

## Installing Firmware Updates on PVIQ™ Panels

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### Determine if the Panel Requires a Firmware Update

Power on new PANVIEW iQ™ Patch Panel(s) with attached PVIQ™ Panel Managers and PVIQ™ Expansion Modules and if all port LEDs appear as solid (non-blinking) red or solid amber, then a panel firmware update is required.

### Determine the Appropriate Panel Firmware Update Needed

The update you will perform will depend upon the firmware that you are currently running. Choose one instructions in this technical reference based on your firmware version. However, before you begin, make sure that you have completed the following:

- Install and connect the PVIQ hardware as indicated in the System Hardware Installation Instructions.
- Make sure that you have completed all Firmware Preparations as instructed in Technical Reference # TR44
- Determine the firmware versions you are running as described in Technical Reference # TR45
- Make sure that you have access to a DHCP server

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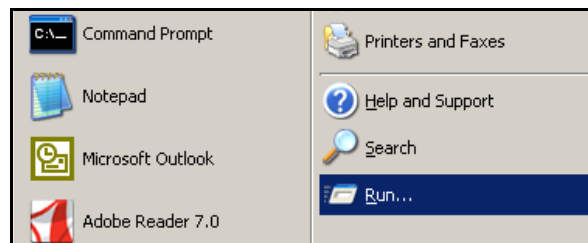
### 1.) Firmware Version 1.14.xx and Newer Update

If you have a version of firmware that is greater than version 1.08.04, the panels will automatically perform updates, so no further action is required.

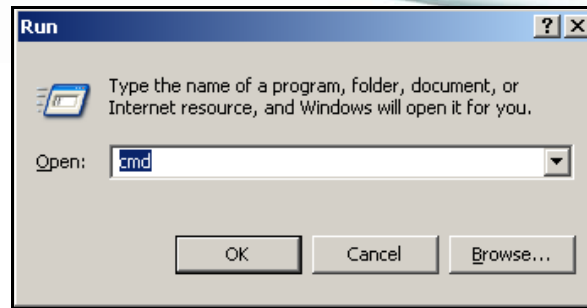
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### 2.) Firmware Versions 1.08.00, 1.08.04 and 1.12.03 Updates

1. Ensure that the first Panel Manager (PM) of the Ethernet daisy chain is connected to a subnet with an available DHCP server.
2. Ensure that the laptop's Ethernet port is set to use DHCP (see your Windows help files for more info).
3. Connect the laptop computer to the available RJ45 port on the last PM of the Ethernet daisy chain.
4. Open a Command window (cmd.exe) on the PC by navigating to the Microsoft® Windows® "Start" icon and selecting the "Run" icon.



5. In the dialog box, type `cmd` (see below) and then hit the OK button.



6. Navigate (cd...) to directory containing the `pviqutil.exe` command.
7. Type the following command to discover the IP addresses of all *PANVIEW iQ™* Panel Managers connected to this subnet: `pviqutil-a`

**NOTE:** You may navigate (using Windows® Internet Explorer®) to the `pviqutil.exe` command and double-click on this icon to perform the PM device discovery

```

C:\WINDOWS\system32\cmd.exe - pviqutil -a
Microsoft Windows [Version 5.2.3790]
(C) Copyright 1985-2003 Microsoft Corp.

C:\Documents and Settings\Administrator>cd
D:\>cd Utilities
D:\Utilities>dir
Volume in drive D is PIM_1_0_0
Volume Serial Number is 4AD3-093C

Directory of D:\Utilities

03/20/2008  12:26 PM  <DIR>          .
03/24/2008  01:35 PM  <DIR>          ..
03/20/2008  09:01 AM             74,240 pviqutil.exe
03/19/2008  08:12 AM             14,498 pviqutil.pdf
03/19/2008  07:18 AM              6,523 pviqutil.rtf
               3 File(s)              95,261 bytes
               2 Dir(s)                0 bytes free

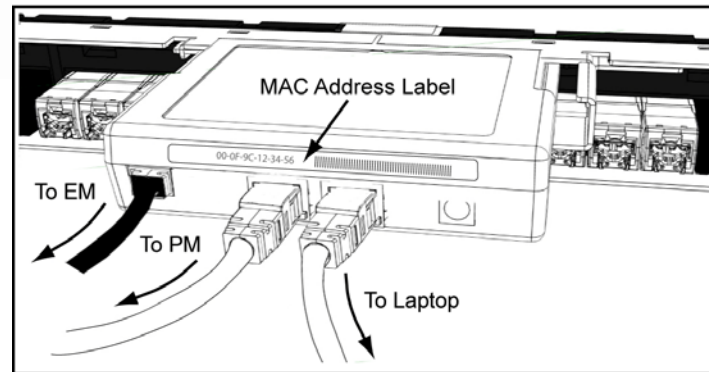
D:\Utilities>pviqutil -a

There is 1 interface
1: network address 192.168.0.0

Search Network 192.168.0.0,
It takes 10 to 30 seconds, please wait ...

192.168.0.146      00:0F:9C:00:3E:1B
192.168.0.149      00:0F:9C:00:3A:EE
192.168.0.150      00:0F:9C:00:39:56
192.168.0.156      00:0F:9C:00:3A:F0
192.168.0.167      00:0F:9C:00:3B:17
192.168.0.168      00:0F:9C:00:3B:3B
192.168.0.174      00:0F:9C:00:3C:8C
192.168.0.176      00:0F:9C:00:3A:F8
192.168.0.177      00:0F:9C:00:3C:92
  
```

8. Compare the MAC-to-IP mapping list with the MAC address label on the desired *PANVIEW iQ™* PM (as demonstrated in the illustration below).



*Back View of Last PM in Daisy Chain*

9. Type the following command to update each *PANVIEW iQ™* PM group found that needs firmware update:  
`pviqutil -w (IP Address)`
10. Repeat step 9 for each IP Address obtained in step 7.

### Firmware Update Complete

- 1.) After the firmware update completes, the system automatically goes through a Reset. Observe the following:
  - All LEDs are off for a short interval
  - All SYS LEDs are Amber
  - All TRC, MODE, and MAC LEDs are Off
  - All port LEDs flash in the following sequence: Amber, Red, Green, and then remain off.
- 2.) The system starts running with all panels and modules updated:
  - All EM SYS LEDs are Green
  - The PM SYS LED is Green and flashes Amber approximately once every 7 seconds.
  - All port LEDs flash in the following sequence: Amber, Red, Green, and then remain off.

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