

Powerline embedded Notching Tool User Guide.

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PowerGrid Direct Access Tool

Downloading the PowerGrid DAT

The PowerGrid DAT allows you to access your Powerline browser based graphical user interface. You can download a copy of the PowerGrid DAT at Comtrend's website <u>www.comtrend.com</u>. Remember the folder where you have downloaded the file as you will need to access it later.

Installing the PowerGrid DAT

The Comtrend PowerGrid DAT will run automatically after double-clicking the .exe file extension. See the "Getting started with the PowerGrid DAT" section.

Check List for using the PowerGrid DAT

Before you can start using the PowerGrid DAT, make sure:

- Your Powerline (PLC) is connected to your PC/Laptop via an Ethernet cable
- Your other Powerline is connected to your modem/router
- Your modem/router is on and connected to the World Wide Web (WWW)

This ensures that your router will provide an IP address to your Powerlines.

Getting started with the PowerGrid DAT

Open the PowerGrid DAT

Open the folder where the PowerGrid DAT zip file is located and extract all the files using software such as WinRAR or WinZip.

Locate the "PowerGrid DAT.exe" file and double-click on it.



If you see the words "Authentication Failed", as shown below, please click the Refresh button.

Double click on	the Powerline you wish to configure.
Adapter Informa	tion
Intel(R) PRO/10 169.254.216.55)0 VE Network Connection - Packet Scheduler Miniport / 255.255.0.0
PLC Informatio	
	MAC IP Address AP/EP
Local PLC	001D20769971 Authentication Failed
Local PLC Remote PLC	

Input the Network Password and then click the OK button.



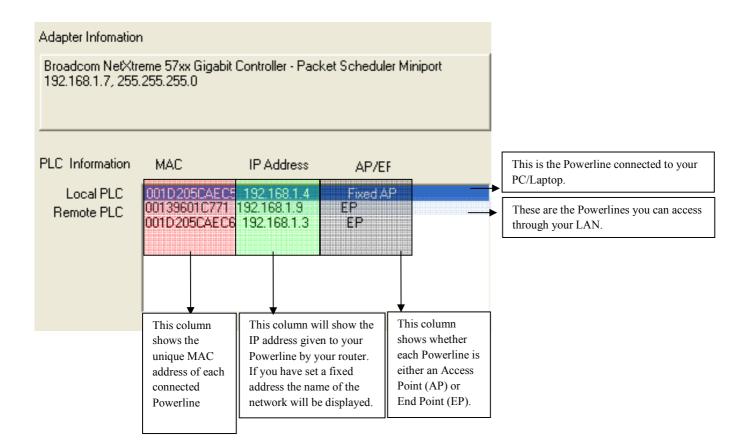
The PowerGrid DAT tool will open and start scanning your network for existing Powerlines:

Advanced P	LC Configu	ration Managem	ent Tool V1.	0 🔀
		ent connected Powe	sires	
PLC Information Local PLC Remote PLC	00120E91A 00139601C	P Address 605 192 1681.4 A60 Nietwark #11 771 Netwark #21 Netwark #23 Netwark #31	AP/EF Fixed AP	
			Rehesh	Cancel

After scanning you network the tool will display all existing Powerlines.

🔏 Advanced P	LC Configurat	ion Manageme	int Tool V1.0	
Adapter Informatio	ene 57 in Sigabit		H Scheduler Minipol	
PLC Information Local PLC Remote PLC	NAC 0012015CAE (7 001201591AA80 00139601C771 00139601C878 0010209CAE (5	Network #1' Network #2' Network #3'	AP/EF Fixed AP EP	
		F	ahash C	ancel

Understanding the information displayed by the PowerGrid DAT



PG902 Graphical User Interface (GUI)

Accessing the PG902 GUI

Your Comtrend PG902 has a browser based GUI.

To access the interface simply double click on the Powerline you want to configure:

Adapter Infomation Broadcom NetXtr 192.168.1.7, 255	eme 57xx Gig	abit Controller - Pack	et Scheduler Minipo	ort
PLC Information Local PLC Remote PLC	00139601C7	IP Address EC5 192.168.1.4 771 192.168.1.9 EC6 192.168.1.3	AP/EF Fixed AP EP EP	R

• The PowerGrid DAT will open your browser displaying the Graphical User Interface (GUI) main page and request that you to enter a password. Type the word "admin" into the password box.

COMTREND	Web Configuration	Pouverfiride 902
	Authentication	
	The PLC Adapter unit is password protected. Resse Web Pages	enter the opriest password to access the
	- Password	
		Di Cirol

• A new page will be displayed: click on the "Change Configuration" link on the left side menu.

COMTREND	Web	Configuration	\sim	Pour frid S		
Home Advanced Information Change Configuration		le Countections				
Charge Contrigue which	PLC Con	nections	Phy Tx	Phy Rx.	Bridge	
	Post	MAC Address	Threaghput	Throughput	State	Hetwork Id
	11	001202918860			Disableil	Network#1

• On the new page click the "Phy" link to access the Notching Tool

CONTREND	Web Configuration	Pauler firid 902
Home Advanced Information Change Configuration	PHY Configuration	Network Nac Physics and Fradware Reset - Naglade

A new page is displayed showing the PHY (Physical) current configuration. By default, the notches are enabled. Some frequencies will be notched from factory settings, some of these notches cannot be changed as these frequencies could interfere with other devices; while some others are enabled by default but can be disabled. This is the case with the 26.5 to 28 MHz frequencies, this particular range is used by some old wireless keyboards and mice, if you suspect you have one of these we recommend you don't disable this notch.

The following Notches are enabled by default and cannot be changed:

- 1.8 2 MHz
- 3.5 4 MHz
- 7 7.3 MHz
- 10.1 10.15 MHz
- 14 14.35 MHz
- 18.068 18.168 MHz
- 21 21.45 MHz
- 24.89 24.99 MHz
- 28 29.7 MHz

The 26.5 to 28MHz notched frequencies are enabled by default but can be changed.

Notching a frequency or a range of frequencies

• At the bottom of this page you can add either a specific frequency to a notch or a range of frequencies. These will be listed under "Notch Customization". To notch a particular frequency you need to add the same frequency on to both the "Start Frequency (KHz)" and the "Stop Frequency (KHz)".

After clicking on the Add button, the page will refresh and list the new notched frequencies.

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-Western (S.1.): (MWE) Eacher Theorem total	later a
Prove Control	Farmer -
	(m) (100+)
Nok & Calmittine	
Net/regains 0th:	the Progenty SH
0 2500	18000
	(mark)
shat frequency dist."	
-Stop Yrmaning (0501	
	[411]
Web Configuration	Prover foride 90
Hetwerk Nov - P	Prover Condo 90
Network No P PMY Configuration -Notches	
Network No P	ly (Security - Hardware Reset - Upga
Hetwork No P 1997 Configuration -Statches -Wickless (26.5-26.0991c) keyboard/bause	iy o Security - Hardware Reset - Upgra
Hetwork - Noc - 19 1997 Canfiguration «Notches - Wireless (26.5-26.09982) keyboard/heouse notch	ly - Security - Hardware Reset - Nyga (busing (busing)
Hetwork - Noc - 19 1997 Canfiguration «Notches - Wireless (26.5-26.09982) keyboard/heouse notch	lay & Security - Handware Reset - Ngga (transis) (transis) (transis)
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	-Western (Sci / A 1991) Staffmar Khonson 1980) -Prover Contrad - Hick & Contradictions - Hick & Contradictions - Hick & Contradictions - D 20000

You can add up to a maximum of 5 notches using the same procedure. Once you finish adding notches you can simply close your browser.

De-Notching

If you ever need to de-notch your Powerline, just follow the same steps you followed to get your Powerline IP address, open the GUI and go to the same "Change Configuration" page. Each notched frequency has a radio button on the left hand side. Select the radio button of the frequency you would like to de-notch. Bear in mind that only one frequency or range of frequencies can be de-notched at a time. After selecting the notch, click the **Remove** button.

These frequencies are now active again.

See the screenshots below as an example.

Home Advanced Information Change Configuration	PHY Configuration	curity - Hardware Reset - Upgrade			
	-Holchus	fratient -			
	 Wireless (26.5-28.89Hz) keyboard/kouse notch 	Traditor			
	+Power Control	find and			
		CA (Lama)			
	Notch Custemization				
	Shart Proquency (KHz)	Step Programmy (RHz)			
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	® 5000	5000			
	© 1000	3569	>	Stat In openant (Ella)	Sep In quency (19)
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	-Shart Frequency (IDIa)		c	1000	3569
					[]
	+Stop Frequency (KHz)				
		4.02			