

TELETASK

Home Automation

Support & Troubleshooting

+ Tips & tricks

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1 TROUBLE SHOOTING MICROS+ AND NANOS







TROUBLE SHOOTING (*/**/***) for a MICROS+ and a NANOS central unit.

*

Occurred problem: in exceptional case, the buzzer immediately beeps continuously after the power up.

Possible reason: the resistor R33 must be 18k ohm instead of 10k ohm

<u>Solution:</u> send for repair to replace the R33 10k ohm m(ust be replaced by a 18 k ohm resistor)

Involved central units: MICROS+ : serial number xxxxx0101 to xxxxx0611 NANOS: serial number xxxxx0101 to xxxxx0151

**

Occurred problem: in exceptional cases the heartbeat LED never blinks after the power up

Possible reason; problem with the SD card connector resistor R20 is to be exchanged (56K has to be replaced by 6K8)

<u>Solution:</u> send for repair to replace the SD card and/or R20

2 DISTRIBUTION BOARD RECOMMENDATIONS



The wiring of the distribution board (DB), equipped with TELETASK interfaces is not different to any other DB. As there are both low-voltage (110-400V) and extra low-voltage (mainly 12-24V) devices in a typical Home Automation DB, these two should be kept away from each other as much as possible. CE regulations and general quality oblige the panel/DB- builder to hand a simple but very important rule: bring all low voltage wires/cables at one side of the DB and the extra-low voltage wires/cables at the other side.

For example low voltage at the right (from below and from above). The extralow voltage wires at the opposite side, in this case at the left side of the DB.

Before you select the DB you need to know if you are going to use the NANOS or MICROS+ central unit. With NANOS there are no special remarks because this is a standard DIN-rail unit. If you use a MICROS+ central unit, you need to decide if you want this central unit going to be installed external or internal in the DB.

 for small installations with MICROS+ and up to 10 DIN-rail TELETASK interfaces (like TDS12116, TDS13500, TDS13524...), we recommend to use a standard (plastic or metal) DB and have the MICROS+ installed beside of it (left or right).



Figure 1: MICROS+ outside distribution board

2. For medium and large installation where you have more interfaces (and circuit breakers and other components) to be installed in the DB, we recommend to use one or more large industrial DB cabinets. Most of them are metal plate based.

The MICROS+ is then mounted in the DB. Keep in mind that the MICROS+ in- and outputs are at the bottom side of its housing. The extra-low voltage wires (contact inputs, sensor inputs, AUTOBUS connections..) are at the left side (one large hole) and the low-voltage (output relay contacts for 12-250Volt) are to be made trough the round break-out holes on the same bottom plate but the mid- to right side. This fits with a DB which is wired in the same way (extra-low voltage to the left).

Remark for MICROS+ installation: for easy wiring, start-up and servicing, mount the housing at eye level height. This means underside of the MICROS+ housing at about 100 to max. 170 cm from ground level.

Generally, circuit breakers can be mounted below in the DB because the non-controlled circuits (circuits like the ones to freezers, refrigerators which are not on/off controlled by the TELETASK system) do not need to be connected over screw terminals (see also below about using DIN-rail screw terminals).

So you obtain the shortest cabling to power cables coming from below by connecting them directly with the concerned circuit breaker, which in this case should be installed in the lower part of the DB.



Figure 2: Clear division between input and output cables



Figure 3: Division between extra-low and low voltage interfaces

Cable trays:

To have the necessary trays for bringing the wires and cables up/down in the DB, we recommend using a wide cable tray at the left and at the right side of the DB. It may be necessary to have a larger cable tray for the 110-250V cabling than for the extra-low voltage (signal) cabling. Some panel builders will divide the panel in two parts or in zones.

Only extra-low voltage and signal interfaces in the left part of the DB and low-voltage at the right. In such case, you can have a cable tray left for extra-low voltage and a tray in the middle and at the right of the DB for low voltage wiring.

Remark: extra-low voltage wiring is not only for TELETASK, but may also be applicable for other systems placed in the DB like video-door phone system, security, IT equipment, etc...

Another way of working in large DB's is using zones: A zone for Home Automation, a zone for videodoor phone and a zone for circuit breakers. This is also a possible way of working.

Any how, you need to arrange that extra-low voltage and low voltage wires and cables are mounted isolated from each other. A general rule is keeping cables/wires away from each other at least 5 cm. So if you have two cable trays in parallel keep a distance of 5 cm between them.

Earthing:

It is very important to have a correct earth connection to the central unit. The whole network of central unit and AUTOBUS shieldings (to all interfaces, touch panels...) is based on a good central earth connection in the MICROS+ central unit.

Always connect the main DB- earth connection directly to the earth connection of your electrical installation. Use the internal screw in the MICROS+ housing at the lower-right corner. In case of the NANOS central unit, like on the MICROS+, it is the earth connection on the NANOS which becomes the central earth point.



Figure 4: MICROS (old version) Central unit

DIN-rail screw terminals:

For medium- and large DB's it is recommended to use the lowest and highest DIN-rail for mounting screw terminals. All connections between the DB and the building can be made over these terminals. This way, the panel builder (DB-builder) can fully pre-wire the DB before bringing at site. It also avoids dust getting in the DB during the construction of the house/building.

Most electrical contractors use spare wires in their cable between standard contacts/push-buttons and the contact inputs in the DB. These inputs can be in the MICROS+ central unit (32) or on digital input interfaces like TDS12116 (16 channel input voltage free contact interface). To avoid having to many cables/wires coming in the MICROS+ unit, you only connect the used wires to the DIN-rail screw terminals and keep the spare wires unconnected.

Then you use for example 3 multi-wire cables (6pair) to go from the DIN-rail screw terminals to the MICROS+ contact inputs. It will make wiring much more simple, faster and obtain the highest quality/reliability.

A standard DIN-rail is 24 units wide. The TDS13500/TDS113501/TDS13524 interfaces are 10 units wide. It means you can mount for example 2 x TDS13500 beside of each other and have 4 units available for 2x2 circuit brakers which can each supply the power to each individual TDS13500 interface (if 16/20Amp is enough to power all connected circuits on the TDS13500).

Example distribution board:



Figure 5: Example distribution board - placing the MICROS+ at the left would have been better.

- The distribution board is divided in zones with a clear division.

- Good overview and clean wire arrangement.
- Screw terminals and circuit breakers at the top and bottom of the board.

Tip: By placing the MICROS+ at the left side of the cabinet you avoid crossing extra-low voltage cable and low voltage cables. This way the input-/sensor-/AUTOBUS-cables can be run through a left cable tray and all power wires can be run through the middle and right cable tray!

3 SERVUS TDS12110 TOUCH SCREEN CALIBRATION

3.1 How to start touch screen calibration?

Choose the "Settings Menu" from the main menu buttons.



Push the hidden "Calibration Button" on the lower right side of the touch screen.



Follow the instructions and touch each of the required 5 calibration points (center of the last cross) with a stylus (not your hand), to recalibrate the SERVUS touch screen.



2.



3.





3.2 Finalizing Calibration

After you touched the fifth and therefore final calibration point with the stylus, the program will ask you to touch the center of the screen, to confirm and safe the calibration data. If you do not touch the center of the screen for confirmation within 30s, the calibration will be aborted and the new calibration data will be discarded.

4 AURUS-TFT HARDWARE RESET

4.1 Intro

In some exceptional cases it can be that the AURUS-TFT hangs in the start-up screen. If this is still the case when the AUTOBUS cable is removed and reconnected, then the following instructions can bring the AURUS-TFT back to factory settings.

This is only applicable for AURUS-TFT versions with serial number bigger than *****0256.

4.2 How to reset an AURUS-TFT to factory settings?

- 1. First of all, check if the last four digits of the serial number is bigger than 0256.
- 2. Put the AURUS-TFT downwards on a soft surface.
- 3. Remove the backcover of the AURUS-TFT by gentle pushing the inner snaps in the corners towards the center with a flat screwdriver, while pulling the backcover upwards. Repeat this for the four corners.



4. With the backcover removed, connect the first and third hole with a tweezer or a wire, like shown on the picture below.



5. Reconnect the AUTOBUS cable with the holes still connected.



6. The AURUS-TFT will now startup in the 'bootloader' screen. Remove the tweezer or wire and let the AURUS-TFT continue the upgrade process via AUTOBUS.



7. The AURUS-TFT is now back to factory setting and has received the latest updates of the Central unit. If the problems remain than contact your TELETASK distributer.

5 CASE STUDIES

5.1 DoIP – VPN Integration

5.1.1 Introduction

This document describes how you can set up a home network for the use of a GUI, GUI+ or iSGUI which is to be run from a remote (away) location.

To do this, TELETASK advises to use a VPN (Virtual Private Network) connection. The advantages of VPN are:

- Universal (available from different brands)
- Protected against unwanted access (data is encrypted).
- GUI configuration is the same for both local and remote use.

The principle of VPN is easy: From a remote location it adds your laptop or Smartphone (virtually) to your home network (LAN). For this you need either a "Static IP address" or a "Dynamic DNS" address. A static IP address is the most easy and preferred solution, but Dynamic DNS can be an alternative (probably cheaper) solution. This may vary from country to country.

To set up a VPN connection the following steps are needed:

- Setting up a router (at home) with embedded VPN server
- Setting up a VPN connection on it via your PC or mobile device
- Test the VPN connection

Setting up a VPN router solution needs ICT skills and network knowhow. If you are not an experienced professional, TELETASK recommends that you consult your ICT supplier.

5.1.2 Dynamic DNS (DynDNS)

5.1.2.1 Intro

Dynamic DNS is a service with which your VPN router regularly sends its dynamic (changing) IP address to a dedicated server on the internet with a static (known and never changing) IP address, so you can have access to your VPN router from anywhere on the internet.

There are several providers of this service one of the most known is <u>www.DynDNS.org</u>. In this chapter we will create a DynDNS account, and set up the VIGOR 2130 to work with this account.

5.1.2.2 Create a DynDNS account

Creating a DynDNS account is necessary to use the DynDNS service.

- Open a browser and go to <u>www.DynDNS.org</u>.
- Create an account and complete the required information.
- Once your account has been activated you can log in.
- Enter a "Hostname", select the service type "Host with IP address", click on the "Use auto detected IP address" link, and click "Create Host" (it is advised to perform this step at the location where the TELETASK central unit is placed).

5.1.3 Network Range

IMPORTANT: When using a VPN connection from a network you must make sure that the network to which you are connecting and the network from which you are connecting are in a different IP subnet (in most cases this means that the 3 first numbers are not the same, 192.168.1.1 and 192.168.1.100 are in the same subnet, 192.168.0.1 is in a different subnet and so is 10.0.1.1)

Example: If you have configured your private network in the range 192.168.1.xxx and you have an iSGUI on your Smartphone, you will not have a problem when connecting over a GPRS/EDGE/3G/HSDPA connection. If you have a holiday home (with an internet connection) you can connect to your TELETASK central unit using the WLAN of your holiday home but you must make sure that the network range in your holiday home is different from 192.168.1.xxx.

Most residential and small business networks are in the range 192.168.X.X with 192.168.1.X and 192.168.0.X being the most used by far. As you do not necessary know from which networks you will connect to your network using VPN it is advisable to choose an arbitrary number for the third part of the IP address e.g 192.168.113.X.

Do not use 168 or 10 as third number because this may interfere with the virtual network that is set up over the USB connection to your TELETASK central unit.

Basic drawing of the setup (the PC at home is not needed and is just added as a practical example of a home network. The PC is only temporarily needed for the configuration of the VPN router):



5.1.4 VPN routers

There are a lot of routers available on the market with an embedded VPN server and it is impossible to give instructions for all the different types.

Therefore at TELETASK we have tested some of these types and give you a detailed installation procedure for (in our opinion) a reliable, easy to install and well priced router: the VIGOR 2130 from DrayTek.

This document also contains detailed info for setting up a SnapGear SG300 router. This router is no longer available but for the people who already has purchased this device the information is not removed from this document..

For other types of routers, the steps for setting up a VPN connection are more or less the same, but if you decide to use another type of router please note:

- Although PPTP (a protocol for VPN) is a standard, the specific implementation may vary from brand to brand (router and device). So check if the device (e.g. PC or SmartPhone) is compatible with the router.
- There are different types of data encryption so check the specifications of you (mobile) device when choosing a router. Make sure that they are compatible.
- TELETASK can't offer support on any type of router. If you need help, please contact your local router supplier (for VIGOR check www.draytek.com).

5.1.5 <u>Set up a VIGOR 2130</u>

In this part of the document the term 'VIGOR' refers to a VIGOR 2130 series router. For this document the standard VIGOR 2130 is used, but versions with integrated WiFi and other functionalities are also available.

5.1.5.1 General settings

To get started for Setting up a VIGOR, just connect your computer with one of the LAN ports of the VIGOR and the WAN port of the router with the internet.

The default IP address for the VIGOR is 192.168.1.1, when you enter this address in a browser, a login page appears, the default IP address and password are 'admin' (without the quotes).

After login you will see a page like this:

Oell TrueMobile 1184 Wirele ×	🔇 Vigor2130 × 🛨				
← → C ③ 192.168.44.1/i	ndex.htm	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)			
Vigor2130 High Speed Gigat	Series it Router	Dray Tek			
Auto Logout 💌	System Status				
• Quick Start Wizard • Online Status • WAN • LAN • NAT • Firewall	Model: Vigor2130Firmware Version: v1.5.1_RC2Build Date/Time: Wed Apr 6 10:30:10 CST 2011System Date: Tue Jun 21 22:56:42 2011System Uptime: 0d 00:39:45	Auto-refresh 🗏 Refresh			
CSM Bandwidth Management Applications VPN and Remote Access USB Application IPV6	System CPU Usage : 7% Memory Usage : 26440K / 62796K (42.1%) Cached Memory : 9448K / 62796K Clean	WAN Connection Mode: DHCP Link Status : Connected MAC Address : 00:50:7F:C9:9D:55 IP Address : 04:25:187.152			
User System Maintenance Diagnostics Support Area Application Note	LAN MAC Address : 00:50:7F:C9:9D:54 IP Address : 192.168.44.1 IP Mask : 255.255.255.0	IP Makes : 255.255.240.0 IP Mask : 255.255.240.0 IPv6 Address : fe80::250:7fff:fec9:9d55/64 (Link) Default Gateway : 94.225.176.1 Primary DNS : 195.130.130.1 Secondary DNS : 195.130.131.1			
FAQ - Admin mode	IPv6 Address : fe80::250:7fff:fec9:9d54/64 (Link) DHCP Server : Yes				

Remark: the Firmware version of the VIGOR for which this manual is written is v1.5.1_RC2. Small differences may appear if the version of your VIGOR is different.

It is recommended that you start with the 'Quick Start Wizard' (top item in the bar at the left). This will set up the time zone, the new administrator password and some basic settings regarding the

internet connection (ask your Internet Service Provider for the correct info). In most cases the default values are OK.

5.1.5.2 LAN Settings

As stated before, the network range of your network is important for VPN. To change the network range, click 'LAN', 'General Setup'

🔇 Dell TrueMobile 1184 Wirel 🗙	🔇 Vigor21	30 × 🕀			- 0 ×
← → C ③ 192.168.44.1/	/index.htm				<u>له</u>
Vigor2130 High Speed Giga	Serie	es ter			Dray Tek
Auto Logout 💌		LAN >> General Setup			
Quick Start Wizard Online Status		Ethernet TCP / IP and DHO LAN IP Network Configur For NAT Usage	CP Setup ration	DHCP Server Configuration	on le Server
► LAN ■ General Setup		IP Address	192.168.44.1	Start IP Address	192.168.44.100
Ports MAC Address Table	=	For IP Routing Usage	Enable Enable	IP Pool Counts	50
 VLAN Monitor Port 		IP Address	192.168.2.1	Lease Time	720 minutes
Static Route Bind IP to MAC		Subnet Mask	255.255.255.0	Force DNS manual setting	9
Firewall		PPPoE Passthrough		Primary IP Address	0.0.0.0
 Bandwidth Management 				Secondary IP Address	0.0.0.0
 VPN and Remote Access USB Application IPv6 				ОК	
Admin mode	í				

In the 'LAN IP Network Configuration', change the third number of the IP address to your wish. You also need to change the 'Start IP Address' in the 'DHCP server Configuration' accordingly so that it is in the same network range.

Remark: the 'Start IP address' together with the 'IP Pool Counts', determine a range of IP addresses that can be assigned by the router to computers which are connected to the network (In the example, these are the addresses 192.168.44.100 – 192.168.44.150). So it is important that you do not assign one of these addresses statically to a device such as a TELETASK DoIP central unit, an IP camera, a network printer, a network hard disk,...

5.1.5.3 Dynamic DNS settings

To set up DynDNS on the VIGOR click 'Applications', 'Dynamic DNS'. You will see a page like this:

Solution Solution	Vigor21 1/index.htm	30 × +		_ @ × ☆ ∢
Vigor2130 High Speed Gig) Serie abit Rou	es ter		Dray Tek
Auto Logout 💌		Applications >> Dynamic DNS		
Quick Start Wizard Online Status WAN LAN LAN NAT Firewall CSM Bandwidth Management Applications Dynamic DNS Schedule IGMP IGMP Status UPnP Configuration Wake on LAN	E	Dynamic DNS Configuration Enable Dynamic DNS Service Provider Domain name Username Password IP source Check IP change every Force IP update every	Image: Second constraints mypersonaldomain.dyndns.org myusername My WAN IP 10 minutes 72	
 VPN and Remote Access USB Application IPv6 User Admin mode 		ОК	Cancel View Log Force Update	

- Check the 'Enable Dynamic DNS' field
- Select the correct service provider (in this example dyndns.org)
- Enter the Domain name you have registered with the service provider (in this example mypersonaldomain.dyndns.org)
- Enter the Username and Password used for the DynDNS registration with the service provider.
- Select the correct setting for IP source: 'My WAN IP' in case your VIGOR is directly connected to the internet, 'My Internet IP' in case there is a cable modem/router from you internet provider between the VIGOR and the internet (see remark below).
- The rest of the settings are normally OK.

Remark: In case you have a cable modem/router between your VIGOR and the internet, you have to take additional steps to make thing work. In this case the WAN IP address of your VIGOR will be a 'private IP address' (in the rages 10.x.x.x, 172.16.x.x to 172.31.x.x or 192.168.x.x). If the VIGOR would update this IP address (e.g.: 192.168.1.x) to your dynamic IP-address host, but this would not work as this is a 'private IP address'. To solve this you need to set the VIGOR to use his 'internet IP address', and not his local 'My WAN IP address'.

To make it possible to connect to your VIGOR VPN router from the internet, you need to enable port-forwarding on you cable/DSL modem-router. Forward the port 1723 to the WAN IP-address of your VIGOR VPN router. It also advised to set the WAN IP address of your VIGOR VPN router static. (e.g. 192.1.0.2). For detail on how to set up port forwarding on your cable/DSL modem-router, contact you internet provider.

IMPORTANT REMARK: This is not the same as port-forwarding directly to the Central Unit! You are still using a secure VPN connection and you are only using the Port-forwarding to go from the internet directly to your VIGOR VPN router.

5.1.5.4 Adding Users

Before we can set up the VPN server, users must be added. Each user has its own username and password to connect to the VPN server (and can have different privileges).

To add a user, click 'User', 'User Configuration

You will see this screen:

Off	User >> User Configuration				
Quick Start Wizard	Please install Samba Server before	enable Disk Sharing			
Online Status	Add User				
	🗷 Enable	User Settings			
VAT	Username	John			
irewall	Full Name	John Doo			
andwidth Management	Fuil Name	Solin Doe			
pplications	Password				
PN and Remote Access	Confirm Password				
2V6	Allow Disk Sharing				
ser	Allow IPSEC/L2TP				
vstem Maintenance	Allow PPTP				
Diagnostics	Enable BPTP I AN to I AN				
	Linable FFTF LAN to LAN				
pport Area plication Note	Local Network / Mask	0.0.0.0 / 0.0.0.0			
Q	Remote Network / Mask	0.0.0.0 / 0.0.0.0			
oduct Registration	Allow FTP				

- Check the 'Enable User Settings' field

Fill in:

- Username: a name for the user to log into the VPN (all users must have a unique name)
- Full Name: the full name of the user (only to simplify user management)
- Password: the password for the user
- Check the "Allow PPTP field"
- Click OK

Repeat these steps for all users.

5.1.5.5 Setup VPN server

Now we are ready to set up the VPN server itself, click on 'VPN and Remote Access', 'Remote Access Control'.



Adjust the following settings:

- Uncheck 'Enable IPSec VPN Service'
- Check 'Enable PPTP VPN Service'
- If you plan to use Apple devices (iPhone/iPod touch/iPad or Mac) Check '*MPPE Required'

Remark: like the DHCP server, the VPN server also has a pool of IP addresses from which it gives an IP address to a device that makes a VPN connection. So make sure that no devices that are physically on the network have a static IP address in the 'IP Address range for PPTP client'

Click 'OK' to save the settings, your VIGOR is now ready to accept incoming VPN connections.

5.1.6 Setup a SG300 (not available anymore)



Once you have connected your laptop to the LAN side of the SnapGear router, open a browser and browse to the SG300, enter the root password (this is not standard configured).

Remark that the default LAN setup of the SG300 is static configured on 192.168.0.1

The easy way to set up your Router/Firewall is to use the 'Quick Setup Wizard'.

Following screens will appear on your configuration-PC:

- Quick Setup
- Manual LAN Configuration
- ISP connection

5.1.6.1 Quick Setup

LAN -> Internet -> Confirm -	LAN -> Internet -> Confirm -> Done							
This setup wizard will guide you through some of the required initial configuration. If the local network interface is already properly configured, or if you would like to defer this step until later, select the <i>skip</i> option.								
Select the name this SnapGea	Select the name this SnapGear unit should know itself by.							
Hostname	Hostname SG300							
The SnapGear unit is able to dynamically obtain the necess or it can be manually configur	The SnapGear unit is able to glean its local network (LAN) address configuration in one of two ways. It can dynamically obtain the necessary setup information from a DHCP server already installed on the local network or it can be manually configured with fixed parameters.							
Direct Connection Settings	Obtain LAN IP address from a DHCP server on LAN							
	 Manual configuration 							
	Skip: LAN already configured							
Back Next								

In most cases 'Manual configuration' will be the correct one, because the SG300 will be the only device that will act as a DHCP server.

5.1.6.2 Manual LAN Configuration

LAN - Vintermet - Confirm - Conf								
LAN -> Internet -> Commin -> Done								
Configure the local network (LAN) interface.								
Select the address that the SnapGear unit should use for its LAN network interface. This must be an address that lies within the range of the local network and that is not used by any other host.								
IP Address	192.168.1.1							
The subnet mask determines the	ne logical size of the local area network.							
Subnet Mask	255.255.255.0							
Select the range of addresses that the DHCP server on this Secure Computing unit may assign to other machines on the LAN. (May be left blank to disable the DHCP server)								
DHCP Server Address Range 192.168.1.100-149								
Back Next	Back Next							

In this case we assume that we will configure the private network in the range: 192.168.1.xxx and choose for the LAN IP-Address of the SG300 192.168.1.1

5.1.6.3 ISP Connection

LAN -> Internet -> Confirm -	AN -> Internet -> Confirm -> Done								
Select the method you use to connect to your Internet Service Provider (ISP). If you have already correctly configured this or if you want to defer this configuration until later, select the <i>skip</i> option.									
Internet Port Configuration 💿 Cable Modem									
	O Modem								
	O ADSL								
	O Direct Connection								
	Skip: Internet connection already configured								
Back Next									

Select the correct connection to the internet, if you don't know, contact your Internet Service Provider (in most cases 'Direct Connection' is correct).

After finishing the wizard you will have to change the IP-Address in your browser to 192.168.1.1 to continue the configuration.

5.1.6.4 VPN Configuration

In the previous step you have configured the basic network settings. Now you can start setting up the actual VPN server.

- Click on the left side under VPN on PPTP VPN Server
- Check the option "Enable PPTP Server"
- For the "Authentication Scheme" choose "Encrypted Authentication (MS-CHAP), this means that devices using MS-CHAP or better (MS-CHAP v2) can connect. If only PC's running Windows Vista and/or Smartphones running Windows mobile V6 are used, you can select the option "Encrypted Authentication (MS-CHAP v2)" here.
- Leave the rest of the settings to their default values and click 'Submit'.

PPTP VPN Server	
PPTP Server Setup	
Enable PPTP Server	
IP addresses to give to remote hosts	192.168.1.10-49
IP Address to Assign VPN Server	LAN Port (192.168.1.1) 💌
Authentication Scheme	Encrypted Authentication (MS-CHAP)
Required Encryption Level	Strong Encryption (MPPE 128 Bit) 💌
Authentication Database	Local 💌
Submit Advanced	

- Click on the left side under 'System on User' and choose the tab page 'Local Users'.
- Click 'New', fill in a name, description and Password
- Make sure the option "PPTP access" is check-marked
- Click finish

Administrative Users Local Users					
	Ucomana	Description			
	Username	Description			
ø	koen	VPN PC	\Box	Ì	
4	qtek	GSM user	\Box	Ì	
4	teletask	Temporary	\Box	Ì	
Ne	w				

Administrative Users Local Users R/	ADIUS	TACACS+
Edit User Information		
Username	teletas	sk
Description	Tempo	orary
Domain		
Password	••••	
Confirm Password	••••	
Dialin Access		
Dialin Address		
PPTP Access	~	
PPTP Address		
L2TP Access		
L2TP Address		
Internet Access (via. Access Controls)		
Bypass Content Filtering		
Change Password		
Finish Cancel		

5.1.6.5 Setting up Dynamic DNS in SG300

- Click on the left side on Network Setup under NETWORK SETUP and choose first tab page DNS and then tab page 'Dynamic DNS'
- Select "dyndns.org" from the dropdown list and click "New"
- Check the "Enable" option
- Enter your DynDNS username password and Domain (in the example below we have created a DynDNS account with username 'dyndnsuser' and hostname 'homestreet.homeip.net'
- Click "Finish"

Conn	Connections Failover & H/A Routes System DNS								
DNS	DNS Proxy Dynamic DNS Static Hosts								
	Interface	Service	Domain	Status					
4	Default Gateway Interface	dyndns.org	leliestraat.homeip.net	Active					
N	TZO Y]							

Connections Failove	r & H/A Routes System DNS
DNS Proxy Dynami	c DNS Static Hosts
Service	dyndns.org
Enable	
Interface	Default Gateway Interface 💌
Username	dyndnsuser
Password	•••••
Confirm Password	•••••
Domain	homestreet.homeip.net
Additional Domains	
мх	homestreet.homeip.net
Wildcard	
Finish Cancel	

5.1.7 Setting-up a client-VPN connection

Now that the VPN-router is set-up, and the Dynamic DNS is activated, we can set up a VPN connection from a remote location. In this step we will set up a VPN connection using Windows 7 (for Windows Vista and XP the steps are the same). If you want to set up a VPN connection from a mobile device we suggest to first set up a PC connection (to test if the VPN server is working) and then set up the connection from your Mobile device. For help about setting up a VPN connection from a mobile device see the iSGUI installation manual.

5.1.7.1 Setting-up a client-VPN connection on Windows 7

• Go to Start > Control panel > Network and Internet > Network and Sharing center



• Select "Connect to a workplace" and click "Next".



• Select 'No, create a new connection' and click next (depending on your system this step can be skipped).



• Click 'Use my Internet connection (VPN)

🚱 🌆 Connect to a Workplace		
Type the Internet addr	ess to connect to	
Your network administrator	can give you this address.	
Internet address:	mypersonaldomain.dyndns.org	
Destination name:	John's home	
Use a smart card () Allow other people to This option allows ar Don't connect now; j	o use this connection yone with access to this computer to use this connection. ust set it up so I can connect later	
	Nex	t Cancel

- Enter the IP address or the DynDNS name in the 'Internet address' field
- Give it a name by which you know that this is a connection to your (clients) home and click "Next"

Connect to a Workpl	ace	
Type your user nar	me and password	
User name:	John	
Password:	•••••	
	Show characters	
	Remember this password	
Domain (optional):		
		Connect Connec

- Enter the user name and Password as configured in the VPN router
- Click 'Connect' (The first time you connect will take some time)

5.1.7.2 Setting-up a client-VPN connection on Windows XP

• Go to Start > Configuration panel > Network connections.



• Click on 'Create a new connection'.

New Connection Wizard
Network Connection Type What do you want to do?
○ <u>C</u> onnect to the Internet
Connect to the Internet so you can browse the Web and read email.
Connect to the network at my workplace
Connect to a business network (using dial-up or VPN) so you can work from home, a field office, or another location.
○ <u>S</u> et up a home or small office network
Connect to an existing home or small office network or set up a new one.
O Set up an advanced connection
Connect directly to another computer using your serial, parallel, or infrared port, or set up this computer so that other computers can connect to it.
< <u>₿</u> ack <u>N</u> ext> Cancel

• Choose to make a connection to the network at my workplace and click "Next".

New Connection Wizard
Network Connection How do you want to connect to the network at your workplace?
Create the following connection:
O Dial-up connection
Connect using a modern and a regular phone line or an Integrated Services Digital Network (ISDN) phone line.
Virtual Private Network connection
Connect to the network using a virtual private network (VPN) connection over the Internet.
< <u>B</u> ack <u>N</u> ext > Cancel

• Choose VPN connection and click "Next"

Connection Name Specify a name for th	his connection to your workplace.
Type a name for this o	connection in the following box.
Company N <u>a</u> me	
Home-Network	
For example, you coul will connect to	Id type the name of your workplace or the name of a server you
YNII COMINGULU.	

• Give it a name by which you know that this is a connection to your (clients) home and click "Next"

PN Server Selection What is the name or address of the VI	PN server?
Type the host name or Internet Protoc	ol (IP) address of the computer to which you are
Host name or IP address (for example,	, microsoft.com or 157.54.0.1):
84.193.169.60	
	Kack Next> Lance

- As Host name or IP address, you give the hostname that you configured on DynDNS (in the example we used in "Setting up DynDNS in SG300" this would be 'homestreet.homeip.net'). If you have a static IP address enter your IP address here.
- Click "Next", and then "Finish" in the next screen. Now the laptop is ready to connect to your "home network"



5.1.8 Test the VPN connection

In this chapter we will first test the connection and than explain how to use a TELETASK GUI over the VPN connection.

5.1.8.1 Test the VPN connection on Windows 7

The VPN connection is already tested while setting up. To disconnect or connect again, click the network icon in the notification area.



5.1.8.2 Test the VPN connection on Windows XP

- Open your VPN connection with "Start", "Connect to".
- Enter the User name and password that you have created in the router (in the chapter "VPN configuration")
- ...and click 'connect'



5.1.8.3 Ping

• To test the connection, we suggest you to do a ping to the IP address of the equipment at your home (e.g. the TELETASK 'MICROS+' or 'NANOS' DoIP central unit). If you have set up everything correctly this should work



5.1.8.4 Using a TELETASK GUI over the VPN connection

As said in the introduction, one of the benefits of a VPN connection is that the configuration for local and remote usage is exactly the same. So in the properties of the GUI+ (or iSGUI) you need to enter the same IP address and port number as if you would use the GUI locally.

So you can run your GUI+ on your laptop at home, take your laptop with you to work, holiday, etc... and run the GUI+ from the same laptop on the remote site without changing any settings.

All you need to think about is click the "Connect to" button and connect to your home network before starting the GUI+ on a remote location.

5.2 How to control a CEILING SWEEP FAN



This article is written for CEILING SWEEP FAN's with single coil (2 wires + earth connection only).

5.2.1 Control overview

There are several ways to control an AC ceiling sweep fan with the TELETASK system.

You can control the fan in three basic ways:

- 1. On/of control (off or full speed)
- 2. Multi-speed control with relays (2 to 5 speed control)
- 3. Multi-speed control with a power dimmer (continues speed control; low humming noise of the ceiling fan may occur; <u>not recommend for use in low noise rooms</u>)

5.2.2 ON/OFF control



This can be obtained by using a single power output contact like an output of the MICROS+ central (250V/10Amp) unit or from a TDS13500 (250V/16Amp) or TDS13501 (10Amp/250V) relay output interface.

PROSOFT: use the "switch" function for on/off control of this fan control relay. You can also include this relay in any "mood"- or "step"- function.

5.2.3 <u>MULTI-SPEED control with relay contacts in combination with</u> <u>dedicated capacitor(s).</u>

IMPORTANT REMARK: The capacitor is subject to the recommendations of the fan manufacturer. According to international safety standards, the capacitor should be of the MKP (Metalized Polypropylene AC motor run Capacitor) type, 250V or higher.

5.2.3.1 2-speed control medium/full speed control with 2 contacts.



5.2.3.2 4-speed low/medium/high/full control with 3 contacts

(most often used).



C1 and C2 are to be considered selected for lowand medium- speed setting.

The values of the capacitors C1 and C2 are depending on the information given by the fan manufacturer (most often in the range of 1μ F, 2.2F, 3.3 μ F or 4.4 μ F). Most of the time, the capacitors are also supplied by the manufacturer together with the fan unit.

Remark: Some manufacturers supply a capacitor- housing containing 2 capacitors for 4- speed

control. In such case use the common wire to connect to the 'L' phase wire and the individual capacitor wires to connect to the "R2" and "R3" contacts as on the drawing below.

R3 closed: low speed (C2 for example 2µ2) R2 closed: medium speed (C1 for example 4µ4) R2+R3 closed: high speed R1 closed: full speed (any other combination with R1 closed: full speed)

5.2.3.3 Multi-speed control with > than 4 speeds



You can make more speed settings by using more relays and more capacitors. In the drawing aside, by using 3 capacitors and 4 relays, you can obtain up to 6speed control.

R1 ON = Full Speed R2+R3 ON = High 2 Speed R2+R4 ON = High 1 Speed R2 ON = Medium 2 Speed R3+R4 ON = Medium 1 Speed R3 ON = Low Speed

Possible capacitor values: C1=4µ2F; C2=2µ2F; C3=1µF

In this case capacitor values become (example; depending on the fan- manufacturer recommendations):

Speed1 = $2\mu^2$ Speed2 = $3\mu^3$ Speed3 = $4\mu^2$ Speed4 = $3\mu^2$ Speed5 = $6\mu^4$ Speed6 = Full Also possible, but not recommended! : R4 ON = 1μ F -> SPEED is TO LOW R2+R3+R4 ON = 7μ 4 -> TO HIGH (hardly no difference with 6μ 4 combination)

5.2.3.4 How to configure a relay- multi-speed control in PROSOFT.

We recommend to use a "local mood" for every speed setting you want to obtain. Then you make a "STEP" function (on a standard button or any touch panel button) and use your dedicated local moods in it, to be able to step from zero to the highest speed and back.

5.2.4 VARIABLE speed control with a power dimmer output.

When using a power dimmer output to control the CEILING SWEEP FAN, it is possible to have a continuous fan speed control. To protect the fan coil from heating up at low speeds, starting from PROSOFT version 3.3 there is a special fan speed control function available which avoids power control below 40%. Therefore we strongly recommend to only use this function and <u>never use the standard 'dim' function (can go below 40% and generated heat-up of the fan coil)</u>.

Alternatively you can use any "local mood" (do not use any speed settings below 40%).

IMPORTANT REMARK:

Do not use the basic "dim" function or fan over heating may occur!!!