

RS485 Command Summary

Com Port Settings

Baudrate: 19200
 Bits: 8
 Stop bits: 1
 Parity: None

Global Commands

???[CR]

Respond with board type and address.

Response

T16 EF This board is a Top16 and its' address is EF

Super4 RS485 Relay Module

#AAHM[CR]

AA - hex address of this board 00 to FF
 H - hex number 0 to F to set the 4 bits of the output
 M - mask (0 to F) which outputs to affect and which to ignore
 (1 == output will be affected, 0 == don't change output)
 both H and M are human readable ascii representation of the HEX number

returns:

>AAH[CR] - where H is hex representation of the new output state (4 bits)
 AAH are human readable ascii representation of the HEX numbers.

or

[CR]> if error or unsuccessful.

!AAHMCC[CR]

Same as above but with crc checksum
 CC = 1 byte CRC in human readable format (00 to FF)
 The CRC is calculated for every byte in the string including the '!' character.

returns:

>AAH[CR] - where H is hex representation of the new output state (4 bits)
 AA is the board address
 AAH are human readable ascii representation of the HEX numbers.

Or

>ERR CRC Error

Top16 RS485 IO Module

```
#AAHHMM[CR] AA - hex address of this board 00 to FF
                HH - hex number 00 to FF to set the 8 bits of the output
                MM - mask (00 to FF) which outputs to affect and which to ignore
                    (1 == output will be affected, 0 == don't change output)
                both HH and MM are human readable ascii representation of the HEX
                number
```

returns:

```
>AAIIIO[CR] - where II is hex representation of input bits (8),
                and OO is hex representation of output bits (8)
                IIOO are human readable ascii representation of the HEX numbers.
```

or

```
>ERR if error or unsuccessful.
```

```
#AA(Z to T)(1 to 8)
                analog input command, reads at the specified gain and returns 4
                byte raw analog value. Where:
                AA - hex address of this board 00 to FF
                Z = gain of 1, Y = 2, X = 4, W = 8, V = 16, U = 32, T = 64
```

```
#AAP(1 to 8)(00 to FF)
                AA - hex address of this board 00 to FF
                pwm output setting, sets the output to PWM value 00 to FF
```

```
#AAI (1 to 8)
                AA - hex address of this board 00 to FF
                return pulse count for specified input (negative edges)
```

Using CRC

When using a 1 byte polynomial CRC, the above commands should use '!' in place of the '#' character and the CRC should be appended to the end of the command.

Example:

```
!AAHHMMCC[CR]
                Where CC = 1 byte (2 nibbles) CRC (CRC calculation on separate
                document)
                The CRC is calculated for the whole command including the '!'
                character.
                For CRC calculation each character in the string is a byte, however the
                calculated CRC 'CC' is a two character representation of the CRC byte.
```

Returns:

```
>AAIIIO[CR]
or
>ERR          CRC Error
```

END.