# Serial connection to a Lantime without a Display - LANTIME V5 Firmware

## MEINBERG

In the LANTIME NTP server without a display one has to start a serial connection between a PC and the LANTIME in order to check or assign a Lantime IP address. The serial connection can be set up with a NULL-MODEM cable or via an USB to Serial Adapter.

1. Open an SSH client on your PC (e.g. PuTTy.exe). Type in the serial port of the PC and the connection values for speed and framing, for our example 38400 Baud / 8N1 as shown in Fig. 1. Confirm with Open button.

PuTTY Configuration	8 ×			
Category:				
- Session	Basic options for your PuTTY session			
Logging	Specify the destination you want to connect to Serial line Speed			
- Keyboard	COM3 38400			
Features Window Appearance Behaviour Translation Selection Convection Oata Oroxy Teinet Riogin SSH Senal	Connection type: ◎ Ra <u>w</u> ◎ <u>T</u> elnet ◎ Rlogin ◎ <u>S</u> SH ◎ Serial			
	Load, save or delete a stored session Saved Sessions Default Settings Load Saye Delete			
	Close window on egit: Always Never Only on clean exit			
About <u>H</u> elp	Open Cancel			

Figure 1: Serial connection with an SSH client.

- 2. LOGIN with a Username and a Password-Default values *root / timeserver.*
- 3. Type in *setup* to enter the Lantime Configuration window.
- 4. Choose *Ethernet* menu (in the lower left corner) and confirm with "Enter" to enter the Ethernet Configuration window. Secondly, choose *Ethernet 0* to proceed to the Ethernet Configuration Line 0 as shown in Fig. 2.

	E	THERNET CONFIGURA	TION LINE 0		
IPv4:	<request ip-addres<="" th=""><th>ss from DHCP Serv</th><th>er&gt; ENABLED</th><th></th><th></th></request>	ss from DHCP Serv	er> ENABLED		
	<tcp address="" ip=""></tcp>	172.16.75.10	0 addr not	active=>DHCP	enabled
	CITC ONGLORY	20012001200.			
IPv6:	<ip 1=""> <ip 2=""> <ip 3=""></ip></ip></ip>				
	<autoconf></autoconf>	ENABLED			
	<net link="" mod<="" th=""><th>ie&gt; Auto</th><th></th><th></th><th></th></net>	ie> Auto			
IPv4:	IP from DHCP:	172.16.100.240			
	Gateway from DHCP: Netmask from DHCP:	255.255.0.0			
IPv6:	IP Router Advert.:	f=90212.05ff.f	000.5455/64		BACK
	Link Iocai.	1200215.5511.1	.204.3433/04		

Figure 2: Ethernet Configuration Line, where the Lantime IP address is configured .

5. Note down the IP address and Netmask as assigned from a DHCP.



#### Serial connection setup

The figure shows a LANTIME M100 connected with power, network, GPS antenna and a serial connection between a LANTIME and a computer.



#### **(1)** USB to Serial Adapter

If you do not use a NULL-MODEM cable you have to connect a signal changer (TxD - RxD) ② and a gender changer ③ if the used adapter cable is equipped with an male connector

- 6. Close this window and exit the SSH client.
- 7. Connect the LANTIME with your network and start the WEB interface in your browser via the configured IP-Address.

## Serial connection to a Lantime without a Display - LANTIME V6 Firmware

### MEINBERG

In the LANTIME Firmware LTOS6 the CLI Interface is no longer supported. Therefore start a serial connection between a PC and the LANTIME via NULL-MODEM cable or via an USB to Serial Adapter.

 Open a SSH client on your PC (e.g. PuTTy.exe). Type in the serial port of the PC and the connection values for speed and framing, for our example 38400 Baud / 8N1 as shown in Fig. 1. Confirm with Open button.

ategory:				
- Session	Basic options for your PuTTY session			
Logging	Specify the destination you want to connect to			
- Ieminal	Serial line Speed			
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Hondow Petrures Window Appearance Behaviour Convection Convection Convection Outs Proxy Tenet Rogin SSH Senal	Connection type: ◎ Ra <u>w</u> ◎ <u>T</u> elnet ◎ Rlogin ◎ <u>S</u> SH ◎ Serial			
	Load, save or delete a stored session Saved Sessions			
	Saye			
	Close window on egit: ○ Always ○ Never			

Figure 1: Serial connection with SSH client

2. LOGIN with Username and Password - Default values *root / timeserver*:

ANTIME\_V6 100\_146\_RDT login: root

3. Open the network configuration file in editor - "nano /etc/mbg/net.cfg".

### Setting Shell Timeout to 300 seconds. [LOCAL] LANTIME V6 100 146 RDT ~ # nano /etc/mbg/net.cfg

Press "Enter" to confirm.

 Scroll with the arrow keys to the line with "[VIRTUAL INTERFACE 0]".
If the DHCP service is enabled, you can see the IP address

given from your DHCP server. With this IP you can establish a connection via the web interface. At this point you can stop the procedure.

- Configure the IP-Address: IPV4-ADDRESS=xxx.xxx.xxx.xxx and Subnetmask: IPV4-NETMASK=xxx.xxx.xxx.xxx
- 6. Deactivate DHCP: DHCP-CLIENT=OFF





① USB to Serial Adapter

Serial connection setup The figure shows a LANTIME CPU without LC-Display. For

the IP address.

initial configuration you have

to connect the CPU via serial terminal to find out or setup

If you do not use a NULL-MODEM cable you have to connect a signal changer (TxD - RxD) ② and a gender changer ③ if the used adapter cable is equipped with an male connector



- 7. Close the file press CTRL + x and save the changes press y to confirm. Press Enter.
- 8. Save the new configuration regularly with "saveconfig".
- 9. Apply the new configuration with the command "reboot" (restart the system).
- 10. Connect the LANTIME with your network and start the WEB interface in your browser via the configured IP-Address.