About your new RIMS Tube

Your RIMS tube was deigned to work with circulation and will overheat if wurt is not continuously pumped through the tube. A great pump choice would be MARCH model 809-PL-HS, available through <u>www.Amazon.com</u> and from most good homebrew stores. You also need a mash tun temperature controller to manage the outlet temperature of your RIMS tube. We offer two stand-alone mash controllers based on the same MYPIN TA4 series controllers we use in our larger brew panels.

We pre-assemble the electrical box and element of your RIMS tube kit then we coat the front of the element base with a protective black food contact rated epoxy to protect your element's base from corrosion. Disassembling the pre-assembled portion of your RIMS tube kit will damage this corrosion resistant coating.

Your RIMS tube is designed to be mounted horizontal with the inlet coming up from the bottom near the electrical box and the outlet exiting the top near the temperature sensor. This mounting position accomplishes three things.

- 1. Your RIMS tube will be self-purging as your wort pumps through the tube any air bubbles will purge out the top and into your mash tun.
- 2. When you drain your wort into your brew kettle your RIMS tube will self-drain.
- 3. Your thermal probe will be measuring the output temperature of your RIMS tube.

Your RIMS tube can be mounted to your brew stand with a couple of automotive band style (radiator) clamps around the center tube or by drilling a couple of holes through the side of electrical box and bolting the box to your brew stand. Your RIMS tube should be mounted so that you can separate at least one of the center nipple joints for cleaning and drying dry after each brew session.

If you purchased the 120V RIMS tube with copper clad heating element

Your RIMS tube shipped with a 1650 Watt ultra-low watt density fold back style element. The element sheath is zinc plated copper and the zinc will eventually erode off exposing the copper sheath. The erosion will do no harm, it's no different than the erosion the element would experience if it were installed in your hot water tank.

If you purchased the 120V RIMS tube with stainless steel heating element

Your RIMS tube shipped with a 1650 Watt ultra-low watt density fold back style element. The element sheath is and threaded base are both made of 304 stainless steel. Unlike Incoloy, the stainless steel your electric stove eye is coated with, 304 stainless steel is bright and shiny. The stainless steel may turn dark from heat but it should not rust or corrode.

If you purchased the 240V RIMS tube

Your RIMS tube shipped with a 5500 Watt low watt density fold back style element. The element is sheath is Nickel Chromium Alloy, a very corrosion resistant form of Stainless Steel, and you should never see a corrosion issue with the element. Your 240V element can also run on 120V but the wattage will drop to from 5500 Watts at 240V to 1375 Watts at 120V.

Your 1-1/4" RIMS tube kit includes

$1 - 8'' \times 1 - 1/4''$ stainless steel pipe nipple (240V kit)

- OR 1 5.5" X 1-1/4" stainless steel pipe nipple (120V kit)
- 3 1-1/4" X 1/2" stainless steel pipe bushings
- 1 1-1/4" X 1" stainless steel pipe bushing will be pre-assembled to the element
- 1 Water resistant electrical box will be pre-assembled to the element
- 1 Water resistant power cord strain relief
- 1 Roll of Teflon tape

2 - 1-1/4" stainless steel pipe tees - 1 will be pre-assembled to the element

- $1 1/2'' \times 1/4''$ stainless steel pipe bushing (adapter for $\frac{1}{2}'' MPT$ sensor) OR 1 – stainless steel thermowell with threaded rubber plug
- 2 1/2'' stainless steel pipe X 1/2'' stainless steel barb fittings
- 1 Water resistant electrical box cover
- 1 Pre-assembled power cord
- 1 Instruction sheet / insert

Assembling your RIMS tube

Assembly is easy – wrap two turns of the supplied Teflon tape around each threaded part and assemble. Tighten until hand tight then tighten at least one more turn to seal. You may need two sets of slip-joint pliers and/or a helper to tighten the threads.

Using your RIMS tube

Set your RIMS tube up so that it will automatically drain when you drain your mash tun. The ideal location is about ½ way up the side of your mash tun so that your RIMS tube also fills. Your circulation pump should be mounted so that your wurt pumps from the bottom of your mash tun through your RIMS tube and then into the top of your mash tun.

Even with wurt in your RIMS tube your pump must be started at the same time or before you start your mash schedule. Even a few minutes without circulation can cause scorched wurt or damage to your RIMS tube heating element.

Even though all of the exposed metal surfaces of your RIMS tube are copper or stainless steel, it's not wise to leave standing water anywhere in a brew rig and you should unscrew the last joint to help the inside of your RIMS tube air dry after each brew session.



Recommended Mounting Orientation