

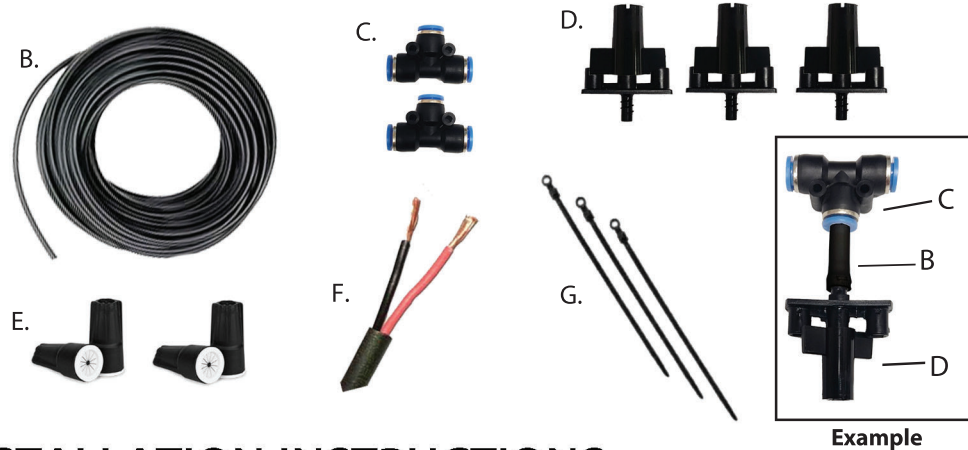
KIT-SMART-AC-JR connects to an existing water source and the low voltage (24V AC) thermostat control wires of the AC unit. It reduces the run time of the Air Conditioner Compressor, thereby lowering utility costs.

KIT-SMART-AC-JR

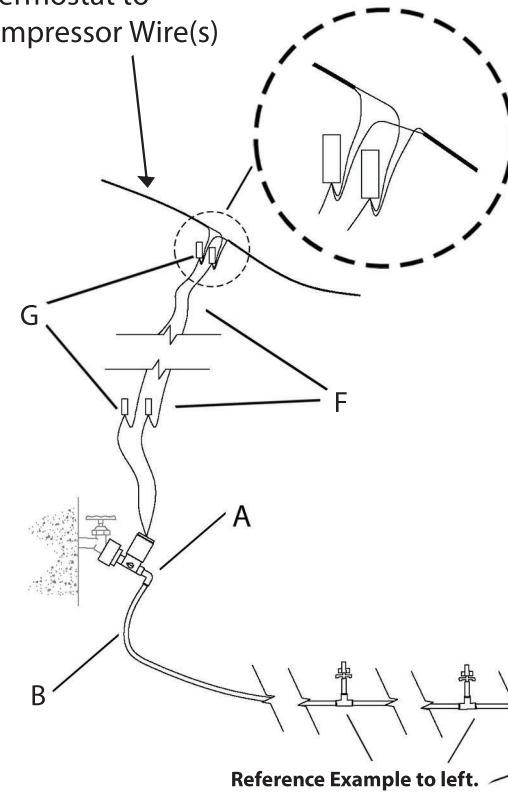
INCLUDED IN THIS KIT:

- A. 1 - Valve Assembly: HV-1800-601
- B. 25 ft - Vinyl Supply Tubing: PE-A 250/25
- C. 2 - Tees: MFP-WT-162
- D. 3 - Fogger Nozzles & base: MS-FOG-BE-NZ & MSA-MOD-BR-QT
- E. 4 - Wire Connectors (waterproof): WIRE-61148
- F. 10 ft - Control Wire: WIRE-18-2-CUT
- G. 3 - Zip Ties: CLAMP-77108

*If extra foggers are desired, the KIT-FOG-JR is an excellent compliment to this kit. If replacement or additional parts are needed, each component of this kit is sold individually at www.irrigation-mart.com.



Connect only to 24V AC Thermostat to Compressor Wire(s)



ONLY USE LOW VOLTAGE



Fig1. Position assembled nozzles at desired angle on intake panels of AC unit.



For technical assistance, please call 1-800-SAY-RAIN (729-7246). You may also visit us at <https://www.youtube.com/irrigation-mart> for detailed assembly tutorials.

Reference Example to left.

INSTALLATION INSTRUCTIONS

SAFETY NOTE: Please be careful when working with electric wires, components and AC units. We recommend that you turn all power OFF while installing this kit, and that only those with electrical experience attempt this installation. Irrigation-Mart is not responsible for any injury or damage to property. Check with AC manufacturer to ensure warranty is not voided through use of SMART-AC.

INSTALLATION INSTRUCTIONS (some items come assembled)

- 1) Connect Valve Assembly (A) to garden hose or faucet.
- 2) Run Tubing (B) to configure the Foggers (D) around the AC Unit using the Tees (C), cut tubing as needed.
- 3) Before attaching Foggers (D) - flush Tubing (B) by manually opening the valve (1/4 turn of lever below solenoid). Set lever to "OFF" position to enable automatic functionality.

- 4) Use Zip Ties (G) to position the Fogger Nozzles (D) on the intake sides of the AC unit.
**Foggers and base are 2 parts, do not use glue to join them (Fogger Nozzles may come assembled to pressfit).*

- 5) Ensure power to AC unit is turned OFF.

- 6) Connect the two Solenoid wires on the Valve Assembly (A) to the 24V AC thermostat control wires (wire from thermostat to the power relay/contactors of the AC compressor unit). Connect one wire from the Solenoid to one of the thermostat control wires, and connect the other wire from the Solenoid to the other thermostat control wire. This can be done inside the AC unit where the thermostat wires are connected to the relay, or by cutting and splicing into wires anywhere between the relay and the thermostat using Wire Connectors (E) provided.

- 7) Turn the power and thermostat on and test the system. The valve (A) should open and fogger (D) start spraying when the AC compressor comes on, and stop when the compressor stops.

FAQ - SMART-AC-KIT

1) The water keeps running / misters keep spraying continuously when the air conditioner cuts off.

Ensure the manual on/off lever is in the “off” position (for automatic operation). If this does not correct the problem, unscrew the solenoid from the valve base and make sure that the rubber end of the plunger is facing down -- toward the valve base that the solenoid screws into.

NOTE: (see #11 below on testing the solenoid).

2) On the tees for the ¼” tubing, is there a way to pull the tubing out without damaging the tubing or the tee?

Yes, to remove the tubing from the push connect style fittings, pull and hold the blue ring in toward the fitting while pulling the tubing away from (out of) the fitting. It may help to first push the tubing in toward the fitting to help compress the blue ring in toward the fitting.

3) My air conditioner has 4 sides and the Kit only has 3 foggers. Can I use 4 on the system? What parts do I need to add an additional fogger?

You may use more or less foggers than those that come in the Kit. We suggest using one fogger per side of the unit where air is sucked in; typically, air does not flow into the unit from all four sides; sometimes air actually flows out of one side. It is good to hook up a fogger and place it in different positions and areas around the unit (while the unit is on) to see what position is best for your unit.

The extra parts needed to add an additional mister are shown on the reverse side of this page. You can order extra parts on our website: <http://irrigation-mart.com>

4) Do I need to take down my AC kit in the winter months?

Yes, at least remove or drain the water from the Kit components that might burst during cold weather. And, you might as well do this when the maximum expected temperature for the season falls below about 75°F.

5) Does it matter which wire is connected to which when installing?

No, but be sure you are connecting to the 24VAC thermostat control wires or the 24VAC terminals of the relay at the outside unit. Just connect one wire to one wire/side and the other wire to the other wire/side of the 24VAC source.

6) I’ve got a lot of minerals in my water; do I need to install some kind of filter or is there some way to clean the components? Will I also need to clean my HVAC coils?

A screen washer comes with the kit, but this will not protect against all plugging. A 150 mesh or finer filter would be needed to protect against plugging of the foggers by solids in the water. It’s likely the minerals in your water are dissolved (in solution and not solids) but will precipitate out when oxidized (meets air) and accumulate on surfaces. The foggers can be removed and soaked (overnight) in an acidic solution (vinegar) to remove mineral deposits (like calcium and iron). And, you might need to remove any mineral buildup on your HVAC from time to time.

7) Can I use more/fewer fogger tips?

Yes, we sell components to add to the Kit if needed for larger units. We suggest as many foggers per unit as possible without causing too much runoff/puddling. In some cases, as few as 2 foggers per unit might achieve the desired effect.

8) How do I determine which wire on my HVAC unit to connect to?

Using a volt meter, locate the two wires at the outdoor unit which run from the thermostat and which gives 24VAC when the outdoor unit (compressor) is running. Inside the outdoor unit you can test at the compressor relay terminals for the 24VAC power from the thermostat. If you do not wish to open the outdoor unit you may test the wires themselves outside the unit with the volt meter. If you do not have 24VAC from the thermostat (some newer digital units may not) this kit will not work as is; some options exist for this situation; contact us for more information on this.

9) The model of my HVAC unit is xxxx-xxx; is this compatible with the SMART-AC-KIT, and if so where is the wire I need to connect to?

As long as the unit has a 24VAC control wires from the thermostat to the outdoor unit it will work. See testing instructions above.

10) I have installed the SMART-AC-KIT but nothing comes on. Why won’t it work?

First make sure the source water is on. Next use the manual on-off lever on the valve base to manually turn on water to the foggers. If water still does not flow, turn the source water off (in order to not get wet) and unscrew/remove the solenoid (do not lose the spring and plunger). Turn the source water on and make sure water will run from the water source through the hole into the valve base. If this does not work, there must be something plugging the valve preventing water from reaching the plunger port; remove the inlet screen washer on the hose connection to check for blockage. When done testing, be sure to turn the manual on-off lever back to the off position for automatic operation.

11) How do I test the solenoid to make sure it is good?

Using a standard 9-volt battery, touch one solenoid wire to the positive side of the battery and the other solenoid wire to the negative side of the battery. If the solenoid is good, and the battery is good, you should hear a “click” sound (the plunger moving inside the solenoid). If no sound is made/heard, unscrew the solenoid from the base to verify the condition of the plunger and spring; be careful not to lose these when unscrewing the solenoid.

*For further assistance, call 800-SAY-RAIN (729-7246).