THAMWAY PROT series hardware server software

RF Controller section

TCP/IP port to be used

TCP/IP PORT:5027 It uses to communicate with the RF Controller.

About numerical value to be used

Integer

If you put a "0x" at the beginning it is regarded as hexadecimal.

If you put a "0" at the beginning it is regarded as octal.

If you put a "0b" at the beginning it is regarded as binary.

Other than the above it will consider the decimal.

Example: 0x123 → 291

0b1100 → 12

0123 → 83

Real

If you put a "u" in the back of the numeric value is regarded as 1e-6(micro).

If you put a "m" in the back of the numeric value is regarded as 1e-3(milli).

If you put a "k" in the back of the numeric value is regarded as 1e+3(kilo).

例: 123k → 123000

1.2u → 0.0000012

QPSK

At the same time I will output a QPSK pulse and transmitted pulse. There are two 'QPSK1' and 'QPSK2'.

TIME

Unit of time is sec.

FREQUENCY

Unit of frequency is Hertz(Hz).

VOLTAGE

Unit of voltage is volt.

RFController command list

TCP/IP PORT NUMBER:5027 or callRF()

Common commands

View device information

[Format]

***idn?**

[Description]

Make the display of the hardware and software of information connected.

[Result]

THAMWAY,C0477A/B,20100922,DIO2_DISABLE,

Run the Lua script file.

[Format]

run_lua <file name>

[Description]

Run a lua script file on your PC.

[Example]

run_lua c:/myprograms/test1.lua

Write data to the I/O port

[Format]

outb <I/Oaddress>,<byte data(8bit)>

outw <I/Oaddress>,<word data(16bit)>

[Description]

It is used when operating the register of each device directly.

Read data from the I/O port

[Format]

inb <I/O address>

inw <I/O address>

[Description]

It is used when operating the register of each device directly.

inb: read 8bit data.

inw: read 16bit data.

RF CONTROL COMMAND

Read status

[Format]

STTSR

[Description]

Frequency read and write

[Format]

FREQW<frequency>

FREQR

[Description]

Set frequency MMM.HHHHHH (M=MHz, H=Hz)

[Example]

12.5678MHz	FREQW12.567800	
98.1MHz	FREQW98.100000	(good)
	FREQW98.1	(wrong)

Please specify decimal point always six digits.

TX power level read and write.

[Format]

ATT1W<TX power level>

ATT1R

[Description]

It does the setting of the transmission level.

TX power level 0-1023

[Example]

Set to minimum power	ATT1W0
Set to maximum power	ATT1W1023

Reading and writing of the receiver gain.

[Format]

GAINW<RX gain>

[Description]

Make the settings for the reception gain. The unit is dB.

RX gain 0-95

[Example]

Set to minumum gain	GAINW0
Set to maxum gain	GAINW95

Reading and writing of the LPFfrequency.

[Format]

LPF1W<LPF frequency>

LPF1R

[Description]

It will read and write LPF frequency. The unit is Hertz.

LPF frequency　100-1000000

[Example]

Set to minimum frequency　　LPF1W100

Set to maximum frequency　　LPF1W1000000

Reading and writing of the RX phase.

[Format]

PHASW<RX phase>

PHASR

[Description]

It will read and write the receiver phase. The unit is degrees.

RX phase　　0.0-359.9

[Example]

Set to minimum phase　　LPF1W0.0

Set to maximum phase　　LPF1W359.9

Reading and writing of RF SW setting

[Format]

RFSWW<onoff>

RFSWR

[Description]

It will do the setting of TX RF switch.

Onoff　0:RF SW is off.

　　1:RF SW is on.

[Example]

RFSWW1

RFSWW0