



# Pathfinder 800 series MG-KVM-831 MG-KVM-832

User Guide V1.00

PDF-MG-KVM-83x-V1.00 Feb 2020

# In this guide

Hardware recommendations	1
Multi-mode optical fiber	2
Single-mode optical fiber	2
CAT 7 cables	2
DisplayPort cables	2
HDMI to DisplayPort adapters	2
Network switches	2
System requirements for Pathfinder Control	2
About your Pathfinder 800 series device	3
About the status LED light	5
Fitting or replacing the SFP module	6
Installing single and multiple endpoints	6
Extending a single PC	6
Connecting to multiple endpoints	7
Quick start	8
Connecting your hardware	9
Setting up your system in Pathfinder Control	9
To set up your system in Pathfinder Control	9
Updating your firmware	.11
Connecting encoders and decoders in Pathfinder Control	. 12
Next steps	. 12
Using the on-screen display	. 13
Opening the on-screen display	. 13
Navigating in the on-screen display	. 13
Closing the on-screen display	. 13
Logging in	. 13
Using the on-screen display – basic operations	. 13
The home menu	. 13
Connecting, disconnecting, and switching encoders	. 14
Connecting directly to an encoder with a point-to-point connection	. 14
Viewing the status of your system	. 14
View information about your decoder	. 15
Managing features with the on-screen display	. 15
Restricting access to features with matrix switching mode	. 15
WindowView	. 15
Setting up a notification border	. 16

Cross-Click	
To set up Cross-Click	
Using WindowView and Cross-Click together	
Managing your device with the on-screen display	
Protecting your PC from viruses from a USB drive	
Finding the current version of your firmware	19
Updating your firmware	19
Device settings	
Defining what DDC or EDID data your PC uses	
Selecting QWERTY, AZERTY, or QWERTZ keyboard layout	
Changing your keyboard shortcuts	21
Changing the speed of your mouse	21
Waking up your PC remotely	
Using your Pathfinder 800 series device as a hub splitter	
Enabling DisplayPort multistream	23
Network settings and more	24
Troubleshooting and FAQs	
Updating your firmware	24
No power is getting to my Pathfinder device	24
My USB keyboard or mouse isn't working	25
No video is reaching the monitor connected to the decoder	
Video is poor quality or stripy	
l can't hear any audio	
I can't access WindowView or Cross-Click settings in the on-screen display	
General troubleshooting checklist	
Returning a product for repair	
Contact us	

Thanks for buying this Magenta Pathfinder 800 series device. Pathfinder 800 series devices provide a scalable, zero latency, KVM (Keyboard, Video, Mouse, and USB 2.0) extension and switching solution. Capable of over 3000 high-quality endpoints in a single system, Pathfinder is the perfect solution for mission critical control and collaboration including medical, broadcast, and control room operations. Pathfinder devices come with a choice of Small Form-factor Pluggable (SFP) transceivers. Choose from single-mode optical fiber, multi-mode optical fiber, or RJ45 Ethernet for a fully flexible experience.

The Pathfinder 800 series includes:

- 1x MG-KVM-831 HD DisplayPort encoder
- 1x MG-KVM-832 HD DisplayPort decoder

#### Features

Some features are only available in Pathfinder networks that include 500 and 800 series devices.

- KVM matrixing solution with over 3000 endpoints
- Use either Ethernet or fiber optic cable for KVM, USB, and video
- Up to 4K @60 Hz video
- Mix-and-match HD and 4K endpoints
- Zero latency performance
- Point-to-point extension up to 20 km (12 miles)
- Mix copper and fiber cables for maximum flexibility in your system design
- Plug'n'play installation over IP
- Monitor up to 4 PCs from a single 4K monitor, keyboard, and mouse with WindowView
- Extend PC desktop to dual displays over single cable
- Work across multiple PCs seamlessly with Cross-Click
- Local monitor loop out

### Hardware recommendations

At tvONE, we design our products to the highest quality standards. To get the best results from our products, we recommend that you use the best quality connectors, cables, and adapters. Consider the points below when you choose accessories and position equipment.

- For best results with HDMI/DVI, use cables under 15 m long, or shorter if you use connection adapters or the signal is 4K. If you need to place your products more than 15 m apart, use a signal extender.
- See our range of signal extenders at tvone.com/signal-extension-systems.
- For best results with HDMI, use High Speed or Premium High Speed HDMI cables.
- In industrial environments, use shielded Ethernet cables for signal extension systems.
- Shielded Ethernet cables are often marked F/UTP or FTP. Use shielded Cat 6 cables with HDBaseT input and output modules and Streaming media and 4K playback input modules.

### Multi-mode optical fiber

- Maximum length 800 m (1640 feet).
- Duplex Multimode 50/125µ (OM2).
- LC connector 850 nm.

### Single-mode optical fiber

- Maximum length 20 km (12.43 miles).
- Duplex single-mode.
- LC connector 310 nm TX -1550 nm RX.

### CAT 7 cables

- The pins are connected 1:1. Caution: the cable pairs must be twisted to EIA/TIA- 568A (rare) or EIA/TIA-568 B (common) pairs. Erroneous assignments cannot be found with a simple cable tester.
- The pins for the green pair of wires are not adjacent to one other.
- The cable must at the very least meet the CAT 7 specifications and be suitable for 10 Gigabit transmission.
- The cable should meet one of the following standards: Class D ISO/IEC 11801:2002 or EN 50173-1:2002. Schema EIA/TIA-568 B.
- Only use shielded installation cable with min. cross section of 24 AWG throughout the length.
- The shield should be contiguous and connected to both ends. A shielded patch cable is allowed for connection to the device. Schema EIA/TIA-568 B.

#### **DisplayPort 1.2 cables**

• Maximum length 1.8 m (5.9 feet).

#### HDMI to DisplayPort adapters

Some TVs require their HDMI UHD Color feature enabled to work correctly with adapters.

#### Network switches

Your Pathfinder network requires its own dedicated network. As Pathfinder uses multicast, you must place it on its own VLAN or dedicated switches.

The network switch must fulfil the following specifications:

- The Pathfinder 800 series requires a 10 Gigabit switch, with true port-to-port transfer rates of 10 Gigabit/second.
- Network switches must support IGMP snooping and IGMP snooping must be switched on.

# System requirements for Pathfinder Control

- Windows 7 (32bit/64bit) or higher
- 1 GB RAM
- 50 MB free storage
- 1 Gbit dedicated network interface

# About your Pathfinder 800 series device

The Pathfinder 800 series includes a DisplayPort encoder and decoder, capable of extending a 2160p signal up to 20 km (12 miles).

# MG-KVM-831 encoder rear panel

En En USB 2.0	coder Co
Ŷ	Audio in from PC. Connect to the PC with 3.5 mm jack.
<b>4</b> 》	Audio out to PC. Connect to the PC with 3.5 mm jack.
RS232	Connect to a control device with DB9 cable.
ር	Power on and off.
Ť	Grounding screw. Connect to electrical ground.
90-240VAC	Connect to electrical outlet.
USB 2.0	Connect to USB port of PC.
LAN	Currently disabled.
DP IN	DisplayPort in. Connect to the PC you want to control.
DP OUT 1 DP OUT 2	DisplayPort out. Connect to monitors.
RED. POWER 12VDC	Redundant power. Connect to 12 V power supply.
KVM-LINK	<ul> <li>Depending on your SFP, connect to one of the following:</li> <li>Single-mode optical fiber cable</li> <li>Multi-mode optical fiber cable</li> <li>Ethernet cable</li> </ul>

De De usb	2.0 LAN O DP OUT 1 DP OUT 2 RD FOR KVM O LINK		
Ŷ	Audio in from microphone or other audio device. Connect to audio device with a 3.5 mm jack.		
<b>■</b> 》	Audio out to speakers or other audio device. Connect to audio device with a 3.5 mm jack.		
RS232	Connect to a control device with DB9 cable.		
ር	Power on and off.		
Ŧ	Grounding screw. Connect to electrical ground.		
90-240VAC	Connect to electrical outlet.		
USB 2.0	Connect to keyboard, mouse, or other USB device.		
LAN	Currently disabled.		
DP OUT 1 DP OUT 2	DisplayPort out. Connect to monitors.		
RED. POWER 12VDC	Redundant power. Connect to 12 V power supply.		
KVM-LINK	<ul> <li>Depending on your SFP, connect to one of the following:</li> <li>Single-mode optical fiber cable</li> <li>Multi-mode optical fiber cable</li> <li>Ethernet cable</li> </ul>		

# About the status LED light



The Status LED light can be red, orange, or green.

Color	Blinking	Physical link	Active connection	Video extended	USB Initialization	USB data received	ldentify command	Auto-update mode
Main LED								
Red	None	Yes	No	No				Update failed
Red	Slow	No	No	No				
Orange	None	Yes	Yes	No				
Orange	Fast							Update in progress
Green	None	Yes	Yes	Yes				Update succeeded
Green	V. fast				Yes		Yes	
Red/Green	V. fast							
Ethernet po	ort LEDs,	800 serie	es only					
Yellow	None	No						
Yellow	Slow	Yes						
Green	None			Yes				
Green	V. fast					Yes		

Read troubleshooting information on page 24.

# Fitting or replacing the SFP module

Only use SFP modules from, or recommended by, tvONE.



- 1. Remove the black dust protector from the SFP module.
- 2. Pull the metal latch of the SFP module forwards until it is at a right angle.
- 3. Insert or replace the SFP module.
- 4. Push the metal latch back into position.

# Installing single and multiple endpoints

You can use your Pathfinder 800 series devices to extend a single PC, or you can use a 10G network switch to connect multiple endpoints.

#### Extending a single PC



# Connecting to multiple endpoints



# **Quick start**



If you're setting up a network with multiple endpoints, for best results connect just a few Pathfinder devices at a time, and then add them to Pathfinder Control and update the firmware before you move on to the next set. This makes it much easier to find, name, and connect your devices.

### Connecting your hardware

- 1. Connect the 90-240VAC port of the encoder and decoder to electrical outlets.
- 2. Connect the USB port on your PC to the USB 2.0 port of the encoder.
- 3. Connect a USB keyboard and mouse to the decoder.
- 4. Connect the PC video output to the DP IN port of the encoder.
- 5. Connect the encoder and the decoder with fiber optical or Ethernet cable. Or

Connect all endpoints to a network switch. Ensure that all connections have a bandwidth of 10 Gbit/sec minimum.

For video sharing the network switch must support IGMP snooping, and IGMP snooping must be switched on.

- 6. Connect the remote monitor or monitors to the decoder with a DisplayPort cable.
- 7. OPTIONAL: use a 3.5 mm jack to connect the ◀) port of the encoder to a speaker, or to the mic port of your PC. Connect the ♀ port of the encoder to the headphone port of your PC.
- 8. OPTIONAL: use a 3.5 mm jack to connect the  $\clubsuit$  port of the decoder to a speaker. Connect the  $\clubsuit$  port to a microphone.
- 9. Switch on your PC and monitors.
- 10. If you're using a network switch, connect the power supply to an electrical outlet.
- Switch on the encoder and decoder. Your Pathfinder devices start.

### Setting up your system in Pathfinder Control

• If your Pathfinder network includes a network switch, Pathfinder Control must run on your Pathfinder network at all times. You don't have to be logged in.

Use Pathfinder Control to set up your system and upgrade your firmware.

#### To set up your system in Pathfinder Control

• This task is for administrators.

- 1. Install Pathfinder Control on a dedicated PC connected to the Pathfinder network. Download Pathfinder Control from tvone.com/softwares.
- 2. Open Pathfinder Control and log in as an administrator. The default username is admin, and the default password is admin.

#### 3. Select General Settings.

«		Select the Network Interface:	Ethernet -
≽	Endpoints	Enable extender automatic add	~
≽	Users	Enable Extender User System	
≽	Features	Time Until Logout (in minutes). "0" = User has to login every time	5
*	Layout	Enable Legacy Update System	
	List	Extender Time To Live (in seconds)	20
	Grid	Extender TTL Timer Interval (in seconds)	8
	Treeview	Hide Inactive Extenders	
~	System	Restore Last Connection	~
	General Settings	Enable USB HID Share Mode	
	Update Management	Enable USB 2.0 Share Mode	
	Scenarios Session Protocol	Default Extenders Layout	List -
		Default Language	en-GB
		Search for new Extenders	Reset to defaults
		Import/Export General Settings	
		Import Export	
		Import/Export Extender Settings	
		Import Export	
		Version	1.3.4
		Enable Grid Preview	

- 4. Make sure Enable extender automatic add is selected. If it isn't, select it, then save. Pathfinder Control closes. Open it again.
- 5. Optional settings:
  - If you want users to be able to use the on-screen display to connect to and disconnect from devices, or share their connection with other users, select Enable Extender User System. Users can only log in to devices they are bound to.
  - If you want users to be logged out of an on-screen display after a set time, enter a time in minutes in Time Until Logout. If you want users to have to log in every time they open the onscreen display, enter a time of 0 minutes.
  - If you want your network to automatically log off inactive devices:
    - Choose how often your network checks for inactive devices. Enter the time in seconds in Extender TTL Timer Interval.
    - Choose how long the network waits to hear from the device. Enter the time in seconds in Extender Time To Live.
  - If you want devices that are not currently connected to the network to be hidden in Layout > List, select Hide Inactive Extenders.
  - If you want to restore the last connections made between encoders and decoders when the software starts, select Restore Last Connection.
     Note: this setting also re-connects any devices that lost power or are powered off when power returns.
  - If you want users to be able to share control of their connection as well as their video signal, select Enable USB HID Share Mode or Enable USB 2.0 Share Mode.

- You can choose the default layout view. Select your layout from Default Extenders Layout.
- 6. Select your language from Default Language.
- 7. Select Search for new Extenders.
- 8. Select Endpoints > Extender Settings.
- 9. Double-click each extender and give it a name.

### Updating your firmware

- 1. Download the latest firmware from tvone.com/softwares.
- 2. In Pathfinder Control, select System > Update Management.

UPDATE SETTINGS
Firmware folder:
500 Series Firmware:
Ţ
800 series Firmware:
(Lo)Mark All
500 series
Send firmware to marked modules
UPDATE marked modules
Send and Update Firmware
800 series
<u> </u>
Start Update

3. In UPDATE SETTINGS, select ••• and navigate to the firmware file you downloaded in step 1.

The firmware .bin file appears under MG-KVM-800 Firmware.

- 4. Select (Un)Mark All to select all the devices on your network.
- 5. Select Start Update.

Your devices update. When the firmware update is complete, Finished! appears under Alerts. If Error! Try again! appears, select the device or devices that did not update, and select Send and Update Firmware.

You can now add your next batch of devices. Start again from To set up your system in Pathfinder Control on page 9.

### Connecting encoders and decoders in Pathfinder Control

This task is for systems with multiple endpoints only. If you're only extending a single PC, skip this task and go to Using the on-screen display on page 13.

- 1. Select Layout > List.
- 2. For the devices you want to connect, select the box in the Grid column. If you don't want to connect a device right now, clear the box in the Grid column.
- 3. Select Layout > Grid.
- 4. From Decoders, select a decoder. When the decoder turns green, select an encoder from Encoders. When the two devices are connected, they turn blue.

#### Next steps

Congratulations, your basic network is set up. You can now log on to and use your Pathfinder network with just the on-screen display.

Read on for information about how users can log on to a PC and connect to an encoder.

You can also set up more sophisticated features in Pathfinder Control, such as device groups, Cross-Click, and WindowView.

Read more about setting up extra features in the Pathfinder Control User Guide. Download the User Guide from help.tvone.com/products/mg/mg-kvm.

# Using the on-screen display

### Opening the on-screen display

To open the on-screen display (OSD), press Scroll Lock (ScrLk) quickly five times.

 If your keyboard doesn't have a Scroll Lock key, open the on-screen keyboard.
Select Start > Settings > Ease of Access > Keyboard.

#### Navigating in the on-screen display

Use the arrow keys to navigate. Use Enter to select, or press the key corresponding to the selection you want, as shown in the menu.

#### Closing the on-screen display

Press Esc.

#### Logging in

The on-screen display of Pathfinder 800 series devices does not include a dedicated login menu. Instead, the network prompts you to log in when needed.

# Using the on-screen display – basic operations

#### The home (PATHFINDER KVM Extender) menu

The home menu includes a list of sub menus.

PATHFINDER KVM Extender			
S	System Status		
F	Features Menu		
U	Update		
G	Settings		
A	About This Device		

S	System status screen	View the status of your system and connection
F	Features menu	Manage the features of your Pathfinder network
L	Switching List	Connect to an encoder on your Pathfinder network
U	Update	We recommend you update your firmware with Pathfinder Control
G	Settings menu	Manage the settings of your Pathfinder network
A	About this device	View information about this Pathfinder device

### Connecting, disconnecting, and switching encoders

You can quickly connect, disconnect, and switch between encoders. If you're viewing multiple PCs with WindowView, first move your mouse pointer to the area of your monitor where you want to make a change.

Connect, disconnect, and switch encoders in the Switching List menu. In the home menu, press L.

Nr.	Device	State	Name	
	UVX	free	01	
	UVX	free	Degenh	
	UVX	free		
	UVX	free	04	
	UVX	free	Ingrid	
	UVX	free		
	UVX	free	05	
	UVX	free	Thomas	

- To connect or switch to an encoder, use the arrow keys to navigate to the encoder you want, and press Enter.
- To disconnect from an encoder, use the arrow keys to navigate to the encoder you want to disconnect from, and press D.

#### Connecting directly to an encoder with a point-to-point connection

If your decoder and encoder are linked directly, instead of through a network switch, you can open a point-to-point connection.

• In the home menu, press F > P.

### Viewing the status of your system

View the status of your system in System Status. In the home menu, press S.



Find information about hardware and software versions, as well as the activated upgrades. The menu displays information about the connection, the resolution of the video channel and the USB status. The current firmware version appears in the upper left corner. The link status indicates whether a connection is possible. Video and USB display data transfer status.

### View information about your decoder

View information about your decoder in the About This Device menu. In the home menu, press A.

General:	
Hardware Version:	
Firmware Version:	0.32
Upgrades:	
Analogue Sound:	enabled
Embedded Sound:	enabled
RS232:	enabled

# Managing features with the on-screen display

Manage features for your device, including Cross-Click and WindowView, in the Features menu. In the home menu, press F.

Features				
	Window∀iew (without Pathfinder Control)	0		
	Cross-Click (without Pathfinder Control)			
	Point to Point Mode (direct connection)			
	Matrix Switching Mode (only with Pathfinder Control)			
	USB Save Feature (no mass storage)			
D	Displayport Multistream			

To set up and manage features for multiple devices, we recommend you use Pathfinder Control.

Download the User Guide from help.tvone.com/products/mg/mg-kvm

#### Restricting access to features with matrix switching mode

If option S, Matrix Switching Mode, is selected in the Features menu, you cannot manage features such as Cross-Click and WindowView with the on-screen display. Only administrators can manage these features with Pathfinder Control software.

#### WindowView

If your network contains no more than one 800 series device and eight 500 series devices you can set up WindowView with the on-screen display.

To set up and manage WindowView on larger networks, or to set up combinations of VindowView and Cross-Click, use Pathfinder Control.

Download the User Guide from help.tvone.com/products/mg/mg-kvm.

With WindowView, you can display up to four PCs, connected to Pathfinder 500 series encoders, on a single 4K monitor, connected to a Pathfinder 800 series decoder.

You can combine WindowView with Cross-Click to show up to 16 PCs on four monitors, all operated with a single mouse and keyboard. Set up combinations of WindowView and Cross-Click in Pathfinder Control.

To set up WindowView for the decoder you are working on, in the home menu, press F > V.



- To search for encoders, press F. Found encoders appear under Select Encoder. Each encoder is assigned a number.
- To select a position on the monitor, use the arrow keys.
- To select an encoder for the position you chose, press the number key for that encoder, shown in the Select Encoder list. Press C to confirm.
- To automatically connect to your chosen encoders when you log in, turn on automatic connection. To turn automatic connection on or off, press A.
- To see more easily which PC your mouse is currently operating, you can enable a temporary notification border. To configure borders, press H.
- To disconnect from an encoder, select that encoder with the arrow keys, and press D.
- To disconnect from all encoders, press E.

#### Setting up a notification border

You can configure a temporary red border around the window of the PC you are currently operating with your mouse. This makes it easier to see what you're working on. The border can appear when you first move your mouse pointer onto the window, and can also appear when you move your mouse pointer a period of inactivity.

Configure your border in the View-Highlight Settings menu. From the home menu, press F > V > H.



- To enable or disable borders, press A.
- To make the red border transparent, press T.
- To make the red border appear when you first move your mouse pointer onto the window, press V.
- To make the red border appear when you move your mouse pointer after a period of inactivity, press M.

### Cross-Click

If your network contains no more than four Pathfinder 800 series decoders and eight Pathfinder 800 series encoders you can set up Cross-Click with the on-screen display.

To set up and manage Cross-Click on larger networks, or networks containing a mixture of 500 and 800 series devices, or to set up combinations of WindowView and Cross-Click, use Pathfinder Control.

Download the User Guide from help.tvone.com/products/mg/mg-kvm.

You can work across up to 16 PCs with a single keyboard and mouse with Cross-Click. Each monitor is connected to a Pathfinder 800 series decoder. You group and arrange the decoders in Pathfinder Control, or in the on-screen display for small networks only.

You can combine WindowView with Cross-Click to show up to 16 PCs on as few as four monitors, all operated with a single mouse and keyboard.

To set up Cross-Click for the decoder you are working on, in the home menu, press F > M.



#### To set up Cross-Click

When you set up Cross-Click you choose a layout and then connect encoders and decoders.

- 1. Choose a layout that matches the physical arrangement of your monitors. To switch between 2x2 and 1x4 layout, press T.
  - You don't have to use all the positions in a layout.
  - If you want to use a custom layout, use Pathfinder Control to set up Cross-Click.
- 2. Press F to search for Pathfinder devices.

Numbers associated with Pathfinder devices appear under Select Decoder and Select Encoder. Names of Pathfinder devices do not appear. The only way to tell which device is associated with which number is to use the Identify option. Read more in step 7.

- 3. Use the arrow keys to select a monitor position.
- 4. To select a decoder for that position, press R and then the number of the decoder.
- 5. To select an encoder for that position, press L and then the number of the encoder.

- 6. You can choose to show a temporary red border around the monitor where you are currently working. To configure borders, press B.
  - To enable or disable borders, press A.
  - To make the red border transparent, press T.
  - To make the red border appear when you first move your mouse pointer onto the window, press V.
  - To make the red border appear when you move your mouse pointer after a period of inactivity, press M.
- 7. To check your encoders and decoders are assigned to the right positions, select a monitor with the arrow keys, and then press I. LED lights blink on the front panels of Pathfinder devices assigned to that monitor.

We recommend you make a note of which number is associated with which device.

8. To save your settings and create your group, press A.

### Using WindowView and Cross-Click together

When you combine WindowView and Cross-Click you can show up to four PCs on a single monitor, and work across multiple monitors with a single keyboard and mouse. This means you can work on up to 16 PCs with a single keyboard and mouse.

You can only configure combinations of WindowView and Cross-Click in Pathfinder Control. Read more about Pathfinder Control in the User Guide. Download the User Guide from

help.tvone.com/products/mg/mg-kvm.

# Managing your device with the on-screen display

#### Protecting your PC from viruses from a USB drive

To protect your PC from viruses, you can prevent your decoder from sending information from USB drives to an encoder with the **USB Save Feature** option. In the **home menu**, press F > U.

#### The **USB Save Feature** option does not prevent you from updating your firmware with a USB drive.

#### Risk of harm to network

• You can't lock the USB Save Feature option. A malicious user could turn disable the option and send harmful information to a PC on your network.



### Finding the current version of your firmware

To view the current version of your firmware, in the home menu, press U.



#### Updating your firmware

You can update the firmware of your decoder with a USB drive.

For best results, we recommend you use Pathfinder Control software to manage and update

- the firmware on all your Pathfinder devices.
   Read about how to update firmware with Pathfinder Control on page 24.
- 1. Download the latest firmware from tvone.com/softwares.
- 2. Save the .bin firmware file to the root directory of a USB drive. The USB drive must be formatted with the FAT-32 filesystem.
- 3. Disconnect the Ethernet or fiber optical cable from the KVM port of your decoder.
- 4. Connect the USB drive to a USB port on your decoder.
- 5. In the home menu, press U > U > S.



6. Press U to start updating your decoder.

7. When all items on the screen show **Done**, press R to restart your decoder.

USB UPDATE					
Remote Update to Version 0.38.8					
Erasing flash: 100%	Done				
Updating: 100%	Done				
R Reboot					
ESC Exit					

### **Device settings**

Manage device settings in Settings. In the home menu, press G.

Settings				
	DDC/EDID Settings			
	Keyboard Locale			
	Keyboard Shortcuts (DE)			
	Mouse Settings			
N	Name Overlay (OFF)			
	Local Settings			
	Video Sync Settings			

### Defining what DDC or EDID data your PC uses

In the DDC Information menu, you can define what DDC information the PC uses. In the home menu, press G > O.



- To choose which DDC or EDID information your PC uses:
  - Press 1 to use the DDC information from the monitor attached to the decoder.
  - Press 2 to 4 to use a predefined resolution which is saved.

#### Selecting QWERTY, AZERTY, or QWERTZ keyboard layout

You can switch between keyboard layouts for navigating the on-screen display. You can choose between French (AZERTY), English (QWERTY), and German (QWERTZ).

Select a keyboard layout in the Settings menu. In the home menu, press G > K.

Press Enter to cycle through keyboard layouts.

### Changing your keyboard shortcuts

You can change the keyboard shortcuts for common commands. Edit shortcuts in the Keyboard Shortcuts menu. In the home menu, press G > S.

М	Main Menu	5× < SCROLLLOCK >	
	Device List	< LEFT_CTRL + LEFT_ALT	F12 >
	Status	< LEFT_CTRL + LEFT_ALT	F9 >
	Disconnect	< LEFT_CTRL + LEFT_ALT	F11 >
	Favourites Prefix	< LEFT_CTRL + LEFT_ALT	F1 >
Ente	r to Edit		

You can have a keyboard shortcut that is a combination of keys, or a keyboard shortcut that is a single key pressed quickly multiple times.

- 1. Press the letter key for the shortcut you want to change.
- To use a keyboard shortcut that is a combination of keys, press your new key combination. Note: For Favorites Prefix, only key combinations including 1 or F1 are allowed. OR

To use a keyboard shortcut that is a single key pressed quickly multiple times, press the key you want to use. Then use the left and right arrow keys to increase or decrease the number of times to press the key.

3. Press Enter.

#### Changing the speed of your mouse

You can change the speed of your mouse pointer when you use Cross-Click. Change your mouse speed in the Mouse Speed menu. In the home menu, press G > M.



• Select an axis and change the speed of your mouse with the arrow keys.

#### Displaying the names of connected PCs

If you're using Cross-Click or WindowView, you can choose to display the name of each connected PC in its window, or you can just display the name of the PC you're currently working on. Enable the display of names, in the **Settings** menu. In the home menu, press G.



- To cycle between display options, press N.
  - To display the name of each connected PC in its window, select **PERMANENT**.
  - To display the name of the PC you're currently working on, select FOLLOW RED FRAME.

#### Reducing video tearing with monitor synchronization

You can reduce the effects of video tearing with monitor synchronization. The default value is medium.

Choose a level of monitor synchronization in the Video Sync Presets menu. In the home menu, press G > V.



- To increase monitor synchronization, press H.
- To decrease monitor synchronization, press S.

#### Waking up your PC remotely

You can choose to have your connected PC or PCs wake up when you move your mouse. Enable remote waking in the Local Settings menu. In the home menu, press G > L.



Press W to turn on remote waking.

# Using your Pathfinder 800 series device as a hub splitter



You can use your Pathfinder 800 series device to send one 4K signal to two outputs simultaneously, up to a maximum resolution of 2x 2560x1440 @60 Hz, or 2x 3840x2160 @30 Hz. You can extend a desktop across two monitors, or duplicate a desktop across two monitors.

Both the graphics card and monitors must comply with DisplayPort Standard 1.2.

For some monitors the Display port function 1.2 must be activated in the monitor menu.

To use your Pathfinder 800 series device as a hub splitter, enable **DisplayPort multistream** in the onscreen display.

#### Enabling DisplayPort multistream

You can enable DisplayPort multi-stream functionality. In the home menu, press F > D.



When you change this setting, your decoder restarts.

# Network settings and more

Network settings, user administration, and device settings are managed in Pathfinder Control software.

Read about Pathfinder Control in the User Guide. Download the User Guide from help.tvone.com/products/mg/mg-kvm

# **Troubleshooting and FAQs**

#### Updating your firmware

- 1. Download the latest firmware from tvone.com/softwares.
- 2. In Pathfinder Control, select System > Update Management.

UPDATE SETTINGS
Firmware folder:
500 Series Firmware:
800 series Firmware:
(Un)Mark All
500 series
Send firmware to marked modules
UPDATE marked modules
Send and Update Firmware
800 series
Start Update

- 3. In UPDATE SETTINGS, select and navigate to the firmware file you downloaded in step 1. The firmware .bin file appears under MG-KVM-800 Firmware.
- 4. Select (Un)Mark All to select all the devices on your network.
- 5. Select Start Update.

Your devices update. When the firmware update is complete, Finished! appears under Alerts. If Error! Try again! appears, select the device or devices that did not update, and select Send and Update Firmware.

#### No power is getting to my Pathfinder device

The status LED light is not lit.

- Check the power supply is connected and plugged in.
- Try a different power supply.

#### My USB keyboard or mouse isn't working

The status LED light is green or blinking green.

- Check the keyboard or mouse is connected correctly.
- Disconnect the keyboard or mouse. Reconnect the keyboard or mouse. Wait for drivers to install or update.
- Check the USB port of the encoder is connected to the PC.
- Check the keyboard or mouse works correctly when connected directly to a PC.
- ✓ Try a different USB cable.
- Check that the encoder and decoder are running the latest firmware.
- Try a different encoder and decoder.
- Try a different keyboard fallback mode.
- ✓ If the LED status light is blinking green, your USB keyboard or mouse might not be compatible.

#### No video is reaching the monitor connected to the decoder

The LED status light is red or orange.

- Check all cables are connected correctly.
- ✓ Connect a monitor directly to the PC and check for signal.
- ✓ Check that the DDC or EDID is correct.
- Try adjusting the resolution of the monitor.
- ✓ Check that the encoder and decoder are running the latest firmware.
- Check that the video content is not protected with HDCP. Pathfinder 800 series devices are not compatible with HDCP.

#### Video is poor quality or stripy

The LED status light is green.

- Check all cables are connected correctly.
- Connect a monitor directly to the PC and check video quality.
- Check that the DDC or EDID is correct.
- Check that the encoder and decoder are running the latest firmware.
- Check the network switch. Is it set up correctly? Is there enough bandwidth?
- ✓ Check other units for the same behavior.

#### I can't hear any audio

The status LED light is green.

- Check all cables are connected correctly.
- Connect an audio playback device to the encoded PC and check the signal.
- ✓ Connect a mic to the encoded PC and check the signal.

#### I can't access WindowView or Cross-Click settings in the on-screen display

If option S, Matrix Switching Mode, is selected in the Features menu, you cannot manage features such as Cross-Click and WindowView with the on-screen display. Only administrators can manage these features with Pathfinder Control software.

# General troubleshooting checklist

If specific troubleshooting advice isn't helping, or your product has stopped working, go through the points below. If your product still doesn't work, you might need to return it for repair.

- 1. Make sure your product is set up correctly, as shown in this guide.
- 2. Check that your cables and equipment are all connected firmly.
- 3. Check that your product is connected to an electrical outlet that is switched on.

Can you see LED lights on the front of your product?

- 4. Test your sources by connecting them directly to a display.
- 5. Test your display by connecting it directly to a source.
- 6. Test each cable.
- 7. Try restoring your product to factory default settings.

Note: during factory reset your custom settings are deleted.

8. Try updating your firmware.

Note: during a firmware update your custom settings are deleted.

### Returning a product for repair

You can request to return your product to tvONE<sup>™</sup> for repair. When you contact tvONE support, have the following information ready.

- Product type
- Serial number of the faulty unit (this is on the underside of the unit)
- Full details of the issue
- Invoice number (if available)

Contact tvONE support for your area.

- Customers in North, Central, and South America (NCSA), email tech.usa@tvone.com.
- Customers in Europe, the Middle East, and Africa (EMEA), email tech.europe@tvone.com.
- Customers in Asia, email tech.asia@tvone.com.

#### **EMEA** and Asia

Customers in EMEA and Asia receive an RMA Request form from tvONE support. Complete the form and return it to tvONE support for your area.

All customers

tvONE support decides if your product needs to return for repair, and, if needed, provide a return authorization number.

Send your product to tvONE by insured carrier or registered mail. Write your return authorization number on the outside of the packaging, and on any documents you send with your product.

You must arrange and pay for shipping and insurance. Products in transit are your responsibility. tvONE does not accept responsibility for products lost in transit.

Do not return a product for warranty repair without a return authorization number. tvONE will not repair your product.

# **Contact us**

0

tvone.com

info@tvone.com

Support NCSA: tech.usa@tvone.com

Support EMEA: tech.europe@tvone.com

Support Asia: tech.asia@tvone.com

Information in this document is subject to change without notice. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or any means electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of tvONE.

Copyright © 2019 tvONE™. All rights reserved.

Registered in the U.S. Patent and Trademark Office.