RS 232 communication

Configuration Mita WP3000

1. Table of contents

2. Introduction

This document shows how to enable RS232 communication on a WP3000 controller.

The document includes:

- How to change parameter and which settings needs to be changed.
- Hardware updates and changes.
- What new hardware is needed.
- Cable connections.

3. Mita - WP3000

The following parameters have to be set to get a WP3000 working.

- Baud rate
- Handshaking
- Modem handling
- Id number

Normally is all communication done via com4 and the default setting is 9600 Baud. A WP3000 always uses 8 data bits, no parity and 1 stop bit (8N1)

To be able to change parameter is it necessarily to login.

- Arrow down (4 times) to select
- Press enter to select “Access rights”
- Enter the password and accept with the enter key
- Use the arrow keys to select “Request active-stat.”
- Press enter and key in a user id 123 and accept with the enter key

The computer should now be in access level 99 and active.

The menu can be toggled by using the arrow keys left and right.

Use Esc to go out of a sub menu.

Use enter to accept a new input.

Use DEL to erase a value (The cursor must be to the left of the value)

To remove the access level 99 select the start menu and use the arrow keys to select the “Access rights line” and press enter two times.

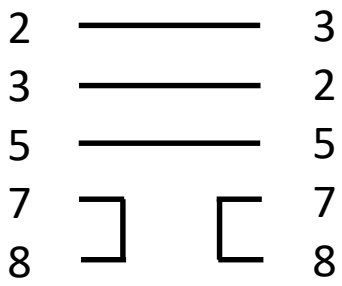
To remote the active-state select the “Release Active-state” and press enter one time.

- Service menu
- DataLog ctrl
- Ser.# menu
- Access list
- Event list
- Status count
- Status list
- **Parameters**
    - **Communication control**
        - Baudrate Com1
        - Baudrate Com2
        - Baudrate Com3
        - **Baudrate Com4** **9600** **(Can be between 1200 and 57600)**
        - WP3033 Com1
        - WP3033 Com2
        - Com 5 not installed
        - Com 5 not installed
        - **Node number** **1** **(Can be between 1 to 254)**
        - **RTS 4 always on** **1**
        - **Ignore CTS 4** **1**
    - **Parkmaster-control**
        - **Select systemtype** **Select parkmaster**
        - Init modem 5m
        - **Mod.ini.1:** **Erase**
        - **Mod.ini.2:** **Erase**
        - Connect time 60s
        - Filter park echo: 0
        - Park Id Park phone no
        - Alarm call control
            - **Phone 1** **Erase**
            - **Phone 2** **Erase**
            - **Phone 3** **Erase**
            - **Phone 4** **Erase**
            - **Phone 5** **Erase**
            - **Phone 6** **Erase**
            - **Try 1-3** **0 times**
            - **Try 4** **0 times**
            - **Try 5** **0 times**
            - **Try 6** **0 times**
        - Node number control
            - Add and remote node no
        - Alarm st. code 0 OFF
- Grid
- Status
- Start menu

4. Cables

4.1. Cable layout for F2403

Four-Faith	WP3000
DB9 Female	DB9 Female



Same as the standard Four-Faith (Black) communication cable.

4.2. Cable layout for F2816 - COM 1

Four-Faith 2816 Terminal		WP3000 DB9 Female	
3	———	3	White
4	———	2	Green
5	———	5	Brown
1 PWR		7	
2 GND		8	

4.3. Cable layout for F2816 - COM 2

Four-Faith 2816 Terminal		WP3000 DB9 Female	
6	———	3	White
7	———	2	Green
5	———	5	Brown
1 PWR		7	
2 GND		8	

The Power (PWR) must be between +5V to +36V DC (Standard power supply is 12V DC)

An easy way to check if the wires on pin 3 and 4 (COM1) or pin 6 and 7 (COM2) is mounted correct is to measure the DC voltage on both pins in reference to GND (pin 5). If the Rx and Tx wires are mounted correct, should it be possible to measure a voltage on both pins (Above 3 volts). If there is only voltage on one pin is the wires wrong and they must be flipped.

5. Four Faith – Signal monitoring

5.1. F2403 Signal monitoring

The Four Faith F2403 GPRS modem can be used to monitor the signal strength during installation.

This can be done on units bought after October 2014 and with firmware versions after this date.

The Signal mode is activated using a special DB9 adaptor that is inserted into the RS232 port on the Four Faith modem. When the adaptor is inserted will the online LED on the modem not display the online status anymore but instead will the signal strength be display. The signal level is illustrated by a number of blinks that is repeated every 3 seconds.

There are 5 different blink levels.

Level	Signal strength (dBm)	Quality
1	-113 -> -103	Bad
2	-101 -> -95	Marginal
3	-93 -> -85	OK
4	-83 -> -75	Good
5	-73 or higher	Excellent

The GPRS modem will not attempt to connect unless the signal strength is 2 or above but the signal should be no less than 3 or more before a stable connection can be expected.

Be aware that when the Signal tester adaptor is inserted will the modem NOT attempt to go online. The modem will return to normal operation when the adaptor is removed.

5.1. F2816 Signal monitoring

The Four Faith F2816 GPRS modem can be used to monitor the signal strength during installation.

The Signal mode is activated by pressing the signal tester button on the “Multiport interface” unit. The button has to be kept pressed during the signal testing.

If the kit is not equipped with the signal tester button can the signal mode be activated by connecting pin 11 (IO2) to the ground pin 2 or 5.

When the connection is established will the online LED on the modem not display the online status anymore but instead will the signal strength be display. The signal level is illustrated by a number of blinks that is repeated every 3 seconds.

There are 5 different blink levels.

Level	Signal strength (dBm)	Quality
1	-113 -> -103	Bad
2	-101 -> -95	Marginal
3	-93 -> -85	OK
4	-83 -> -75	Good
5	-73 or higher	Excellent

The GPRS modem will not attempt to connect unless the signal strength is 2 or above but the signal should be no less than 3 or more before a stable connection can be expected.

Be aware that when the Signal tester is active will the modem NOT show the online signal anymore. The modem will return to normal operation when the adaptor is removed.