

Browser Manual ProMinent® ProMtrac Cooling Tower Water Treatment Controller

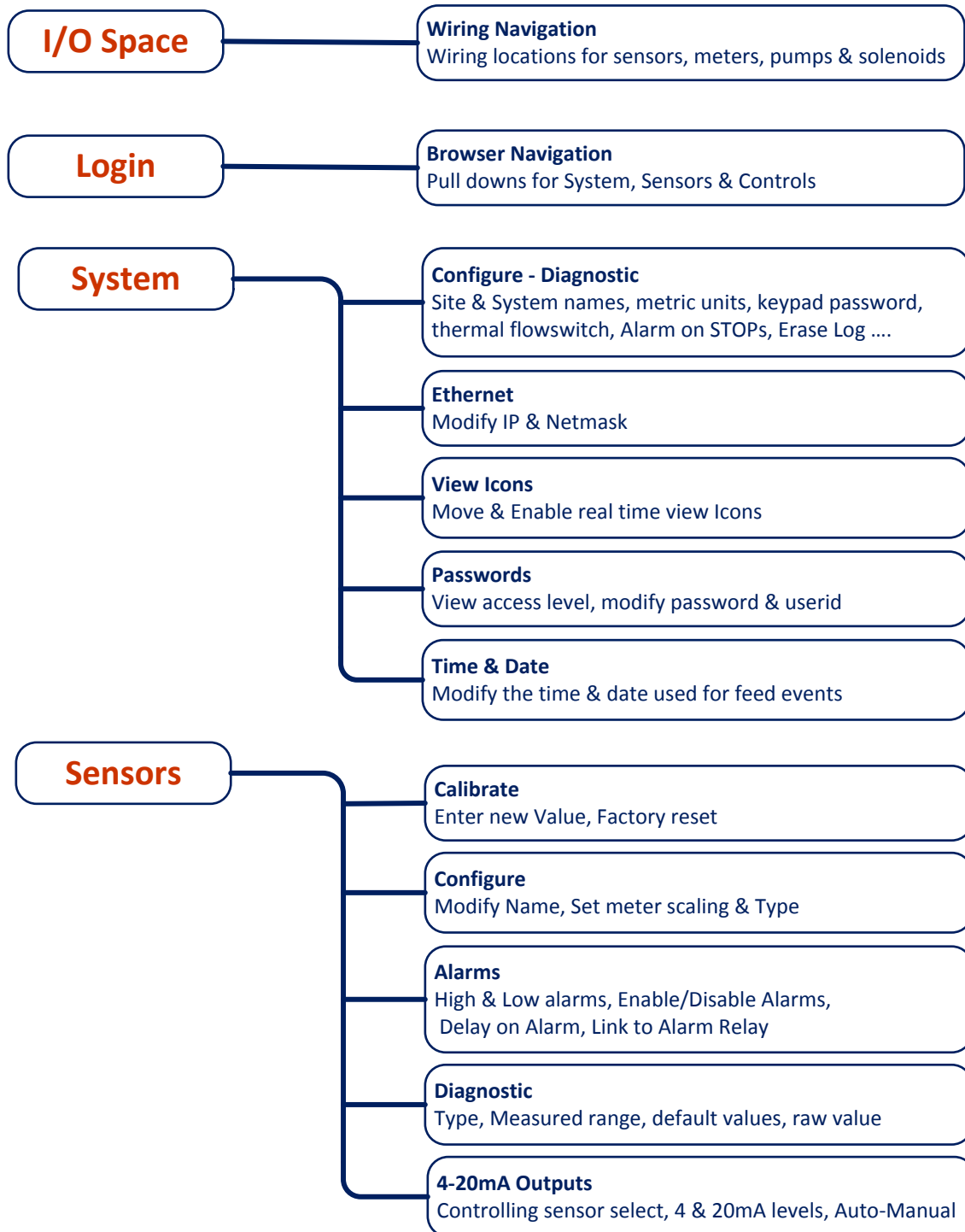
ProMtrac_Browser_Manual.docx (5/23/13) rev1: – pn. 7501088



Please completely read through these operating instructions first! Do not discard! The warranty shall be invalidated by damage caused by operating errors!

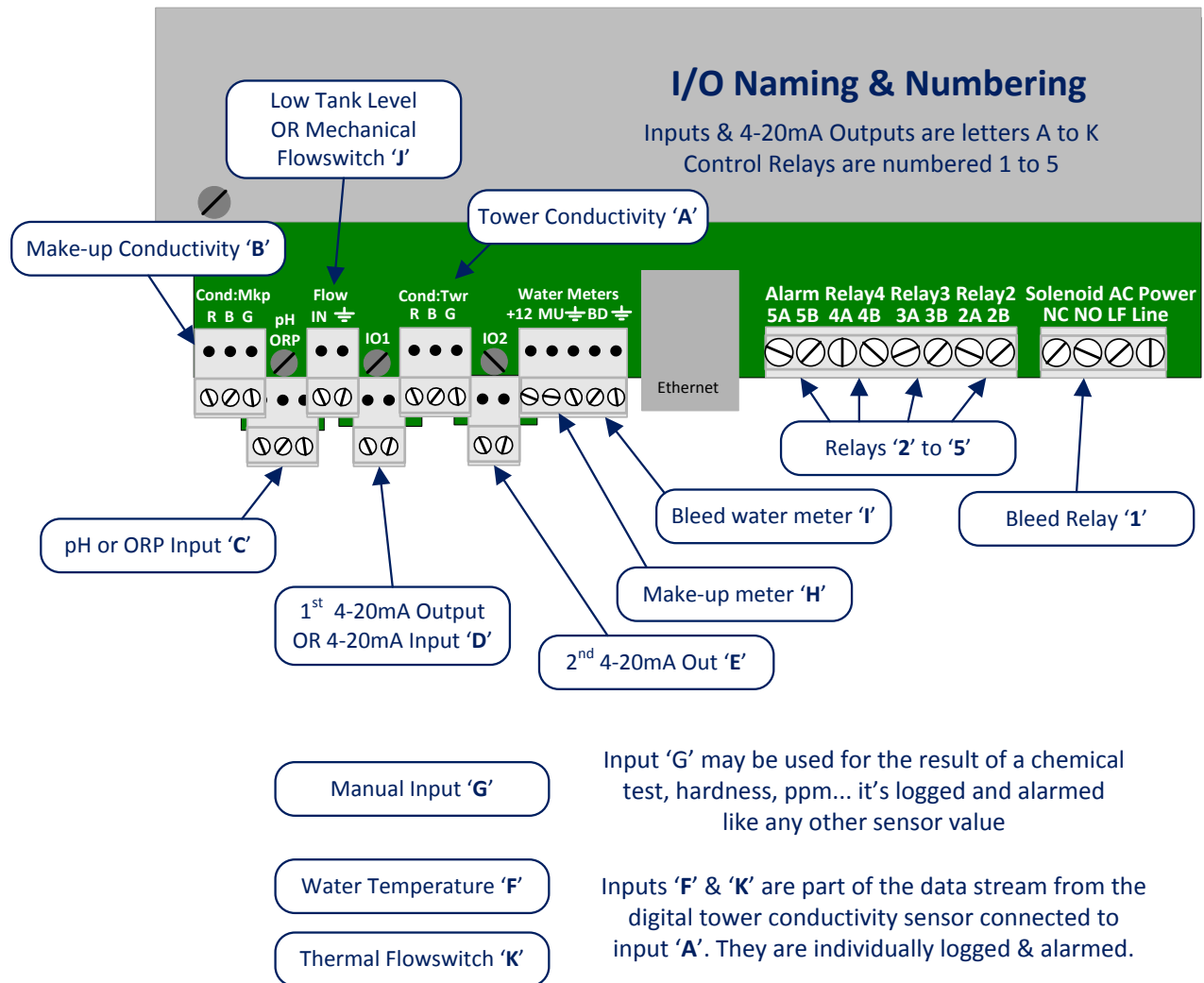
ProMinent Fluid Controls, Inc. (USA) 136 Industry Drive, Pittsburgh, PA 15275

Contents 1 of 2



Controls	Auto / Prime / Stop	Select control, test or force OFF
	Setpoint	View & modify pump or solenoid control setting
	Configure	Select feed-control mode, Modify Name, Prebleed, lockout & event cycle for biocides
	Alarms	Feed limit alarms, OFF on alarm, Enable/Disable Alarms, Link to Alarm Relay
	Biocide Feed Events	View-Modify-Add timed event feeds
	Diagnostic	Current state, time owed, prebleed-lockout status
Connect	Ethernet Set-up	Configuring for PC-to-controller browsing

I/O Space Wiring Navigation



Sidebar:

The physical connection points for inputs & outputs are designated by letters (A-K) for inputs & 4-20mA outputs & numbers (1-5) for control relays

Using letters & numbers provides a way to refer to wiring points and I/O locations while allowing users to change the names of these location to fit their site.

For Example: The bromine feed may be user labeled 'Feeder 123' but the wiring location is always Relay No.3 & a '3' tags the browser pages & the LCD displays

ProMtrac Browser

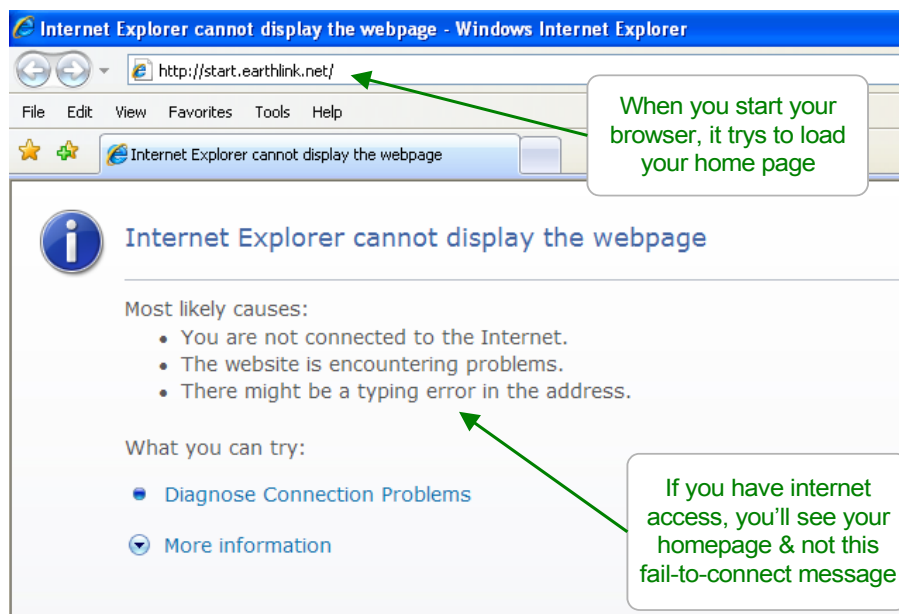
Login Browser Navigation 1 of 3

On-Site using a Notebook PC to a ProMtrac not on the Site LAN

- A. You'll need an Ethernet patch cable & a crossover adapter available from office supply & electronics stores; Example: **Office Depot #942378**,.
- B. You'll need to set up a new connection in your notebook or PC.
Refer to **Connect** @ end of manual

Open the controller enclosure door, remove the lower access panel and jack into the controller Ethernet jack located @ the bottom center of the controller circuit board.

Start **Internet Explorer** or **Mozilla's Firefox**.

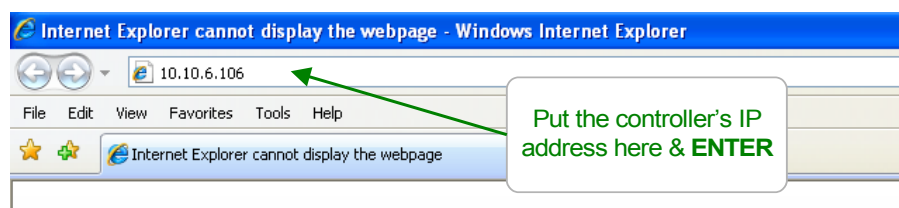


Notebook PC & Over the Site LAN

Key the controller IP address into the PC's browser address.

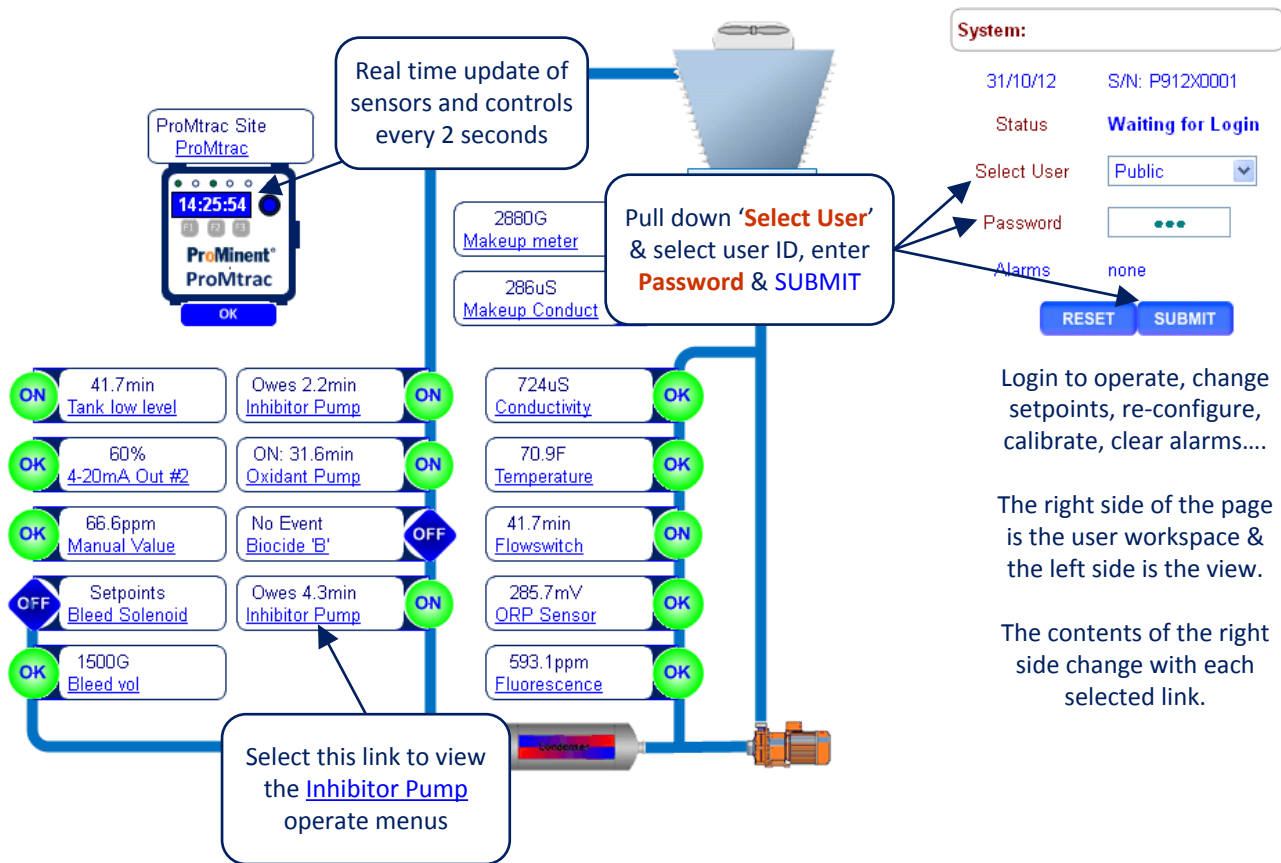
You can find the controller's IP address using the controller keypad (default = **10.10.6.106**).

Refer to **Connect** @ end of manual.



ProMtrac Browser

Login Browser Navigation 2 of 3



Login to operate, change setpoints, re-configure, calibrate, clear alarms....

The right side of the page is the user workspace & the left side is the view.

The contents of the right side change with each selected link.

Note: Views are optimized for limited resolution displays, notebook & netbook PCs at 1024 x 768 pixels.

Default Passwords:

The factory default userids & passwords are:

Operator1 = 1 Operator2 = 2 Operator3 = 3 Operator4 = 4.
Configure5 = 5 Configure6 = 6 Configure7 = 7 Administrator = AAAA

There are 3 password levels, Operator, Configure and Administrator.

The User IDs are used in the controller's keypress log.

WARNING: 5 incorrect passwords, blocks logon until 7:00AM or until a power OFF/ON.

ProMtrac Browser Login Browser Navigation 2 of 3

The selector at the top, right side of the browser page navigates to both System & I/O pages.

The screenshot shows the ProMtrac Browser interface with several navigation elements and annotations:

- System Selector:** A dropdown menu at the top right, currently showing "Home". Annotations indicate that pulling down this selector accesses ProMtrac configuration pages and that a page load occurs on selection. The dropdown menu lists: Home, Diagnostic, Activity Log, COM Configure, Time & Date, View-Config, SYS Configure, and Passwords.
- Alarms, Events and Timers:** A section with a "Reset All" button and a status indicator showing "Alarms none".
- Oxidant Pump :3:** A section with a "Diagnostic" dropdown menu. Annotations indicate that clicking the "Oxidant Pump" link on the left side loads the "Diagnostic" page and that pulling down the selector for "Oxidant Pump" pages loads the "Diagnostic" page. The dropdown menu lists: Diagnostic, Diagnostic, Alarms, Configure, Events, and STOP.
- Conductivity:A:** A section with a "Diagnostic" dropdown menu. Annotations indicate that clicking the "Conductivity" link on the left side loads the "Diagnostic" page and that pulling down the selector for "Conductivity" pages loads the "Diagnostic" page. The dropdown menu lists: Diagnostic, Diagnostic, Calibrate, Alarms, and Configure.
- Control Data:** A table showing control parameters for the Conductivity sensor.

Control by:	C
TurnON setpoint	286 mV
TurnOFF setpoint	425 mV
Control by: <th>C</th>	C

Period Maximum	928 uS
Period Minimum	215 uS
Period Average	637 uS
Period	279 minutes

ProMtrac Browser

System Configure - Diagnostic

System: SYS Configure

Requires 'admin' login to modify. All users may view

Site name: ProMtrac Site

Controller name: ProMtrac

Metric Units: ☐ Yes ☒ No

Keypad Password: ☒ Yes ☐ No

Makeup Conduct: ☒ Yes ☐ No

ORP Sensor: ☒ Yes ☐ No

Thermal Flowswitch: ☒ Yes ☐ No

Alarm on STOPs: ☒ Yes ☐ No

System restart: ☐ Yes ☒ No

Erase Log: ☐ Yes ☒ No

Factory Reset: ☐ Yes ☒ No

RESET SUBMIT

System: Diagnostic

Serial number: P912X0001

Configure as: as-built.cfg

Firmware: 0002

Watchdog Resets: 1

Factory Reset: 12:15 18/07/12

Admin Pswd: Default

12VDC Power: 12.0 V

Log records: 926

REFRESH

Sequential Firmware version.

Build date or last time 'admin' user reset

5 minute logging interval total records. 0 to 18,000, 62.5 days

Last digits of Serial# used to identify both log & configuration files

Current, loaded configuration file

of times the controller has restarted on electrical or firmware fault. Should be very low#

Helps with remote connection support & indicates user action to block access

Voltage after +12 water meter thermal fuse. Below 11V indicates external wiring problem

ProMtrac Browser System Ethernet

System: COM Configure ▾

IP Address

Netmask

Gateway

Primary DNS

HTTP Port

MAC Address

RESET SUBMIT

The default IP address is 10.10.6.106

Most sites & direct connects will use this netmask

Defaults to 10.10.6.1

System View Icons

System: View-Config ▾

Switch icon

with icon

Enable I/O

RESET SUBMIT

Any icon in the view can be moved to the location of any other icon. Use this tool to make the view reflect your system layout

Disabled inputs are removed from the view & LCD. Enabled inputs automatically appear in the view & the LCD display

ProMtrac Browser System Passwords

System: Passwords

Status Login @ Admin

Password AAAA

Select User O:Operate1

Access Level Operate

RESET

Operate

Configure

The 'admin' level user can change their password but not their userid

The 'admin' level user can change all other users **Access Level**

Operate Level users can calibrate & change setpoints.
Configure Level users can change control & feed methods

System: Passwords

Status Login @ configure

User ID Configure6

Password 6

RESET SUBMIT

Up to 8 letters & numbers may be used as a **Password**

This user has **Configure** level controller access

Each user can change their default **User ID**

NOTE: Keypad users can only enter numbers & caps. Short passwords work best for these users

System Time & Date

System: Time & Date

Date DD/MM/YY 31/10/12

Time HH:MM:SS 14:34:05

Weekday Wed

GMT offset 5 hours

RESET SUBMIT

Time & date used for biocide feed events & to stamp data log, alarms & keypress record.

Set in Plug&Feed configuration file & used at time of manufacture to set time correctly for your time zone

ProMtrac Browser Sensors Calibrate

Conductivity:A Calibrate

Enter value

Factory Reset ☐ Yes ☒ No

RESET SUBMIT

Use a grab sample from the sensor entry header to calibrate

Sensor scaling or filming may cause an error message on calibration. A very low conductivity on **Factory Reset** indicates a fouled sensor

Manual Value :G Calibrate

Enter value

Factory Reset ☐ Yes ☒ No

RESET SUBMIT

The result of a manual chemical test may be logged & alarmed by the ProMtrac. Select **Calibrate** on input '**G**' to log a test result

Input '**G**' may be disabled @ **Configure**, removing it from the browser view & the LCD display

Sensors Configure 1 of 2

Makeup meter:H Configure

Description

Volume/contact

Meter Type Contact Meter

Display units

Decimal digits 0

REFRESH SUBMIT

Description can be up to 14 characters. HTML characters, <>&%.. are blocked

Volume/contact becomes '**K**' Factor; pulses/gallon or pulses/liter for Turbine meter selected

Meter Type selects either contact head or insertion paddlewheel-turbine. Higher speed turbines are not debounced. Contact head meters are debounced to block false counts.

ProMtrac Browser

Sensors Configure 2 of 2

Bleed vol :I Configure

Status **Reconfigured**

Description Bleed vol

'K' Factor 45.26

Meter Type Turbine Meter

Display units G

Decimal digits 0

Disable Input ☐ Yes ☒ No

REFRESH SUBMIT

The bleed water meter may be configured as either a **Contact Meter** or **Turbine Meter**

Input 'I' may be disabled removing it from the browser view & the LCD display

Sensors Alarms 1 of 2

Conductivity:A Alarms

Status **Adjusted Alarm**

Alarms Disable ☐ Yes

High Alarm 4500 uS

Low Alarm 750 uS

Delay on Alarm 5.0 minutes

RESET SUBMIT

Disabling alarms may hide operational problems

High Alarm typically set @ chemistry limit for cycles limited towers

Low Alarm typically used to catch open bleed solenoids & tower overflows or sump leaks.

Delay on Alarm used to block nuisance alarms on transient operating states

Makeup meter:H Alarms

Alarms Disable ☐ Yes

High Alarm 990200 G

Low Alarm 80 G

RESET **SUBMIT**

High Alarm is the daily volume

Low Alarm is checked at midnight.
Set to zero for towers OFF over weekends to prevent alarming

Sensors Diagnostic 1 of 2

Fluorescence:D Diagnostic

Status **Operational**

Sensor Type 4-20mA Input

Inhibitor ppm sensors connect to the isolated 4-20mA input card @ input 'D'

Period Maximum	593.5 ppm
Period Minimum	593.0 ppm
Period Average	586.2 ppm
Period	3 minutes
Measured Level	674.6 mV
Gain Multiply	1.2500
Default Gain	1.2500
Offset Adjust	-250.0000
Default Offset	-250.0000

Gain & Offset are used to convert the **mV** measured on the current loop input to ppm

In this example $674.6 \text{ mV} \times 1.25 - 250 = 593 \text{ ppm}$
($\text{mV} \times \text{Gain} - \text{Offset} = \text{ppm}$)

Measured Level is the mV across the 50 ohm 4-20mA loop termination.
($0.6746\text{V} / 50 = 13.5\text{mA}$)

Fluorescence:D Configure

Description Fluorescence

Gain Multiply 1.2500

Offset Adjust -250.0000 ppm

Display units ppm

Decimal digits 1

REFRESH **SUBMIT**

Users may change the make-up meter name but it's always connected to input 'H'

Makeup meter:H	
Status	Operational
Digital Type	Volume meter
Current Period	4680 G
Vol. this year	49100 G
Days Online	12
Vol. last year	0 G
Period	118 minutes
Volume/contact	180.0 G

Period starts from most recent Power ON & ends @ midnight

The meter connected to input 'H' is a contact head type, scaled @ 180 Gallons / contact closure

REFRESH

Sensors 4-20mA Outputs

If the tower conductivity = 1000uS
Then the 4-20mA loop current would be: 8mA = 4mA + 16mA x (1000 / 4000)

4-20mA Out #2 :E	
Status	Reconfigured
Manual Mode	<input type="checkbox"/> Yes
Control by:	A:Conductivity
Description	4-20mA Out #2
20mA=	4000 uS
4mA=	0 uS

Select Yes to switch to Manual, user control of the loop current

Pull down to select the sensor which controls the 4-20mA output

In this example, the 4-20mA output is controlled by the tower conductivity connected to input 'A' & spanned 0-4000uS = 4-20mA

REFRESH SUBMIT

4-20mA Out #2 :E	
Auto Mode	<input type="checkbox"/> Yes
Description	4-20mA Out #2
4-20mA	60 %

4-20mA Outputs may be set to Manual where the loop current is fixed by the user. Select Yes to return to sensor control of the loop

In this example, the 4-20mA @ 'E' is set to 60% for a loop current of 0.6 x 16mA + 4mA = 13.6mA

REFRESH SUBMIT

ProMtrac Browser

Controls Auto / Prime / Stop

Inhibitor Pump:2 Diagnostic

Status: **Operational, ON**

Mode: Auto, PRIME, STOP

Control by: I 4600 G

Measure volume and Turn ON for 100 G 10 seconds

Last fed at 4600 G

0.1m ON today 0.1m ON, actuation

Time Owed 2.7 min

REFRESH SUBMIT

Auto ProMtrac is controlling the pump, valve or solenoid

PRIME pump, valve or solenoid turns ON for a user set time, if flowswitch is ON. Returns to **Auto** @ end of **PRIME** time

STOP pump, valve or solenoid turns **OFF** & stays **OFF** until the user selects **PRIME** or **Auto**.

Time Owed is the owed pump ON time caused by measured volume on **Control by: I**, the bleed water. In this example **2.7 minutes** is caused by measuring 1620 gallons (1620G / 100G x 10s = 162 sec or 2.7 minutes)

Controls Setpoint 1 of 2

Inhibitor Pump:2 Configure

Description: Inhibitor Pump

Control by: Bleed meter

Measure volume 100 G

and Turn ON for 10 seconds

Interlocked Flowswitch

Bleed delays Feed Yes No

RESET SUBMIT

The **Configure** page displays the current pump control method & setpoints

Every **100** gallons of make-up The inhibitor pump connected to relay **2**, turns ON for **10** seconds

Bleed delays Feed used on meter controls where towers not bleed limited (Bleed not always ON when high thermal load)

ProMtrac Browser

Controls Setpoint 2 of 2

Bleed Solenoid:1 Configure

Status

Reconfigured

Description

Bleed Solenoid

Control by:

Make-up/Bleed Meter

Measure volume

100 G

and Turn ON for

25 G

Interlocked

Flowswitch

RESET

SUBMIT

Note: If we re-purposed Relay 5 as bleed control on conductivity & wired it in parallel to the solenoid, we would have a high conductivity fail-safe

In this example, we're using the ratio of Tower make-up to bleed volume. Every 100 gallons of make-up, the Bleed Solenoid turns ON for 25 gallons; 4 cycles of concentration

Bleed Solenoid:1 Diagnostic

Status

Operational,OFF

Mode

Auto
TEST
STOP

Control by: H:I

12240 G

Measure volume

100 G

and Turn ON for

25 G

Last fed at

12200 G

13.6m ON today

0.0m ON, actuation

REFRESH

SUBMIT

Diagnostic shows Control by: the meters connected to inputs 'H' & 'I' When the make-up meter measures 12340 gallons the bleed will turn ON for 25 Gallons

ProMtrac Browser

Controls Configure 1 of 4

Inhibitor Pump:2 Configure

Description Inhibitor Pump

Control by: Bleed meter

Measure volume Bleed meter

and Turn ON for Bleed meter

Interlocked Flowswitch

Bleed delays Feed ☐ Yes ☒ No

RESET SUBMIT

Make-up or **Bleed meter** provides reliable & accurate feed controls.

Bleed & Feed and **Bleed then Feed** typically used on smaller towers.

Percent Time used to slug on start-up or to bridge maintenance or sensor problems.

Fluorescent offered if option card installed

Bleed Solenoid:1 Configure

Description Bleed Solenoid

Control by: Conductivity

TurnON setpoint Make-up/Bleed Meter

TurnOFF setpoint Tower/Make-up Ratio

Interlocked Flowswitch

Deadband 10 uS

RESET SUBMIT

Most towers control the **Bleed** using **Conductivity**. Sites with constant make-up chemistry may the use the ratio of volumes; **Make-up/Bleed Meter**, measured by water meters for cycle control

If a make-up water conductivity sensor is installed, the **Tower/Make-up Ratio** control option is available. Make-up meter bleed control would typically be limited to sites with constant make-up water chemistry **Percent Time** used to slug on start-up or to bridge maintenance or sensor problems.

ProMtrac Browser

Controls Configure 2 of 4

Bleed Solenoid:1 Configure

Status **Reconfigured**

Description Bleed Solenoid

Control by: Tower/Make-up Ratio

TurnON setpoint 3.00 cyc

TurnOFF setpoint 2.90 cyc

Interlocked Flowswitch

Deadband 0.10 cyc

RESET SUBMIT

Note: Select a bleed control method that works with the tower water chemistry & holding time.

Ratio of conductivities may be inappropriate for a tower with a long holding time & frequent make-up water conductivity changes

In this example, we're using the ratio of Tower to Make-up conductivity to control the cycles of concentration, so both the setpoint and the deadband are in cycles.

Oxidant Pump :3 Configure

Status **Reconfigured**

Description Oxidant Pump

TurnON setpoint 425 mV

TurnOFF setpoint 431 mV

Interlocked Flowswitch

Prebleed 35.0 minutes

Prebleed to 500 uS

Lockout 90.0 minutes

Event Cycle 7 Day

Event ORP 720.0 mV

Deadband 6 mV

RESET SUBMIT

Prebleed turns on the bleed before a timed feed event. If the conductivity measures **500uS** before **35.0 minutes** elapses, **Prebleed** ends & the feed event starts

Lockout prevents the bleed from turning ON to allow kill times. Typically more common with non-oxidizing biocides. **Lockout** time starts at the beginning of the feed event time.

Event ORP controls Oxidant Pump during timed events.

Deadband is applied to **TurnON** to set **TurnOFF**. Default **Deadband** varies with sensor type

ProMtrac Browser

Controls Configure 3 of 4

Alarm Relay:5 Configure

Description Alarm Relay

Relay 5 Alarm Relay

R Alarm Relay

Inhibitor Feed

Conductivity Control

Feed on Events

Select **Configure** to repurpose **Alarm Relay:5** to another inhibitor, bleed or timed event control

Inhibitor Pump:5 Configure

Description Inhibitor Pump

Control by: Make-up meter

Measure volume 100 G

and Turn ON for 10 seconds

Interlocked Flowswitch

Bleed delays Feed ☐ Yes ☒ No

Relay5 =Alarm Relay ☐ Yes ☒ No

Relay 5 can be returned to being an alarm relay by selecting Yes

RESET SUBMIT

ProMtrac Browser

Controls Configure 4 of 4

Tank low level:J [Configure](#) ▼

Description

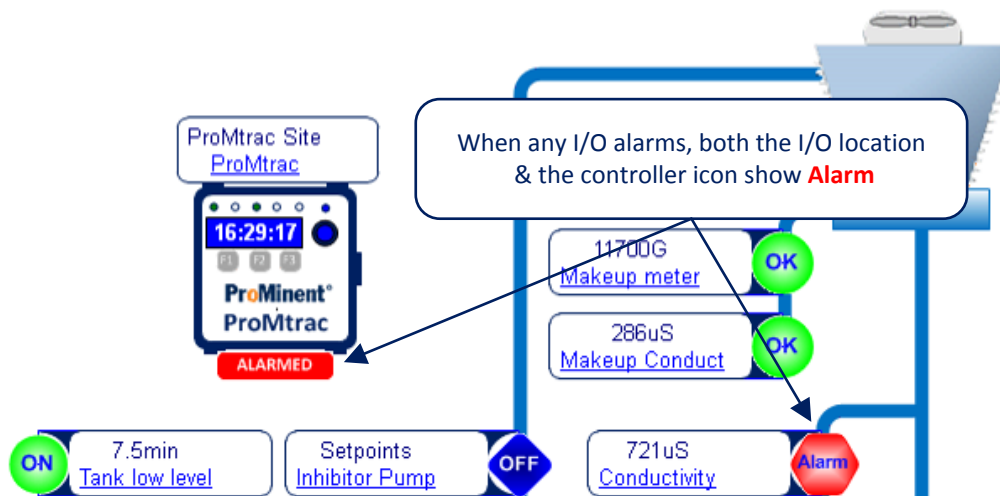
Invert sense ☐ Yes ☒ No

[REFRESH](#) [SUBMIT](#)

If the ProMtrac is using the thermal flowswitch built into the conductivity sensor, input 'J' is available for a tank level switch or a filter backwash monitor...

The ProMtrac measures ON when a contact set is closed. If your dry contact input is active in the open state, then select **Invert sense Yes**

Controls Alarms 1 of 3



ProMtrac Browser

Controls Alarms 2 of 3

Inhibitor Pump:2 Alarms

Status **Alarms adjusted**

Alarms Disable ☐ Yes

Day Timeout

Prime time

OFF on Alarm ☒ Yes ☐ No

Reset Alarm ☐ Yes ☒ No

Disable turns OFF the inhibitor pump feed limit

Day Timeout resets @ midnight so you can set a maximum amount of inhibitor pumped in a day

OFF on Alarm typically set to **Yes** for Inhibitor, Acid & Oxidant pumps & **No** for Bleed Solenoids

REFRESH **SUBMIT**

Biocide 'B':4 Alarms

Alarms Enable ☐ Yes

Prime time

Reset Alarm ☐ Yes ☒ No

Disabled 15:00 30/10/12

Feed limit alarms are typically disabled for non-oxidizing biocides & enabled for oxidizing biocides.

REFRESH **SUBMIT**

ProMtrac Browser

Controls Alarms 3 of 3

Bleed Solenoid:1 Alarms

Alarms Disable ☐ Yes

ON Timeout

Test time

OFF on Alarm ☐ Yes ☒ No

Alarm Relay ☒ Yes ☐ No

Reset Alarm ☐ Yes ☒ No

Use the **Bleed ON Timeout** to alert you to a long bleed cycle which may indicate a blocked or faulted bleed valve

OFF on Alarm typically set to **No** for bleeds, so bleed to stays ON when alarmed

Alarm Relay displays if Relay 5 is used as an alarm relay.
Yes turns ON the alarm relay when the bleed ON time exceeds **ON Timeout**

Oxidant Pump :3 Alarms

Status **Alarmed**

Alarms Disable ☐ Yes

ON Timeout

Prime time

OFF on Alarm ☒ Yes ☐ No

Alarm Relay ☐ Yes ☒ No

Reset Alarm ☐ Yes ☒ No

Limit,ON timer 12:23 09/11/12

If an control or sensor alarms, the **Alarms** page displays the alarm type & the alarm time-date stamp

ProMtrac Browser

Controls Biocide Feed Events

Oxidant Pump :3 Events

Status **Events Added**

Select Activity Add an Event
Edit an Event
Delete an Event
Delete all Events

Select for Edit & Delete
Day 2 @ 07:30 for 20 minutes

Values for Add & Edit

Start Day 2 1-7

Start Time 7:30 HH:MM

ON Time 20 minutes

Event frequency Once
Alternate Days
Daily

RESET SUBMIT

Pull down selector to see all timed feed events

Modify these fields to **Edit** or **Add** an event

If **Add**ing an event, select **Frequency**.
Frequency options vary with the current
Event Cycle: 1, 7 or 28 days

Biocide 'B' :4 Diagnostic

Status **Operational, OFF**

Mode Auto
PRIME
STOP

7 Day Event Cycle 2 Events Day 4

0.0m ON today 0.0m ON, actuation

Prebleed-Lockout Offline

REFRESH SUBMIT

Diagnostic on biocide controls shows both
the #of events & the event cycle.

Displays the Prebleed state
when an feed event is
running

ProMtrac Browser

Controls Diagnostic

Bleed Solenoid:1 Diagnostic

Status	Operational, ON
Mode	<div>Auto TEST STOP</div>
Control by: A	721 uS
TurnON setpoint	700 uS
OFF Setpoint	690 uS
Control Type	Lower TDS
11.6m ON today	9.0m ON, actuation

REFRESH SUBMIT

Use **Bleed Diagnostic** for **ON today** & **actuation** times.

Extended **ON** time may indicate a bleed limited tower, or a change in make-up water chemistry.

Long **actuation** time may indicate a too large deadband

Connect Ethernet Set-up 1 of 3, Windows

Windows operating systems have a simple way to find the Ethernet setup parameters:

The diagram illustrates the process of finding Ethernet setup parameters in Windows. It features two overlapping command prompt windows. The top window shows the initial state with the prompt 'C:\Documents and Settings\Owner>'. The bottom window shows the output of the 'ipconfig/all' command. Callouts provide instructions: 'Locate 'Run' (location differs with Windows version) and open the "cmd" command window' points to the top window; 'Type 'ipconfig/all' and ENTER' points to the command entered in the bottom window; and 'In this example Netmask:Subnet Mask = 255.255.255.0 Gateway:Default Gateway = 192.168.0.1 Primary DNS:DNS Servers = 192.168.0.1' points to the corresponding lines in the output of the bottom window. A separate callout states: 'You can find Netmask, Gateway & Primary DNS from any PC or notebook; hardwired or wireless connected to the site LAN'.

Locate 'Run' (location differs with Windows version) and open the "cmd" command window

You can find **Netmask**, **Gateway** & **Primary DNS** from any PC or notebook; hardwired or wireless connected to the site LAN

Type 'ipconfig/all' and ENTER

In this example
Netmask:Subnet Mask = 255.255.255.0
Gateway:Default Gateway = 192.168.0.1
Primary DNS:DNS Servers = 192.168.0.1

```
C:\windows\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600.5512]
(C) Copyright 1985-2001 Microsoft Corporation

C:\Documents and Settings\Owner>

C:\windows\system32\cmd.exe
C:\Documents and Settings\Owner> ipconfig/all

Windows IP Configuration

    Host Name . . . . . : Development
    Primary Dns Suffix . . . . . : 
    Node Type . . . . . : Mixed
    IP Routing Enabled. . . . . : No
    WINS Proxy Enabled. . . . . : No

Ethernet adapter Local Area Connection 2:

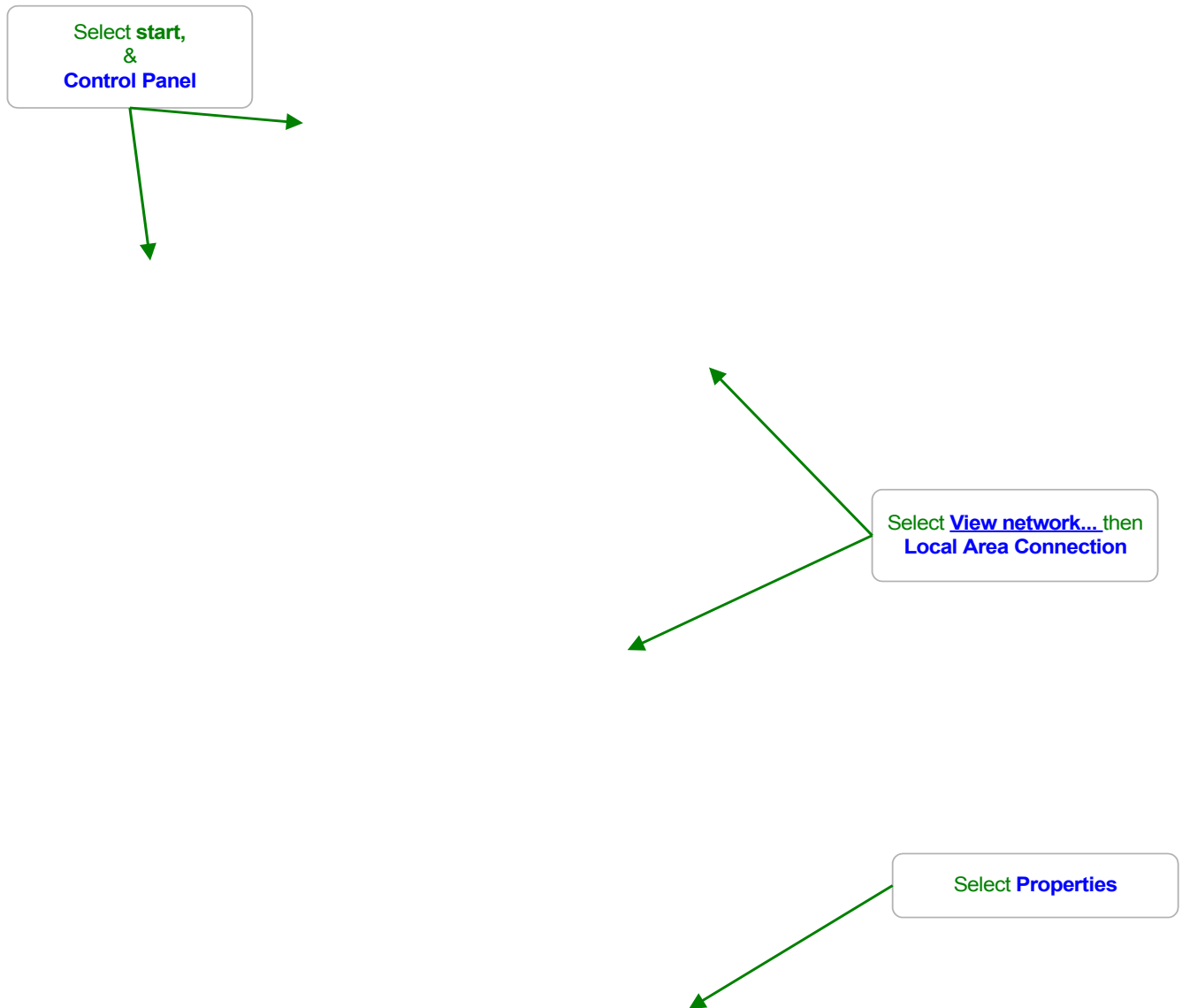
    Connection-specific DNS Suffix . : 
    Description . . . . . : SiS 900-Based PCI Fast Ethernet Adapter #2
    Physical Address. . . . . : 00-E0-18-6F-75-45
    Dhcp Enabled. . . . . : Yes
    Autoconfiguration Enabled . . . : Yes
    IP Address. . . . . : 192.168.0.103
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.0.1
    DHCP Server . . . . . : 192.168.0.1
    DNS Servers . . . . . : 192.168.0.1
                           192.168.1.1
    Lease Obtained. . . . . : Monday, December 26, 2011 6:40:10 PM
    Lease Expires . . . . . : Tuesday, December 27, 2011 6:40:10 PM

Ethernet adapter Local Area Connection 4:

    Media State . . . . . : Media disconnected
    Description . . . . . : Iomega Virtual Ethernet Adapter
    Physical Address. . . . . : 00-D0-B8-76-03-00

C:\Documents and Settings\Owner>
```

You can use either the Keypad-LCD interface or the browser to setup the controller's IP Address, Netmask, Gateway & Primary DNS.



ProMtrac Browser

Connect Ethernet Set-up 3 of 3, Windows 7

The image shows a Windows 7 desktop with several windows open. The primary window is 'Local Area Connection Properties', which lists various network protocols. A green arrow points to 'Internet Protocol Version 4 (TCP/IPv4)' in this list. Another green arrow points from a text box to the 'Internet Protocol Version 4 (TCP/IPv4) Properties' window, which is open in the foreground. In this window, the 'General' tab is selected, and the 'Use the following IP address' radio button is chosen. The IP address field is set to '10 . 10 . 6 . 200', the Subnet mask is '255 . 255 . 255 . 0', and the Default gateway is empty. A green arrow points to the IP address field from a text box. Another green arrow points to the 'OK' button at the bottom of the 'Internet Protocol Version 4 (TCP/IPv4) Properties' window from a text box. A third green arrow points from a text box to the 'Internet Protocol Version 4 (TCP/IPv4) Properties' window, specifically to the 'Use the following IP address' radio button. A fourth green arrow points from a text box to the 'Internet Protocol Version 4 (TCP/IPv4) Properties' window, specifically to the 'Use the following DNS server addresses' section. A fifth green arrow points from a text box to the 'Internet Protocol Version 4 (TCP/IPv4) Properties' window, specifically to the 'Validate settings upon exit' checkbox.

Select **TCP/IPv4** then select
Use the following...

Note the present IP Address and gateway,
server settings before you modify.
You'll need to restore them after browsing the
controller if you use the local Ethernet jack to
connect to other devices or services

Edit the IP address,
10.10.6.200 in this example
& **OK**

We've put our notebook PC
on the same LAN as the
ProMtrac. Now we can
connect using an Ethernet
cross-over cable