

# AUTOMATIC STORMWATER DIVERSION SYSTEM



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## **CONFIGURATION GUIDE**

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## GLOSSARY

### STORMSwitch -



This is the device that continuously samples the environment for rain/storm water, collects rain fall and signals the STORMController, Every time the STORMSwitch detects 1/100<sup>th</sup> of 1" rainfall it signals the STORMController

#### STORMController -



This is the device that takes the signal from the STORMSwitch and determines when to divert the E.G Start or stop a pump, Open or close a valve. Open the front panel on the STORMController to wire to power, wire the STORMSwitch and wire all diversion devices (pumps, valves...)

#### COUNTER/TIMERS

There are three main counters/timers that are configurable for your ASWDS

<u>RC RESSET</u> RAIN COUNTER RESET TIMER – The RC RESET is for setting how long a duration or time you wish your **RAIN CTR** to signal a **STORM EVENT** E.G. 1/10<sup>th</sup> of 1" of rain **in 30 minutes.** This timer is for the time facet and the **RAIN CTR** must also be set. **RAIN CTR** STORMSwitch COUNTER – The **RAIN CTR** is for setting the amount you wish your **STORMSwitch** to signal a **STORM EVENT** E.G. 1/10<sup>th</sup> of 1" of rain **in 30 minutes.** This counter is for the amount facet and the **RC RESET** must also be set.

<u>SE STORM EVENT RESET TIMER</u> – This timer allows you to decide when you would like your **CONTROLLER** to reset back to **NORMAL MODE** from **STORM EVENT MODE** E.G. 2 hours after the last 1/100<sup>th</sup> of an inch of rain has fallen, the **CONTROLLER** resets to the **NORMAL MODE**.

**EXERCISER -** The system is programmed to automatically open and close the valve every 30 days (this setting can be changed from 1-99999 days) to prevent valve from sticking during long periods of no rain.

**NORMAL MODE** – This is the normal condition (Not during STORM EVENT) of the ASWDS. This is indicated by the **GREEN** light on the STORMController being illuminated.

**STORM EVENT –** When the end user desired amount of rain fall has fallen into the STORMSwitch and the STORMSWITCH has signaled to the STORMCONTROLLER that a STORM EVENT has occurred.

**STORM EVENT MODE** – This is when the Desired amount of rain fallen within given amount of time to trigger an event to divert E.G. 1/10<sup>th</sup> of an inch (10 on the rain counter within 30 Minutes. This is indicated by the **RED** light on the STORMCONTROLLER being illuminated.

## CONFIGURING THE STORMCONTROLLER



This is the typical STORMController Screen Front. Note the configuration buttons



(From most screens, by continuing to press this key will return you to the first screen)



(This keys acknowledges you want to accept the current choice or configure or save the current screen)

Once the unit is powered up the **FIRST SCREEN** will appear like this:



This first screen describes the number of days and hours since the last time a **STORM EVENT** was triggered. The screen also indicates the STORMController is currently in a **NORMAL MODE**.

If the STORMController is currently in

**STORM EVENT MODE** it will appear like this.







This Screen shows the **ACCUMULATED RAIN FALL** sine last reset. To RESET the ACCUMULATED RAIN FALL:

While in the **FIRST SCREEN** press and hold the **ESC** key then, while holding the

LESC key press and hold the key. The resetting counter display screen will begin flashing, continue holding the keys (approximately 3 seconds) until the display stays constant.

Once the display stays constant the counter is reset back to 0.

By using the V key, from the ACCUMULATED RAIN screen it will take you to CLOCK/DATE SCREEN.



The first line of this screen shows the current: Day Mo = Monday Tu = TuesdayWe = Wednesday Th = Thursday Fr = Friday Sa = Saturday Su = Sunday aswell as the current time Hours: Minutes NOTE THIS IS A 24 HOUR CLOCK The second line of the CLOCK/DATE screen shows the YEAR-Month-Date YOU MUST PRESS THE **ESC** key, from the **CLOCK/DATE** screen it will take you to the

**MENU SCREEN:** 



## STOP PROGRAM SCREEN:



DO NOT USE THIS SCREEN IT CAN NEGITVELY EFFECT YOUR ASWDS STORMCONT<u>ROL</u>LER

If you find yourself at this screen press the **ESC** button and return to the **MENU** screen



## RC RESET = RAIN COUNTER RESET TIMER

Desired amount of rain fallen within given amount of time to trigger an event E.G. 1/10<sup>th</sup> of an inch (10 on the STORMSwitch counter **RAIN CTR**) within 30 **Minutes** (30:00m) This is the time facet only. You must also configure the **RAIN CTR- STORMSwitch COUNTER.** 

TO change the **RC RESET = RAIN COUNTER RESET TIMER** press the button. The first number on the **"T" line** will begin to blink

#### **RC REST** = RAIN COUNTER RESET TIMER

keys to display the different numbers Use the A 0 - 9s = secondsm = minutesh = hourskeys to move between the different place holders Press the You may configure your **RAIN COUNTER RESET TIMER** 00:00s Seconds through 99:99s Seconds 00:00m Minutes through 99:99m Minutes 00:00h Hours through 99:99h Hours

The "**Ta**" line will start to count down once the **Collector** has registered 1/100<sup>th</sup> of an inch of rain fall. If the STORMSwitch does not signal the configured amount of rainfall, for this setting is reached **E.G. 10/100<sup>th</sup> of an inch, in 30 minutes** this timer will reset to "0". Thus preventing the signaling of a storm event over a greater period of time than the time desired.

Once you have completed configuration press to save your settings. **REMEMBER YOU MUST STILL CONFIGURE YOUR RAIN COUNTER FOR THE AMOUNT OF RAIN TO FALL TO TRIGGER A STORM EVENT.** 

From the **RAIN COUNTER RESET TIMER** screen press the V key to display the **STORM EVENT RESET TIMER** screen.

## SE RESET = STORM EVENT RESET TIMER

Automatically reset to normal mode after storm event E.G. 6 hours after the last 1/100<sup>th</sup> of an inch has fallen. (06:00h)

### STORM EVENT RESET TIMER SCREEN:



To change the **STORM EVENT RESET TIMER** press the **ok** button. The first number on the **"T" line** will begin to blink

## STORM EVENT RESET TIMER



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#### You may configure your **STORM EVENT RESET TIMER**

00:00s Seconds	through	99:99s Seconds
00:00m Minutes	through	99:99m Minutes
00:00h Hours	through	99:99h Hours

Once you have completed configuration press or to save your settings.

The "**Ta**" line will start counting down once the STORMController has registered a storm event. If the STORMSwitch signals another 100<sup>th</sup> of an inch of rain has fallen, this timer will reset to "0" and begin to count down again. Once this timer meets the amount of time configured in the **STORM EVENT RESET TIMER** the STORMController will reset to the **NORMAL MODE**.

From the **STORM EVENT RESET TIMER** screen press the V key to display the **RAIN COUNTER** screen.

### **RAIN CTR = RAIN COUNTER**

Rain Amount to trigger event, **E.G.**  $1 = 1/100^{\text{th}}$  of an inch,  $2 = 2/100^{\text{th}}$  of an inch. (This is the amount variable you must set **B1**)

To change the **RAIN CTR = RAIN COUNTER** press the **OK** button. The first number at the **"ON"** line will begin to blink

## **RAIN COUNTER SCREEN:**



keys to move between the different place holders Press the Each place holder can register between o and 9 by using the to configure the different numbers

The counter is in .01 or 1/100ths of an inch. To set the STORMController to trigger a STORM EVENT example: 1/10<sup>th</sup> of an inch of rain fall set the counter to



## SET OFF THE SAME AS ON

This example equals **TEN** 100ths of an inch.

Once you have completed configuration press or to save your settings.

From the **RAIN CTR** screen press the V key to display the **EXERCISER** screen.

(IF YOUR UNIT DIVERTS WITH A VALVE THE NEXT SCREEN IS AVALIBLE)

## EXERCISER = STORM EVENT EXERCISE DAY COUNT

Number of days to trigger event (exercise valve for maintenance), **E.G. 30 = 30** days Recommended by most manufactures,15 = 15 days. To change the

**EXERCISE = STORM EVENT EXERCISE DAY COUNT** press the **ok** button. The first number at the **"ON"** line will begin to blink **EXERCISER SCREEN:** 



EXAMPLE:

ON 000030 OFF 000030

Press the **ESC** button and return to the **MENU** screen

From the **MENU** screen, use the  $\bigvee$  key or the  $\bigtriangleup$  key to move the > to select your MENU choice. By placing the > next to **CLOCK SET**, then pressing  $\bigcirc$  will take you to the

## CLOCK SET SCREEN:



The first letter of the Day of the week will begin blinking.

```
Su = Sunday
Mo = Monday
Tu = Tuesday
We = Wednesday
Th = Thursday
Fr = Friday
Sa = Saturday
                       keys to change the display to the different days of the
Use the 4
week.
Once you have selected the correct day of the week, press the
                                                                     key.
The first digit of the 24 hour clock will begin to blink. Use the \measuredangle
                                                                            kevs
to display the different hours of the 24 hour clock. After setting the first number in
                    key to set the second number of the 24 hour clock.
the hour use the
Continue this process to set the minutes EG: 10:10 = Ten minutes after ten
o'clock AM or 22:10 = Ten minutes after ten o'clock PM
```

Once you have finished selecting the correct hours and minutes for the 24 hour

clock, press the key. This will take you to the second to the last number in the **year** configuration. NOTE you can not change the first two numbers of the **year**. The first two numbers will remain 20 you will notice the third number in the

**year** starts to blink. Use the  $\bigtriangleup$  or  $\lor$  keys to display the different **years** in the third space E.G. 20<u>0</u>0. After setting the first number in the **year**, press the

key to set the second number of the **year**. Once you complete this process you will have set the last two numbers only in the four digit **year** E.G. 2004.

Once you have selected the correct **year**, press the key. This will take you to the first of the two digit **month** setting. You will notice the first number in the

two number **month** start to blink. Use the  $\bigtriangleup$  or  $\lor$  keys to display the different **months** in the first space

Once you have selected the correct first space for the month setting, press the

key. This will take you to the second of the two digit **month** setting. You will

notice the second number in the two number **month** start to blink. Use the

or  $\vee$  keys to display the different **months** in the second space E.G. 09,

Once you have selected the correct **month**, press the key. This will take you to the first of the two digit **date** setting. You will notice the first number in the

two number **date** start to blink. Use the  $\bigtriangleup$  or  $\lor$  keys to display the different **dates** in the first space Once you have selected the correct first space for the

date setting, press the key. This will take you to the second of the two digit **date** setting. You will notice the second number in the two number **date** start to

blink. Use the  $\bigtriangleup$  or  $\lor$  keys to display the different **dates** in the second space E.G. 25,

## PROGRAM NAME SCREEN:



### DO NOT USE THIS SCREEN IT CAN NEGITVELY EFFECT YOUR ASWDS STORMCONTROLLER

If you find your self at the **PROGRAM NAME SCREEN** press the **ESC** button and return to the **MENU** screen

## CONFIGURING MANUAL/AUTOMATIC EVENT RESET MODES:

If you wish to only have the STORMController reset manually by pressing the reset button on the front of the STORMController or if you wish to change the **STORMCONTROLLER** from **MANUAL EVENT RESET MODE** to **AUTOMATIC EVENT RESET MODE**.

While in the **FIRST SCREEN** press and hold the **ESC** key then, while holding the

**ESC** key press and hold the key. The mode the STORMController is switching to will begin flashing either **AUTOMATIC RESET MODE** or **MANUAL RESET MODE**. Continue holding the keys (approximately 3 seconds) until the display stays constant. Once the display stays constant the STORMController is now set in that mode. If you require the other mode simply repeat this process and the other condition will be set.

## CONFIGURING VALVE OPEN/CLOSED DURING AN EVENT MODES:

THIS MAY NOT BE USED ON ALL STORMCONTROLLERS, ONLY OF YOUR STORMCONTROLLER IS SENT FROM THE FACTORY TO CONTROL (1) VALVE AS ONE OF THE DIVERSION METHODS.

This process sets/changes weather your valve is in the open or the closed position during a **STORM EVENT.** 

While in the **FIRST SCREEN** press and hold the **ESC** key then, while holding the

**ESC** key press and hold the key. The mode the STORMController is switching to will begin flashing VALVE OPEN DURING AN EVENT MODE or VALVED CLOSED DURING AN EVENT MODE. Continue holding the keys (approximately 3 seconds) until the display stays constant.

Once the display stays constant the STORMController is now set in that mode. If you require the other mode simply repeat this process and the other condition will be set.

## CONFIGURING PUMP ENABLED/DISABLED DURING EVENT MODES:

THIS MAY NOT BE USED ON ALL STORMCONTROLLERS, ONLY OF YOUR STORMCONTROLLER IS SENT FROM THE FACTORY TO CONTROL (1) PUMP AS ONE OF THE DIVERSION METHODS.

This process sets/changes weather your valve is in the open or the closed position during a **STORM EVENT.** 

While in the **FIRST SCREEN** press and hold the **ESC** key then, while holding the

**ESC** key press and hold the key. The mode the STORMController is switching to **PUMP ENABLED DURING EVENT MODE** or **PUMP DISABLED DURING EVENT MODE**. Continue holding the keys (approximately 5 seconds) until the display Returns to the first screen.

Once the display returns to the first screen, the STORMController is now set in that mode. If you require the other mode simply repeat this process and the other condition will be set.

## **RESETTING THE ACCUMULATED RAIN COUNTER:**

While in the **FIRST SCREEN** press and hold the **ESC** key then, while holding the

**ESC** key press and hold the key. The resetting counter display screen will begin flashing. **RESETTING ACCUMULATED RAIN COUNTER**. Continue holding the keys (approximately 3 seconds) until the display stays constant. Once the display stays constant the counter is reset back to 0.

## QUICK REFERENCE CONFIGURATION SCREENS

#### **FIRST SCREEN**



#### STOP PROGRAM SCREEN





## STORM EVENT RESET TIMER SCREEN



#### RAIN COUNTER SCREEN



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NOTES			