NightBlend Node Communication Protocol
Version 0.3

SERIAL

Read and write IP related information from and to the node.

- Baud rate: 9600 kbps
- Command must be terminated with carriage return.

COMMAND	DESCRIPTION
WRITE:IP:100.168.1.70<CR>	Write and save IP address
WRITE:SUBNET:255.255.0.0<CR>	Write and save Subnet
WRITE:GATEWAY:100.168.4.1<CR>	Write and save Gateway
WRITE:DNS:100.168.4.1<CR>	Write and save DNS
READ:IP<CR>	Read IP address
READ:SUBNET<CR>	Read Subnet
READ:GATEWAY<CR>	Read Gateway
READ:DNS<CR>	Read DNS
READ:ALL<CR>	Read all network information
RESTART:NET<CR>	Restart

EEPROM ADDRESS

IP related information are stored in the following EEPROM addresses. Each IP segment is stored as a single address.

COMMAND	DESCRIPTION
IP ADDRESS	0, 1, 2, 3
SUBNET	4, 5, 6, 7
GATEWAY	8, 9, 10, 11
DNS	12, 13, 14, 15
LEFT BLEND VALUE (NIGHT)	17, 18
RIGHT BLEND VALUE (NIGHT)	19, 20

UDP

Broadcast discovery for node that are available in a network. Correct broadcast address must be used, for example: 100.168.255.255.

- UDP Port: 7001
- Command must be terminated with carriage return

COMMAND	DESCRIPTION
WHO<CR>	Node will respond with their network information

TCP

Set the node blending mode. Available modes are in the table below:

- TCP Port: 7001
- Command must be terminated with carriage return.

COMMAND	DESCRIPTION
DAY<CR>	Set to day mode
NIGHT<CR>	Set to night mode
[1050 TO 1600]<CR>	Set both left/right blend to specific value (range: 1050 to 1600)
L:[1050 TO 1600]<CR>	Set left blend to specific value individually (range: 1050 to 1600) and save it to EEPROM. Leave the value parameter blank to read back current value from EEPROM.
R:[1050 TO 1600]<CR>	Set right blend to specific value individually (range: 1050 to 1600) and save it to EEPROM. Leave the value parameter blank to read back current value from EEPROM.