PARSING MAVERICK XML DATA
AND
REMOTELY CONTROLLING OUTPUTS

The following documentation assumes a Maverick (Model IP-PC-101-44) is configured for its default IP address, *192.168.1.10,* as shown in **Figure 1**.

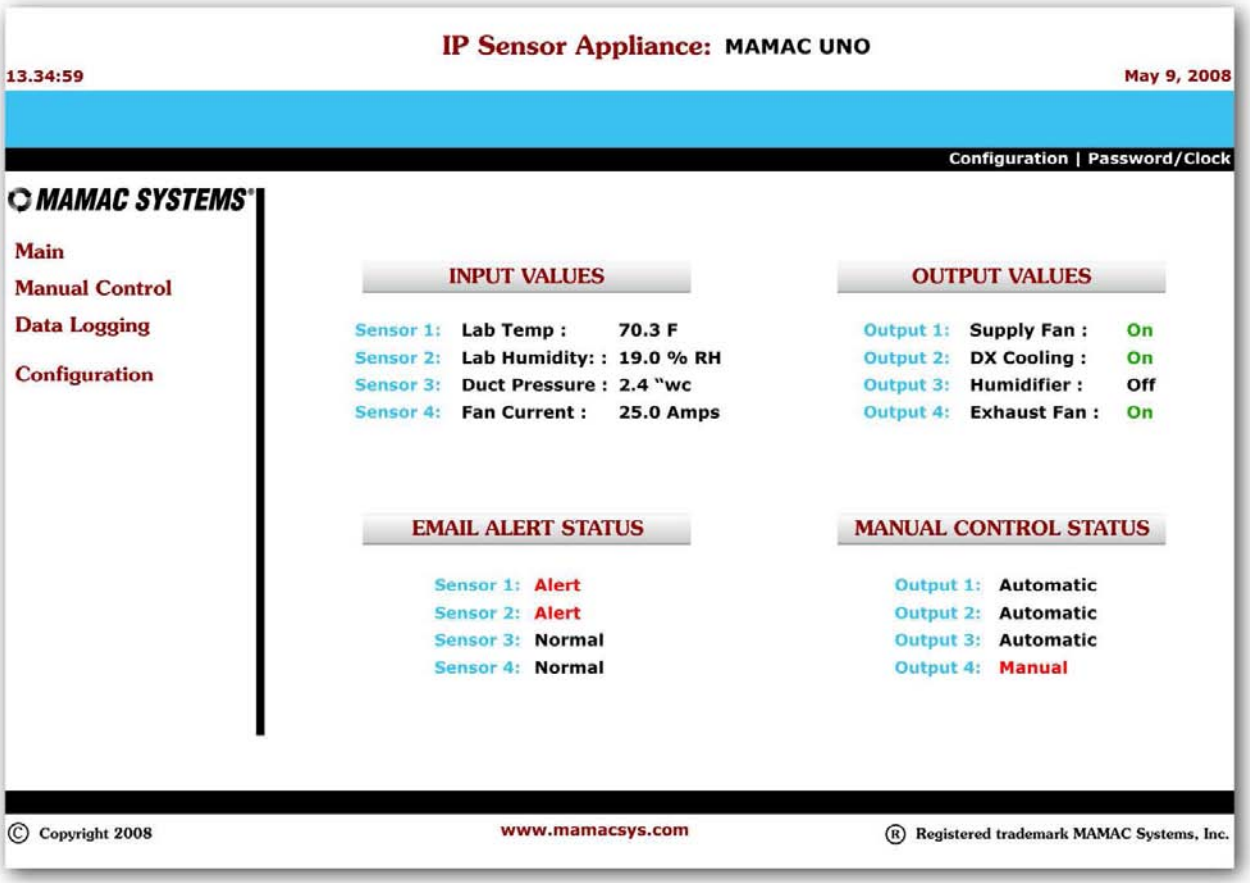

Figure 1: Maverick HTML Output

The Maverick input/output values displayed on the Main page are available in XML format. To request the XML file, request http://192.168.1.10/pc10144.xml. The Maverick will return something similar to the XML shown in **Figure 2**.

***Figure 2**: Maverick XML Output*

```
1.  <?xml version="1.0" encoding="ASCII"?>
2.  <Maverick xmlns="http://mamacsys.com/pc10144" version="1.13">
3.    <NodeID>MAMAC UNO</NodeID>
4.    <CurrentTime>13:34:59</CurrentTime>
5.    <CurrentDate>May 9, 2008</CurrentDate>
6.    <Sensor id="1" Channel="1">
7.      <SensorName>Lab Temp</SensorName>
8.      <SensorValue>70.3</SensorValue>
9.      <SensorUnits>F</SensorUnits>
10.     <SensorAlert>Alert</SensorAlert>
11.     <SensorRelay>None</SensorRelay>
12.     <SensorLTValue>0.0</SensorLTValue>
13.     <SensorGTValue>1.0</SensorGTValue>
14.     <SensorLog>1</SensorLog>
15.   </Sensor>
16.   <Sensor id="2" Channel="2">
17.     <SensorName>Lab Humidity:</SensorName>
18.     <SensorValue>19.0</SensorValue>
19.     <SensorUnits>% RH</SensorUnits>
20.     <SensorAlert>Alert</SensorAlert>
21.     <SensorRelay>None</SensorRelay>
22.     <SensorLTValue>0.0</SensorLTValue>
23.     <SensorGTValue>1.0</SensorGTValue>
24.     <SensorLog>1</SensorLog>
25.   </Sensor>
26.   <Sensor id="3" Channel="3">
27.     <SensorName>Duct Pressure</SensorName>
28.     <SensorValue>2.4</SensorValue>
29.     <SensorUnits>&amp;quot; wc </SensorUnits>
30.     <SensorAlert>Normal</SensorAlert>
31.     <SensorRelay>None</SensorRelay>
32.     <SensorLTValue>0.0</SensorLTValue>
33.     <SensorGTValue>1.0</SensorGTValue>
34.     <SensorLog>1</SensorLog>
35.   </Sensor>
36.   <Sensor id="4" Channel="4">
37.     <SensorName>Fan Current</SensorName>
38.     <SensorValue>25.0</SensorValue>
39.     <SensorUnits>Amps</SensorUnits>
40.     <SensorAlert>Normal</SensorAlert>
41.     <SensorRelay>None</SensorRelay>
42.     <SensorLTValue>0.0</SensorLTValue>
43.     <SensorGTValue>1.0</SensorGTValue>
44.     <SensorLog>1</SensorLog>
45.   </Sensor>
46.   <Output id="5" Channel="5">
47.     <OutputName>Supply Fan</OutputName>
48.     <OutputValue>On</OutputValue>
49.     <OutputControl>Automatic</OutputControl>
50.     <OutputSchedule enabled="0">
51.       <Sunday enabled="0" start="00:00" stop="00:00" />
52.       <Monday enabled="0" start="00:00" stop="00:00" />
53.       <Tuesday enabled="0" start="00:00" stop="00:00" />
```

(Continued on Page 3)

(Continued from Page 2)

```
54.       <Wednesday enabled="0" start="00:00" stop="00:00" />
55.       <Thursday enabled="0" start="00:00" stop="00:00" />
56.       <Friday enabled="0" start="00:00" stop="00:00" />
57.       <Saturday enabled="0" start="00:00" stop="00:00" />
58.     </OutputSchedule>
59.   </Output>
60.   <Output id="6" Channel="6">
61.     <OutputName>DX Cooling</OutputName>
62.     <OutputValue>On</OutputValue>
63.     <OutputControl>Automatic</OutputControl>
64.     <OutputSchedule enabled="0">
65.       <Sunday enabled="0" start="00:00" stop="00:00" />
66.       <Monday enabled="0" start="00:00" stop="00:00" />
67.       <Tuesday enabled="0" start="00:00" stop="00:00" />
68.       <Wednesday enabled="0" start="00:00" stop="00:00" />
69.       <Thursday enabled="0" start="00:00" stop="00:00" />
70.       <Friday enabled="0" start="00:00" stop="00:00" />
71.       <Saturday enabled="0" start="00:00" stop="00:00" />
72.     </OutputSchedule>
73.   </Output>
74.   <Output id="7" Channel="7">
75.     <OutputName>Humidifier</OutputName>
76.     <OutputValue>Off</OutputValue>
77.     <OutputControl>Automatic</OutputControl>
78.     <OutputSchedule enabled="0">
79.       <Sunday enabled="0" start="00:00" stop="00:00" />
80.       <Monday enabled="0" start="00:00" stop="00:00" />
81.       <Tuesday enabled="0" start="00:00" stop="00:00" />
82.       <Wednesday enabled="0" start="00:00" stop="00:00" />
83.       <Thursday enabled="0" start="00:00" stop="00:00" />
84.       <Friday enabled="0" start="00:00" stop="00:00" />
85.       <Saturday enabled="0" start="00:00" stop="00:00" />
86.     </OutputSchedule>
87.   </Output>
88.   <Output id="8" Channel="8">
89.     <OutputName>Exhaust Fan</OutputName>
90.     <OutputValue>On</OutputValue>
91.     <OutputControl>Manual</OutputControl>
92.     <OutputSchedule enabled="0">
93.       <Sunday enabled="0" start="00:00" stop="00:00" />
94.       <Monday enabled="0" start="00:00" stop="00:00" />
95.       <Tuesday enabled="0" start="00:00" stop="00:00" />
96.       <Wednesday enabled="0" start="00:00" stop="00:00" />
97.       <Thursday enabled="0" start="00:00" stop="00:00" />
98.       <Friday enabled="0" start="00:00" stop="00:00" />
99.       <Saturday enabled="0" start="00:00" stop="00:00" />
100.    </OutputSchedule>
101.  </Output>
102.</Maverick>
```

***Figure 2**: Maverick XML Output*

Reference ***Figure 1*** *for the following explanation of the XML output shown in* ***Figure 2****.*

- ***Line 1*** contains the standard XML declaration.

- ***Line 2*** contains the root tag for the XML document <Maverick>. Every XML document must have 1 (*and only 1*) root tag. The root element defines the Maverick XML namespace (http://mamacsys.com/pc10144) with an xmlns attribute. It also has a version attribute containing the firmware version of the Maverick.

- ***Line 3*** contains the configured name of the IP Sensor Appliance in the NodeID element.

- ***Lines 4*** & ***5*** contain the current time and current date respectively.

INPUTS

- ***Lines 6*** through ***45*** contain the XML for the four (4) input sensors.
  - *Lines 6* through *15* contain the XML for Input Sensor 1
  - *Lines 16* through *25* contain the XML for Input Sensor 2
  - *Lines 26* through *35* contain the XML for Input Sensor 3
  - *Lines 36* through *45* contain the XML for Input Sensor 4

Each input sensor has the following XML elements contained within a <Sensor> element. The <Sensor> element has both a Channel and ID attribute that defines the input sensor the element references.

The <SensorName> element contains the configured name given to the input sensor on its configuration page. In **Figure 2**, ***line 7***, the name, *Lab Temp*, was given to the first channel input sensor.

The <SensorValue> element contains the current value of the input sensor at the time the XML data was requested. In **Figure 2**, ***line 8***, the first channel input sensor has a value of *70.3*.

The <SensorUnits> element contains the configured units given to the input sensor on its configuration page. In **Figure 2**, ***line 9***, the units, *F,* for degrees Fahrenheit, was given to the first channel input sensor.

The <SensorAlert> element contains the current value of the e-mail alert status for the sensor. It will contain either *Alert* or *Normal*. In **Figure 2**, ***line 10***, the first channel input sensor has an *Alert* status.

The <SensorRelay> element contains the channel number (*5 - 8*) of the output relay this sensor will automatically operate based on this sensor's value. It will contain, *None*, if it is not configured for automatic operation.

The <SensorLTValue> element contains the value against which this sensor value is compared. If the sensor value is less than the value of this XML element, it will operate the relay ON/OFF as configured.

The <SensorGTValue> element contains the value against which this sensor value is compared. If the sensor value is greater than the value of this XML element, it will operate the relay ON/OFF as configured.

The <SensorLog> element contains *0* or *1* indicating logging for this sensor is disabled or enabled respectively.

OUTPUTS

- ***Lines 46*** through ***101*** contain the XML for the four (4) output controls (numbered 5-8).
  - *Lines 46* through *59* contain the XML for Output Control 1
  - *Lines 60* through *73* contain the XML for Output Control 2
  - *Lines 74* through *87* contain the XML for Output Control 3
  - *Lines 88* through *101* contain the XML for Output Control 4

Each output control has the following XML elements contained within an <Output> element. The <Output> element has both a *Channel* and *id* attribute that defines the output control the element references.

The <OutputName> element contains the configured name given to the output control on its configuration page. In **Figure 2**, ***line 47***, the fifth element channel (first output) was given the name, *Supply Fan.*

The <OutputValue> element contains the current value of the output control. It will contain either *On* or *Off*. In **Figure 2**, ***line 48***, the fifth channel (first output) is *On,* meaning its output relay is energized.

The <OutputControl> element contains the current state of the output control. It will contain either *Automatic* or *Manual*. In **Figure 2**, ***line 49***, the fifth channel (first output) is in the *Automatic* control state. This state must be set at *Manual* to manually control the output. The *Automatic* state means the Maverick will control the output as it has been configured.

The <OutputSchedule> element contains the current timed output schedule for this output relay. It has an *enabled* attribute with a value of *0* or *1* indicating the timed output schedule is disabled or enabled respectively. This element has child elements for each day of the week. Each child element has attributes defining the schedule for that day. An *enabled* attribute containing *0* or *1* indicates if the schedule for that day is disabled or enabled. Each child element has *start* and *stop* attributes defining the *HH:MM* of the day in which to automatically *start* and *stop* the timed output.

HOW TO USE XML IN CODE

AJAX applications can use *XMLHttpRequest()* in JavaScript to dynamically update a web page or desktop gadget/widget. A code snip is shown in **Figure 3**.

***Note**: This code will not work in browsers since it is requesting an XML file from a different domain. It would work if the script was served directly from the Maverick. In Internet Explorer 7, you can set http://192.168.1.10 as a trusted site, and then it does work. The code was tested on a Maverick with version 1.13 firmware.*

```
var xmlHttp = new XMLHttpRequest();
var url = http://192.168.1.10/pc10144.xml";

xmlHttp.open("GET",url, false);
xmlHttp.send(null);
```

Figure 3: Maverick XML Request Using JavaScript

In Visual Basic 6, the code would look like **Figure 4**. Include a project reference to "*Microsoft XML, v3.0*" in your VB6 project.

```
Dim xmlHttp As New MSXML2.xmlHttp
Const url = "http://192.168.1.10/pc10144.xml"

xmlHttp.open "GET", url, False
xmlHttp.send
```

Figure 4: Maverick XML Request Using Visual Basic 6

Another way to load the XML in VB6 is to use the "*DOM Document*" directly as shown in **Figure 5**.

```
Dim xml As New MSXML2.DOMDocument
Const url = "http://192.168.1.10/pc10144.xml"

xml.Load url
```

Figure 5: Maverick XML Request Using Visual Basic 6

Once the XML is obtained, it can be parsed using World Wide Web Consortium (W3C) standards for the Document Object Model (DOM). The XPath expression to obtain the Duct Pressure (input 3 of *Figures 1 & 2*) would be: Maverick/Sensor[@Channel=3]/SensorValue.

A free online tutorial where you can learn more about XML and the DOM is available at http://www.w3schools.com/.

MAVERICK OUTPUT CONTROL

Controlling a Maverick output is not done with XML. It uses standard HTML forms control. Therefore, parameters must be sent to the Maverick using an http *POST* command to *http://192.168.1.10/override.html*. The *POST* parameters are set to ***0*** or ***1*** and are defined as shown in **Figure 6**.

Channel	POST parameter	0	1
5	MAV_05_16	Automatic	Manual
6	MAV_06_16	Automatic	Manual
7	MAV_07_16	Automatic	Manual
8	MAV_08_16	Automatic	Manual
5	MAV_05_00	Off	On
6	MAV_06_00	Off	On
7	MAV_07_00	Off	On
8	MAV_08_00	Off	On

Figure 6: Maverick HTTP* POST *Parameters

The HTTP protocol message to set *Channel 8* (*Exhaust Fan* in **Figure 1**) to a *Manual* control state is shown in **Figure 7**. Note that to control a relay On/Off, the control state for that relay must be in the *Manual* control state.

```
POST /override.html HTTP/1.1
Host: 192.168.1.10
Authorization: Basic YWRtaW46cGFzc3dvcmQ=
Content-Type: application/x-www-form-urlencoded
Content-Length: 11

MAV_08_16=1
```

Figure 7: Maverick Control - HTTP Message

To perform this task using *XMLHttpRequest* from languages like JavaScript or Visual Basic would look like the code shown in **Figures 8** and **9**, which assumes the Maverick default username ("*admin*") and the password ("*password*").

```
var xmlHttp = new XMLHttpRequest();
var url = http://192.168.1.10/override.html;

var PostData = "MAV_08_16=1";

xmlHttp.open("POST",url, false, "admin","password");
xmlHttp.setRequestHeader("Content-Type","application/x-www-form-urlencoded");
xmlHttp.send(PostData);
```

Figure 8: Maverick Control Using JavaScript

```
Dim xmlHttp As New MSXML2.xmlHttp
Const url = "http://192.168.1.10/override.html"
Dim PostData

PostData = "MAV_08_16=1"

xmlHttp.open "POST", url, False, "admin", "password"
xmlHttp.setRequestHeader "Content-Type", "application/x-www-form-urlencoded"
xmlHttp.send PostData
```

Figure 9: Maverick Control Using Visual Basic 6

To change relay control settings, *POST* the following parameters to url *http://192.168.1.10/setchan.html*.

Channel	POST parameters	
	Lesser than or Equal to	**Greater than or Equal to**
1	MAV_01_07	MAV_01_08
2	MAV_02_07	MAV_02_08
3	MAV_03_07	MAV_03_08
4	MAV_04_07	MAV_04_08

For example, to change the relay control settings for the first channel input sensor (which can be configured to control any of the outputs) use code similar to **Figure 10**. This example will set the relay control less than value to 69.0 and the relay control greater than value to 71.0.

```
Dim xmlHttp As New MSXML2.xmlHttp
Const url = "http://192.168.1.10/setchan.html"
Dim PostData

PostData = "MAV_01_07=69.0&MAV_01_08=71.0"

xmlHttp.open "POST", url, False, "admin", "password"
xmlHttp.setRequestHeader "Content-Type", "application/x-www-form-urlencoded"
xmlHttp.send PostData
```

Figure 10: Maverick Relay Control Setting Using Visual Basic 6

The following table lists Maverick parameters that can be changed via an HTTP *POST* command.

MAVERICK POST PARAMETERS: Setup & Channel Input Sensors 1 & 2

POST parameter to	Parameter Name	Description
setup.html	MAV_00_00	Node I.D. of Maverick
	MAV_00_38	Main Page Refresh Rate
	MAV_00_20	Username
	MAV_00_21	Password
	MAV_00_22	Hours
	MAV_00_23	Minutes
	MAV_00_24	Seconds
	MAV_00_25	Month
	MAV_00_26	Day
	MAV_00_27	Year
	MAV_00_35	Day of Week
setchan.html	MAV_00_29	I/O Type (3=0-10, 4=0-5, or 6=digital)
	MAV_01_01	Channel 1 Name
	MAV_01_03	Channel 1 Min Value
	MAV_01_04	Channel 1 Max Value
	MAV_01_05	Channel 1 Units
	MAV_01_06	Channel 1 Output Control Channel (5-8)
	MAV_01_07	Channel 1 Relay Control less than value
	MAV_01_08	Channel 1 Relay Control greater than value
	MAV_01_09	Channel 1 Relay less than On/Off select
	MAV_01_10	Channel 1 Relay greater than On/Off select
	MAV_01_11	Channel 1 Alert Enable on/off
	MAV_01_12	Channel 1 Email Alert lower value
	MAV_01_13	Channel 1 Email Alert upper value
	MAV_01_14	Channel 1 Alert lower value enable/disable
	MAV_01_15	Channel 1 Alert upper value enable/disable
	MAV_01_17	Channel 1 Alert Wait time in seconds
	MAV_01_18	Channel 1 Attach Log
setchan.html	MAV_02_01	Channel 2 Name
	MAV_02_03	Channel 2 Min Value
	MAV_02_04	Channel 2 Max Value
	MAV_02_05	Channel 2 Units
	MAV_02_06	Channel 2 Output Control Channel (5-8)
	MAV_02_07	Channel 2 Relay Control less than value
	MAV_02_08	Channel 2 Relay Control greater than value
	MAV_02_09	Channel 2 Relay less than On/Off select
	MAV_02_10	Channel 2 Relay greater than On/Off select
	MAV_02_11	Channel 2 Alert Enable on/off
	MAV_02_12	Channel 2 Email Alert lower value
	MAV_02_13	Channel 2 Email Alert upper value
	MAV_02_14	Channel 2 Alert lower value enable/disable
	MAV_02_15	Channel 2 Alert upper value enable/disable
	MAV_02_17	Channel 2 Alert Wait time in seconds
	MAV_02_18	Channel 2 Attach Log

MAVERICK POST PARAMETERS: Channel Input Sensors 3 & 4

POST parameter to	Parameter Name	Description
setchan.html	MAV_03_01	Channel 3 Name
	MAV_03_03	Channel 3 Min Value
	MAV_03_04	Channel 3 Max Value
	MAV_03_05	Channel 3 Units
	MAV_03_06	Channel 3 Output Control Channel (5-8)
	MAV_03_07	Channel 3 Relay Control less than value
	MAV_03_08	Channel 3 Relay Control greater than value
	MAV_03_09	Channel 3 Relay less than On/Off select
	MAV_03_10	Channel 3 Relay greater than On/Off select
	MAV_03_11	Channel 3 Alert Enable on/off
	MAV_03_12	Channel 3 Email Alert lower value
	MAV_03_13	Channel 3 Email Alert upper value
	MAV_03_14	Channel 3 Alert lower value enable/disable
	MAV_03_15	Channel 3 Alert upper value enable/disable
	MAV_03_17	Channel 3 Alert Wait time in seconds
	MAV_03_18	Channel 3 Attach Log
setchan.html	MAV_04_01	Channel 4 Name
	MAV_04_03	Channel 4 Min Value
	MAV_04_04	Channel 4 Max Value
	MAV_04_05	Channel 4 Units
	MAV_04_06	Channel 4 Output Control Channel (5-8)
	MAV_04_07	Channel 4 Relay Control less than value
	MAV_04_08	Channel 4 Relay Control greater than value
	MAV_04_09	Channel 4 Relay less than On/Off select
	MAV_04_10	Channel 4 Relay greater than On/Off select
	MAV_04_11	Channel 4 Alert Enable on/off
	MAV_04_12	Channel 4 Email Alert lower value
	MAV_04_13	Channel 4 Email Alert upper value
	MAV_04_14	Channel 4 Alert lower value enable/disable
	MAV_04_15	Channel 4 Alert upper value enable/disable
	MAV_04_17	Channel 4 Alert Wait time in seconds
	MAV_04_18	Channel 4 Attach Log

MAVERICK POST PARAMETERS: Relay Control Settings - Channel 5

POST parameter to	Parameter Name	Description
setrel.html	MAV_05_01	Channel 5 Name
	MAV_25_00	Channel 5 Time Controlled Output Enable
	MAV_25_01	Channel 5 Sunday Start Hour
	MAV_25_02	Channel 5 Sunday Start Minute
	MAV_25_03	Channel 5 Sunday Stop Hour
	MAV_25_04	Channel 5 Sunday Stop Minute
	MAV_25_05	Channel 5 Monday Start Hour
	MAV_25_06	Channel 5 Monday Start Minute
	MAV_25_07	Channel 5 Monday Stop Hour
	MAV_25_08	Channel 5 Monday Stop Minute
	MAV_25_09	Channel 5 Tuesday Start Hour
	MAV_25_10	Channel 5 Tuesday Start Minute
	MAV_25_11	Channel 5 Tuesday Stop Hour
	MAV_25_12	Channel 5 Tuesday Stop Minute
	MAV_25_13	Channel 5 Wednesday Start Hour
	MAV_25_14	Channel 5 Wednesday Start Minute
	MAV_25_15	Channel 5 Wednesday Stop Hour
	MAV_25_16	Channel 5 Wednesday Stop Minute
	MAV_25_17	Channel 5 Thursday Start Hour
	MAV_25_18	Channel 5 Thursday Start Minute
	MAV_25_19	Channel 5 Thursday Stop Hour
	MAV_25_20	Channel 5 Thursday Stop Minute
	MAV_25_21	Channel 5 Friday Start Hour
	MAV_25_22	Channel 5 Friday Start Minute
	MAV_25_23	Channel 5 Friday Stop Hour
	MAV_25_24	Channel 5 Friday Stop Minute
	MAV_25_25	Channel 5 Saturday Start Hour
	MAV_25_26	Channel 5 Saturday Start Minute
	MAV_25_27	Channel 5 Saturday Stop Hour
	MAV_25_28	Channel 5 Saturday Stop Minute
	MAV_25_31	Channel 5 Time Output Sunday Enable
	MAV_25_32	Channel 5 Time Output Monday Enable
	MAV_25_33	Channel 5 Time Output Tuesday Enable
	MAV_25_34	Channel 5 Time Output Wednesday Enable
	MAV_25_35	Channel 5 Time Output Thursday Enable
	MAV_25_36	Channel 5 Time Output Friday Enable
	MAV_25_37	Channel 5 Time Output Saturday Enable

MAVERICK POST PARAMETERS: Relay Control Settings - Channel 6

POST parameter to	Parameter Name	Description
setrel.html	MAV_06_01	Channel 6 Name
	MAV_26_00	Channel 6 Time Controlled Output Enable
	MAV_26_01	Channel 6 Sunday Start Hour
	MAV_26_02	Channel 6 Sunday Start Minute
	MAV_26_03	Channel 6 Sunday Stop Hour
	MAV_26_04	Channel 6 Sunday Stop Minute
	MAV_26_05	Channel 6 Monday Start Hour
	MAV_26_06	Channel 6 Monday Start Minute
	MAV_26_07	Channel 6 Monday Stop Hour
	MAV_26_08	Channel 6 Monday Stop Minute
	MAV_26_09	Channel 6 Tuesday Start Hour
	MAV_26_10	Channel 6 Tuesday Start Minute
	MAV_26_11	Channel 6 Tuesday Stop Hour
	MAV_26_12	Channel 6 Tuesday Stop Minute
	MAV_26_13	Channel 6 Wednesday Start Hour
	MAV_26_14	Channel 6 Wednesday Start Minute
	MAV_26_15	Channel 6 Wednesday Stop Hour
	MAV_26_16	Channel 6 Wednesday Stop Minute
	MAV_26_17	Channel 6 Thursday Start Hour
	MAV_26_18	Channel 6 Thursday Start Minute
	MAV_26_19	Channel 6 Thursday Stop Hour
	MAV_26_20	Channel 6 Thursday Stop Minute
	MAV_26_21	Channel 6 Friday Start Hour
	MAV_26_22	Channel 6 Friday Start Minute
	MAV_26_23	Channel 6 Friday Stop Hour
	MAV_26_24	Channel 6 Friday Stop Minute
	MAV_26_25	Channel 6 Saturday Start Hour
	MAV_26_26	Channel 6 Saturday Start Minute
	MAV_26_27	Channel 6 Saturday Stop Hour
	MAV_26_28	Channel 6 Saturday Stop Minute
	MAV_26_31	Channel 6 Time Output Sunday Enable
	MAV_26_32	Channel 6 Time Output Monday Enable
	MAV_26_33	Channel 6 Time Output Tuesday Enable
	MAV_26_34	Channel 6 Time Output Wednesday Enable
	MAV_26_35	Channel 6 Time Output Thursday Enable
	MAV_26_36	Channel 6 Time Output Friday Enable
	MAV_26_37	Channel 6 Time Output Saturday Enable

MAVERICK POST PARAMETERS: Relay Control Settings - Channel 7

POST parameter to	Parameter Name	Description
setrel.html	MAV_07_01	Channel 7 Name
	MAV_27_00	Channel 7 Time Controlled Output Enable
	MAV_27_01	Channel 7 Sunday Start Hour
	MAV_27_02	Channel 7 Sunday Start Minute
	MAV_27_03	Channel 7 Sunday Stop Hour
	MAV_27_04	Channel 7 Sunday Stop Minute
	MAV_27_05	Channel 7 Monday Start Hour
	MAV_27_06	Channel 7 Monday Start Minute
	MAV_27_07	Channel 7 Monday Stop Hour
	MAV_27_08	Channel 7 Monday Stop Minute
	MAV_27_09	Channel 7 Tuesday Start Hour
	MAV_27_10	Channel 7 Tuesday Start Minute
	MAV_27_11	Channel 7 Tuesday Stop Hour
	MAV_27_12	Channel 7 Tuesday Stop Minute
	MAV_27_13	Channel 7 Wednesday Start Hour
	MAV_27_14	Channel 7 Wednesday Start Minute
	MAV_27_15	Channel 7 Wednesday Stop Hour
	MAV_27_16	Channel 7 Wednesday Stop Minute
	MAV_27_17	Channel 7 Thursday Start Hour
	MAV_27_18	Channel 7 Thursday Start Minute
	MAV_27_19	Channel 7 Thursday Stop Hour
	MAV_27_20	Channel 7 Thursday Stop Minute
	MAV_27_21	Channel 7 Friday Start Hour
	MAV_27_22	Channel 7 Friday Start Minute
	MAV_27_23	Channel 7 Friday Stop Hour
	MAV_27_24	Channel 7 Friday Stop Minute
	MAV_27_25	Channel 7 Saturday Start Hour
	MAV_27_26	Channel 7 Saturday Start Minute
	MAV_27_27	Channel 7 Saturday Stop Hour
	MAV_27_28	Channel 7 Saturday Stop Minute
	MAV_27_31	Channel 7 Time Output Sunday Enable
	MAV_27_32	Channel 7 Time Output Monday Enable
	MAV_27_33	Channel 7 Time Output Tuesday Enable
	MAV_27_34	Channel 7 Time Output Wednesday Enable
	MAV_27_35	Channel 7 Time Output Thursday Enable
	MAV_27_36	Channel 7 Time Output Friday Enable
	MAV_27_37	Channel 7 Time Output Saturday Enable

MAVERICK POST PARAMETERS: Relay Control Settings - Channel 8

POST parameter to	Parameter Name	Description
setrel.html	MAV_08_01	Channel 8 Name
	MAV_28_00	Channel 8 Time Controlled Output Enable
	MAV_28_01	Channel 8 Sunday Start Hour
	MAV_28_02	Channel 8 Sunday Start Minute
	MAV_28_03	Channel 8 Sunday Stop Hour
	MAV_28_04	Channel 8 Sunday Stop Minute
	MAV_28_05	Channel 8 Monday Start Hour
	MAV_28_06	Channel 8 Monday Start Minute
	MAV_28_07	Channel 8 Monday Stop Hour
	MAV_28_08	Channel 8 Monday Stop Minute
	MAV_28_09	Channel 8 Tuesday Start Hour
	MAV_28_10	Channel 8 Tuesday Start Minute
	MAV_28_11	Channel 8 Tuesday Stop Hour
	MAV_28_12	Channel 8 Tuesday Stop Minute
	MAV_28_13	Channel 8 Wednesday Start Hour
	MAV_28_14	Channel 8 Wednesday Start Minute
	MAV_28_15	Channel 8 Wednesday Stop Hour
	MAV_28_16	Channel 8 Wednesday Stop Minute
	MAV_28_17	Channel 8 Thursday Start Hour
	MAV_28_18	Channel 8 Thursday Start Minute
	MAV_28_19	Channel 8 Thursday Stop Hour
	MAV_28_20	Channel 8 Thursday Stop Minute
	MAV_28_21	Channel 8 Friday Start Hour
	MAV_28_22	Channel 8 Friday Start Minute
	MAV_28_23	Channel 8 Friday Stop Hour
	MAV_28_24	Channel 8 Friday Stop Minute
	MAV_28_25	Channel 8 Saturday Start Hour
	MAV_28_26	Channel 8 Saturday Start Minute
	MAV_28_27	Channel 8 Saturday Stop Hour
	MAV_28_28	Channel 8 Saturday Stop Minute
	MAV_28_31	Channel 8 Time Output Sunday Enable
	MAV_28_32	Channel 8 Time Output Monday Enable
	MAV_28_33	Channel 8 Time Output Tuesday Enable
	MAV_28_34	Channel 8 Time Output Wednesday Enable
	MAV_28_35	Channel 8 Time Output Thursday Enable
	MAV_28_36	Channel 8 Time Output Friday Enable
	MAV_28_37	Channel 8 Time Output Saturday Enable

MAVERICK POST PARAMETERS: Network Setup

POST parameter to	Parameter Name	Description
setnetwork.html	MAV_00_03	Maverick IP address – first digit
	MAV_00_04	Maverick IP address – second digit
	MAV_00_05	Maverick IP address – third digit
	MAV_00_06	Maverick IP address – fourth digit
	MAV_00_07	Maverick subnet mask – first digit
	MAV_00_08	Maverick subnet mask – second digit
	MAV_00_09	Maverick subnet mask – third digit
	MAV_00_10	Maverick subnet mask – fourth digit
	MAV_00_11	Gateway IP address – first digit
	MAV_00_12	Gateway IP address – second digit
	MAV_00_13	Gateway IP address – third digit
	MAV_00_14	Gateway IP address – fourth digit
	MAV_00_15	SMTP Server IP address – first digit
	MAV_00_16	SMTP Server IP address – second digit
	MAV_00_17	SMTP Server IP address – third digit
	MAV_00_18	SMTP Server IP address – fourth digit
	MAV_00_19	Email address #1
	MAV_00_28	DHCP Enable/Disable
	MAV_00_30	DNS Server IP address – first digit
	MAV_00_31	DNS Server IP address – second digit
	MAV_00_32	DNS Server IP address – third digit
	MAV_00_33	DNS Server IP address – fourth digit
	MAV_00_34	Email server IP select (DNS/SMTP)
	MAV_00_36	Email return address
	MAV_00_41	Power Recycle email (Enable/Disable)
	MAV_00_42	DHCP IP change email (Enable/Disable)
	MAV_00_43	Email address #2

MAVERICK POST PARAMETERS: Input Data Logs

POST parameter to	Parameter Name	Description
setlog.html	MAV_11_01	Input 1 Log (Enable/Disable)
	MAV_11_02	Input 1 Log Max Samples
	MAV_11_03	Input 1 Log Sample Rate Hours
	MAV_11_04	Input 1 Log Sample Rate Minutes
	MAV_11_05	Input 1 Log Sample Rate Seconds
setlog.html	MAV_12_01	Input 2 Log (Enable/Disable)
	MAV_12_02	Input 2 Log Max Samples
	MAV_12_03	Input 2 Log Sample Rate Hours
	MAV_12_04	Input 2 Log Sample Rate Minutes
	MAV_12_05	Input 2 Log Sample Rate Seconds
setlog.html	MAV_13_01	Input 3 Log (Enable/Disable)
	MAV_13_02	Input 3 Log Max Samples
	MAV_13_03	Input 3 Log Sample Rate Hours
	MAV_13_04	Input 3 Log Sample Rate Minutes
	MAV_13_05	Input 3 Log Sample Rate Seconds
setlog.html	MAV_14_01	Input 4 Log (Enable/Disable)
	MAV_14_02	Input 4 Log Max Samples
	MAV_14_03	Input 4 Log Sample Rate Hours
	MAV_14_04	Input 4 Log Sample Rate Minutes
	MAV_14_05	Input 4 Log Sample Rate Seconds

SAVING MAVERICK LOG DATA

The Maverick will log input data, sampling data every HH:MM:SS as configured. A maximum of 2048 data points will be saved before being overwritten. The Maverick provides the logging data in a .csv file. An application is being written to save the .csv data to an SQLite database for long-term storage.

SQLite (http://www.sqlite.org) is a software library that implements a self-contained serverless, zero-configuration, transactional SQL database engine. An SQLite database is a single disk file, so backing up the database is as simple as copying a file. There are numerous implementations of SQLite with details available at http://www.sqlite.org/cvstrac/wiki?p=SqliteWrappers.

A free SQLite Manager is available at http://code.google.com/p/sqlite-manager.