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## **Setting up an IP Address on a PowerFlex Drive**

#### **Overall Description**

This document serves as a supplement to the PowerFlex '4' and '7' class range of drives, and the communication adapter user manuals. The EtherNet IP address and subnet mask for a PowerFlex drive, can be set by a number of different methods, dependant on the drive type and what peripherals you have available.

The table below lists the drive type and method, in order of your most likely peripheral from left to right etc

Drive Type	HIM on Drive	AnaCanDa Serial	RSLogix 5000 v16.x	External HIM	BOOTP server
PowerFlex 40 / 40P / 400	No	Yes	Yes if IP set	Yes	Yes
PowerFlex 70 / PF70EC / 700std / 700H	Yes	Yes	Yes if IP set	Yes	Yes
PowerFlex 700VC	Yes	Yes	Yes if IP set	Yes	Yes
PowerFlex 700S	Yes	Yes	Yes if IP set	Yes	Yes

N.B. The AnaCanda is a serial interface, and is either a 1203-SSS, 22-SCM-232, or a 1203-USB

The EtherNet/IP communication adapters 22-COMM-E for the '4' class drives, and 20-COMM-E for the '7' class drives, require that specific IP address and subnet is assigned to each adapter, so that it can be exclusively allocated to a PLC for control. When adapters are new, they are defaulted to BOOTP enabled. Although BOOTP is widely used in the IT world, drive users in the industrial control world often are not familiar with BOOTP servers, and so this is the least preferred method. Therefore this application note details how we can use different types of peripheral, to set the IP address and subnet mask.

So looking at the table above, often the easiest method is the HIM on the front of the drive. This is great for say a PF70, but the built-in keypad of the PF40 will not access the EtherNet card, so the AnaCanDa is the next likely method. If the IP address has been previously set and is known, then you can use RSLogix5000 v16.x, to force a new IP address. If you don't have an AnaCanda, then maybe you can use an external HIM plugged into the drive. However if you don't have any of these peripherals, then your last resort is a BOOTP server.

The application note provides the procedure for BOOTP, and each of the peripherals and drive types.

N.B. Ensure that the EtherNet/IP adapters are already installed before putting power on the drives.

#### PowerFlex '7' class drive – using the HIM on the drive

The PowerFlex '7' class EtherNet adapter 20-COMM-E resides inside the drive. Assuming we intend to change the IP address = 192.168.100.10, and subnet = 255.255.0.0

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- 1. We will use the top row of keys on the HIM: ESC, Sel, Up arrow, Down arrow, & Enter
- 2. Reset the drive to defaults as follows:
  - 1. Press Esc to return to the Main Menu.
  - 2. Press or to choose "*Memory Storage*" from the list.
  - 3. Press to see a list of items within Memory Storage.
  - 4. Press Or To find "Reset to Defaults".
  - 5. Press to request a reset.
  - 6. Press to confirm and execute a reset to defaults.
  - 7. Press O to clear the fault. Notice how the STS led changes from a flashing red to a flashing green. A pop-up message also appears informing you that the loading of factory defaults is complete.
- 3. Changing the IP address of the drive as follows:
  - 1. Press Esc to return to the Main Menu.
  - 2. Press or to choose "Device Select".
  - 3. Press to see a list of items within the drive.
  - 4. Press or to find "20-COMM-E".
  - 5. Press to select the adapter, and to select parameters

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- 6. Press or to select the parameters from the list.
- 7. Press to select IP Addr Cfg 1
- 8. Press Sel and then the numeric keys to change the address to a value of **192**. Then press
- 9. Press **V** and then repeat for IP Addr Cfg 2,3 & 4
- 10. Press **V** and then repeat for **SubNet Cfg 1,2,3 &4**
- 11. The IP address = 192.168.100.10, and subnet = 255.255.0.0
- 12. Now power down the drive and ensure EtherNet patch cable is plugged into the 20-COMM-E card. Now power up the drive

#### PowerFlex '4' & '7' class drive – using the AnaCanda serial interface

An AnaCanda (22-SCM-232 or 1203-USB) connects to the PowerFlex '4' class drive, using the RJ45 connector on the motherboard of the drive. Do NOT mistake the Ethernet connector on the 22-COMM-E as the AnaCanda connection.

An AnaCanda (1203-SSS or 1203-USB) connects to the PowerFlex '7' class drive using the DPI mini DIN connector on the bottom plate of the drive, just behind the front cover.

All AnaCanDa's can be inserted / removed under power.

It is possible to use either of the software drive tools, DriveExecutive or DriveExplorer. The following screenshots detail DriveExplorer.

1. Make a connection via the serial point to point connection, and select the 22-COMM-E parameter list

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File Edit Explore Actions Help	an	🔒 🔍 🔍 🚃 💥 🖋	>		
Devices     Device Properties     Device Properties     Device Properties     Device Properties     Parameter List     Parameters     1 - 22-COMM-E EtherNet     Parameter List     Devameter List     Custom Views     Compare Results	* 1:1 * 1:1.3 * 1:1.4 * 1:1.5 * 1:1.6 * 1:1.7 * 1:1.8 * 1:1.10 * 1:1.10 * 1:1.11 * 1:1.12 * 1:1.13 * 1:1.14 * 1:1.15 * 1:1.16 * 1:1.16 * 1:1.17 * 1:1.18 * 1:1.20 * 1:22 * 1:22	Serial to Network Criffe Serial to Network Criffe IP Addr Cfg 1 IP Addr Cfg 2 IP Addr Cfg 1 Subnet Cfg 1 Subnet Cfg 1 Subnet Cfg 3 Subnet Cfg 3 Subnet Cfg 4 Gateway Cfg 1 Gateway Cfg 3 Gateway Cfg 3 Gateway Cfg 3 Gateway Cfg 3 Gateway Cfg 4 EN Rate Cfg EN Rate Cfg EN Rate Cfg EN Rate Cfg EN Rate Cfg EN Rate Actt Reset Module Comm Fit Action Idle Fit Action Fit Cfg Ref DSI I/O Act Dry 0 Addr	Value           Single Drv           Disabled           192           168           100           7           255           255           255           255           255           0           100Mbps Full           Ready           Fault           0           0           0           0           0           100	Units	
a	1: 1.26 1: 1.27	Drv 2 Addr Drv 3 Addr	101 102 103	-   - )	, î
Connect to the local node	- <b>-</b> 11		Local DSI		

2. Click on the information icon **1**. and then the EtherNet Settings tab.

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FЛ	Stopped		Auto	Ŧ
	Port 5			
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)evice È No È	es ode 1: - PowerFlex 40 ]- 0 - PowerFlex 40 1P 24	5 N:P.P# ks 1: 1.1 1: 1.2	Mode BOOTP	Value Single Drv Enabled	Units
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iu: Ior	Subnet Mask:	8 2 0 2	0 . 0		
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3. Uncheck the BOOTP box, so that the EtherNet Settings are not greyed out and can be adjusted

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E- Device	es ode 1: - PowerFlex 40 ]- 0 <sub>,</sub> - PowerFlex 40 1P 2	5 N:P.P# 15 R 1: 1.1 40' * 1: 1.2 * 1: 1.2	Name Mode BOOTP	Value Single Drv Disabled	Units	
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0	IP Address:	<b>192</b> . 168 . 10	00.7	Apply		
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For Help, p	oress F1			Local DSI		- //

- 4. Enter the correct EtherNet/IP address and subnet, then click Apply.
- 5. Now we need to reset the adapter for the changes to take effect. This can be done with parameter 17, or just power cycle the drive.

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#### PowerFlex '4' and '7' class drive - using the RSLogix5000 v16.x

If a drive has a fixed IP address and is known to you, then you can use RSLogix5000 v16.x programming software, to force a new IP address.

# Lets assume that the IP address of a PF40 = 192.168.100.102, and subnet = 255.255.255.0, but we need the address changed to 192.168.100.8

1. Open RSLogix5000 v16.x and either copy and paste an instance of the drive, or create a new drive instance. Goto the I/O configuration tree and right click on the *EtherNet* and select *New Module* 



2. Expand the Drives selection, and select the correct drive type, we will choose a PF40 in this case

- 2364F RGU-EN1       2364F Regen Bus Supply via 1203-EN1         - PowerFlex 40-E       PowerFlex 40 Drive via 22-COMM-E         - PowerFlex 40-E       PowerFlex 40 Drive via 22-COMM-E         - PowerFlex 40-E       PowerFlex 40 Drive via 22-COMM-E         - PowerFlex 70 EC-E       PowerFlex 70 Drive via 20-COMM-E         - PowerFlex 70 EC-E       PowerFlex 70 Drive via 20-COMM-E         - PowerFlex 70 Dec       PowerFlex 70 Drive via 22-COMM-E         - PowerFlex 70 Dec       PowerFlex 70 Drive via 22-COMM-E         - PowerFlex 700 Vector-200V-E       PowerFlex 700 Vector Drive (208/240V) via 2         - PowerFlex 700 Vector-400V-E       PowerFlex 700 Vector Drive (400/480V) via 20-COM         - PowerFlex 700 Vector-400V-E       PowerFlex 700 Drive (208/240V) via 20-COM         - PowerFlex 700 Vector-400V-E       PowerFlex 700 Drive (208/240V) via 20-COM         - PowerFlex 700 Vector-400V-E       PowerFlex 700 Drive (208/240V) via 20-COM         - PowerFlex 700 -200V-E       PowerFlex 700 Drive (400/480V) via 20-COM         - PowerFlex 700-600V-E       PowerFlex 700 Drive (400/480V) via 20-COM         - PowerFlex 700-600V-E       PowerFlex 700 Drive (400/480V) via 20-COM         - PowerFlex 700-600V-E       PowerFlex 700 Drive (400/480V) via 20-COM         - PowerFlex 700-600V-E       PowerFlex 700 Drive (600V) via 20-COMM         - PowerFlex 700 Drive (500V)		Description		Module
PowerFlex 4-E     PowerFlex 4 Drive via 22-COMM-E       PowerFlex 40-E     PowerFlex 40 Drive via 22-COMM-E       PowerFlex 40-E     PowerFlex 40 Drive via 22-COMM-E       PowerFlex 70 E     PowerFlex 70 Drive via 22-COMM-E       PowerFlex 70 E     PowerFlex 70 E C Drive via 20-COMM-E       PowerFlex 70-E     PowerFlex 70 Drive via 20-COMM-E       PowerFlex 700 E     PowerFlex 700 Drive via 22-COMM-E       PowerFlex 700 Vector-200V-E     PowerFlex 700 Vector Drive via 22-COMM-E       PowerFlex 700 Vector-200V-E     PowerFlex 700 Vector Drive (208/240V) via 2       PowerFlex 700 Vector-600V-E     PowerFlex 700 Vector Drive (208/240V) via 2       PowerFlex 700 Vector-600V-E     PowerFlex 700 Vector Drive (208/240V) via 20-COM       PowerFlex 700 Vector-600V-E     PowerFlex 700 Vector Drive (400/480V) via 20-COM       PowerFlex 700 Vector-600V-E     PowerFlex 700 Drive (208/240V) via 20-COM       PowerFlex 700-200V-E     PowerFlex 700 Drive (208/240V) via 20-COM       PowerFlex 700-200V-E     PowerFlex 700 Drive (400/480V) via 20-COM       PowerFlex 700-00V-E     PowerFlex 700 Drive (400/480V) via 20-COM       PowerFlex 700-600V-E     PowerFlex 700 Drive (400/480V) via 20-COM       PowerFlex 700-600V-E     PowerFlex 700 Drive (400/480V) via 20-COM       PowerFlex 700 Drive (500V) Via 20-COMH-E     PowerFlex 700 Drive (400/480V) via 20-COMH		2364F Regen Bus Supply via 1203-EN1	GU-EN1	2364F RGU
PowerFlex 40-E         PowerFlex 40 Drive via 22-COMM-E           PowerFlex 40P-E         PowerFlex 40P Drive via 22-COMM-E           PowerFlex 70 EC-E         PowerFlex 70 EC Drive via 20-COMM-E           PowerFlex 70 EC         PowerFlex 70 EC Drive via 20-COMM-E           PowerFlex 700-E         PowerFlex 70 EC Drive via 20-COMM-E           PowerFlex 700 Vector-200V-E         PowerFlex 700 Vector Drive via 22-COMM-E           PowerFlex 700 Vector-200V-E         PowerFlex 700 Vector Drive (208/240V) via 2           PowerFlex 700 Vector-400V-E         PowerFlex 700 Vector Drive (208/240V) via 2           PowerFlex 700 Vector-600V-E         PowerFlex 700 Vector Drive (400/480V) via 20-COM           PowerFlex 700-00V-E         PowerFlex 700 Drive (208/240V) via 20-COM           PowerFlex 700-00V-E         PowerFlex 700 Vector Drive (400/480V) via 20-COM           PowerFlex 700-00V-E         PowerFlex 700 Drive (400/480V) via 20-COM           PowerFlex 700-600V-E         PowerFlex 700 Drive (400/480V) via 20-COM		PowerFlex 4 Drive via 22-COMM-E	ex 4-E	PowerFlex
PowerFlex 40P-E PowerFlex 700 EC-E PowerFlex 700 EC-E PowerFlex 700-E PowerFlex 700-E PowerFlex 700 Vector-200V-E PowerFlex 700 Vector-200V-E PowerFlex 700 Vector-600V-E PowerFlex 700 Vector-600V-E PowerFlex 700 Drive (400/480V) via 20-COM PowerFlex 700 Drive (400/480V) via 20		PowerFlex 40 Drive via 22-COMM-E	ex 40-E	PowerFlex
PowerFlex 70 EC-E       PowerFlex 70 EC Drive via 20-COMM-E         PowerFlex 70-E       PowerFlex 70 Drive via 20-COMM-E         PowerFlex 400-E       PowerFlex 70 Drive via 22-COMM-E         PowerFlex 700 Vector-200V-E       PowerFlex 700 Vector Drive (208/240V) via 2         PowerFlex 700 Vector-400V-E       PowerFlex 700 Vector Drive (400/480V) via 20-CC         PowerFlex 700 Vector-600V-E       PowerFlex 700 Vector Drive (208/240V) via 20-CC         PowerFlex 700 Vector-600V-E       PowerFlex 700 Drive (208/240V) via 20-CCM         PowerFlex 700-200V-E       PowerFlex 700 Drive (208/240V) via 20-CCM         PowerFlex 700-200V-E       PowerFlex 700 Drive (400/480V) via 20-CCM         PowerFlex 700-600V-E       PowerFlex 700 Drive (400/480V) via 20-CCMM		PowerFlex 40P Drive via 22-COMM-E	ex 40P-E	PowerFlex
PowerFlex 70-E     PowerFlex 70 Drive via 20-COMM-E     PowerFlex 700 Vector-200V-E     PowerFlex 700 Vector Drive (208/240V) via 2     PowerFlex 700 Vector-200V-E     PowerFlex 700 Vector Drive (208/240V) via 2     PowerFlex 700 Vector Drive (200/480V) via 2     PowerFlex 700 Drive (200/480V) via 20-COM     PowerFlex 700 Drive (200/480V		PowerFlex 70 EC Drive via 20-COMM-E	ex 70 EC-E	PowerFlex
PowerFlex 400-E         PowerFlex 400 Drive via 22-COMM-E           PowerFlex 700 Vector-200V-E         PowerFlex 700 Vector Drive (208/240V) via 2           PowerFlex 700 Vector-400V-E         PowerFlex 700 Vector Drive (400/480V) via 2           PowerFlex 700 Vector-600V-E         PowerFlex 700 Vector Drive (208/240V) via 2           PowerFlex 700 Vector-600V-E         PowerFlex 700 Vector Drive (400/480V) via 20-COM           PowerFlex 700-00V-E         PowerFlex 700 Drive (208/240V) via 20-COM           PowerFlex 700-00V-E         PowerFlex 700 Drive (400/480V) via 20-COM		PowerFlex 70 Drive via 20-COMM-E	ex 70-E	PowerFlex
PowerFlex 700 Vector-200V-E         PowerFlex 700 Vector Drive (208/240V) via 2           PowerFlex 700 Vector-400V-E         PowerFlex 700 Vector Drive (400/480V) via 2           PowerFlex 700-00V-E         PowerFlex 700 Drive (208/240V) via 20-C0V           PowerFlex 700-00V-E         PowerFlex 700 Vector Drive (600V) via 20-C0V           PowerFlex 700-00V-E         PowerFlex 700 Drive (208/240V) via 20-C0V           PowerFlex 700-00V-E         PowerFlex 700 Drive (400/480V) via 20-C0V           PowerFlex 700-0600V-E         PowerFlex 700 Drive (600V) via 20-C0V           PowerFlex 700-0600V-E         PowerFlex 700 Drive (600V) via 20-C0V		PowerFlex 400 Drive via 22-COMM-E	ex 400-E	PowerFlex
PowerFlex 700 Vector-400V-E         PowerFlex 700 Vector Drive (400/480V) via 2           PowerFlex 700 Vector-600V-E         PowerFlex 700 Vector Drive (600V) via 20-CC           PowerFlex 700-200V-E         PowerFlex 700 Drive (208/240V) via 20-CC           PowerFlex 700-00V-E         PowerFlex 700 Drive (400/480V) via 20-CC           PowerFlex 700-00V-E         PowerFlex 700 Drive (400/480V) via 20-CCM           PowerFlex 700-00V-E         PowerFlex 700 Drive (400/480V) via 20-CCM           PowerFlex 700-00V-E         PowerFlex 700 Drive (600V) via 20-CCMM-E	20-COMM-	PowerFlex 700 Vector Drive (208/240V) via 20-0	ex 700 Vector-200V-E	PowerFlex
PowerFlex 700 Vector-600V-E     PowerFlex 700 Vector Drive (600V) via 20-CCM     PowerFlex 700-200V-E     PowerFlex 700 Drive (208/240V) via 20-CCM     PowerFlex 700-400V-E     PowerFlex 700 Drive (400/480V) via 20-CCM     PowerFlex 700 Drive (600V) via 20-CCM     PowerFlex 700 Drive (600V) via 20-CCM     PowerFlex 700 Drive (600V) via 20-CCM	20-COMM-	PowerFlex 700 Vector Drive (400/480V) via 20-0	ex 700 Vector-400V-E	PowerFlex
PowerFlex 700-200V-E     PowerFlex 700 Drive (208/240V) via 20-COMI     PowerFlex 700 Drive (400/480V) via 20-COMI     PowerFlex 700 Drive (400/480V) via 20-COMI     PowerFlex 700 Drive (600V) via 20-COMIN-E	COMM-E	PowerFlex 700 Vector Drive (600V) via 20-COMM	ex 700 Vector-600V-E	PowerFlex
	MM-E	PowerFlex 700 Drive (208/240V) via 20-COMM-E	ex 700-200V-E	PowerFlex
PowerFlex 700-600V-E PowerFlex 700 Drive (600V) via 20-COMM-E	MM-E	PowerFlex 700 Drive (400/480V) via 20-COMM-E	ex 700-400V-E	PowerFlex
	i D	PowerFlex 700 Drive (600V) via 20-COMM-E	ex 700-600V-E	PowerFlex
FindAd	dd Favorite	Find Add Fa		
By Category By Vendor Favorites		Favorites	By Vendor	By Category

3. Type in a name for the new drive, and type in the IP address you wish to change it to. i.e. the new IP Address.

Type: Vendor: Parent:	PowerFlex 40-E PowerFlex 40 Drive via 22 Allen-Bradley LocalENB	2-COMM-E	ame	
Name: Description:	New_IP_Add	<ul> <li>IP Address:</li> <li>Host Name:</li> </ul>	192 . 168 . 100 . 8	
Module Defin Series: Revision: Electronic Ke Connection: Data Format	vition None Change 4.1 eying: Compatible Module Detailinks : 0 Datalinks	12		
-			2	
Status: Crea	ting	OK	Cancel He	elp

4. Click the *Change* button to select the correct drive type and revisions and click ok. If your drive is not listed or you get errors when downloading, you may need to create a database for your new drive. See Step 11 later.

Electronic Keying: Compatible Module DriveStatus LogicCommand OutputFreq PreqCommand Drive Rating: 1P 240V .50HP	Compatible Module     DriveStatus     LogicCommand       OutputFreq     FreqCommand       1P 240V     .50HP	Revision:	3 💌 3	🗾 👻 Input Data	Output Data	
Electronic Keying: Lompatible Module OutputFreq FreqCommand Drive Rating: 1P 240V .50HP	Compatible Module     Image: Compatible Module       1P 240V     50HP			DriveStatus	LogicCommand	
Drive Rating: 1P 240V .50HP	1P 240V .50HP	Electronic Keying:	Lompatible Module	OutputFreq	FreqCommand	
k	Dataiinks	Drive Rating:	1P 240V	-		
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Data Format: U Datainks		Connection: Data Format:	Datalinks 0 Datalinks	*		

5. Goto the *Port Configuration* tab, and enter the Subnet mask and click the *SET* button. Now we can click *OK* to create the module.

New Module			
General* Connection	Module Info Port Configuration Drive		
IP Address:	192 . 168 . 100 . 8		
Subnet Mask:	255 . 255 . 255 .		
Gateway Address:			
Enable BootP			
Endble been			
			Set 🔶 🗲
Status: Creating		OK	Cancel Help

6. The new drive will now appear on the I/O Configuration tree. Double click it, or right click and select *Properties* and select the *Drive* tab

⊕	đ	New Module	
Add-On-Defined	ж	Cut	Ctrl+X
ELing Predefined	8	Сору	Ctrl+C
	B	Paste	Ctrl+V
🗄 📹 I/O Configuration		Delete	Del
Backplane, CompactLogix System     1769-L35E CompactLx_drives_demo		Cross Reference	Ctrl+E
		Properties	Alt+Enter
PowerFlex 40-E New_IP_Add	4		

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		Rockwell Offices	х	Options Use	Date	20/08/2007
		Drives Team		Application Experience	Revision	С
L				(Name) only		

7. In the Drive I/O tree select the complete drive with adapter *New\_IP\_Add* (top line), and right click and select *Download All.* 

Image: Second secon	New Peripheral Device Import Drive Data Export Drive Data Upload All Download All Ocreate Database Web Update	PowerFlex 40 1P 240V .50HP Revision: 3.003	
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8. RSLinx will now open, so select your drive by its old IP address *192.168.100.102* to define the connection path to the drive.

Workstation, EUGBMKFDWITHEN2       ▲         → Linx Gateways, Ethernet       ▲         → A B_DF1-1, DF1       ↓         → A B_ETH-1, Ethernet       ↓         → 192.168.100.100, PowerFlex 70 EC, PowerFlex 70 EC 20       ↓         → 192.168.100.101, VersaView CE 700H, PanelView_Plus-       ↓         → 192.168.100.102, PowerFlex 40, PowerFlex 40 IP 240V       ↓         → 192.168.100.103, PowerFlex 70 EC, PowerFlex 70 EC 2       ↓         → 192.168.100.102, PowerFlex 70 EC, PowerFlex 70 IP 240V       ↓         → 192.168.100.103, PowerFlex 70 EC, PowerFlex 70 EC 2       ↓         → 192.168.1.100, 1769-L32E Ethernet 70 EC, PowerFlex 70 EC 2       ↓         → 192.168.1.100, 1769-L32E Ethernet Port, 1769-L32E Ethernet 192.168.1.120, 1769-L32E Ethernet Port, 1769-L32E Ethernet 192.168.1.120, 1769-L32E Ethernet Port, 1769-L32E Ethernet 192.168.1.121, PanelView Plus 1000, PanelView-Plus       ↓         → 192.168.1.122, SMC Flex, SMC Flex       192.168.1.120, 1768-LNBT/A, 1768-ENBT/A       ↓
192.168.1.131, PanelView Plus 700, PanelView-Plus     192.168.1.132, PowerFlex 70 EC, PowerFlex 70 EC 240     102.1102.1102.0102.0102.0102.0102.01

9. Click *OK* and you will get the following. Select Yes and we get the download screen.

Dist	trib	ution:-		Related to:-		
	х	Open		Inverter Use	Generated By	D.J.Withenshaw
		Rockwell Offices	x	Options Use	Date	20/08/2007
		Drives Team		Application Experience	Revision	С
l				(Name) only		

Connection f	Node Mismatch	Select Devices To Download	×
Project:	CompactLx_drives_demo in CompactLx_drivesdemo_Mar07_v16 (New_	Project: CompactLx_drives_demo in	CompactLx_drivesdemo_Mar07_v16 (New_
Drive:	AB_ETH-1\192.168.100.102	Drive: AB_ETH-1\192.168.100.10	2
A	The node used for connection to the drive does not match the node	Project Devices	Drive Devices
Project: Drive:	stored in the project. If you continue, the project will NOT be updated to match the drive node. Continue with connection process? 192.168.100.8 192.168.100.102	New_IP_Add 0 PowerFlex 40 2 M 1 22-COMM-E	New_IP_Add 0 PowerFlex 40 1 22-COMM-E
	Yes No Help		
		Differences found. Click Dow You can modify which device checkboxes in the project tr	l wnload to continue the operation. es to download by clicking the ee view.
		₽\$	
		Show Details.	nload Cancel Help

- 10. Click the *Download* button, and the parameters and new IP address will be transferred to the drive. To make the new IP address active, power cycle the drive.
- 11. If you get an error that you have the wrong drive rating or firmware version, you may need to create a new database. This can be created from the drive, by right clicking the drive and selecting *Create Database*. Again you will need to define the path to the drive in RSLinx. Creating a database may take a few minutes, but once completed additional drive ratings / firmware are now selectable as in Step 4.

	New Peripheral Device Import Drive Data Export Drive Data Upload All Download All Create Database Web Update	PowerFlex 40 1P 240V .50HP Revision: 3.003	
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### PowerFlex '4' and '7' class drive - using the External HIM on the drive

Using an external HIM on a PowerFlex '7' class drive is identical to the earlier description of a drive mounted HIM.

An external HIM connects to the PowerFlex '4' class drive, using the RJ45 connector on the motherboard of the drive. Do NOT mistake the Ethernet connector on the 22-COMM-E as the HIM connection.

1. Select the 22-COMM-E as shown below.



#### Using the HIM

2. Use the Up / down arrows to scroll to the BOOTP parameter 002. Now select the BOOTP by pressing the enter key, and use the down arrow to put the value to 0. Now press enter to disable the adapter.



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- 3. Now we need to reset the adapter for the changes to take effect. This can be done with parameter 17, or just power cycle the drive.
- Return to the 22-COMM-E parameters, and goto parameter 3 IP address Config 1 and start inputting your IP address values. In our case the first octet was 192, so press enter on parameter 3 and press the up/down keys or enter a value, then press enter to accept.



- 5. Continue with the IP Address Config 2 to 4 and then the Subnet Cfg 1 to 4.
- 6. When complete, we need to reset the adapter for the changes to take effect. This can be done with parameter 17, or just power cycle the drive.

#### Using the BOOTP server

In order to control the drive over the communication port (EtherNet/IP adapter 20-COMM-E or 22-COMM-E), the IP address needs to be set in the card. A new adapter defaults to BOOTP enabled, with no fixed IP address, so the following procedure assumes a new adapter is fitted.

1. Stop RSLinx browsing, by un-checking the *Autobrowse* feature..



- The BOOTP-DHCP server program is normally supplied as part of the accessories with Rockwell Software. From the *Start menu ..... Rockwell Software .... BOOTP-DHCP Server .... BOOTP-DHCP Server*.
- Make sure that the PowerFlex EtherNet cards 20-COMM-E or 22-COMM-E is connected to the EtherNet switch, and when the drive is powered up, the the EtherNet adapters will issue BOOTP requests. The BOOTP server will detect the hardware MAC address of the adapter. This number can be confirmed on the label on the chip of the 22-COMM-E adapter.

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4. When BOOTP identifies this MAC address, double click on one of the instances, and you will be prompted to input the IP address. Type in **192.168.100.7** and click **OK**.

(hr:min:sec)	Туре	Ethernet Address (MAC)	IP Address	Hostname	
0:14:50	BOOTP	00:00:BC:08:C3:89			10
10:14:37 10:14:36	BOOTP	New Entry		X	1
10:14:35 10:14:33 10:14:32	BOOTP	Ethernet Address (MAC): IP Address:	00:00:BC:08:C3	:89 100 . 7	
lation List — New   Dele	te Enabl	Hostname: Description:	[		
Ethernet Add	ress (MAC)		ОК	Cancel	
					-

5. Now that the adapter has been given an IP address, it appears in the relational list . Click on the adapter in the relational list, and click the **Disable BOOTP/DHCP** button. The BOOTP server should respond within a few seconds, that the operation was successful.

Clear History Add to Relation List					
(hr:min:sec)	Туре	Ethernet Address (MAC)	IP Address	Hostname	
10:15:20 10:15:15 10:15:10 10:15:09 10:15:08 10:15:01 10:15:00	BOOTP BOOTP BOOTP BOOTP BOOTP BOOTP BOOTP	00:00:BC:08:C3:89 00:00:BC:08:C3:89 00:00:BC:08:C3:89 00:00:BC:08:C3:89 00:00:BC:08:C3:89 00:00:BC:08:C3:89 00:00:BC:08:C3:89	192.168.100.7		
	ress (MAC)	Type IP Address	Hoŵname	Description	
Ethernet Add 00:00:BC:08:0	23:89	BOOTP 192.168.10	00.7		
Ethernet Add 00:00:BC:08:1	C3:89	BOOTP 192.168.10	00.7		

6. Cycle the power on the drive, to make sure the IP address is validated.

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х	Open		Inverter Use	Generated By	D.J.Withenshaw
	Rockwell Offices	x	Options Use	Date	20/08/2007
	Drives Team		Application Experience	Revision	С
			(Name) only		