3_tap4)	D8TAC1	<input type="checkbox"/>
MIP-7XXX_01199	MIP-7600-APR	01199	Connected	tap7mip Release 7.2.1.0-13022712 (release_7_2)	D8TAC1	<input type="checkbox"/>
MIP-5301_01372	MIP-5301	01372	Connected	tap4 Release 7.3.0.0-13062509 (release_7_3_tap4)	D9TAC	<input type="checkbox"/>
7301-DMH_01784	MIP-7301-DMH	01784	Configuring	tap7mip Release 7.2.1.0-13022712 (release_7_2)	[Unknown]	<input type="checkbox"/>
CPT-8100_8100_01043	CPT-8100-M2H	01043	Configuring	tap7icp Release 7.2.1.0-13022712 (release_7_2)	[Unknown]	<input type="checkbox"/>

# Collecting Information

## Locate SystemManager Software Version

1. From the **Page** bar, click the **Help** tab.
2. The software version information is displayed under the Server Software section of the Version page.

Facility: Training-Beaverton  
Current user: administrator  
Device Monitoring State: monitoring

SYSTEMMANAGER HOME CONFIGURATION SECURITY DIAGNOSTICS **HELP**

**Help**

Version Information  
[Version](#)

Local Information  
[Custom](#)

Online Help  
[Launch Online Help](#)

**Version**

**Harmonic SystemManager**

**Server Software**

Harmonic Core DLL	HTTP Server	Perl	ModPerl	Mason
6.5.0.0.37	Apache/2.2.27	5.014004	2.000008	1.54

**Web Browser**

**Web Browser Version**

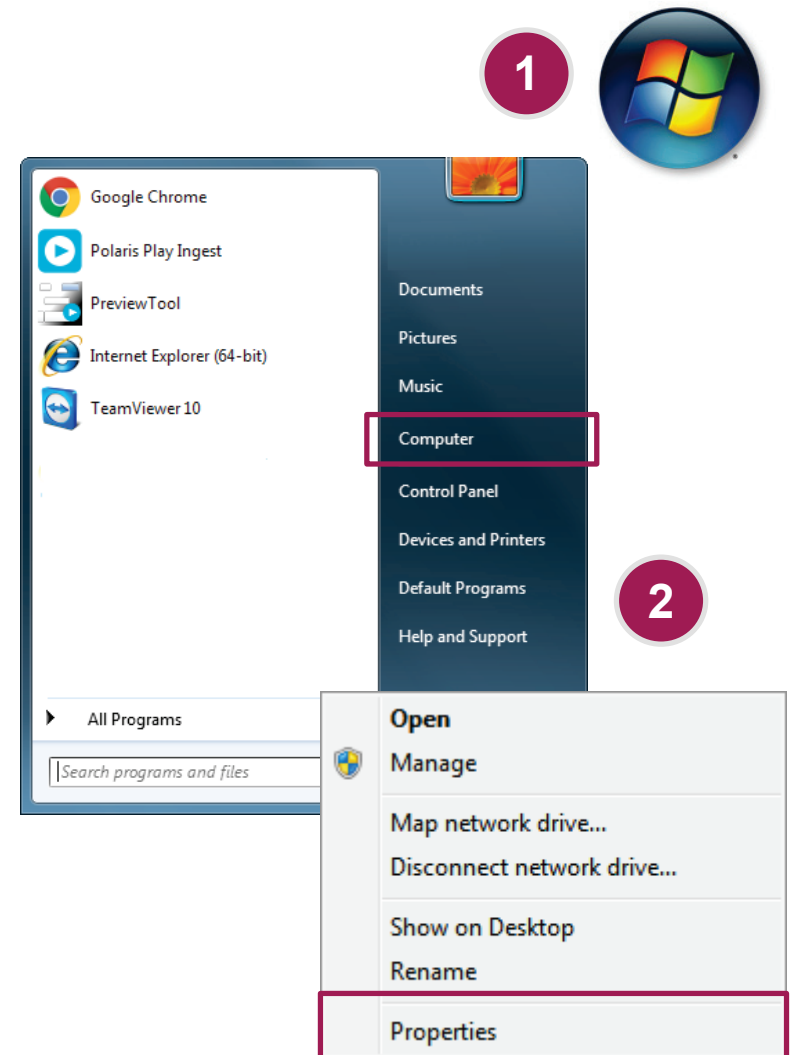
Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/51.0.2704.79 Safari/537.36 Edge/14.14393

Current User	Client Address (127.0.0.1 = localhost)
administrator	10.20.89.148

# Collecting Information

## Locate Memory Installed on SystemManager Platform

1. From the SystemManager platform, click the **Start** button.
2. Right-click **Computer**, and then click **Properties**.
3. From the **System** window, under **System**, view the **Installed Memory (RAM)**.





- For drive diagnosis and remediation, gather the following before you remove the failing/failed drive:
  - General Information
    - Site location
    - Server name
    - Date of failure
    - Time of failure
    - Description
  - Drive Information
    - Disk GUID
    - Disk Serial #
    - Disk Size (GB)





# Collecting Information

## Locate Drive Information

1. From the **Configuration** panel, click **Disk Utilities**.
2. From the **Spectrum – Disk Utilities** page, click the *Spectrum X* link for the video server whose drive information you want to locate.
3. From the **Disk Utilities** page, click the *Spectrum X* link for the drive that is whose information you want to locate.
4. From the **Drive Properties** page, gather the **Disk GUID**, **serial number**, and **size**.

<b>Model</b>	WDC-WD1003FBYX-0
<b>Manufacturer</b>	ATA
<b>Serial Number</b>	WD-WCAW32926802
<b>Firmware Rev. Level</b>	01.01VA3
<b>Wink State</b>	Off
<b>Disk GUID</b>	fe574443-2a8d1ea2
<b>MediaStore</b>	<a href="#">MediaStore2387</a> (50030480-00e3547f)
<b>MediaStore Slot Number</b>	2
<b>Loop Master</b>	Disabled (MSC Only)
<b>Disk Statistics:</b>	
<b>Disk Size</b>	1000 GB / 931 GiB
<b>Block Size</b>	4,096
<b>Blocks</b>	244,190,133

## ■ Player Information

- What is the name of the player that is being used?
- What file format and bitrate is the player configured for?
- If the problem is related to ingest or playout of a clip, what is the Clip ID involved?
- What brand of automation, if any, is being used for control?
- Is the automation using VDCP or API for communication control?
- What third party devices are involved?

# Collecting Information

Locate Player Name, File Format, and Bitrate in SystemManager

1. From the **Page** bar, click the **Configuration** tab.
2. From the **Configuration** panel, click **Player Configuration**.
3. From the **Spectrum – Player Configuration** page, click the *name* link for the associated video server.
4. From the **Player List** page, the names of all players on that video server will display. To view their configuration details, click the associated **Film** icon.
5. The file format and bitrate are located in the Track rows.

Current user: administrator LOG OFF Device Monitoring State: monitoring

SYSTEMMANAGER CONFIGURATION SECURITY DIAGNOSTICS HELP

Configuration

Spectrum

SystemDiagram

Player Configuration

Disk Utilities

Access Control

Video Server Services

Harmonic MediaGrid

Servers & Switches

Install License

Performance

Access Control

ProBrowse

Servers

ProXchange

Servers

MAS

Servers

### Player List for Spectrum Server: SpectrumX

Total number of active players: 1.  
Total number of inactive players: 3.

Refresh Player List Create a Player

Player Name	Status	Actions
12548	Inactive (Play Only)	Edit Delete Enable Activate-as-disabled
SPX-9111-01130-A	Active (Enabled) (Play Only)	Properties Open Disable Deactivate
Video Standard	625/25 or 1080i/25	
Control	AV/C:	
Track 1	MPEG 50.0 (Long GOP 4:2:2) Channel 32	Devices: MIP-9XXX_01130 : A
Track 2	Audio	Devices: MIP-9XXX_01130 : A
eleText	Inactive (Play Only)	Edit Delete Enable Activate-as-disabled
Tim	Inactive (Record Only)	Edit Delete Enable Activate-as-disabled

Enable Selected Disable Selected Select all Players  
Deactivate Selected Delete Selected Clear Selection

To view the details of a player, click on the icon to the left of the player name.

**Move Players from another spectrum server**  
To move Players from another spectrum server onto SpectrumX, select the source server below, then click **Select Players** to display the player selection screen.

D12TAC2 Select Players

## ■ Spectrum File System

– Navigate to \om<serial # of director>

- General information

- Video server syslogs = \logs

- Storage issues and drive failures

- Bad block history logs = \logs

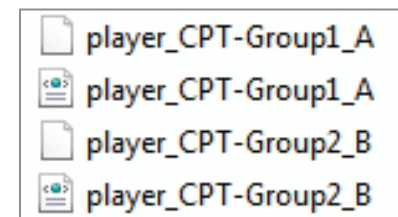
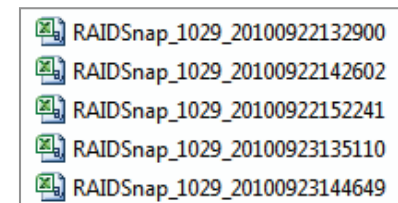
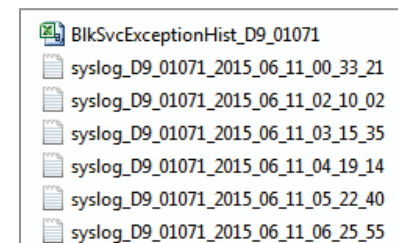
- » Badblockhistory.csv, Badblockhistory\_<serial #>.log, BlkSvcExceptionHist\_<serial #>.csv, etc.

- RAID snapshot logs = \diags

- » RAIDsnap\_<serial #>\_<date/time>.csv, snapshot-<date>-<time>.tgz, etc.

- Player issues

- Player config files = \config\fss



## ■ System Debug Logging

- Once the general information and system information has been documented, Debug Logging may need to be activated for the following:
  - Logging of simple API commands
  - Logging of VDCP related issues
  - Logging of Fibre Channel and storage issues

- SystemManager Logs
  - SystemManager related issues
  - Especially useful when information from file system is not accessible
  - Directory = D:\omneon\manager\omdb  
C:\omneon\manager\omdb
  - Filename = manager.oda



- When contacting support for template authoring issues, please have the following information ready
  - Copies of the project files
    - .fla source files
    - Published .swf files
    - Any associated assets
    - Any associated ActionScript code files
  - Copies of syslog



# Remote Access

Section Four

## ■ Remote System Access

### — Harmonic TSEs need remote access

- Make intelligent technical decisions when diagnosing a problem
- Decrease the amount of time to diagnose and resolve the issue
- Gain access to most log information
- Turn on additional logging, if required



## ■ Remote System Access Continued...

### – Without remote access:

- Very difficult to figure out the problem
- Amount of time to diagnose and resolve the issue increases substantially
- Unclear what the next step should be without having an actual visual of the issue



- Two Access Methods
  - Allow TSEs to gain access to:
    - Most log information
    - Ability to turn on additional logging, if required
  - TeamViewer
    - Available from [Harmonicinc.com](http://Harmonicinc.com)
  - Virtual Private Network (VPN)
    - Customer supplied, required VPN

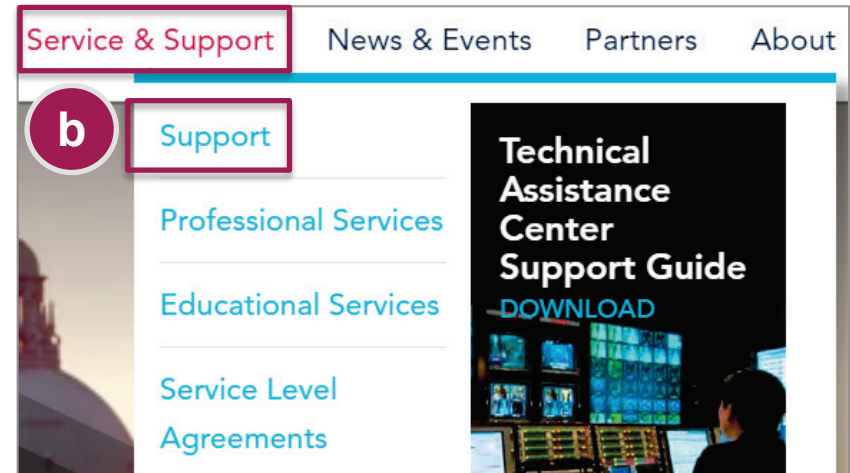
- TeamViewer
  - Harmonic's preferred remote assistance software
  - Aids in the diagnosis of all Harmonic product lines
  - Other software may be used, but Harmonic is set-up and trained to use TeamViewer
  - Enables customers to run on a client on the affected computer
    - Client application that runs on Windows or Mac
    - No software is installed





## Start a TeamViewer Remote Session

1. Contact Support to organize a remote assistance session.
2. Download the software.
  - a. Navigate to the Harmonic website, [www.Harmonicinc.com](http://www.Harmonicinc.com).
  - b. From the **Menu** bar, click **Service & Support > Support**.
  - c. From the **Remote Assistance** section, click the **Download** link.
3. Open the *executable file* on the PC/Mac you wish Harmonic to access.
4. Start the TeamViewer client.
5. Provide the ID and password to Support.



### Remote Assistance

The TAC utilizes remote assistance software to aid the diagnosis of all Harmonic product lines. This enables our support engineers to remotely administer Harmonic products alongside our customers, while conversing in real-time.

To start a remote assistance session, please follow these steps:

- Contact **C** to organize a remote assistance session
- **Download** the Teamviewer software
- Open the executable file on the PC/Mac you wish Harmonic to access
- Click 'Ok' to run which starts the TeamViewer client
- Provide the ID and password to Harmonic support so the engineer may connect remotely

## ■ Virtual Private Network (VPN)

- VPN client produces a secure pipe through a customer's firewall directly to the Harmonic equipment
- Customer supplies specific VPN requirements to support

