ReefKeeper Elite

Advanced Aquarium Controller

Application Guide

Digital Aquatics

PN: 20-0472-000 Rev 0

Welcome to the Digital Aquatics ReefKeeper Elite Application Guide!

This document is designed to help get you started with configuring your ReefKeeper Elite system. Each page is dedicated to a specific set of functions and includes diagrams and example configurations.

Contents

Things to keep in mind:

- The ReefKeeper Elite can accept up to 63 total modules.
- Make sure to use settings appropriate for your specific tank setup.
- Modules can be connected in any order and you can use either bus port on any module.
- Be sure to only use Digital Aquatics brand bus cables. Third party/phone accessories can damage the system.
- Digital Aquatics support can be reached via phone and e-mail:

  Phone: 425-527-0995 (Monday-Friday, 8:30AM-4:30PM PST)
  Email: support@digitalaquatics.com

Controlling Temperature

These examples are designed to get you started with setting up your ReefKeeper system to control your heaters, chillers and other devices that affect the temperature of your aquarium.

What you will need:

- A temperature probe
- Your heating or cooling device connected to a channel on the PC4.
  (High wattage devices may need to be connected to a PC1 or Expansion Socket)

Things to keep in mind

Heating and cooling are extremely important aspects of healthly aquariums. Digital Aquatics highly recommends using devices with built in thermostats to act as a back up.

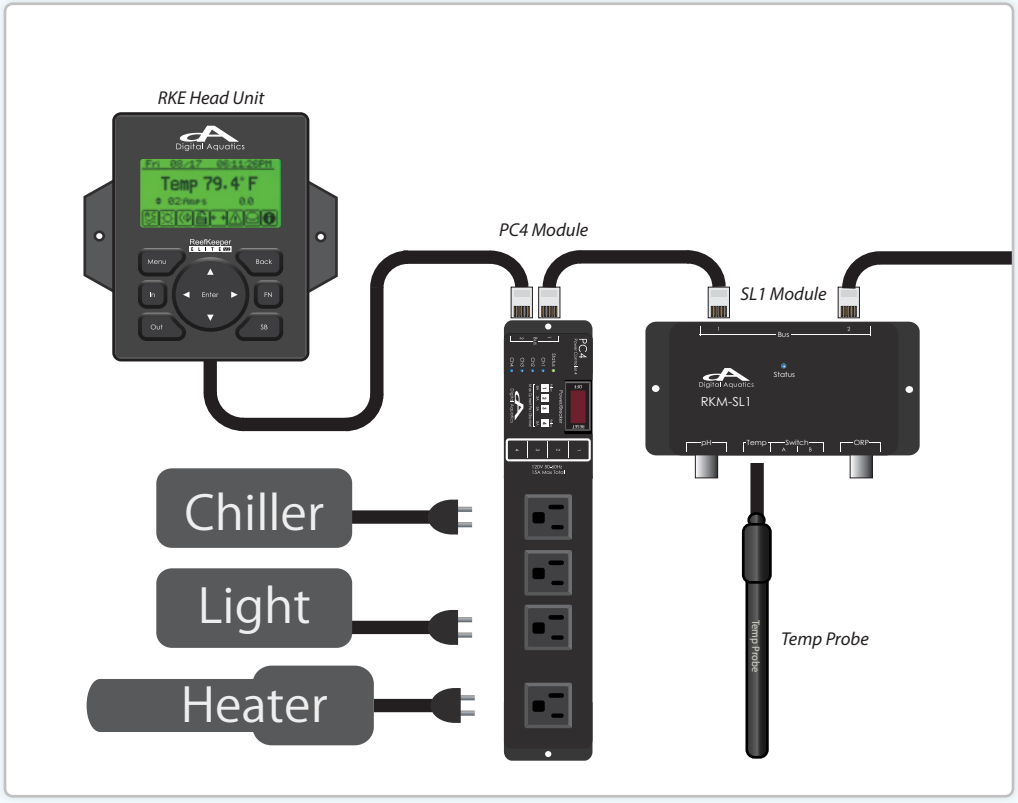
When using both heating and cooling devices, be sure their settings do not overlap, or else the two units will constantly "fight."

You can use the temperature readings to control other devices, such as turning off lights when the water is too warm.

The iTemp probe included with ReefKeeper Lite systems is not directly compatible with the ReefKeeper Elite. In order to use iTemp probes, you would need to have the TM4 module.

Step 1: Connect the temperature probe to the system *(Images not to scale)*

The Temp probe connects to the Temp port on the SL1 or SL2 module. You can add additional temperature probes by adding SL1, SL2, or TM4 Modules.



Step 2: Configure your Channel

You can use the following examples to setup different types of devices. These settings are examples; each aquarium setup is unique. Be sure to use settings approriate for your situation.

Configuring a Custom Heater

The following configuration would trigger Channel 1 to turn on when the iTemp probe reads 77.0 degrees. It would turn the channel off when the probe reads 78.0 degrees.

- Navigate to: Out > PC4 > CH1

Setting	Value
Mode	Auto
Function	Controller
Device	Temp
Target	77.5
Hysteresis*	000.5
On When	Below
Press [Back], scroll down to "Save" and press [Enter]	

Configuring a Custom Chilller or Fan

The following configuration would trigger Channel 4 to turn on when the iTemp probe reads 80.0 degrees. It would turn the channel off when the probe reads 78.0 degrees.

- Navigate to: Out > PC4 > CH4

Setting	Value
Mode	Auto
Function	Controller
Device	Temp
Target	079.0
Hysteresis*	001.0
On When	Above
Press [Back], scroll down to "Save" and press [Enter]	

* Hysteresis can be thought of as the 'range' around your set point. Setting a high hysteresis range can help keep a device from switching on and off as frequently and minimize wear on your devices. Setting low hysteresis range will create tighter control around the set point.

When MH Lights Affect Temperature

To turn off your Metal Halide (MH) lights when the temperature reaches a certain threshhold, configure the light (see below), then configure an alarm (see box at right) based on temperature.

- Navigate to: Out > PC4 > CH3

Setting	Value
Mode	Auto
Function	Light
Device	Halide
Target	SMTWTFS
Hysteresis	08:00:00AM
On When	09:00:00PM
Press [Back], scroll down to "Alarm" and press [Enter]	

Specify the alarm (1-63) and what mode the channel should change to (On or Off.)

Setting	Value
Alarm	01
Mode	Off
Press [Back], scroll down to "Save" and press [Enter]	

Configuring an Alarm

You can set an alarm based on the Temp reading. This alarm will trigger when the temperature is above 80 degrees.

- Navigate to: Menu > Alarms > Alarm 01

Setting	Value
Device	02:Temp
Trip	Above
Value	80.0
[Back] or ←	
Device	None
Device	None
Logic	OR
Alert	F - - (Flash/Beep/E-mail)
Scroll down to "Save" and press [Enter]	

When an alarm trips, it will override your configurations and set the channel to the state you have specified.

Controlling pH

These examples are designed to get you started with setting up your ReefKeeper system and your pH probe to monitor and control the pH level of your aquarium.

pH levels are typically managed with dosing pumps or calcium reactors. In most cases you must determine the rate at which dosing pumps and calcium reactors change the pH in your aquarium. You can than configure the ReefKeeper system to turn on these devices for the amount of time that your tank needs to reach the desired pH level. Be sure to factor in the amount of time that the pH takes to stabilize after a dosing event has occurred. You can control your dosing pump or calcium reactor with your ReefKeeper system by connecting either to a channel (outlet) on your PC4.

What you will need:

- A pH probe and pH calibration solution
- A module with a pH port, such as the System Lab 1 (SL1).

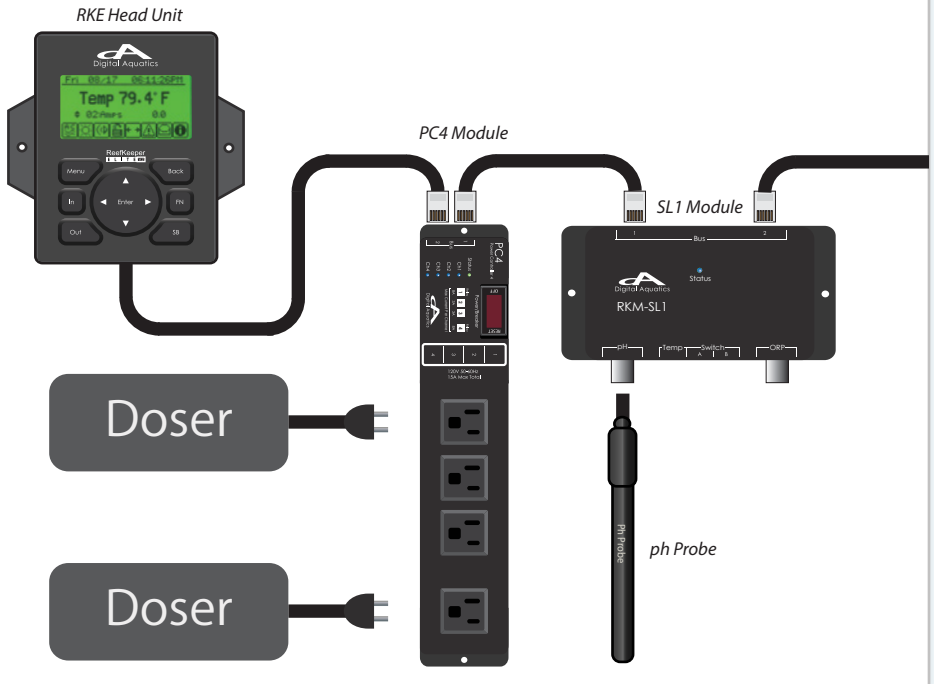
Things to keep in mind

pH probes are sensitive instruments. Any stray voltage in the tank or other electrical interference can interact with the pH reading.

The pH probe comes with a protective cap to keep the tip of the probe moist. Keep the cap available for occasions when the probe must be removed from the tank. The probe will become damaged if it is allowed to dry out.

Multiple SL1 modules and pH probes should not be used in electrically connected water. Multiple pH probes can be used by adding additional System Lab 2 (SL2) modules.

Step 1: Connect the pH probe to the system *(Images not to scale)*

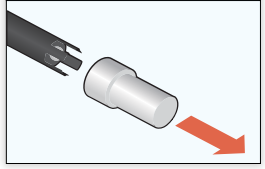


Step 2: Calibrate your pH probe

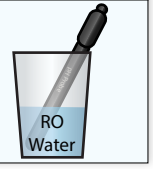
Calibrating the pH Probe

- Navigate to: In > SL1 > pH

Remove the protective cap



Rinse the pH probe



Soak the probe in 10.0 pH calibration solution

[Next]	
Target	10.00
Raw Data	1473

Raw data can take 5-10 minutes to stabilize.

Once the raw data has stabilized, press [Enter] on [Next]. The target will change to 7.00. Rinse the probe in RO water. Place the probe in the 7 pH calibration solution.

Soak the Probe in 7.0 pH calibration solution

[Save]	
Target	7.00
Raw Data	265

Raw data can take 5-10 minutes to stabilize.

Once the raw data has stabilized, press [Enter] on [Save]. Calibration is complete. Rinse the probe in RO water. The probe is now ready for use.

Calibration solution is most accurate at its rated temperature (as shown on the label) and is designed for one-time use.

The raw data value will never fully stop moving, but will eventually oscillate within a range of a few digits.

pH probes should be cleaned and checked regularly (every 30-60 days.) If a probe isn't reading accurately, it should be re-calibrated. Probes which require frequent calibration should be replaced.

Step 3: Configure the channel

Controlling a Channel with pH

The following configuration would trigger Channel 1 to turn on when the pH probe reads 8.0 pH. It would turn the channel off when the probe reads 8.4 pH.

- Navigate to: Out > PC4 > CH1

Setting	Value
Mode	Auto
Function	Controller
Device	pH
Target	08.20
Hysteresis	00.20
On When	Below
Press [Back], scroll down to "Save" and press [Enter]	

Using an Alarm to Control a Channel

Specify the alarm (1-63) and what mode the channel should change to (On or Off).

- Navigate to: Out > PC4 > CH4 > Alarm

Setting	Value
Alarm	01
Mode	Off
Press [Back], scroll down to "Save" and press [Enter]	

Configuring an Alarm

This alarm will trip when the pH is above 8.5.

- Navigate to: Menu > Alarms > Alarm 01

Setting	Value
Device	02:pH
Trip	Above
Value	08.50
[Back] or ←	
Device	None
Device	None
Logic	OR
Alert	- - -
	(Flash/Beep/E-mail)
Scroll down to "Save" and press [Enter]	

Configuring Lights and Lunar Pods

These examples are designed to get you started with setting up your ReefKeeper system to control your lighting fixtures and lunar pods. Most lighting fixtures are fully controllable using a Power Controller 4 (PC4) to turn them on or off. For more advanced lighting control, we recommend the Advanced Lighting Controller (ALC) or Moonlight Controller (MLC).

What you will need

- Your lighting fixture connected to power.
- Your lighting fixture correctly wired and connected to the ALC or MLC.

Please refer to the ALC User Guide to see wiring diagrams for the Serial Out (SDO) and 0v-10v (DIM) ports.

Things to keep in mind

Lighting modules draw more power than most modules. It is best to have at least two PC4 modules on the system to provide enough bus voltage for the system.

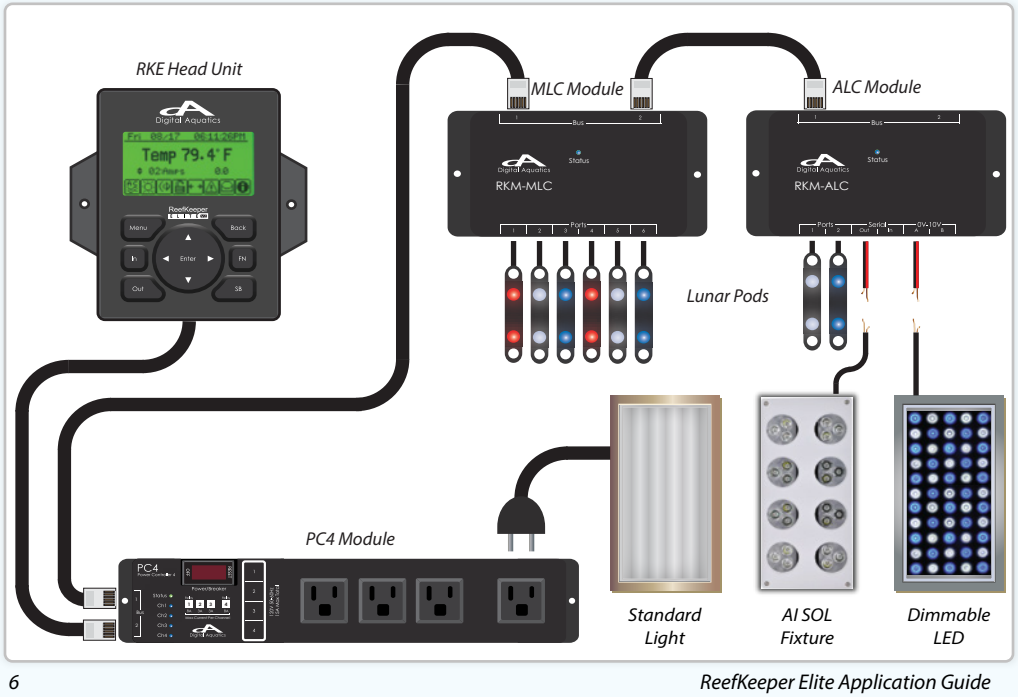
Dimmable drivers draw different amounts of current. The ALC can provide a total of 40mA of current. You may need to refer to the manufacturers specification on the current draw for the 0v-10v port on your fixture.

Be sure to refer to your lighting fixture owner's manual and ALC documentation for wiring instructions. Some of the wiring will require splicing cables together. Familiarity and access to a multi-meter will be required for ensuring that the cables are wired correctly.

The Blue settings and Storm mode of the Advanced Light function are only used with AI fixtures. The Blue settings should be left at '0', and Storm mode should be set to 'No', for use with the DIM ports.

Step 1: Connect the module to the system *(Images not to scale)*

Modules can go in any order and you can use either bus port. To add a module to the system, simply connect a bus cable to a bus port.



Step 2: Configure your module

You can use the following examples to setup your lights.

The Sure-On safety feature will be automatically enabled when using the 'Metal Halide' function. This will keep the channel off for 15 minutes after configuration, and whenever the channel is powered off for any reason. The channel indicator on the PC4 will flash during Sure-on mode.

These settings are examples; each aquarium and light setup is unique. Be sure to use settings approriate for your situation.

Configuring a Simple Light (PC4 only)

The following configuration will turn the channel on every morning at 8AM and turn the channel off at 6PM.

- Navigate to: Out > PC4 > CH4

Setting	Value
Mode	Auto
Function	Light
Type	Other
DOW	SMTWTFS
Time On	08:00:00AM
Time Off	06:00:00PM
Press [Back], scroll down to "Save" and press [Enter]	

Configuring Lunar Pods (MLC and ALC only)

Lunar Pods will follow the intensity of the moon based on a 29.8 day lunar cycle. They turn on and off based on the settings for Night mode.

- **For MLC Pod Ports**
  Navigate to: Out > MLC > POD1+2

- **For ALC Pod Ports**
  Navigate to: Out > ALC > Pods

Setting	Value
Mode	Auto
Function	Lunar
Intensity	80
Ramp	5 (5 = 5 minutes)
Press [Back], scroll down to "Save" and press [Enter]	

How to Set up Night Mode

- Navigate to: Menu > General > Night

Setting	Value
Start	08:00:00PM
Stop	08:00:00AM
Scroll down to "Save" and press [Enter]	

Configuring an Advanced Light (ALC only)

The Advanced light function is used to control dimmable advanced lighting fixtures.

- Navigate to: Menu > Modules > ALC > DIM A

Setting	Value
Mode	Auto
Function	Adv Light
W. Intensity	100
Timer	1 (Timer number)
Ramp	30 (30 = 30 minutes)
Blue Settings	All Set to "0"
User Storm?	Off
Press [Back], scroll down to "Save" and press [Enter]	

Configuring a Timer

Here is an example for setting up a timer that will run every morning at 8AM and turn off at 6PM.

- Navigate to: Menu > Timers > Timer 1

Setting	Value
DOW	SMTWTFS
Start	08:00:00A
Time On	10:00:00
Time Off	00:00:00
Repeat	None
Random	No
Oscillate	No
Scroll down to "Save" and press [Enter]	

The Lunar Pods will turn ON and begin ramping (if set) up when 'Night-mode' becomes active. They will match the intensity of the current lunar cycle and only reach their maximum on a full moon. They may not turn on at all during a new moon.

Digital Aquatics recommends setting the Lunar Pods Max intensity to 80% or lower for the best results and longevity of the Lunar pods.

Controlling Pumps

These examples are designed to get you started with setting up your ReefKeeper system to control your aquarium pumps and wave makers.

What you will need:

- Your standard pumps or skimmer connected to a channel on the PC4.
- A Digital Aquatics Advanced Pump Controller (APC) adapter cable for each Tunze controllable pump.
- If using an APC, connect your Tunze controllable pump to the APC module as well as to a power outlet or channel on the PC4.

Things to keep in mind

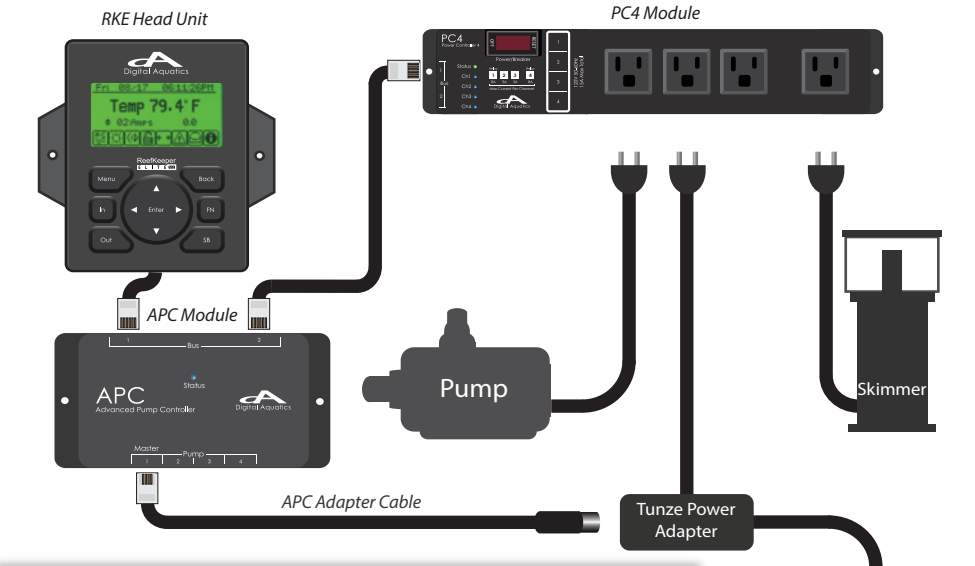
The PC4 has two different kinds of switches. There are mechanical relays in channels 1 and 4. There are solid state TRIAC switches in channels 2 and 3. Some pumps are not completely compatible with the solid-state TRIAC switches and will function better on channels 1 or 4.

If channels 1 and 4 are not available for usage with the pumps, an electronic noise filter or surge protector between the pump and the outlets 2 or 3 can resolve the compatibility issues.

To prevent pre-mature wear on your pump, Digital Aquatics recommends checking with your pump's manufacturer to to determine the minimum on/off cycle for your specific pump.

Step 1: Connect the Module to the system *(Images not to scale)*

Modules can go in any order and you can use either bus port. To add a module to the system, simply connect a bus cable to a bus port.



The APC Adapter Cable

Two APC adapter cables are included with the APC.

Each Tunze pump that is connected to the APC will need an APC adapter cable.

Step 2: Configure your Module

The Wave Maker feature is made up of two sets of alternating timers. While one is on, the other is off. There are two Wave Maker pairs: A/B and C/D. These examples are for Wave Maker cycle A/B, but applies to C/D as well.

These settings are examples; each aquarium and pump setup is unique. Be sure to use settings approriate for your situation.

Setting up the Wave Maker

The wave maker cycles will need to be set up prior to being assigned to a channel. Cycle A/B and C/D are set, and will run, independently.

- Navigate to: Menu > General > Wave Maker

Setting	Value (Hours:Minutes:Seconds)
WM A	00:15:00
WM B	00:20:00
Random	No
Scroll down to "Save" and press [Enter]	

Configuring a Wave Maker A

With this configuration, the channel will follow the wave maker A cycle (WM A).

- Navigate to: Out > PC4 > CH1

Setting	Value
Mode	Auto
Function	Pump
Type	WM A
At Night	Off
Delay	00:00:00 (HH:MM:SS)
Press [Back], scroll down to "Save" and press [Enter]	

Configuring a Wave Maker B

With this configuration, the channel will follow the wave maker B cycle (WM B).

- Navigate to: Out > PC4 > CH4

Setting	Value
Mode	Auto
Function	Pump
Type	WM B
At Night	Off
Delay	00:00:00 (HH:MM:SS)
Press [Back], scroll down to "Save" and press [Enter]	

Configuring a Pump and Skimmer

Pumps and skimmers can run 24 hours a day, or be off at night.

- Navigate to: Out > PC4 > CH4

Setting	Value
Mode	Auto
Function	Pump
Type	Sump/Skim
At Night	Off
Delay	00:00:00 (HH:MM:SS)
Press [Back], scroll down to "Save" and press [Enter]	

Configuring a Pump on the APC

These setting will cause the first pump on the APC to pulse on and off every 5 seconds.

- Navigate to: Out > APC > Pump1

Setting	Value
Mode	Auto
Function	[Enter]
At Night	On
Night Calm	Yes
Pulse	00:05.00 *(Minutes:Seconds: Centiseconds)*
Sequential	No
Cycle	Master
MaxPower	75
MinPower	25
Storm Mode	Off
Delay	00:00:00 (HH:MM:SS)
Press [Back], scroll down to "Save" and press [Enter]	

The **At Night** setting specifies whether the channel will be on or off during night mode.

The **Night Calm** settings decreases the APC intensity setting by 50% during Night mode.

The **Master/Slave Mode** is similar to the wave maker cycle. When the master is on MaxPower, the slave will be on MinPower and vice-versa.

Setting up the NET Module

These examples are designed to get you started with connecting to your ReefKeeper system to your Network Interface Device (NET) module. The NET module enables you to monitor and control your aquarium via the web and to receive e-mail alerts when tank parameters reach critical levels.

What you will need:

- Home networking equipment, such as a router and/or modem.
- Ethernet cable

Things to keep in mind

When adding any device to your network, it is best to have a working knowledge of your network equipment. You may need to refer to the manufacturer or the documentation for your network device. Digital Aquatics is unable to provide support for third-party equipment.

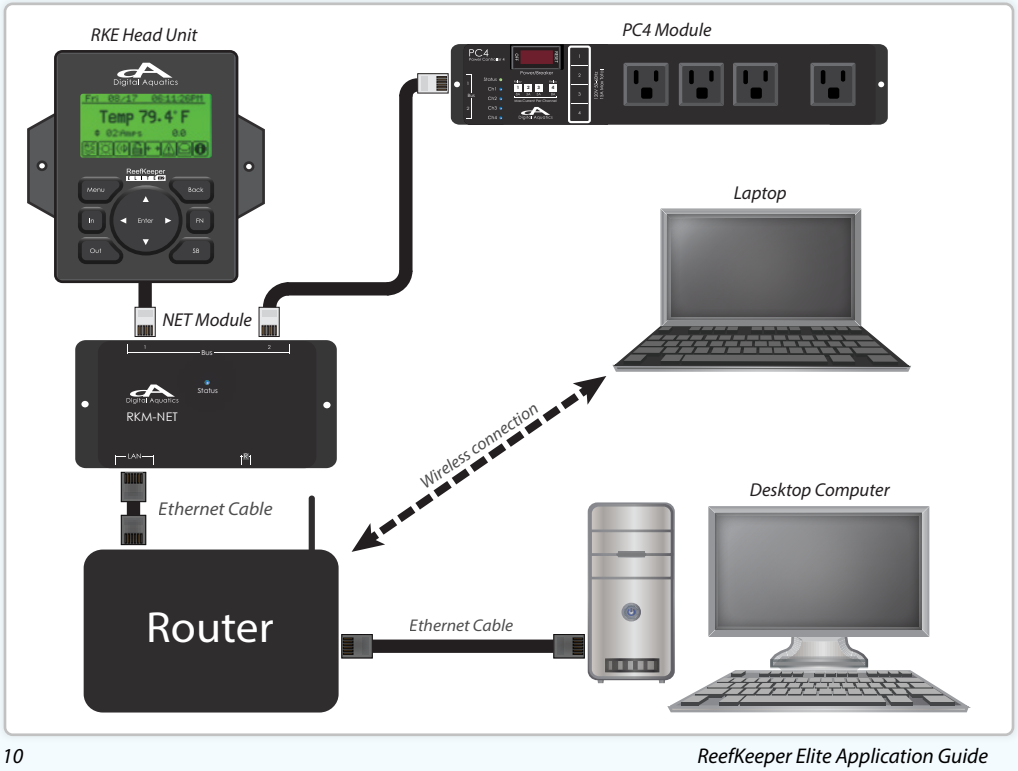
Once you can access the NET module from within your network, configuration of the NET module is complete. To access the NET module from outside of your private network, you will need to configure your network equipment to allow access.

Most routers are setup for DHCP by default and will automatically assign the NET module an dynamic IP address automatically. If you would prefer a static (unchanging) IP address, you can configure your router to assign a specific address to the NET module.

Services such as no-ip.org or dyndns.com can help access your network from over the internet.

Step 1: Connect the module to the system *(Images not to scale)*

Modules can go in any order and you can use either bus port. To add a module to the system, simply connect a bus cable to a bus port.



Step 2: Connect the NET to the router

Once the NET module is connected to the router, the router should assign NET module an IP address.

- To find the IP address, navigate to: In > NET > Status > IP Address *(Example: 192.168.2.4)*
- Enter the IP address into the address bar of a standard web browser. *(Example: http://192.168.2.4)*

- Click on the Enter link and enter your username and password to access the NET module web Interface.
- The default login information is case-sensitive.
- Be sure to enter them exactly:

Username: DigitalAquatics
Password: password

Enabling NET Communication

NET communication will need to be enabled on the ReefKeeper head unit before the system can be configured from the NET module web interface.

- Navigate to: Menu > System > Com

Setting	Value
NET Control	On
myReef	On
[Save]	

Configuring E-mail Notifications

- From the NET web server, click on the 'Notification' tab.

Here is an example setup using a free GMX.com e-mail account.

Setting	Value
Notification Enable	Check
Communication Enable	Check
From: E-mail Address	example@gmx.com
To: E-mail Address	example@gmx.com
CC: E-mail Address	
E-mail Authentication Enable	Check
E-mail Username	example@gmx.com
E-mail Password	<password>
SMTP Server	mail.gmx.com
E-mail Port	587

Be sure to click the 'Test Settings' button to verify that the settings are correct.

Configuring E-mail Alerts

Change the third dash [-] to [E] to enable the e-mail alert. This example alarm will cause the head unit to flash and send an e-mail when it trips.

- Navigate to: Menu > Alarms > Alarm 01

Setting	Value
Device	02:Temp
Trip	Above
Value	80.0
[Back] or ←	
Device	None
Device	None
Logic	OR
Alert	F - E
	(Flash/Beep/E-mail)
[Save]	

Notes

Alarms with e-mail alerts should be set so that they will only trip during emergencies. Setting an alarm which will trigger during normal operation may result in a large number of e-mail alerts.

If your networking equipment or router is not located near your tank, you can use a wireless bridge or wireless gaming adapter to allow access to your NET module.

If you lose your login information, the NET module can be reset by pressing and holding the reset button for 10 seconds.

For more information concerning setting up your network or configuring access from over the internet, please visit our online forums:

http://www.forum.digitalaquatics.com

Setting Up Float Switches

These examples are designed to get you started with setting up your ReefKeeper system to operate with a float switch. Float switches are most commonly used to monitor and control auto-topoff systems and/or trigger an alarm when water levels exceed a user defined level.

What you will need:

- A module with a switch port, such as the SL1 or SW5
- A float switch and bracket
- Familiarity with splicing wires

Things to keep in mind

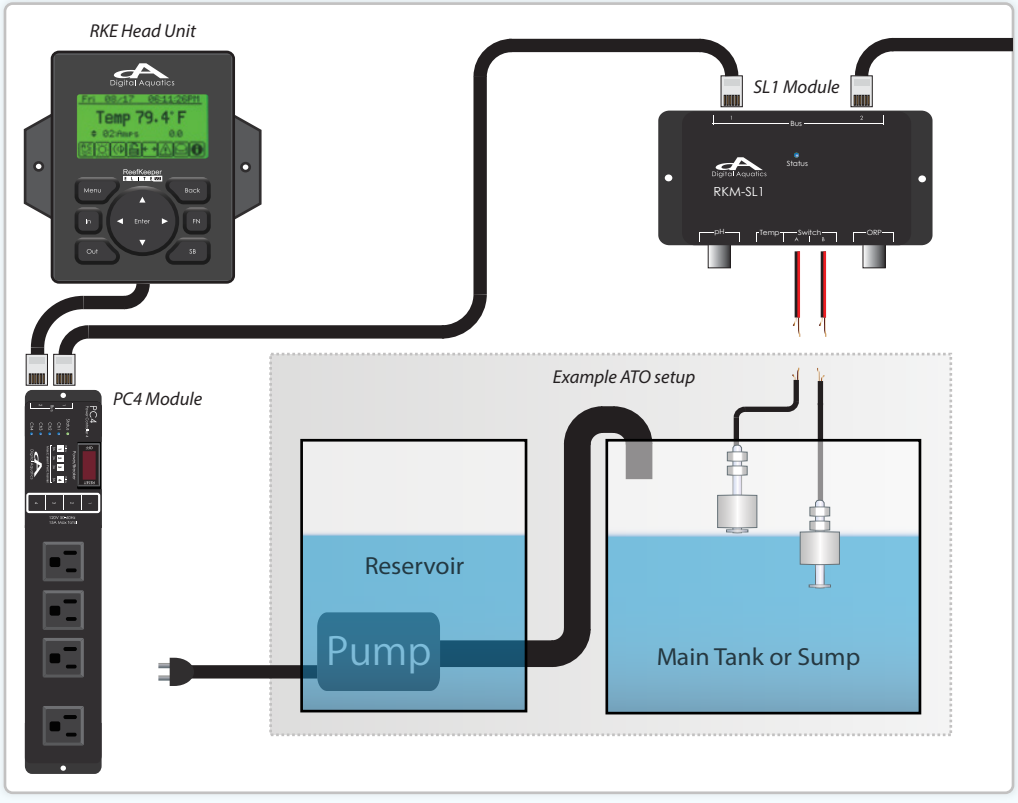
Auto top-off systems are very sensitive and can cause catastrophic damage if they are incorrectly configured or if there is any interruption to regular operation. Digital Aquatics always recommends redundancy as a safety precaution.

You will need to verify which direction is 'Open' and which direction is 'Closed' before configuring a channel or alarm.

Regularly maintain your switches by keeping them clean and making sure there are no livestock or growth which may inhibit the motion of the switch.

Be sure to test the switches and programming prior to installing any devices, to ensure proper function.

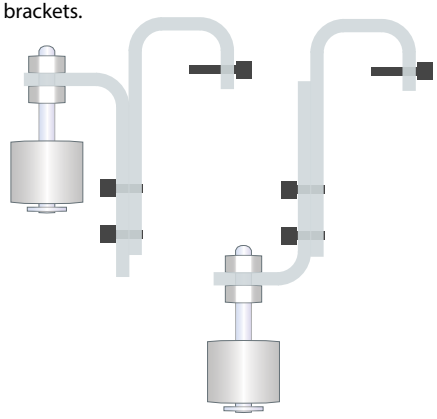
Step 1: Connect the switch to the system *(Images not to scale)*



Step 2: Connect the float bracket

These settings are examples; each aquarium is unique. Be sure to use settings approriate for your situation.

There are multiple ways to configure the float brackets.



Step 3: Configure a channel

Running a Switch with a Timer

This configuration would turn channel 4 on when SWB is open. Channel 4 will stay on until timer 1 runs for 5 minutes or until SWA is closed, whichever comes first.

- Navigate to: Out > PC4 > CH4

Setting	Value
Mode	Auto
Function	Switch
Device	SWB
On When	Open
Timer	1
Device	SWA
Off When	Closed
Press [Back], scroll down to "Save" and press [Enter]	

Using a Switch-Triggered Timer

Here is an example for setting up a timer that will triggered by the Switch function.

- Navigate to: Menu > Timers > Timer 01

Setting	Value
Time On	00:05:00

DOW, Start, Off Duration, Repeat, Random, and Oscillate are not used and should be left at defaults.

Running a Switch with an Alarm

The following RKL configuration would turn channel 4 on when SWB is open and turn channel 4 off when SWB is closed.

- Navigate to: Out > PC4 > CH4

Setting	Value
Mode	Auto
Function	Switch
Device	SWB
On When	Open
Timer	0
Device	SWB
Off When	Closed
Press [Back], scroll down to "Save" and press [Enter]	

Using an Alarm to Control a Channel

A secondary switch positioned higher than the main switch, can be used to tigger an alarm, as a redundant back up.

Specify the alarm (1-63) and what mode the channel should change to (On or Off.)

- Navigate to: Out > PC4 > CH4 > Alarm

Setting	Value
Alarm	01
Mode	Off
Press [Back], scroll down to "Save" and press [Enter]	

Configuring an Alarm

This alarm is based on the switch position

- Navigate to: Menu > Alarms > Alarm 01

Setting	Value
Device	02:SWA
Trip	Open
[Back] or ←	
Device	None
Device	None
Logic	OR
Alert	F B -
	(Flash/Beep/Email)
[Save]	

More than one device can be controlled with the same switch port.

Connecting the System to myReef 2.0

These examples are designed to get you started with the myReef 2.0 software application. myReef can be used to configure your ReefKeeper system and control/monitor your aquarium from your windows PC.

What you will need:

- myReef 2.0 Installed
- SID V2 Unit
- Windows XP or newer
- The ReefKeeper system up and running (for configuration and setup)
- Individual modules for firmware updating

Using myReef 2.0 to configure the ReefKeeper system *(Images not to scale)*

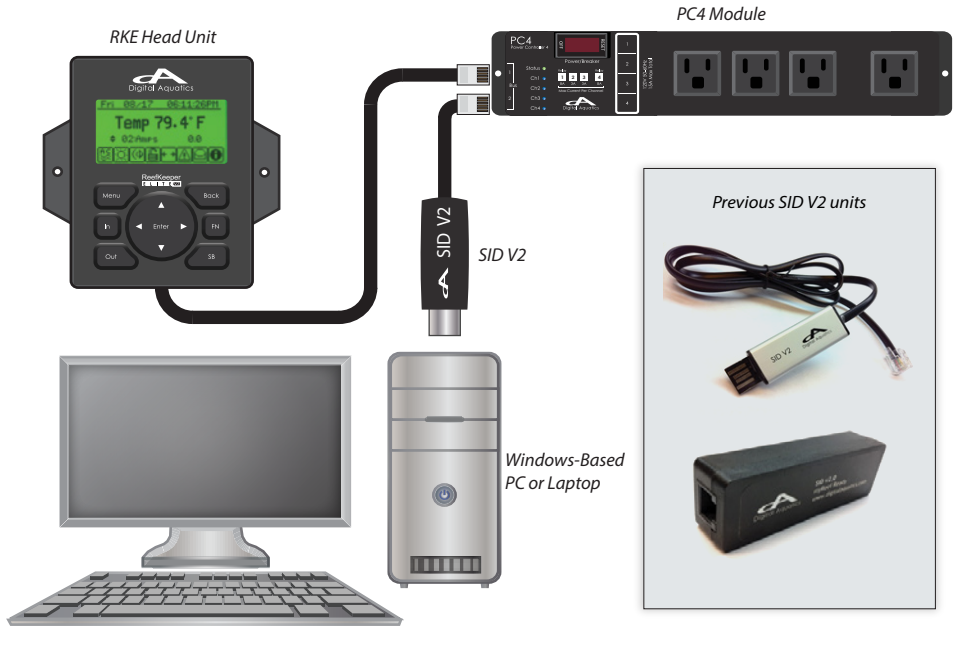
From a fresh restart on the PC, follow these steps:

1. Start the myReef 2.0 software
2. Connect the SID V2 to a USB port

   The SID should appear under 'Systems' on the far left side of myReef 2.0
3. Connect the SID an open bus port on the ReefKeeper system

   The RKE system list should appear under the SID on the far left side of myReef 2.0
4. Select the module you would like to configure

ⓘ When using the graphing feature of the myReef 2.0 software, the computer must be remain up and running; sleep mode and other power saving modes must be disabled in order for data to be successfully graphed.



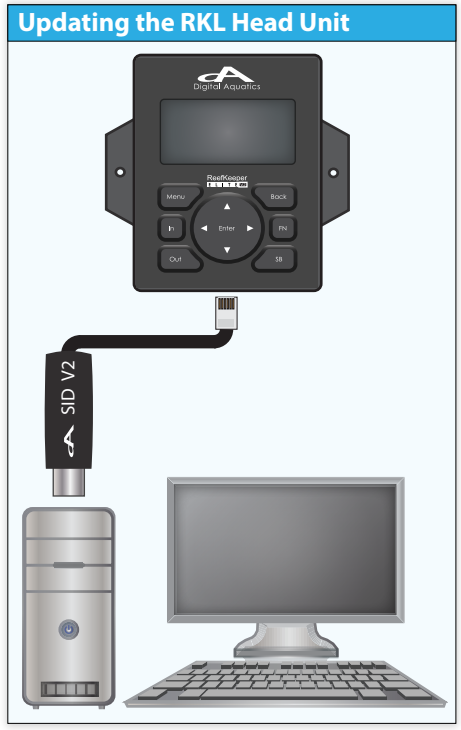
Updating ReefKeeper Firmware

From a fresh restart on the PC, follow these steps:

1. Start the myReef 2.0 software.
2. Connect the SID V2 to a USB port.
3. Connect the SID V2 to an open bus port on the module you would like to update
4. Select the module you are updating from the list on the left
5. Click 'Program' to start the update process
6. When the update is complete, click [OK] on the 'Programming finished' box
7. Reconnect the unit to the system.

ⓘ The RKE head unit has several steps during the firmware update process. Be sure to allow all of the steps to complete before disconnecting the head unit.

Updating the RKL Head Unit



Notes

ⓘ Modules must be updated individually. Be sure to disconnect all other modules prior to updating.

ⓘ PC4 modules will need to be powered off or unplugged for updating.

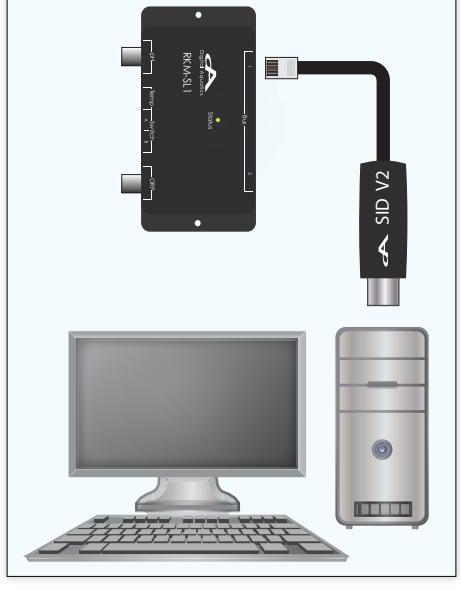
ⓘ NET modules require several additional steps. Please refer to the NET module user guide for updating instructions.

ⓘ A factory reset must be performed after updating the RKE head unit.

ⓘ The head unit and modules will not light up or turn on when connected to the SID.

ⓘ Only SID V2 units are compatible with myReef 2.0. If you have a V1.0 SID, it will need to be updated prior to usage. For details on the SID update program, email us: support@digitalaquatics.com

Updating Modules



ⓘ myReef 2.0 can be downloaded directly from the Digital Aquatics website. It is only compatible with current Windows operating systems, running the latest service packs and .NET Framework (.NET 2.0 and up.)

http://www.digitalaquatics.com/myreef-download

Standby Modes

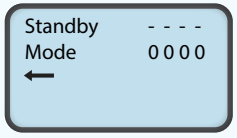
Setting up the Standby modes

Standby mode is typically used for maintenance or feeding periods. When a channel is set to react to Standby mode, the Standby acts like a timer which interrupts a channel's configuration. Once the Standby timer runs out, the each channel will resume its configuration. There are 4 Standby modes on the ReefKeeper Elite. Each channel can respond or react to any or all of the Standby modes.

The duration of each Standby mode can be set by navigating to: Menu > General > Standby

Each channel can be configured to react to the Standby modes by the Standby area of the channel.

Understanding the Standby mode screen



Standby sets which Standby modes will control the channel.The channel will ignore any Standby set with a dash (regardless of **Mode** Setting.)

Mode sets how the channel should react to the Standby mode above it.
0 = Off
1 = On

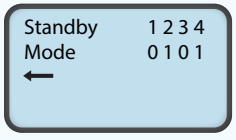
Assigning Standby modes to the channels

- Navigate to: Out > PC4 > CH1 > Standby

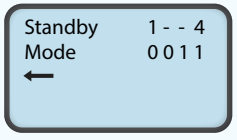
Setting	Value
Standby	1 2 - 4
Mode	0 0 0 1
<- Back	[Save]

In this example, the channel 1 will
respond to Standby modes 1, 2, and 4.
It will turn off during Standby 1 & 2
It will turn on during Standby 4
It will ignore Standby 3

Additional Examples



In this example, the channel will respond to all Standby modes. It will:
Turn off for Standby 1 & 3
Turn on for Standby 2 & 4



In this example, the channel will respond to Standby 1 & 4. It will:
Turn off for Standby 1
Turn on for Standby 4
Ignore Standby 2 & 3

Homedata

HomeData refers to the information displayed on the main screen of the the ReefKeeper Elite head unit. The RKE can display Homedata in two ways. Mode A will display one large reading of your choosing and one small reading.

The Small reading can be set from the home screen with the [Up] or [Down] arrows. This is the default mode for the ReefKeeper Elite.

Mode B will display four small readings of your choosing. These readings will not be change-able from the home screen.

- Navigate to: Menu > General > HomeData

Mode	A
A / B1	01:Temp
B2	None
B3	None
B4	None
[Save]	

This example will display a large temp reading on the main screen. The small reading can be set with the [Up] or [Down] arrows.

Mode	B
A / B1	01:Temp
B2	01:pH
B3	03:CH1
B4	02:SWA
[Save]	

This example will display the Temp, pH, CH1 State, & SWA on the main screen. Each reading will be in a small font.

Appendix & Frequently Asked Questions

Navigating the example menus: Out > PC4 > CH1

To follow the navigation instructions,
Press the [Out] button on the RKE head unit
Scroll down to the [PC4] that you would like to configure is highlighted and press [Enter]
Scroll down until [CH1] is highlighted and press [Enter]

[<-Back] indicates that you should highlight and press [Enter] on the [←] icon, or press the [Back] button once.

Saving your settings

Be sure to press [Enter] on [Save] in order to save your settings when configuring the system.

What is a module?

Modules refer to the add-on units that can be connected to your ReefKeeper system to expand its capabilities. The PC4 included with your system is a module. Modules can add many features, from lunar simulation (the MLC), controllable dimming (ALC), switch inputs, pH, ORP, Temp and Salinity (SL1 and SL2). All modules are compatible with both the ReefKeeper Lite and ReefKeeper Elite systems.

What is a channel?

A channel refers to a programmable output. On the PC4, the channels refer to the Outlets. On the ALC module, for example, the channel can refer to the DIM ports or Lunar ports.

How can I setup the system from a computer?

There are 3 ways to configure the ReefKeeper system: The head unit, myReef 2.0 and the NET module.

"My metal halide isn't turning on" or "my channel indicator on the PC4 is flashing"

The channel indicator on the PC4 will flash during Sure-On mode. The channel indicator on the PC4 will also flash when the channel is in Standby Delay. The Sure-On Safety Mode will keep the channel from turning on for 15 minutes after the channel turns off, in order to keep Metal Halides from overheating.

myReef 2.0: SID>Update Error

If you have a SID v2.0 and are receiving this error, it typically means that either myReef 2.0 did not close properly, or that there is more than one instance of the myReef 2.0 software running simultaneously. The easiest way to resolve this issue is to close all instances of myReef, or reboot the PC. The SID will not need frequent updating. If you receive the SID > Update error message and are running a SID V2.0, updating will not resolve this issue.

Community

Our online forum is host to over 11,000 members. You can find example configurations, pictures of tanks, and new ideas: http://www.forum.digitalaquatics.com/