

DOWNLOAD FIRMWARE USER GUIDE

DTUS040

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I. INTRODUCTION

I.1 Goal

The goal of this documentation is to explain how to

- upgrade an existing firmware¹
- add a new firmware
- into your COMETH device.

For this operation, a telnet client and a tftp client (see in CD for tftp client for Windows) are necessary.

I.2 Conventions used

We will assume that the COMETH parameters are the factory defaults:

- Default IP Address 192.168.1.253 is affected to a COMETH. If your COMETH IP address is different, replace it by your IP address.
- Default administrator login name is "root". If you changed the administrator login name, change the commands appropriately.

The prompts displayed by the COMETH are represented by normal fixed-size characters.

The commands that you should enter are represented by **bold fixed-size characters**. After entering a command you must press the "enter" key.

In the commands, some parameters may vary: they are represented by *italic characters*. You must replace these parameters with the actual value you wish to give them.

¹ A firmware is an application embedded into the COMETH FLASH EEPROM

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II. SOFTWARE ARCHITECTURE

A special firmware called "Download firmware" and provided by ACKSYS allows to download a new firmware or to update an existing one thanks to tftp application.

Segments

The COMETH EEPROM flash is divided in 6 segments :

- 2 are reserved by ACKSYS and contain the download firmware and a backup copy (segments 0 and 1). It is more advisable to not use the backup copy. The backup copy is useful if COMETH detects itself bad data or a checksum error in segment 0. In this case, it automatically loads the DOWNLOAD firmware from segment 1 instead of segment 0.
- 4 are available for a functional firmware (Segments 2 to 5).

Each segment is identified by :

- a location name (/0 to /5) (indicates the memory segment).
- a product name (SERVERCOM, TUNNEL, MODBUS...).
- a release number.
- a status (Status "not valid" indicates a free segment).

Firmwares

Acksys provide four firmwares at the time of writing :

- SERVERCOM : To use cometh in TCP raw server mode, telnet RFC2217 or telnet server mode.
- TUNNEL : To do point-to-point connection between two COMETH devices in UDP mode.
- MODBUS : MODBUS TCP/Serial gateway. (A license is necessary to download this firmware).
- TCP CLIENT : To use cometh in TCP raw client mode.

New firmwares or upgrades are available on Acksys web site (www.acksys.fr).

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III. RUNNING THE SERIAL PORT ADMINISTRATION

There are three ways of accessing the administration system, depending on the product you are using.

On all kinds of COMETH and WL-COMETH, you can activate the administration system through the LAN or WLAN interface, provided that you know the IP address of the device. This is described in the relevant hardware documentation and is not described further here.

On the COMETH range (Ethernet to serial products), and on the WL-COMETH built before march 2004, you can activate the administration system by attaching a terminal to the RS232 serial port as described in the following section : «Administration by a RS232 terminal (COMETH & early WL-COMETH) »

On the WL-COMETH (Wifi to serial product) built after march 2004, you can activate the administration system by attaching a SLIP link to the RS232 serial port as described in the following section : « Administration by a RS232 SLIP link (recent WL-COMETH only) ». This method enables you to download firmware upgrades through the RS232 port.

To help you identify the kind of serial administration you must use, please refer to the next section : « Distinguishing terminal-enabled from SLIP-enabled administration ».

III.1 Distinguishing terminal-enabled from SLIP-enabled administration

This procedure only applies to the WL-COMETH, since other COMETH models can only use terminal-enabled administration when administering from the RS232 port.

Also, the SLIP administration is provided only in the DOWNLOAD firmware.

III.1.1 Select Administrator mode

Push the switch towards the « Admin » position. In less than 10 seconds the orange (DIAG) light begins to blink twice per second.

III.1.2 Connect a terminal to the RS232 port

Below we describe how to do this with a PC with Windows. Other devices (ANSI console...) or operating systems (Linux with "minicom" or "cu"...) can be used, but this is beyond the scope of this manual.

The WL-COMETH has one male DB9 RS232 connector with DTE cabling. You can use the provided null modem cable and plug it directly, into a standard DB9 male connector (PC COM port for example)

III.1.3 Run Hyperterminal at 115200 bauds

When Hyperterminal asks to choose a modem or port, select a direct connection to COMx (COMx being the COM port on which you plugged the WL-COMETH).

Select the following port parameters : 115200 bauds (bits/second), 8 bits, parity none, 1 stop bit, no flow control.

Hyperterminal now displays a blank window. Hit the «C» key (UPPERCASE "C"). If the WL-COMETH answers "CLIENTSERVER", the WL-COMETH is in SLIP administration mode.

III.2 Administration by a RS232 terminal (COMETH & early WL-COMETH)

III.2.1 Select Administrator mode

Push the switch towards the « Admin » position. In less than 10 seconds the orange (DIAG) light begins to blink twice per second.

III.2.2 Connect to a serial port

Below we describe how to do this with a PC with Windows. Other devices (ANSI console...) or operating systems (Linux with "minicom" or "cu"...) can be used, but this is beyond the scope of this manual.

The WL-COMETH FIELD has one male DB9 RS232 connector with DTE cabling. You can use the provided null modem cable and plug it directly, into a standard DB9 male connector (PC COM port for example)

III.2.3 Run Hyperterminal at 2400 bauds

When asked to choose a modem or port, select a direct connection to COMx (COMx being the COM port on which you plugged the WL-COMETH).

Select the following port parameters : 2400 bauds (bits/second), 8 bits, parity none, 1 stop bit, no flow control.

Hyperterminal now displays a blank window. Hit the «ENTER » key to display the admin prompt.

III.3 Administration by a RS232 SLIP link (recent WL-COMETH only)

Administration by SLIP is supported by the DOWNLOAD firmware starting from version 3.4.2.4 on the WL-COMETH. If you have an older version, you can download the latest one on the Acksys website.

III.3.1 Select Administrator mode

Push the switch towards the « Admin » position. In less than 10 seconds the orange (DIAG) light begins to blink twice per second.

III.3.2 Connect to a serial port

Below we describe how to do this with a PC with Windows. Other operating systems (Linux...) can be used, but this is beyond the scope of this manual.

The WL-COMETH has one male DB9 RS232 connector with DTE cabling. You can use the provided null modem cable and plug it directly, into a standard DB9 male connector (PC COM port for example)

III.3.3 Configure a SLIP connection

Windows 9x and Windows Me do not handle SLIP connections, you cannot use them to configure these recent WL-COMETH DOWNLOAD firmwares.

For other operating systems (Windows 2000, XP, Linux...) you must set up your SLIP connection with these parameters :

115200 bauds, 1 stop bit, 8 data bits, no parity, no flow control (neither hardware nor software), and no authentification.

We explain below the SLIP configuration for Windows 2000/XP/NT 4. Screenshots are dependant of the Windows version and service pack.

SLIP Configuration on Windows 2000/XP

1. start | settings | Network and Dial-up Connections



WINDOWS XP

- 2. Open Network and Dial-up Connections
- 3. Double click the icon *Make New Connection*.
- 4. This will open a *Network Connection Wizard*, and click *Next*.



6. Check *Guest* and click *next*

WINDOWS XP / WINDOWS 2000



7. Select *Communication cable between two computers (COM1)*, and click *Next*.

Connection Wizard	
ielect a Device This is the device that will be used to make the connection.	4
Select a device:	
Communications cable between two computers (COM1) Communications nable between two computers (COM1) Communications Port (COM2)	~
Direct Parallel (LPT1)	

- 8. Select if you want share this connection with all user, and click Next.
- 9. click on buton *finish*.
 - WINDOWS XP / WINDOWS 2000

New Connection Wizard	
Ŵ	Completing the New Connection Wizard You have successfully completed the steps needed to create the following connection: Direct Connection • Share with all users of this computer
	The connection will be saved in the Network Connections folder. Add a shortcut to this connection to ny desktop To create the connection and close this wizard, click Finish.
	< Back Finish Cancel

10. At this time you must have a connection dial-up window. WINDOWS XP / WINDOWS 2000

Connect Direct Connect	ion	? 🛛
	9	X
User name:		
Save this user name and Me only Anyone who uses this	password for the foll	owing users:
Connect Cancel		Help

- 11. Click on the *Properties* button.
 12. In the *general* tab, click on the *configure* button WINDOWS XP / WINDOWS 2000
 - Direct Connection Properties
 P
 - a. Select 115200 for the mawimum speed of the connection.
 - b. Uncheck *Enable hardware flow control*.

odem Configuration	2
Communications cable between two	o computers (COM1)
Maximum speed (bps): 115200	*
Modem protocol	~
Hardware features	
Enable hardware flow control	
Enable modem error control	
Enable modem compression	
Show terminal window	
Enable modem speaker	
	OK Canad

13. In the *options* tab, uncheck *Prompt for name and password, certificate, etc.* WINDOWS XP / WINDOWS 2000

Pisptay progress while connecting	
Prompt for name and password, certificate, etc. Include Windows logor domain	
Redial attempts: 3	^ *
Time between redial attempts: 1 minute	~
Idle time before hanging up: never	~
Redial if line is dropped	

- 14. in the *Networking* tab
 - a. Select in server type *SLIP* : unix connection.
 - b. Select *Internet protocol (TCP/IP)* and click on *Properties* button. WINDOWS XP / WINDOWS 2000

eneral Options Se	ecurity Networking Adv	anced
Type of dial-up serve	rīam calling:	
SLIP: Unix Connecti	on	
		Settings
his connection uses	the following items:	
🗹 🐨 Internet Proto	col (TCP/IP)	
Internet Proto	ocol (TCP/IP) Scheduler	
 ✓ Internet Proto ✓ □ QoS Packet ✓ □ File and Print 	ocol (TCP/IP) Scheduler er Sharing for Microsoft Ne	tworks
 ✓ Thernet Proto ✓ OoS Packet ✓ ⊕ File and Print ✓ ● Client for Mic 	ocol (TCP/IP) Scheduler er Sharing for Microsoft Ne rosoft Networks	tworks
Internet Proto QoS Packer Pile and Print Image: Client for Mic	ocol (TCP/IP) Scheduler er Sharing for Microsoft Ne rosoft Networks	itworks
Internet Proto OS Packet OS Packet OS Packet OS Client for Mic Install	icol (TCP/IP) Scheduler er Sharing for Microsoft Ne rosoft Networks Uninstall	etworks Properties
 ✓ Internet Proto ✓ QoS Packet ✓ ➡ File and Print ✓ ➡ Client for Mic Install 	icol (TCP/IP) Scheduler er Sharing for Microsoft Ne rosoft Networks	etworks Properties
Internet Proto OoS Packer OoS Packer OoS Client for Mic Install	sool (TCP/IP) Scheduler er Sharing for Microsoft Ne rosoft Networks	etworks Properties
	scol (TCP/IP) Scheduler er Sharing for Microsoft Ne rosoft Networks Uninstall Uninstall of Protocol/Internet Proto-	Properties

- i. Enter Ip address. For example enter 192.168.2.1 <u>Note :</u> The network part of the chosen IP address must not be already used by another network connection (such
- ii. Click on the *Ok* button.

as a LAN card).



c. Click on *Ok* button 15. connect to WL-COMETH with the *connect* button.

SLIP Configuration on Windows NT

1. Start | Settings -| control panel



2. click on the *modem* icon



3. check *don't detect my modem; I will select it form a list* and click *next* button



4. Select *Standard Modem types*, *Dial-Up Networking cable between 2 PCs* and click *next*

Install New Modem
Click the manufacturer and model of your modem. If your modem is not listed, or if you have an installation disk, click Have Disk.
Manufacturers: Models NoiceVriew Modern Types Standard 300 bps Modern Standard 1200 bps Modern Standard 1200 bps Modern Standard 2400 bps Modern Standard 3600 bps Modern Standard 3600 bps Modern Standard 19200 bps Modern
< <u>B</u> ack <u>N</u> ext > Cancel

5. check *Selected ports* and select the port the WL-COMETH is connected to

You have selected the following modem:
Dial-Up Networking Serial Cable between 2 PCs
On which ports do you want to install it? All ports Selected ports COM1 CDM2
 < <u>B</u> ack <u>N</u> ext> Cancel

6. click on the *Finish* button



7. Select your new modem, and click the *Properties* button

odems Properties ? 🗙
General
The following modems are set up on this computer:
ModemAttache
Contraction Contra
▲ ▶
Add <u>R</u> emove <u>Properties</u>
Dialing Preferences
Dialing from: New Location
Use Dialing Properties to modify how your calls are dialed.
Dialing Properties
Close

8. Select 115200 baud for maximum speed, click OK and the Close button.

General Connection Dial-Up Networking Serial Cable between 2 P Port: COM1 Speaker volume Low High Maximum speed Instrume OK	Dial-Up Networking Serial Cable between 2 PCs 🔡 📔	X
Diał-Up Networking Serial Cable between 2 P Port: COM1 Speaker volume Low High Maximum speed III5200 Cnly connect at this speed OK Cancel	General Connection	
Port: COM1 Speaker volume Low High Maximum speed Information OK Cancel	Dial-Up Networking Serial Cable between 2 P	
Speaker volume Low High III5200 III5200 III5200 IIII5200 IIII5200 IIIII5200 IIIIIIIIII	Port: COM1	
Low High Maximum speed 115200 Conference at this speed OK Cancel	_ <u>S</u> peaker volume	
Maximum speed	Low J High	
Introduction Image: Control of the speed	Maximum speed	
Only connect at this speed OK Cancel	115200	
OK Cancel	<u>O</u> nly connect at this speed	
	OK Cancel	

9. Open the network properties



10. Select the *Services* tab and click the *Add* button

etwork					
Identification	Services	Protocols	Adapte	rs Bindin	igs
<u>N</u> etwork Ser	vices:				
E Comput NetBIO: RPC Co Server Vorksta	er Browser 6 Interface nfiguration ation				
Add Description Distributed service.	protocol re	emove	<u>Propert</u>	ies	Update er Browser
				OK	Conneal
				UN	Lancel

11. Select *Remote Access Service* and click *OK*

Select Network Service
Click the Network Service that you want to install, then click OK. If you have an installation disk for this component, click Have Disk.
Network Service:
📃 NetBIOS Interface
🔜 Network Monitor Agent
Remote Access Service
📇 RIP for Internet Protocol
📇 RPC Configuration
PPC support for Populary
Have Disk
OK Cancel

12. When the installation is finished, you have this window

Remote Acce	ess Setup		×
Port	Device	Туре	
COM1	Dial-Up Networkir	ng Serial Ca Modem (unimodem) Continue
			Cancel
			<u>N</u> etwork
			Help
Add	<u>R</u> emove	onfigure	

a. Click on the *configure* button and check *Dial out only*

Configure	Port Usage	
Port:	COM1	(OK
Device:	Dial-Up Networking Serial Cable between 2	Cancel
- Port Us	age	<u>H</u> elp
O <u>R</u> ec O <u>D</u> ia	Lour only serve calls only I out and Receive calls	

b. Click on the *Network* button, ans check *TCP/IP* protocol then *OK*

Network Configuration	×
Dial out Protocols:	OK
	Cancel
	<u>H</u> elp
1	

- c. Click on the *Continue* button, and restart computer.
- 13. Start | Programs | Accessories | Dial-up networking



14. Click on the *Next* button



15. Click on the Next button

Check all that apply:
 Send my plain text password if that's the only way to connect. Ihe non-Windows NT server I am calling expects me to type login information after connecting, or to know TCP/IP addresses before dialing.
 < <u>B</u> ack <u>N</u> ext > Cancel

16. Click on the Next button



17. click on the *Finish* button



🥾 Dial-Up Networking			? ×
	Phonebook entry to dial: MyDialUpServer Phone number pre⊻iew: Dialing frgm: New Location	<u>N</u> ew Dial	More ▲ Cone entry and modern properties Clone entry and modern properties Delete entry Create shortcut to entry Monitor status Operator assisted or manual dialing User preferences Logon preferences Help Oose

18. click on the *More* button and select *edit entry and modem properties*

19. On the Basic tab, click on the Configure button

Edit Phoneboo	k Entry			? ×
Basic	Server	Script	Security	X.25
Entry name:	MyDialUpS	Server		
Co <u>m</u> ment:				
Phone <u>n</u> umbe	er:			<u>A</u> lternates
	<u> </u> se Te	lephony dialing	properties	\frown
<u>D</u> ial using:	Dial-Up Ne	etworking Seria ether port if hur	l Cable be 💌 🄇	<u>C</u> onfigure
	I ● 0 <u>3</u> e an	other port in but	y.	
			OK	Cancel

a. Select 115200 for initial speed, and uncheck Enable hardware flow control

Modem Configuration	? ×
Dial-Up Networking Serial Cable betw Initial speed (bps): 115200 Hardware Features	een
Enable hardware flow control Enable modem error control	>
 Enable modem <u>compression</u> Disable modem <u>speaker</u> 	
OK Cano	el

20. On the Server tab, select SLIP : Internet, and click on the TCP/IP Setting button

t Phonebook Entry			
Basic Server	Script	Security	X.25
Dial-up <u>s</u> erver type:			
SLIP: Internet			
Network protocols			
	T <u>C</u> P/IF	^o Settings	$\mathbf{)}$
	-		
PX/SPX compatible			
IFX/SFX compatible NetBEUI			
IFX/SPX competible NetBEUI			
IPX/SPX compatible Net8EUI Enable software compression	า		
IPX/SPX compatible Net8EUI Enable software compression Enable PPP LCP extension:	an S		
IPX/SPX compatible NetBEUI Enable software compression Enable PPP LCP extension	an S		
IPX/SPX compatible NetBEUI Enable software compression Enable PPP LCP extension	orn S		

a. Enter the ip address of the computer (for exemple 192.168.2.2), and uncheck *Force Ip header compression*, and *Use default gateway on remote network*

SLIP TCP/IP Settings		? X
IP <u>a</u> ddress:	192.168.2.	2
Name server addresses: -		
Primary <u>D</u> NS:	0.0.0.	0
Secondary D <u>N</u> S:	0.0.0.	0
Primary <u>W</u> INS:	0.0.0.	0
Secondary WINS:	0.0.0.	0
Force IP header com Use default gateway Frame size: 1006	pression	>
	OK Car	icel

21. On the script tab, check None.

Edit Phoneboo	k Entry			? ×
Basic	Server	Script	Security	X.25
- After disling	(login)			
Arter dialing	(iogini)			
(• None	\mathcal{I}_{\dots}			
C Pop up	o a <u>t</u> erminal win	dow		
C Run th	is <u>s</u> cript:			
(none	1			V
		<u>E</u> dit script	<u>R</u> efre	sh list
			<u>B</u> efore	dialing
			OK	Cancel

22. On the *Security* tab check *Accept any authentication including clear text* and click *OK*

Edit Phonebo	ok Entry			? ×
Basic	Server	Script	Security	X.25
- Authentical	ion and encrypt	ion policy ——		_
Accep	t any authentica	ition including <u>c</u> l	ear text	
C Accep	t only <u>e</u> ncrypted	authentication		
C Accep	t only <u>M</u> icrosoft	encrypted authe	entication	
	Require <u>d</u> ata en	cryption		
	<u>l</u> se current user	mame and pass	word	
linsave	nassword			
	Easturia			
_				
			OK	Cancel

23. Click on the *Dial* button

🥵 Dial-Up Networking	? ×
	Phonebook entry to dial: MyDialUpServer <u>N</u> ew <u>M</u> ore
	Phone number pre <u>v</u> iew: Dialing fr <u>o</u> m: New Location
	<u>D</u> ial <u>C</u> lose

24. click on the **OK** button

Connect to h	AyDialUpServer 💦 🔀
Enter a user remote netwo	name and password with access to the ork domain.
<u>U</u> ser name:	Administrator
Password:	
<u>D</u> omain:	
	Save password
	OK Cancel

25. Click on the **OK** button



26. If the connection is ready, you can see an icon in system tray.



III.3.4 Use the SLIP connection

Run the SLIP connection on your computer (for SLIP configuration see section "<u>SLIP Configuration on Windows 2000/XP</u>" or "<u>SLIP Configuration on Windows NT</u>")

When the SLIP connection is ready you can check it with the PING command. For instance, If the SLIP IP address on the PC side is 192.168.2.1, WL-COMETH will respond to any IP address in the range 192168.2.2 to 192.168.2.254.

Example:

```
C:\>arp -d 192.168.2.3
C:\>ping 192.168.2.3
Pinging 192.168.2.3 with 32 bytes of data :
Answer from 192.168.2.3 : bytes=32 time<10ms TTL=64
Answer from 192.168.2.3 : bytes=32 time<10ms TTL=64
```

Your WL-COMETH is ready for SLIP administration. To obtain the administration command prompt, type the command "*telnet 192.168.2.3*" from the command prompt. You can also use the TFTP command to upgrade the WL-COMETH firmwares.

If the PING command results in an error, check the SLIP link configuration. Also make sure that your WL-COMETH <u>supports SLIP administration</u>.

<u>NOTE</u>: Ping syntax and result depends on the operating system type and version.

IV. ADMINISTRATION COMMANDS

To download a firmware into the COMETH, use the following administration commands.

IV.1 Log in

All the « set... » commands require the administrator to be identified beforehand.

```
Type:

> login root

password: root (the password displays as "****")

root>
```

IV.2 Display information about a firmware

To display information about the firmware located in segment *Seg* (*Seg* is a segment number ranging from 0 to 5)

Type: show prog info Seg

The following informations are displayed :

file :	(understand segment) any value from /0 to /5
status :	valid or not valid (status "not valid" indicates a free segment or a bad
	firmware.
name :	ASCII name of the firmware
version :	Release of the firmware
update so	Etware minimum version : Minimum necessary release of the
	download software to enable this firmware update

IV.3 Display information about all firmwares

To display the information about all 6 segments

Type: show prog list

This command is equivalent to 6 consecutive « show prog info *Seg*» commands, with *Seg* ranging from 0 to 5.

IV.4 Enable firmware

To activate/enable the firmware located in segment *Seg* (*Seg* is a segment number ranging from 0 to 5)

Type:root> **set prog enable** Seg

The firmware will be activated after saving the configuration and a COMETH restart.

IV.5 Delete firmware

To delete firmware located in segment Seg (Seg is a segment number ranging from 2

to 5).

Type:set prog clear Seg

This command returns an error if Seg equals 0 or 1, since download firmware cannot be deleted.

WARNING, the firmware is deleted immediately, without further notice.

IV.6 Show enable firmware

To see the current activated firmware. Type: **show prog enable** You can see: enable software : S1 (S1 is the segment) loading software : S2 (S2 is the segment) OK >

Notes :

- Enable software is the current activated software
- Loading software is the firmware which will be activated after next cometh reboot.

IV.7 Reserved commands

The following two commands are not available for general use. They are reserved for factory testing. They are documented here only for completeness.

To allow loading internal memory from preselected firmware Type : **set start** This resets the flag that inhibits the replacement of DOWNLOAD-PROD.

To display the information about all 6 segments

Type: show prog data Seg

This command is equivalent « show prog info *Seg* », but its output is in a format easily parsable by a computer program.

V. DOWNLOADING IN 3 STEPS...

Dealing with firmware parameters: when you download a firmware, parameters common to all firmwares will be retained, while the parameters specific to the firmware will be kept if the firmware is an upgrade of an existing firmware; else and they will be reset to factory defaults.

V.1 Step 1 : enable download firmware

Before downloading a new firmware, you must enable the DOWNLOAD firmware.

- On your computer, run a telnet client.
 - C:\> telnet 192.168.1.253
 - Telnet displays a banner and a prompt from the COMETH
- You must log in. (login factory setting is "root")
 > login root
- You must enter a password for root user, password factory setting is "root"
- Locate the segment Seg where to download the firmware root> show prog list (see IV.3)
- root> snow prog list (see IV.3
- Enable the DOWNLOAD firmware root> set prog enable 0
- Save the configuration change and reset to load the DOWNLOAD firmware root> save root> reset

Your cometh restarts. Please wait for the red led to turn off. Note that the telnet client is now unusable until the COMETH has restarted and TELNET is reconnected.

V.2 step 2 : download firmware into cometh

• To download the new firmware "*filename.ftp*" in segment number *Seg* into the COMETH at IP address *xxx.yyy.zzz.kkk*, the command syntax for MS Windows TFTP is :

C:\> tftp -i xxx.yyy.zzz.kkk put filename.ftp /Seg
For example:
C:\> tftp -i 192.168.1.253 put modbus.ftp /4

Seg is the segment which you identified in step 1. Notice the "/" before the number.

V.3 step 3 : enable the new firmware

On your computer, run a telnet client, or reconnect the previous one.
 C:\> telnet 192.168.1.253

Telnet displays a banner and a prompt from the COMETH

- You must log in. (login factory setting is "root")
 - > login root
- You must enter a password for root user, password factory setting is "root"
- Enable the new downloaded firmware root> set prog enable Seg
- Save the configuration and restart the COMETH to load the new firmware root> save

root> reset

The Cometh restarts. Wait until the DIAG led turns off (less than 15 seconds). The new firmware is now running.

VI. DEFECT REPORT FORM

Name	
Company	
Telephone	
Fax	
E-mail	
COMETH	
Operating system	
driver version	
Type of computer	

Description of the problem

	ACKSYS	
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