

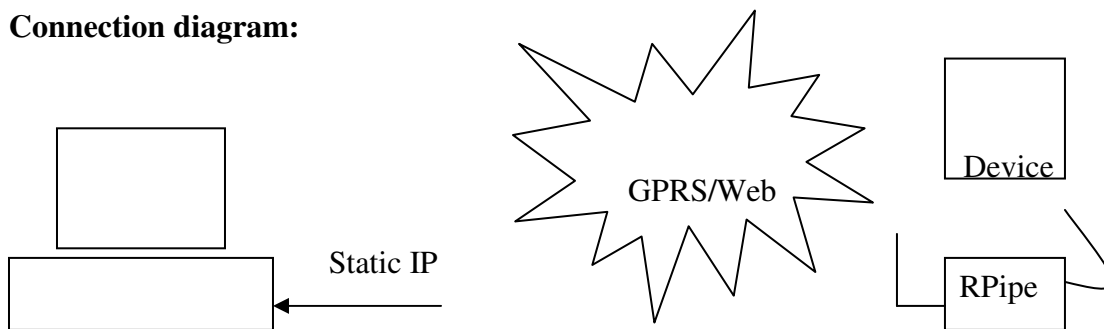
The RPipe Installation Guide

RPipe Installation guide

General: This document describes the installation of Remmon RPipe serial over IP communication gateway. The RPipe is a useful tool for connecting your PC with a remote device via RS232 serial connector, using the popular GPRS network. With this easy-to-use communication gateway, you are free from worrying about distance limitation or radio transmission interruptions. The RPipe comes with the RemPipe application software, this easy-to-use software helps in setting and loading a map between predefined TCP communication port and a virtual RS232 serial port. After loading the virtual ports to your computer, you can use your device software to connect to the appropriate virtual serial ports, the same way as if you connect to a physical RS232 serial port. In this way the serial data are passed over your static IP rather than passing over a serial RS232 cable.

Please follow this step by step guide for proper installation.

Connection diagram:



Hardware Installation

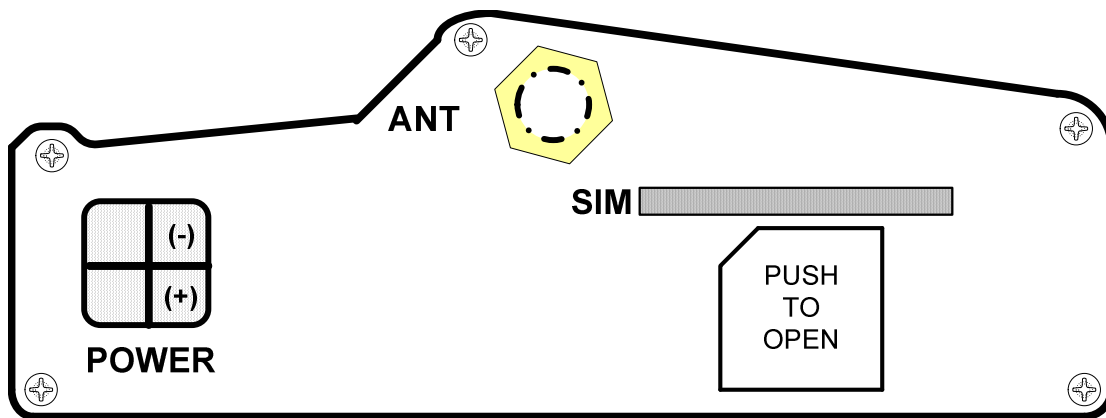


Figure 1 – Back Panel Interface

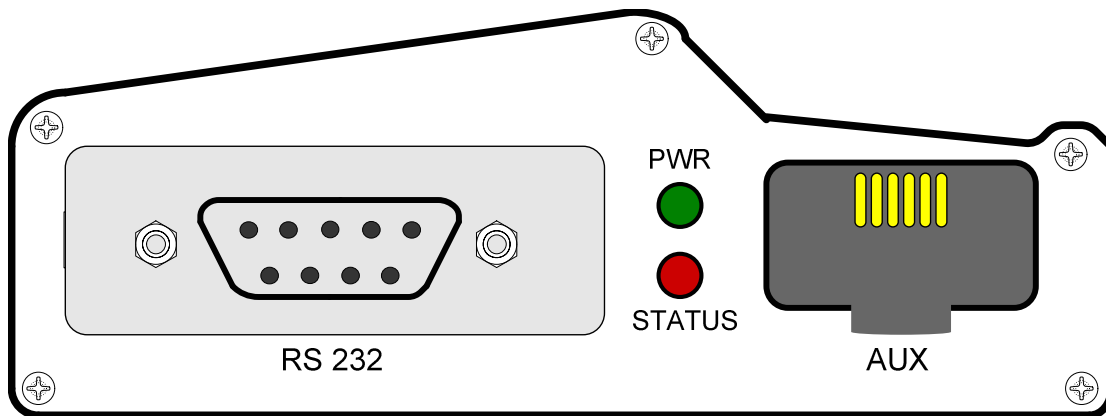


Figure 2 – Front Panel Interface

Power Supply Cable:

Plug in the power plug into the power socket as shown in Figure 1.

PC Cable:

In order to program the RPipe via a PC, use the PC communication cable.

Plug the RS232 cable into the RS232 socket. Connect the other side of the cable (DB9 female connector) to the serial port of your PC.

SIM Card:

To send and receive Data over GPRS you need a valid SIM card.

Insert the SIM card into the SIM slot on the back panel, as shown in Figure 1.

Antenna:

Plug in the GSM antenna by connecting the MMCX plug into the ANT socket.

AUX Cable

Led:

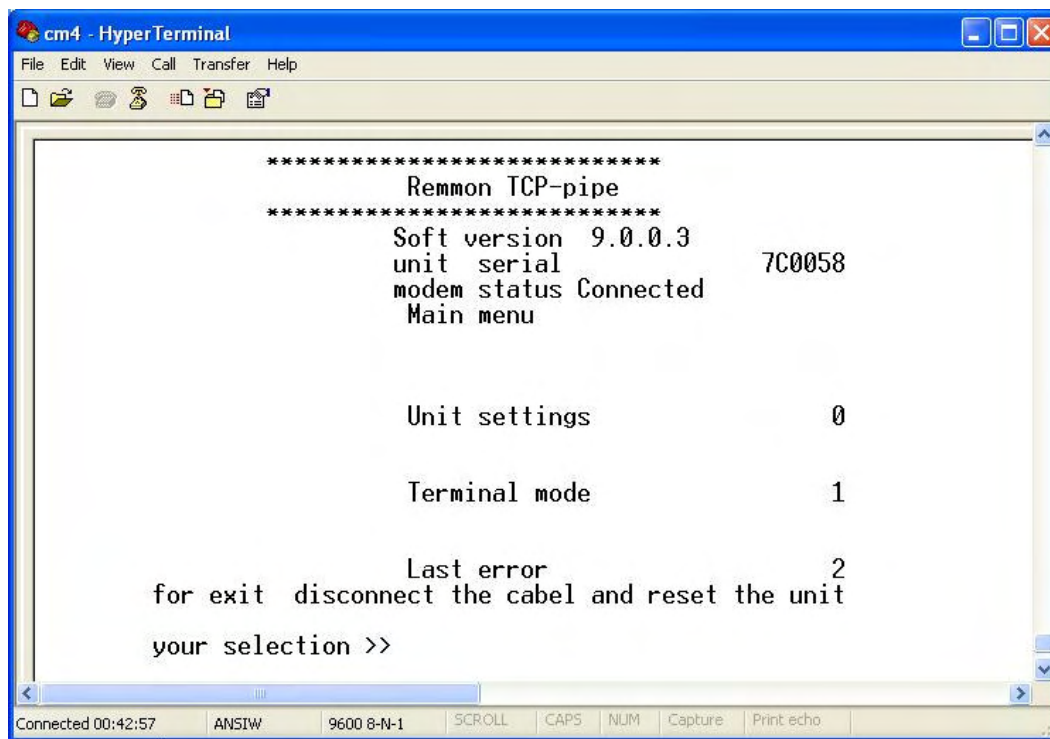
Status	Light (M sec)	Dark (M sec)	Blink (50/50 M sec) count
Initialization	-	-	Every time
Attempting to connect to server TCP	300	300	1
No connection (empty mode)	4000	500	5
Disconnected, wait for the next connection	1000	1000	15
Connected	1000	4000	0
Reset modem	-	-	Every time

Configuration:

Connect the RPipe to the PC via RS-232 connectivity and run "HyperTerminal" application (Start->All program->Accessories->Communication).

More details about the "HyperTerminal" software can be found in <http://www.hilgraeve.com/>

When HyperTerminal is open you will have this screen:



The screenshot shows a HyperTerminal window titled "cm4 - HyperTerminal". The window contains a menu for "Remmon TCP-pipe" with the following text:

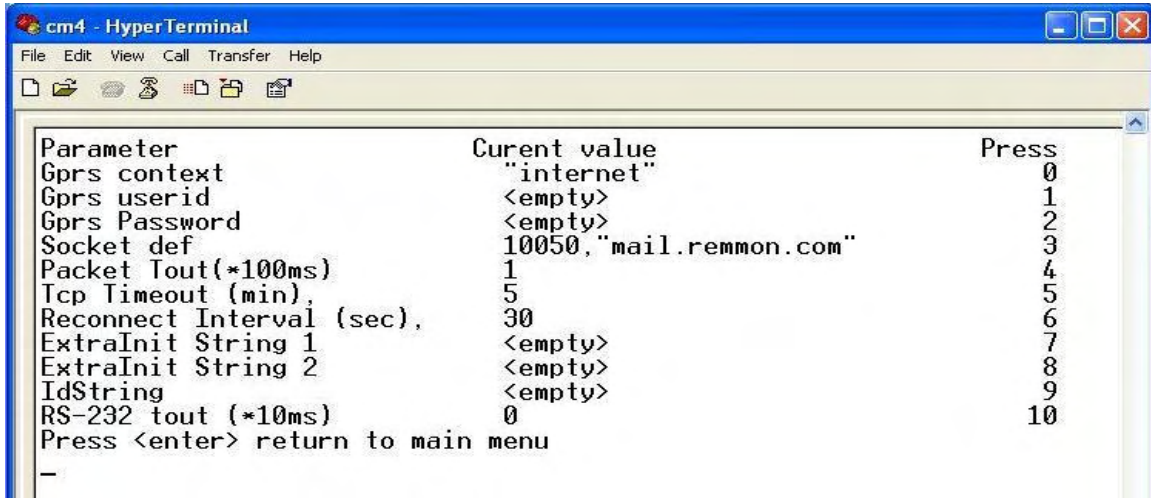
```
*****  
Remmon TCP-pipe  
*****  
Soft version 9.0.0.3  
unit serial 7C0058  
modem status Connected  
Main menu  
  
Unit settings 0  
  
Terminal mode 1  
  
Last error 2  
for exit disconnect the cabel and reset the unit  
your selection >>
```

The status bar at the bottom of the window shows: Connected 00:42:57, ANSIW, 9600 8-N-1, SCROLL, CAPS, NUJM, Capture, Print echo.

Type your choice and then press Enter.

- 0 – For unit setting (see below).
- 1 – For sending AT command direct to the modem.
- 2 – For diagnose the last error from the unit.

Setting:



```
cm4 - HyperTerminal
File Edit View Call Transfer Help
Parameter          Curent value          Press
Gprs context       "internet"            0
Gprs userid        <empty>                1
Gprs Password      <empty>                2
Socket def         10050,"mail.remmon.com" 3
Packet Tout(*100ms) 1                        4
Tcp Timeout (min). 5                        5
Reconnect Interval (sec), 30                       6
ExtraInit String 1 <empty>                7
ExtraInit String 2 <empty>                8
IdString           <empty>                9
RS-232 tout (*10ms) 0                       10
Press <enter> return to main menu
-
```

Parameter	Description	Example
GPRS Context	APN string from cellular provider	"internet", "orangeinternet"
GPRS user ID	Some GPRS providers ask for User Name.	vodafone: "web" EntelPCS: "web"
GPRS password	Some GPRS providers ask for User Password.	vodafone: "web" EntelPCS: "web"
Socket definition	For port and IP [<port>,"IP"] definitions.	6000,"10.11.12.13" 10500,"www.remmon.com"
Packet Time-out	Time delay between the serial RS232 data transmission, sent from the device to the PC, and the TCP data transmission, sent from the RPipe to the PC (through the GPRS network).	Minimum 1 100 MSec.
TCP Time-out	Time duration in which the PC and the device are not transferring data. Exceeding this value results in reconnection.	Minimum 1 minute
Reconnect interval	Waiting time between connection attempts.	Minimum 30 sec.
Extra init string 1	[Optional] AT command if needed.	Recommended: <empty>
Extra init string 2	[Optional] AT command if needed.	Recommended: <empty>
RS-232 Time-out	Time delay between the TCP data transmission, sent by the PC, and the serial RS232 data transmission, sent from the RPipe to the device.	Recommended: 0