



# eyePower Limited

Unit 1 Bespoke Spaces, 465C Hornsey Road,  
London, N19 4DR, United Kingdom.

## eyePower TCP Config User Manual

Version 3.1

18<sup>th</sup> August 2025

### **SAFETY NOTICE**

End users must be made aware that power outlets are remote controlled  
This unit is not certified for safety isolation of the electrical supply

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## Overview

The eyePower Limited power distribution unit (PDU) has fourteen individually switched outlets with inlet current/voltage measurement and optional output current measurement. The status of each outlet (on, off, fuse blown) can be seen on the front panel indicators, checked via the integrated serial port using a control system, or embedded Ethernet web server.

eyePower TCP Config software is available for setting up an eyePower PDU using the Ethernet port. An alternative program, eyePower Windows™ software connected via a serial port, has additional control functions not available in eyePower TCP Config. Either of these programs can be used to change unit fixed IP and DHCP enable/disable options, although units ship with DHCP enabled. IP address changes will be added to the web browser interface, but the benefit of using standalone software is separation of operational and engineering functions. As will be seen, IP settings are only a small part of the functions offered by eyePower TCP Config software that allows programming of macros controlling outputs and GPIs.

eyePower Limited's designs have been incorporated in intelligent PDU since the 1990s and started with delayed sequence-on units followed by changeover, dual supply units. The SMS unit, now over a decade old and well proven, was developed after users asked for widely varying combinations of sequence on/off, response to GPIs etc. SMS offered total programmability with user defined macro routines. eyePower represents the next generation after SMS, with current and various voltage measurements going beyond basic RMS measurements that do not fully represent modern, complex power loads.

Using eyePower TCP Config software, the eyePower Power Distribution Unit (PDU) can be loaded with sequencing routines so the unit works autonomously. These autonomous routines are loaded into the eyePower PDU and are stored into memory that will last for decades without the unit even being powered. With no control system connected, autonomous operation can still be influenced by external events such as night-time shutdown, changeover to backup power, or a fire. This requires logic level (0V/+5V) signals to be connected into any of the four GPI (General Purpose Interface) connections of the eyePower PDU.

This document explains operation of the eyePower TCP Config Software. However, details of the robust communications protocol are available as a separate document for those wanting to write their own control software, or gain more in-depth knowledge of the eyePower PDU operation.

With thousands of units now in service, we have seen how installations world-wide have made best use of the programming capabilities.

As for any software, some users need no help while others have contacted eyePower Limited for advice and how best to write macro programs. This is all part of the service, not least because we are interested how the units are used, but we also want to see them used in the best way.





## Connections and Communications

### ***Ethernet Interface Module***

The eyePower PDU is fitted with an Ethernet interface module. Commands can be sent over TCP using the inbuilt Serial Bridge to a dedicated port number, allowing control and monitoring of units across both LAN and WAN networks. Power over Ethernet (PoE) is fitted as standard and will run the PDU electronics in case of power failure or extended brownout. The Ethernet interface also offers an embedded web browser interface and will support SNMP in a future firmware release.

Connectivity is also available through an RS422/485 serial interface. Please see the eyePower User Manual for more information.

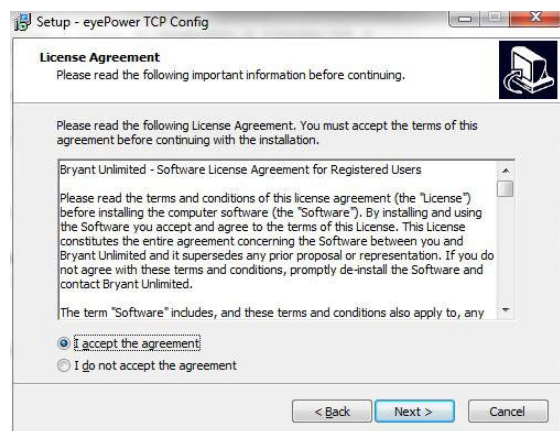
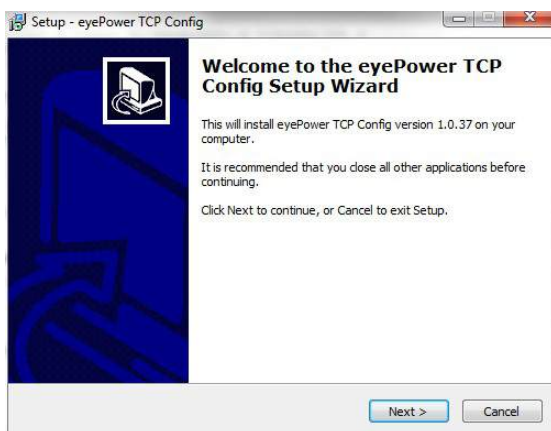
### ***Dallas/Maxim 1-Wire™:***

A port is available to connect external Dallas/Maxim 1-Wire™ environmental sensors.

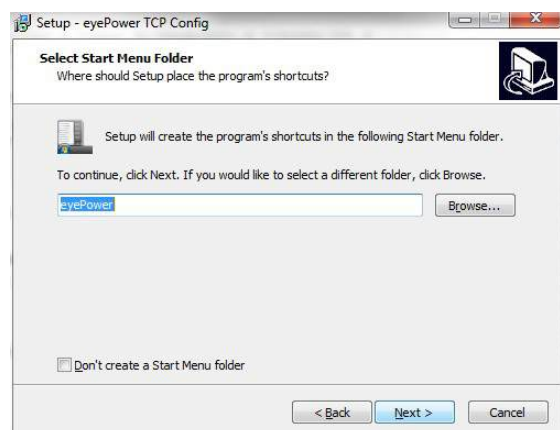
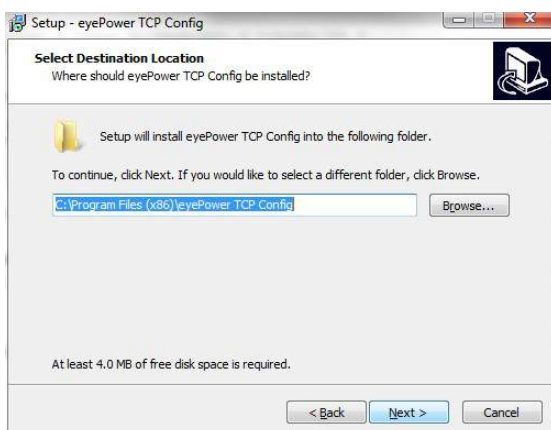


## Software Installation:

Download eyePower TCP Config software from [www.eyepowerlimited.co.uk](http://www.eyepowerlimited.co.uk) - support menu top right of the screen. Extract the zip file and double click on the eyePower TCP Config Setup vx-x-x.exe file, confirming that you wish to install eyePower Software on your computer. The Setup Wizard will start, click Next to continue and confirm the License Agreement. The prompts that follow are typical for any Windows software installation, selecting installation directory, start menu name, desktop icons etc.

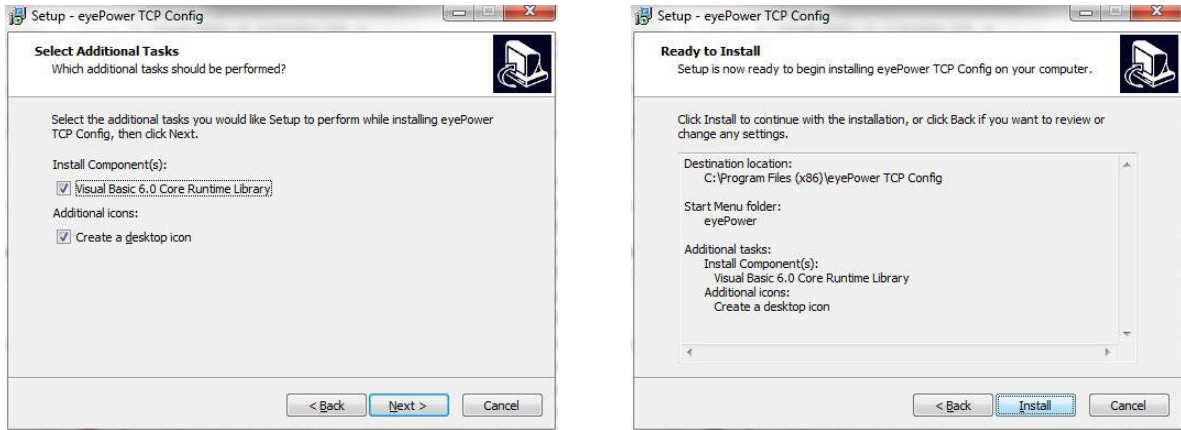


The default installation directory is C:\Program Files (x86)\eyePower. The default start menu folder is eyePower. Both of these items can be changed.





An Additional Tasks window is displayed where you can select whether to install the VB6 Core Runtime Library and Create a desktop Icon. You should install the Core Runtime Library but the desktop item is optional. A Window will be displayed summarising what is about to be installed.



Once completed, a window will be displayed giving you the option to run the eyePower Software. Select Finish to complete the installation.



eyePower TCP Config software is now installed on your computer.

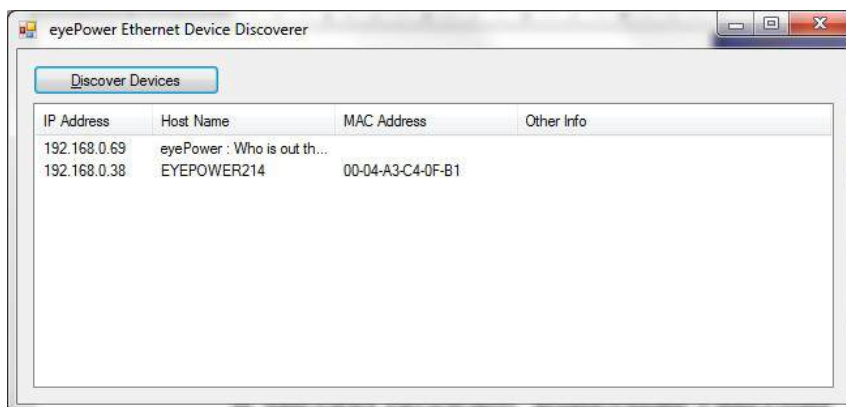


## Connecting the PDU

The Ethernet port on the eyePower PDU is Auto MDI-X and can be connected either directly to a PC or to a network switch using a standard Ethernet cable.

If the PDU is connected directly to a PC, it will have a fixed IP address of 192.168.10.100, so the PC's network port will need to be set to an IP address in the same subnet.

eyePower PDU leave the factory with DHCP enabled, so if connected to a network switch they will automatically receive a random IP address from the DHCP Server. A second program, eyePower Discover, will be installed at the same time as eyePower TCP Config, which can find any eyePower PDU connected to the LAN within the same subnet and display its IP Address, NetBIOS Name and MAC Address. The default NetBIOS name is set to "EYEPOWERxxxxx" where "xxxxx" is the last five digits of the serial number.



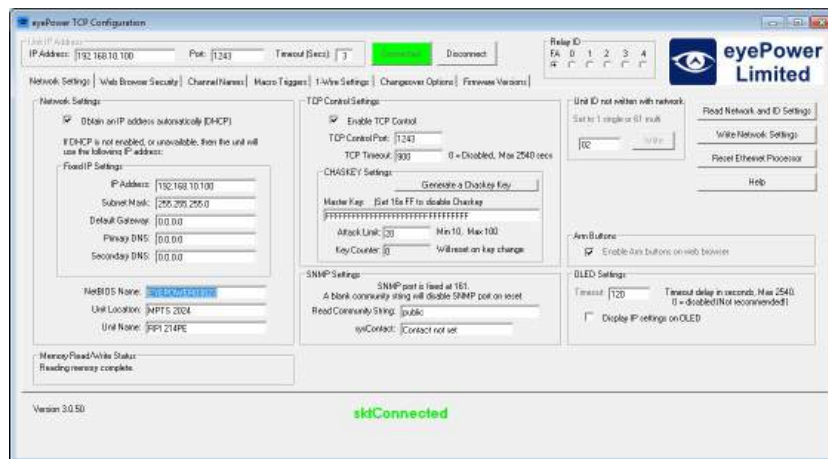


## Software Setup

### First Run:

Run the software using your preferred start button or desktop icon.

The first screen you will see is the Network Settings screen with everything greyed out.



Opening Screen: Connected

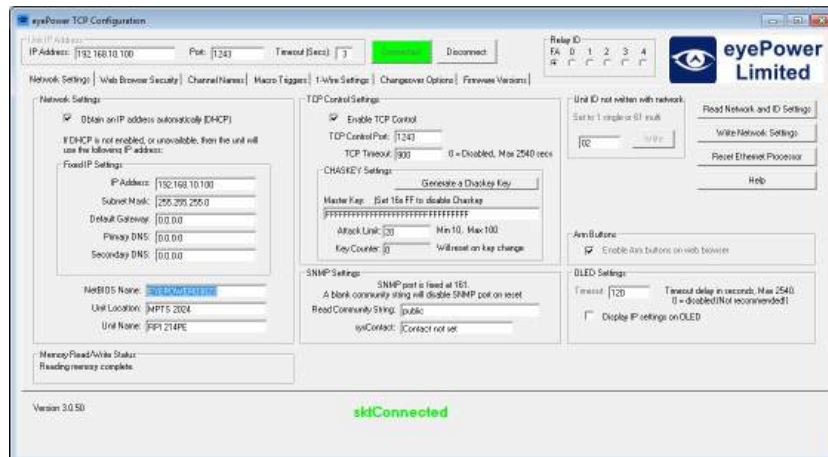
Type the IP address of your PDU into the IP Address field and press the 'Connect' button. If the software successfully connects to the PDU the button will turn green and say "Connected".

Click on the 'Read Network Settings' button to read the network settings from the PDU.



## Network Settings Tab:

This tab allows you to set the parameters to allow you to connect to your eyePower PDU through your network using the web browser interface.



Network Settings Tab.

By default, the PDU is set up with DHCP enabled, so it automatically picks up an IP address from your DHCP server. The PDU has a default fixed IP address set to 192.168.10.100, so you can connect from your computer directly by plugging an Ethernet cable between the two. The PDU Ethernet interface is Auto MDI-X, so you do not need a crossover cable. However, you will need to set your computer to be on the same IP subnet (192.168.10.xxx).

## Network Settings section:

Obtain an IP address automatically (DHCP): Unticking this check box will allow you to set your own fixed IP address, default gateway etc.

IP Address: Network address for the eyePower PDU.

Subnet Mask: The subnet mask, normally 255.255.255.0

Default Gateway: IP address of the gateway for network traffic destined to other networks or subnets.

Primary & Secondary DNS: IP address of the name server(s) for your network.

NetBIOS Name: The default setting for the NetBIOS name is EYEPOWERxxxxx. The last 5 digits are the last 5 digits of the unit's serial number. You can change this NetBIOS name to be whatever you like up to a maximum of 14 characters, avoid spaces and lower case characters. You may be able to connect to the eyePower PDU by typing the NetBIOS name into your web browser address bar.

Unit Location and Unit Name: These fields are available for you to give a location and name to each PDU on your network, 'Main CAR' and 'Rack 17' for instance. These names will be displayed at the top of the eyePower software screen and also in the web browser interface.



### *TCP Control Settings section:*

- Enable TCP Control: Unticking this check box will stop the PDU being controlled over TCP by our eyePower TCP Control software or third party programs.
- TCP Control Port: The port (default 1243) to connect to the PDU over TCP.
- TCP Timeout: If the PDU does not receive a command within this time period, it will close the network port.
- CHASKEY Settings: This section is for setting security on the TCP control port. If you require more information, please contact eyePower Limited.  
**Please Note:** If you set a key here, you will no longer be able to use this software to configure the unit. Once set, the CHASKEY key can only be changed by using the Serial Software.

### *SNMP Settings section:*

eyePower PDU can be monitored using SNMPV2c polling. Use this section to set the Read Community String and sysContact if required.

### *Arm Buttons section:*

- Enable Arm buttons on web: Check this box to add Arm buttons to the web browser interface. This will then require two clicks of the mouse to switch a channel on and off.

### *OLED Settings section:*

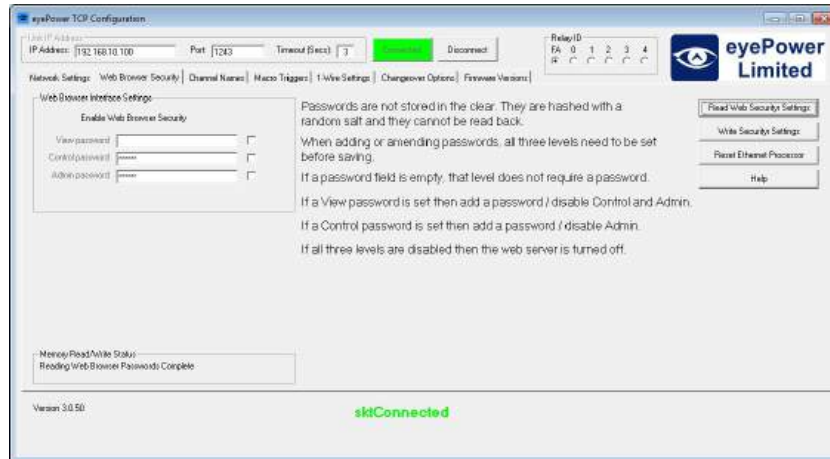
- Timeout: The timeout value for the front panel OLED screen in seconds (default 120), which can be set in multiples of 10 seconds up to a maximum of 2540. A value of 0 (zero) will leave the OLED screen on permanently. This is not advised as like all display technologies, OLED screens have a finite lifespan.

Once you have set the Network Settings, you must click the 'Write Network Settings' button to save them to the PDU.

These settings will only be applied to the PDU embedded Ethernet server after it is reset. Ethernet Reset can be initiated by clicking the 'Reset Ethernet Processor' button or it can be accessed through the 'Unit' menu on the PDU front panel display.



## Web Browser Security tab:



Web Browser Security tab.

Click on the 'Read Web Security Settings' button to read the network settings from the PDU.

### Web Browser Interface Settings section:

An eyePower PDU has three levels of security as follows:

- View. The user can view the web browser screen, but not interact with it.
- Control. The user can view and control the PDU using the web browser.
- Admin. The user can also perform Admin tasks.

Passwords are not stored 'in the clear'.

When adding or amending passwords, all three levels need to be set before saving.

Clicking the checkbox to the right of a password field will disable that level completely.

If a password field is empty, that level does not require a password.

If a View password is set then you must add a password to or disable Control and Admin levels.

If a Control password is set then you must add a password to or disable the Admin level.

If all three levels are disabled, then the web server is turned off.

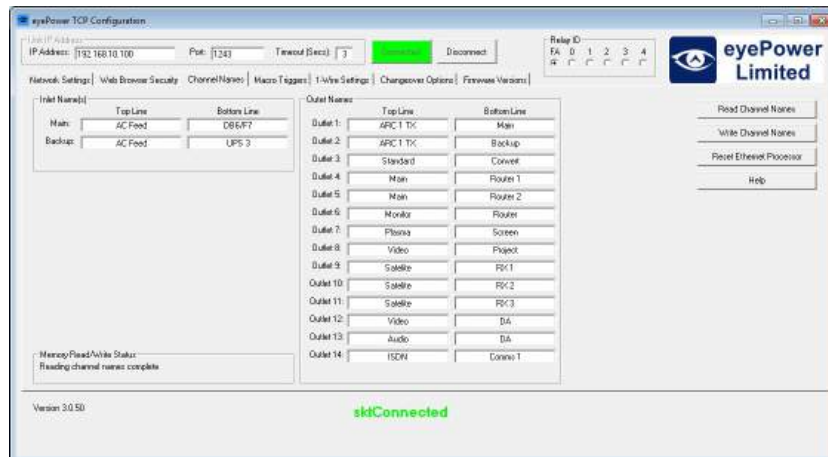
In the above screenshot, the View level is open to anyone, but the Control and Admin levels require a password.



## Channel Names Tab:

This tab allows you to set the inlet and outlet channel names, which appear on the front panel OLED display and the embedded web browser interface.

First click the 'Read Channel Names' button to load the names from PDU memory.



Channel Names tab.

Channel names are limited to 8 characters per line (hence the strange spelling of "Satelite" in the image above).

Once you have set the Channel names, you must click the 'Write Channel Names' button to save them to the PDU.

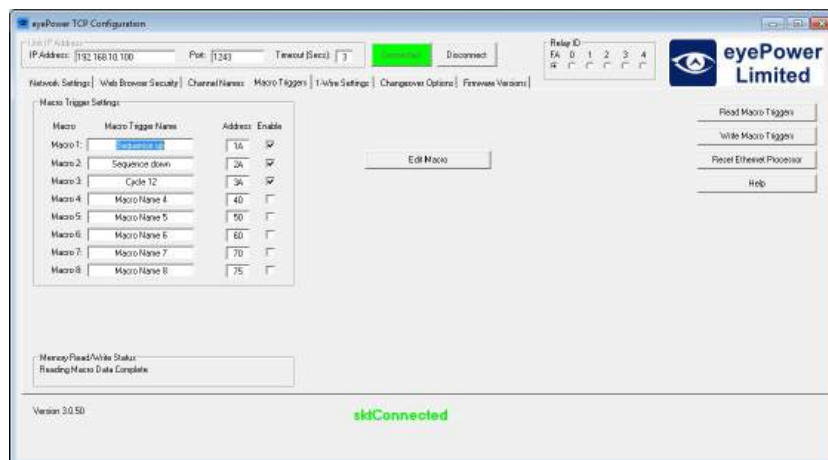
The channel names will appear on the front panel OLED display immediately but will only appear on the Web Browser Interface after the embedded Ethernet server is reset. Ethernet Reset can be initiated by clicking the 'Reset Ethernet Processor' button or it can be accessed through the 'Unit' menu on the PDU front panel display.



## Macro Settings Tab:

As described later in this document, the eyePower PDU has a sophisticated macro programming language built into each unit allowing you to pre-program relay on-off sequences. This tab will allow you to set up triggers to run a specific sequence by clicking a button on the Macro Triggers page of the Web Browser Interface.

First click the 'Read Macro Triggers' button to load the settings from PDU memory.



Macro Triggers tab.

Macro Trigger names are limited to 14 characters per line.

Macro Trigger Name: A descriptive name for the macro sequence.

Address: The macro address of the sequence that you want to run (in Hex).

Enable: Allows you to enable or disable specific macros from being run through the web browser interface.

Once you have set the Macro Trigger Settings, you must click the 'Write Macro Triggers' button to save them to the PDU.

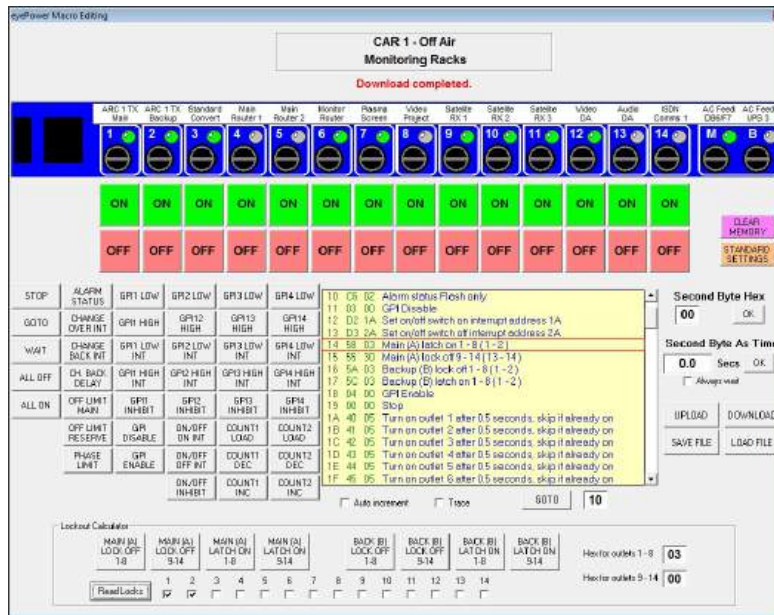
The macro trigger names will only appear on the Web Browser Interface after the embedded Ethernet server is reset. Ethernet Reset can be initiated by clicking the 'Reset Ethernet Processor' button or it can be accessed through the 'Unit' menu on the PDU front panel display.

Clicking on the 'Edit Macro' button opens a new window for advanced macro programming.



## Advanced Macro Programming:

Advanced editing allows the user to define an entirely custom program including setting of GPI inputs and outputs. **Please note that we do not advise editing macros on a live PDU.**



It is suggested demonstration setups are loaded first.

Click the 'Load File' button and select sample macro routine 'eyePower sequential start up only.sms'. This is a macro routine to power relays 1 to 14 in order like a simple sequential mains unit. Click on the 'upload' button and, when complete (see message at top of screen), disconnect the eyePower PDU power inlet, wait, and then reconnect. You will need to reconnect the software to the PDU after repowering.

Assuming the eyePower PDU sequenced on as expected when the front panel switch is switch down, look at the macro routine listing,

10	C6	02	Alarm status Flash only
11	03	00	GPI Disable
12	D2	1A	Set on/off switch on interrupt address 1A
13	D3	2A	Set on/off switch off interrupt address 2A
14	58	03	Main (A) latch on 1-8 (1-2)
15	55	30	Main (A) lock off 9-14 (13-14)
16	5A	03	Backup (B) lock off 1-8 (1-2)
17	5C	03	Backup (B) latch on 1-8 (1-2)
18	04	00	GPI Enable
19	00	00	Stop
1A	40	05	Turn on outlet 1 after 0.5 seconds, skip if already on
1B	41	05	Turn on outlet 2 after 0.5 seconds, skip if already on
1C	42	05	Turn on outlet 3 after 0.5 seconds, skip if already on
1D	43	05	Turn on outlet 4 after 0.5 seconds, skip if already on
1E	44	05	Turn on outlet 5 after 0.5 seconds, skip if already on
1F	45	05	Turn on outlet 6 after 0.5 seconds, skip if already on



The first column, 10 to 1F is the macro address for each line of macro code. When the eyePower PDU is first powered, it always looks to address 10 for its first macro command. In this case it is 'Alarm status Flash and Beep'. Commands follow on in turn, until stop is reached at macro address 14 (hexadecimal).

The green numbers are the two hexadecimal values stored in the eyePower PDU for each macro command. Using eyePower Software, knowledge of these numbers is not important.

Click the Trace check box. The red outline box will jump to location 38 as it is theoretically at the end of its off sequence. Switching the front panel switch down, the red outline box should follow the macro code currently being executed and stop at location 28.

Disable trace.

To write an experimental program, click on the 'Clear Mem' button to start with a blank program list. Click on the top (10) program line, i.e. where the eyePower PDU will look for its first command. Enter delays into the time box,

Second Byte As Time

0.0 Secs OK

Always wait

The time will be red until OK is pressed, which calculates the hexadecimal equivalent and displays it in the box above. Normally delays are ignored if the outlet is already in the required state – the macro routine moves straight on to the next instruction. If the 'Always wait' check box is ticked, delay times are maintained even if the outlet is already in the required state.

Ignoring the grey buttons to the left of the program list, enter a sample sequence of outlets turning on and off using the green/red buttons associated with each outlet. To select the next line, either click on the line required or check the 'Auto increment' box, which will advance one line every time a macro entry is programmed.

Click on the 'Upload' button to upload the sample program to the PDU, then disconnect the power, wait, reconnect the eyePower PDU and prove your basic programming skills.



The grey buttons that have not been used provide the following macro commands,

STOP	Halts program execution, could be restarted by a GPI if programmed
GOTO	Goto macro address, set 10, 11, 12 etc. by first entering in 'second byte as hex' box and clicking OK. Then click GOTO
WAIT	Waits for time pre-entered (+OK) in time box
ALL OFF	Waits for time pre-entered (+OK) in time box then turns off all outlets
ALL ON	Waits for time pre-entered (+OK) in time box then turns on all outlets
GPIx LOW	Set GPIx as low output
GPIx HIGH	Set GPIx as high output
GPIx LOW INT	Set GPIx as input. If GPIx is already low or goes low in the future, macro execution will jump to address specified by first entering in 'second byte as hex' box and clicking OK.
GPIx HIGH INT	Set GPIx as input. If GPIx is already high or goes high in the future, macro execution will jump to address specified by first entering in 'second byte as hex' box and clicking OK, Again for front switch.
GPIx INHIBIT	Inhibit GPIx effect as an input for time pre-entered (+OK) in time box. When time expires any GPI level change during inhibit will be effective.
GPI DISABLE	GPI input and front switch interrupts are disabled allowing sequences to complete before interrupts re-enabled. This is an important command that should be issued before setting several interrupts or as the first command in an interrupt routine to ensure predictable behaviour.
GPI ENABLE	Re-enable after disable above, when routine is complete, or new interrupts will not be processed. By default enabled at power on.
ON/OFF ON INT	If the front panel on/off switch is already in the 'on' position or is switched to the on position in the future, macro execution will jump to address specified by first entering in 'second byte as hex' box and clicking OK.
ON/OFF OFF INT	If the front panel on/off switch is already in the 'off' position or is switched to the off position in the future, macro execution will jump to address specified by first entering in 'second byte as hex' box and clicking OK.
ON/OFF INHIBIT	Inhibit the on/off switch from any effect for time pre-entered (+OK) in time box. When time expires any on/off switch position change during inhibit will be effective.
COUNTx LOAD	Load counter x with a number pre-entered in 'second byte as hex' box
COUNTx DEC	Decrement counter x, if it reaches zero then jump to macro address specified by first entering in 'second byte as hex' box and clicking OK
COUNTx INC	Increment counter x, if it reaches 255 then jump to macro address specified by first entering in 'second byte as hex' box and clicking OK

You can save your macro program to disk by clicking on the 'Save file' button. The file that is saved is human readable to aid debugging. The Macro Triggers are also saved to the file, but these are not imported when the file is reloaded.

The 'Download' button will download the macro program from the PDU, overwriting any program shown in the software.



### ***Other sample .sms files:***

#### **eyePower Counter demo.sms**

Loads counter 1 with 5, turns outlet 1 on then off, decrements counter, carries on switching outlet 1 until counter is zero. Then turns on outlet 14 before stopping.

This is a very simple demonstration, but the counter may be used to limit the number of times equipment is restarted after power failure, before triggering an alarm as a GPI or connected to a mains output.

#### **GPI 1 to 4 operate outlets 1 to 4 with disable used to ensure completion.sms**

The sequence starts by disabling interrupts, so that interrupt definition can complete without interruption. Once re-enabled, the current state of GPIs will direct program flow, Each GPI routine starts by disabling further interrupts. This ensures completion of that GPI sequence, before re-enabling other GPIs.

Not all applications will use GPI Disable. It may be important to allow GPIs to override other actions.

#### **eyePower as it leaves the programmer.sms**

This is the macro that is installed in the eyePower PDU when it leaves the factory. It is provided so that if all else fails, you can reload this macro and start again.



## **1-Wire® Environmental Sensors:**

eyePower offers a 1-Wire® port to allow connection of environmental sensors. The 1-Wire system was invented by Dallas Semiconductor, that company acquired by Maxim in 2001, and combines both power and data on a single cable core. The "1-Wire" refers to this power/data line but signal ground is also required. The powering method is referred to as parasitic power, with sensors charging between bursts of data.

Although 1-Wire is widely used for environmental sensors, one variant is coin-sized ID devices that have been used for many years as door access control or that are often seen as personalised keys for cash registers. The technology is well proven, reliable and stable. All 1-Wire devices have a unique, factory set 64 bit address.

Sensors currently supported and sold by eyePower Limited are

- DS18B20 temperature (type T single or TS string)
- DS2438 temperature (MS-T)
- DS2438 temperature and humidity (MS-TH)

Temperature sensors based on the DS18B20 are supplied fully wired with CAT5 cable and RJ45 plugs. Options include a single sensor T or a string of six sensors TS spaced to suit the height of an equipment rack. To wire multiple T or TS with fitted plugs, the eyePower 1-Wire port should be distributed using an RJ45 parallel strip or splitter.

DS2438 was originally designed as a battery monitor, measuring temperature and voltage when integrated inside battery packs. This sensor was quickly adopted for other uses such as temperature and humidity sensors which output a voltage relative to humidity, a voltage that the DS2438 can convert. MS-T and MS-TH sensors are easily wired in a chain because the small enclosures have two RJ45 sockets to allow loop through. If combining a wired DS18B20 sensor or string and humidity sensor, for example, then the wired sensor can be daisy chained off the humidity sensor.



*T-String (TS) cable with 6 x DS18B20 temperature sensors.*

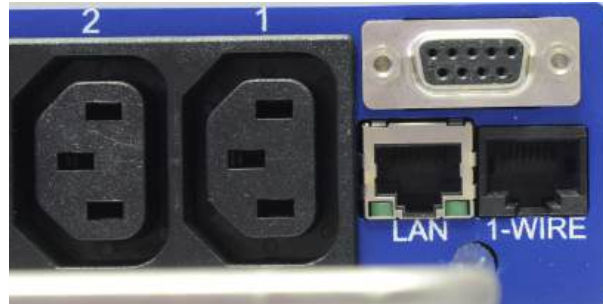


*Temperature and Humidity module (MS-TH).*

There are standard 1-Wire sensors that offer GPIO capability, but any future demand for GPIO is likely to be met with a custom Bryant GPIO box that would be 1-Wire compatible and still communicate on the 1-Wire bus. eyePower equipped with 1-Wire also offer four GPIOs as standard on the adjacent D9 socket.



Various cable and connector types have been used for 1-Wire but the ubiquitous RJ45 connector with unscreened CAT5/CAT5e cable is now widespread. The eyePower rear panel connector is an RJ45 socket, with the pin used for data/power different to the pins used for Ethernet data so mis-plugging between the two rear connectors is not an issue.



*eyePower PDU Interface Ports.*

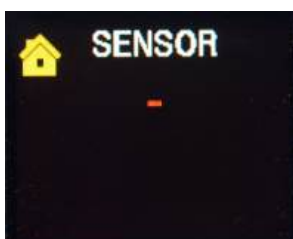
- Pin 2 1-Wire optional 5V, grounded in eyePower units to indicate use of parasitic power
- Pin 4 1-Wire data and parasitic power
- Pin 5 1-Wire ground return

Large numbers of 1-Wire devices can be connected on a shared bus (firmware V1.4.3 onwards), sensors' unique IDs are used for every message with robust cyclic redundancy checksums used to prove message validity.

Most users will not approach the limits of the 1-Wire port. It is difficult to give an exact figure for the number of sensors relative to maximum cable length. This is the same for any multidrop bus, but it is recommended to use only CAT5e network cabling and wire as a chain or, less ideal, star wired close to the eyePower unit. Do not combine chain/star arrangements and avoid stubs. eyePower supports a maximum sixteen sensors, where temperature/humidity counts as two. Sixteen sensors will work reliably if cabling is local to an equipment rack. Electrically noisy environments will limit 1-Wire cable length, but smaller numbers of sensors will work over a few tens of metres' cabling. Performance at the limit can be improved with the addition of an external power supply that injects power into the bus, rather than relying on parasitic power. Contact eyePower Limited for more details if required.

### **Basic 1-Wire with Single Sensor**

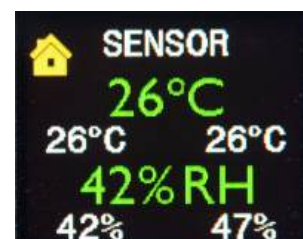
The simplest 1-Wire connection is a single sensor, which will display automatically as temperature or temp/humidity on the unit's OLED display. This is the same as software before version 1.4.3 (September 2015). The web browser interface will also display temp or temp/humidity values.



*No sensor connected*



*Temp T or MS-T with min/max*



*Temp/humidity MS-TH*



## 1-Wire with Multiple Sensors

Sensors sold by eyePower Limited are marked with the sensor's 64 bit address, although the T-String is labelled with only one of the six sensors. However, anyone buying DS18B20 sensors to wire themselves will not have the address information.

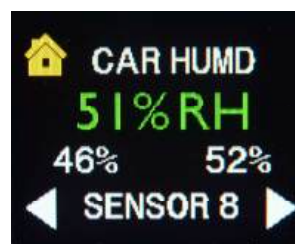
Even with the address information it would be onerous to type into the eyePower Windows program all addresses for a multi sensor system. eyePower Limited have developed a far more user-friendly method.

From new an eyePower unit holds no 1-Wire sensor addresses. For a basic system this is not an issue, a single sensor added at any time will be automatically detected and there is no need for eyePower to store that sensor's address. For multiple sensors, as sensors are plugged in turn, they are added to a live table of sensor addresses. The first sensor plugged into eyePower becomes sensor 1, the next is sensor 2 etc. When strings are plugged, all six sensors are automatically added in order with the sensor closest to the RJ45 plug the first to be added. Default sensor names are SENSE1, SENSE2 etc. which are used on the local OLED and embedded web browser interface.

While at least one sensor remains plugged to eyePower, and power is maintained to eyePower, this live table is maintained. However, if the sensor chain has to be rescanned as a whole due to disconnection or mains power cycle then they may not return in the same order as plugged - the scanning order is determined by a complex branch and fork discovery technique designed into the 1-Wire standard. Therefore it is important when the sensors have been plugged in a specific order that the live addresses are committed to permanent memory. At the same time each sensor can be given a more helpful name than the default SENSEx. See 1-Wire Options below.



*Multiple Sensor (TS) with edited name*



*Multiple Sensor (MS-TH) with edited name*

It may help to understand that the saved table can be cleared at any time, i.e. the table is not fixed for life. eyePower will then behave as if the sensors had again been plugged but not committed to memory. Also, the table of addresses is simply what is read first before searching for additional sensors hence new sensors can be easily added (then committed) to the end of an existing chain if there is no requirement to re-order the existing sensors.



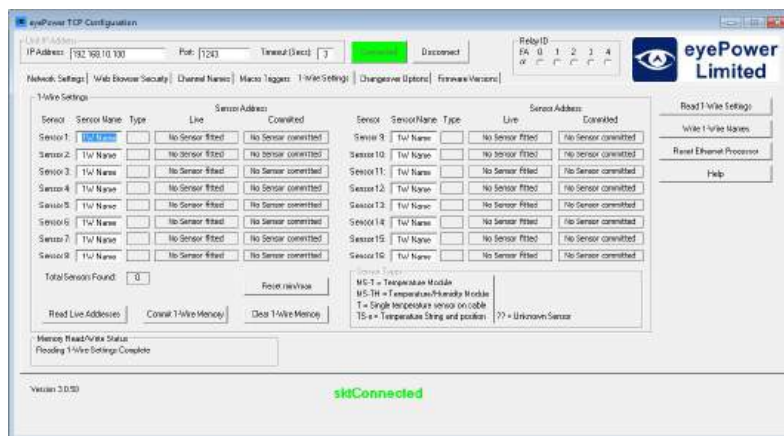
Where eyePower expects to detect sensors, either because they are in the temporary live table or have been committed to memory, any missing sensor will be noted on the OLED or web browser interface as FAULT.



Multiple Sensor (TS) with edited name

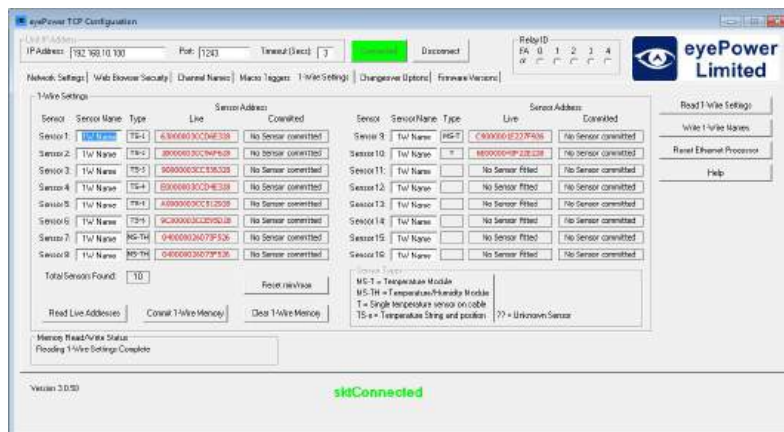
### 1-Wire Settings Tab:

The 1-Wire Options tab, in either eyePower Software or eyePower TCP Config, can be used to commit the 1-Wire sensor addresses to memory and edit the Sensor names that are displayed on the local OLED screen and embedded web browser interface.



1-Wire Settings tab: No sensors fitted.

Remembering that the sensors will appear in the order that you plug them in, after you have connected all sensors, wait for about 5 seconds and click the 'Read Live Addresses' button to populate the 'Type' and 'Live' fields. The sensor addresses will be highlighted in red to show that they have not been committed to memory.



1-Wire Settings tab: 10 sensors fitted, but not committed.



Once you can see all of the sensors in the 'Live' address fields, you can commit the 1-Wire addresses to internal memory using the 'Commit 1-Wire Memory' button. This fixes the positions of the sensors so that they will always appear in the same place.

The screenshot shows the '1-Wire Settings' tab in the eyePower TCP Configuration software. The 'Sensor Address' table has 10 rows, all with green 'Committed' status. The 'Live' column contains the 1-Wire addresses for each sensor. The 'Total Sensors Found' is 10. The 'Commit 1-Wire Memory' button is highlighted in green.

Sensor	Sensor Name	Type	Live	Committed
Sensor 1	TW-1	1B-C1	6300003C04E328	6300003C04E328
Sensor 2	TW Name	1B-C1	3B00003C04E328	3B00003C04E328
Sensor 3	TW Name	1B-F1	5B00003C04E328	5B00003C04E328
Sensor 4	TW Name	1B-F1	E900003C04E328	E900003C04E328
Sensor 5	TW Name	1B-F1	A800003C04E328	A800003C04E328
Sensor 6	TW Name	1B-F1	9C00003C04E328	9C00003C04E328
Sensor 7	TW Name	MS-TH	0400003267F526	0400003267F526
Sensor 8	TW Name	MS-TH	0400003267F526	0400003267F526

1-Wire Settings tab: 10 sensors fitted and committed.

Additional sensors can be added to those already committed. Plug in the new sensors, wait 5 seconds, click on the 'Read Live Addresses' button. Again, any addresses not committed to memory will be highlighted in red.

The screenshot shows the '1-Wire Settings' tab after adding more sensors. The 'Sensor Address' table now has 16 rows. The first 10 rows are green (committed), and the last 6 rows are red (not committed). The 'Total Sensors Found' is 16. The 'Read Live Addresses' button is highlighted in green.

Sensor	Sensor Name	Type	Live	Committed
Sensor 1	TW-1	1B-C1	6300003C04E328	6300003C04E328
Sensor 2	TW Name	1B-C1	3B00003C04E328	3B00003C04E328
Sensor 3	TW Name	1B-F1	5B00003C04E328	5B00003C04E328
Sensor 4	TW Name	1B-F1	E900003C04E328	E900003C04E328
Sensor 5	TW Name	1B-F1	A800003C04E328	A800003C04E328
Sensor 6	TW Name	1B-F1	9C00003C04E328	9C00003C04E328
Sensor 7	TW Name	MS-TH	0400003267F526	0400003267F526
Sensor 8	TW Name	MS-TH	0400003267F526	0400003267F526
Sensor 9	TW Name	1B-F1	3200003267F526	
Sensor 10	TW Name	1B-F1	4400003267F526	
Sensor 11	TW Name	1B-F1	CA00003267F526	
Sensor 12	TW Name	1B-F1	0300003267F526	
Sensor 13	TW Name	1B-F1	3200003267F526	
Sensor 14	TW Name	1B-F1	4400003267F526	
Sensor 15	TW Name	1B-F1	2300003267F526	
Sensor 16	TW Name	1B-F1	3500003267F526	

1-Wire Settings tab: 16 sensors fitted, 10 sensors committed, 6 sensors not committed.

Click on the 'Commit 1-Wire Memory' button to commit the new sensors to memory.

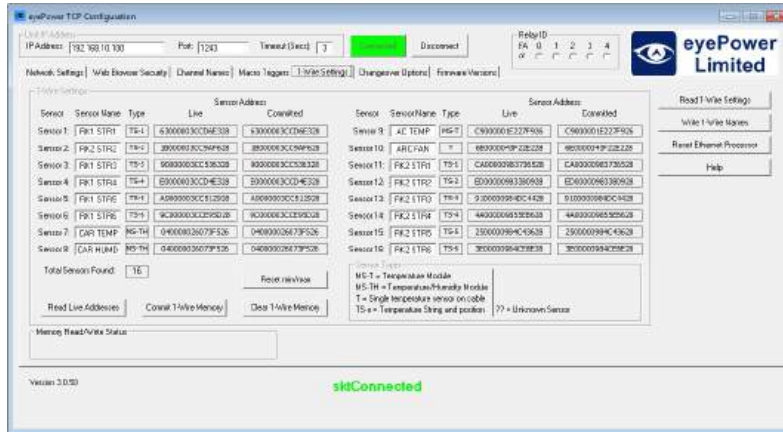
The screenshot shows the '1-Wire Settings' tab after committing the new sensors. The 'Sensor Address' table now has 16 rows, all with green 'Committed' status. The 'Total Sensors Found' is 16. The 'Commit 1-Wire Memory' button is highlighted in green.

Sensor	Sensor Name	Type	Live	Committed
Sensor 1	TW-1	1B-C1	6300003C04E328	6300003C04E328
Sensor 2	TW Name	1B-C1	3B00003C04E328	3B00003C04E328
Sensor 3	TW Name	1B-F1	5B00003C04E328	5B00003C04E328
Sensor 4	TW Name	1B-F1	E900003C04E328	E900003C04E328
Sensor 5	TW Name	1B-F1	A800003C04E328	A800003C04E328
Sensor 6	TW Name	1B-F1	9C00003C04E328	9C00003C04E328
Sensor 7	TW Name	MS-TH	0400003267F526	0400003267F526
Sensor 8	TW Name	MS-TH	0400003267F526	0400003267F526
Sensor 9	TW Name	1B-F1	3200003267F526	3200003267F526
Sensor 10	TW Name	1B-F1	4400003267F526	4400003267F526
Sensor 11	TW Name	1B-F1	CA00003267F526	CA00003267F526
Sensor 12	TW Name	1B-F1	0300003267F526	0300003267F526
Sensor 13	TW Name	1B-F1	3200003267F526	3200003267F526
Sensor 14	TW Name	1B-F1	4400003267F526	4400003267F526
Sensor 15	TW Name	1B-F1	2300003267F526	2300003267F526
Sensor 16	TW Name	1B-F1	3500003267F526	3500003267F526

1-Wire Settings tab: 16 sensors fitted and committed.



You can change the default SENSEx name (up to 8 characters) for each sensor, which will be displayed on the local OLED and embedded web browser interface (only valid if the multiple sensor display is active). Once you have entered the names, you must click the 'Apply' button to save the names back to the PDU.



1-Wire Settings tab: 16 sensors fitted and committed with Sensor Names.

The 1-Wire Names will appear on the front panel OLED display immediately, but will only appear on the Web Browser Interface after the embedded Ethernet server is reset. Ethernet Reset can be initiated by clicking the 'Reset Ethernet Processor' button or it can be accessed through the 'Unit' menu on the PDU front panel display.

**CAR 1 - Off Air**
**Monitoring Racks**

Unit Status | Macro Triggers | Admin | Control allowed
Log out

Outlet	Outlet Name	Outlet Switch	Outlet Status	Graph	Inlet A preferred	Voltage	Hertz	Peak Volts	Crest Factor	N/E Volts	Earth Leakage													
Outlet 1	ARC 1 TX Main	Arm <span style="color: red;">X</span> <span style="color: green;">On</span>	No Load	<input type="checkbox"/>	AC Feed DB8/F7	240V	49.92Hz	328V	1.36	0.1V	1mA													
Outlet 2	ARC 1 TX Backup	Arm <span style="color: red;">X</span> <span style="color: green;">On</span>	No Load	<input type="checkbox"/>	AC Feed UPS 3	0V	-	0V	0	0.0V	0mA													
Outlet 3	Standard Convert	Arm <span style="color: green;">Off</span> <span style="color: green;">On</span>	No Load	<input type="checkbox"/>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Total Current</th> <th>Crest Factor</th> <th>Real Power</th> <th>Apparent Power</th> <th>Power Factor</th> <th>DC Offset</th> <th>Graph Total</th> </tr> <tr> <td>0.204A</td> <td>3.53</td> <td>28.5W</td> <td>48.9VA</td> <td>0.58</td> <td>-0.01V</td> <td><input type="checkbox"/></td> </tr> </table>						Total Current	Crest Factor	Real Power	Apparent Power	Power Factor	DC Offset	Graph Total	0.204A	3.53	28.5W	48.9VA	0.58	-0.01V	<input type="checkbox"/>
Total Current	Crest Factor	Real Power	Apparent Power	Power Factor							DC Offset	Graph Total												
0.204A	3.53	28.5W	48.9VA	0.58	-0.01V	<input type="checkbox"/>																		
Outlet 4	Main Router 1	Arm <span style="color: green;">Off</span> <span style="color: green;">On</span>		<input type="checkbox"/>																				
Outlet 5	Main Router 2	Arm <span style="color: green;">Off</span> <span style="color: green;">On</span>		<input type="checkbox"/>																				
Outlet 6	Monitor Router	Arm <span style="color: green;">Off</span> <span style="color: green;">On</span>	No Load	<input type="checkbox"/>																				
Outlet 7	Plasma Screen	Arm <span style="color: green;">Off</span> <span style="color: green;">On</span>	0.158A 21.5W	<input type="checkbox"/>																				
Outlet 8	Video Project	Arm <span style="color: green;">Off</span> <span style="color: green;">On</span>		<input type="checkbox"/>																				
Outlet 9	Satellite RX 1	Arm <span style="color: green;">Off</span> <span style="color: green;">On</span>	No Load	<input type="checkbox"/>																				
Outlet 10	Satellite RX 2	Arm <span style="color: green;">Off</span> <span style="color: green;">On</span>	No Load	<input type="checkbox"/>																				
Outlet 11	Satellite RX 3	Arm <span style="color: green;">Off</span> <span style="color: green;">On</span>	No Load	<input type="checkbox"/>																				
Outlet 12	Video DA	Arm <span style="color: green;">Off</span> <span style="color: green;">On</span>	No Load	<input type="checkbox"/>																				
Outlet 13	Audio DA	Arm <span style="color: green;">Off</span> <span style="color: red;">X</span>	Relay locked off	<input type="checkbox"/>																				
Outlet 14	ISDN Comms 1	Arm <span style="color: green;">Off</span> <span style="color: red;">X</span>	Relay locked off	<input type="checkbox"/>																				

Internal Temp	RK1 STR1 23°C	RK2 STR2 23°C	RK1 STR3 23°C	RK1 STR4 23°C	RK1 STR5 23°C	RK1 STR6 23°C	CAR TEMP 23°C	CAR HUMD 36%
35°C	AC TEMP 23°C	ARC FAN 23°C	RK2 STR1 23°C	RK2 STR2 23°C	RK2 STR3 23°C	RK2 STR4 23°C	RK2 STR5 23°C	RK2 STR6 23°C

GPIO Status	
High:	<span style="color: green;">●</span> <span style="color: green;">●</span> <span style="color: green;">●</span> <span style="color: green;">●</span>
Low:	<span style="color: grey;">●</span> <span style="color: grey;">●</span> <span style="color: grey;">●</span> <span style="color: grey;">●</span>

Embedded web browser interface showing multiple 1-Wire sensors with names and Min/Max tooltip.