# How To Change A Router's IP Address

For use with the Thinklogical VX and MX Families of Routers



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### 1. Introduction

Thinklogical's MX48, VX40, VX80, VX160, VX640, VX320 and VX320Video & Audio Routers® are high performance, modular, non-blocking matrix switches that are connected to a network for complete, end-to-end routing of video and peripheral signals over multi-mode or single-mode fiber optic cables.

Each Thinklogical Router includes at least one Controller Card (a secondary, back-up Controller Card may also be used) that has an Ethernet port to connect it to a local network. By default, the Thinklogical family of VX and MX Routers uses three static IP addresses; two for the primary controller and one for the secondary controller. A fourth IP address is used for the user's external control server.

### 2. Manually Configuring A Router

### 2.1. The Default Addresses

The primary controller uses default address **192.168.13.15** and alternate address **192.168.13.115**. The secondary controller uses default address **192.168.13.16**. The user's External Control Server address is **192.168.13.9**. This auto configuration allows a controller to work in either slot. If this auto configuration is changed, each controller will only work in its respective slot.

To manually configure a router with one controller, one IP address is required.

To manually configure a router with redundant controllers, four IP addresses are required; two for the primary controller, one for the secondary controller, and one for the external control server.

During a failed condition, when the secondary controller has taken control of the system from the primary controller, the secondary controller will use the primary controller's IP address so that all external control servers will be unaffected by the failure. During this condition, the failed primary controller can still be reached using its alternate IP address.

### 2.2. Configuring the Network

The easiest way to manually configure the network on your Router is to run the "ipconfig" utility. You will need to login as root user and give the command:

### # ipconfig

(The # represents the command prompt for the root user. You do not need to type it.) The **ipconfig utility** will ask you if you would like to set up networking. Use the space bar to select the "Yes" button. Use the tab key to move between items and the space bar to select.

### 2.2.1. The Primary Controller

On the primary controller three options are available. Use the space bar to toggle between **Single**, **Redundant**, and **Auto**.



### 2.2.1.1 Single Option, Primary Controller

Select the **Single** mode to configure a router with one controller. (The [] **Choose** bracket will display what is selected from the [] **Single**, [+] **Redundant** or [\*] **Auto** brackets.)

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### **IP address**

IP address of the primary controller.

### Netmask

Network mask of the primary controller.

Use the space bar to press "OK." Reboot the router to have the changes take affect.



### 2.2.1.2. Redundant Option, Primary Controller

Select the [+] Redundant mode to configure a router with a primary and secondary controller.

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#### **IP address**

IP address of the primary controller.

### Netmask

Network mask of the primary controller.

### Vxcontrol

IP address of the external control server.

### Secondary

IP address of the secondary controller.

#### Alternate

IP address used to reach the primary controller during a failed condition when the secondary controller has take control of the system from the primary controller.

Use the space bar to press "OK." Reboot the router to have the changes take affect.



### 2.2.1.3. Auto Option, Primary Controller

Select the [\*] Auto mode to configure IP addresses of the router based on a DIP switch located on the router. See paragraph 2.2.1.4. for DIP Switch locations and paragraph 2.2.1.5. for DIP Switch settings.

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Use the space bar to press "OK." Reboot the router to have the changes take affect.



### 2.2.1.4. DIP Switch Locations

In Auto mode, the routers' addresses are controlled by a DIP switch located on the router. The location on the router varies by router model. See below for the locations of the routers' DIP Switches.





### VX640 Router DIP Switch Location and Access



To set the VX640 DIP Switch, the front door and front panel must first be removed.

STEP 1: Turn both front door latches one quarter turn clockwise (arrow pointing up) to release the door .

**STEP 2**: Holding the door steady with one hand, **pull down the upper spring-loaded hinge release** and pull the upper portion of the door outward until the latch clears the mounting hole. The door can now be removed and set aside.\*

**STEP 3**: There are **two thumb screws** holding the front panel to the chassis. Loosen the thumb screws, remove the front panel and set it aside. The DIP Switch will now be exposed.

**STEP 4: Set the 8 DIP switches** to the desired settings and **reinstall the front panel** that was removed in Step 3. **STEP 5: When reinstalling the door, insert the lower hinge first**, then, while pulling down the upper hinge spring-release, guide the door into place and allow the upper hinge to insert itself into the mounting hole. Turn the door latches (see Step 1) one quarter turn counter-clockwise to secure the door closed.

\*The VX640 Front Door contains air-flow baffles that are integral to the router's cooling system. Do not leave the front door off the chassis for an extended length of time if the unit is running.

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### 2.2.1.5. DIP Switch Settings

					Primary Controller IP Addresses	Back-up Controller IP			
8	7	6	5	4	3	2	1		Address
0	0	0	0	0	0	0	0	192.168.13.15 <b>&amp;</b> 192.168.13.115	192.168.13.16
0	0	0	0	0	0	0	1	192.168.13.17 <b>&amp;</b> 192.168.13.117	192.168.13.18
0	0	0	0	0	0	1	0	192.168.13.19 <b>&amp;</b> 192.168.13.119	192.168.13.20
0	0	0	0	0	0	1	1	192.168.13.21 <b>&amp;</b> 192.168.13.121	192.168.13.22
0	0	0	0	0	1	0	0	192.168.13.23 <b>&amp;</b> 192.168.13.123	192.168.13.24
0	0	0	0	0	1	0	1	192.168.13.25 <b>&amp;</b> 192.168.13.125	192.168.13.26
0	0	0	0	0	1	1	0	192.168.13.27 <b>&amp;</b> 192.168.13.127	192.168.13.28
0	0	0	0	0	1	1	1	192.168.13.29 <b>&amp;</b> 192.168.13.129	192.168.13.30
0	0	0	0	1	0	0	0	192.168.13.31 <b>&amp;</b> 192.168.13.131	192.168.13.32
0	0	0	0	1	0	0	1	192.168.13.33 <b>&amp;</b> 192.168.13.133	192.168.13.34
0	0	0	0	1	0	1	0	192.168.13.35 <b>&amp;</b> 192.168.13.135	192.168.13.36
0	0	0	0	1	0	1	1	192.168.13.37 <b>&amp;</b> 192.168.13.137	192.168.13.38
0	0	0	0	1	1	0	0	192.168.13.39 <b>&amp;</b> 192.168.13.139	192.168.13.40
0	0	0	0	1	1	0	1	192.168.13.41 <b>&amp;</b> 192.168.13.141	192.168.13.42
0	0	0	0	1	1	1	0	192.168.13.43 <b>&amp;</b> 192.168.13.143	192.168.13.44
0	0	0	0	1	1	1	1	192.168.13.45 <b>&amp;</b> 192.168.13.145	192.168.13.46





### 2.2.2 The Secondary Controller

On the secondary controller, two options are available. Use the space bar to toggle between Redundant, and Auto.

### 2.2.2.1. The Redundant Option, Secondary Controller

Select the [+] Redundant mode to configure a router with a primary and secondary controller.

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### **IP address**

IP address of the secondary controller.

### Netmask

Network mask of the secondary controller.

### Vxcontrol

IP address of the external control server.

### Primary

IP address of the primary controller.

### Alternate

IP address used to reach the primary controller during a failed condition when the secondary controller has take control of the system from the primary controller.

Use the space bar to press "OK." Reboot the router to have the changes take affect.



### 2.2.2.2. The Auto Option, Secondary Controller

Select the [\*] Auto mode to configure the IP addresses of a router based on the DIP switch located on the router.

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Use the space bar to press "OK." Reboot the router to have the changes take affect.

# 3. How to Contact Us

### 3.1 Customer Support

Thinklogical® is an engineering company and you will receive any assistance you require directly from our most knowledgeable engineers. We believe that the first line of support is the design engineer that developed each particular product. Therefore your needs will be handled promptly by our in-house engineers who are most familiar with your products.

Thank you for choosing Thinklogical® products for your application. We appreciate your business and are dedicated to helping you successfully use our products. **thinklogical**® is always here to help you. To contact us, please use the following telephone numbers and internet-based methods:



### Website

Check out our website for current product offerings, support information and general information about all of the products we offer.

Our internet website offers product information on all current systems, including technical specification sheets and installation guides (for viewing online or for download), product diagrams showing physical connections and other information you might need.

### Internet: www.thinklogical.com

<u>Note</u>: Most online documents are stored as Adobe Acrobat "PDF" files. If you do not have the Adobe Acrobat reader needed to view PDF files, visit www.adobe.com for a download.

### Email

Thinklogical is staffed **Monday through Friday from 8:30am to 5:00pm**, Eastern Time Zone. We will do our best to respond to your emails promptly. Please use one of the following email addresses for your particular needs:

info@thinklogical.com – Information on Thinklogical and our products.

sales@thinklogical.com - Sales Department - orders, questions or issues.

**support@thinklogical.com** – Product support, technical issues or questions, product repairs and request for Return Authorization.

### Telephone

**Telephone Sales:** Contact our expert sales staff in Milford, CT at **1-203-647-8700** or if in the continental USA, you may use our **toll-free number 1-800-291-3211**. We are here Monday through Friday from 8:30am to 5:00pm, Eastern Time Zone. Ask for your representative's direct dial phone number when you call.

**Telephone Product Support:** Contact Product Support in Milford, CT at **1-203-647-8700**. The support lines are manned Monday through Friday, 8:30am to 5:00pm, Eastern Time Zone.

**International Sales:** Please contact our US sales staff in Milford, CT at **1-203-647-8700**. We are here Monday through Friday, 8:30am to 5:00pm, Eastern Time Zone (same as New York City). If leaving a voice message please let us know the best time to return your call so we may reach you at your convenience.

Our switchboard attendant will direct your call during regular business hours. We have an automated attendant answering our main telephone switchboard after regular business hours and holidays. You can leave a voice message for an individual at any time. Our Sales Representatives have direct numbers to speed up your next call to us.

### Fax

Our company facsimile number is **1-203-783-9949**. Please indicate the nature of the fax on your cover sheet and provide return contact information.



### 3.2 **Product Support**

Thinklogical's support personnel are available **Monday through Friday from 8:30am to 5:00pm**, Eastern Time Zone. If your application requires assistance at some time outside of our normal business hours, please contact us beforehand and we will do our best to make arrangements to help you with your Thinklogical products.

### **Limited Warranty Information**

Thinklogical, LLC® ("Thinklogical") warrants this product against defects in materials and workmanship for a period of one (1) year from the date of delivery (ordinary wear and tear excluded). This limited warranty does not cover defects resulting from (i) use of the product other than as described in the applicable documentation for the product; (ii) modifications to or repairs of the product that are made by any party other than Thinklogical or a party acting on Thinklogical's behalf, or (iii) combination of the product with third party products that is not consented to by Thinklogical. Occurrences of events described in (i) – (iii) shall void the foregoing warranty. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Except for the express warranty set forth above, to the fullest extent permitted under applicable law, Thinklogical, LLC<sup>®</sup> and its suppliers disclaim any and all other warranties, express and implied, including without limitation the implied warranties of merchantability, fitness for a particular purpose, title and non-infringement.

If the defective product is returned to the authorized dealer within one (1) year of the delivery date, repair or replacement of the product will be made. Repairs may be made with refurbished parts. If repair or replacement is not possible, Thinklogical may keep the defective product and refund the amount that you paid for the defective product. These are Thinklogical's sole obligations, and your exclusive remedies, for a breach of the limited warranty set forth above.

To return a defective product, contact the Thinklogical authorized dealer from whom you purchased the product. Do not return a product directly to Thinklogical without prior authorization from your dealer.

If you have received prior authorization from your dealer and are returning a product directly to Thinklogical:

- 1. You may contact your *Sales Representative* directly or call *Customer Support* at 1-203-647-8700 or 1-800-291-3211 (toll free).
- 2. Describe the defect with the product and Customer Support will issue a Return Merchandise Authorization Number (RMA#).
- 3. Pack the product in all of its original packing, if possible, and write the RMA number on the box.
- 4. Return the product to:

Thinklogical, LLC® Attn: RMA# [Insert the RMA# issued to you by Thinklogical, here.] 100 Washington Street Milford, CT 06460 USA

If you have any issue with a product, have product questions or need technical assistance with your Thinklogical system, please call us at **1-800-291-3211 (USA only)** or **1-203-647-8700** and let us help.

