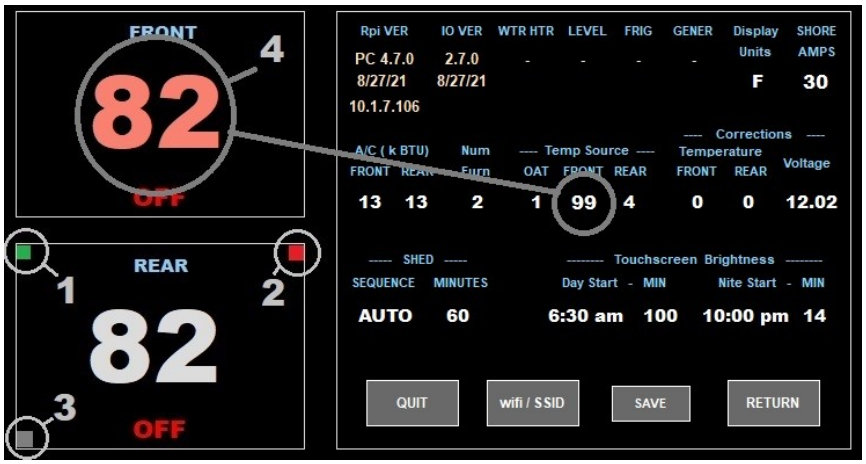
CONFIG / STATUS EXPLANATION

Touchscreen (Rpi) 4.7.0 Control module (IO) 2.7.0.
Aug 28, 2021

This sheet addresses the more common questions asked by users. Many changes, upgrades, and new features have occurred since the Waiter ECC was introduced. Most of the features described here are available on older versions, some are not.



STATUS INDICATORS

1 – GREEN > Furnace commanded to run

2 – GREEN > Compressor commanded to run.
BLUE > Compressor commanded to run, but hard start delay is preventing it from starting.
RED > Compressor was SHED – Actual amps were to high / overload.
RED-GREEN > Compressor commanded to run, but pre-SHED is preventing it from starting.

3 – GRAY > There is a SCHED assigned and running for this system.

4 – If the front or rear Temp Source is set to sensor fault mode, 99, the temperature displays as a light red and uses the good sensor as its source. See below for more detail.

CONFIG SCREEN

Rpi VER and IO VER WTR HTR LEVEL FRIG GEBNER – Version information for touchscreen (Rpi), control module (IO), and optional modules, if installed.

Display Units - Fahrenheit or Celsius. (default F)

SHORE AMPS - Amperage capacity of the shore power connection. Used for Pre-SHED and SHED operations. (10, 15, 20, 25, 30, default is 30)

Useful when plugged into something less than 30 amps and you want SHED and Pre-SHED protection at a lower amperage than the standard 30 amps. i.e. Plugged into a pedestal with a weak 30 amp breaker that trips at less than 30 amps. Or, plugged into a 15/20 amp household outlet.

A/C (k BTU) - BTU of A/C units installed. Used by Pre-SHED to estimate total amp load before a compressor is started (actual amps plus estimated compressor amps). Compressor won't start if amps not available. Estimated amps are for compressor only, doesn't include blower, approx 3 amps: 15k > 11 amps, 13k > 9 amps,

11k > 6 amps, 9k > 4 amps. (default 13k)

NOTE: SHED operates with actual measured amps, not the pre-SHED estimated amps.

Num Furn – Number of furnaces installed (default 2)

Temp Source – Source for temperature display, where the temperature comes from. (default 1 4 4).

OAT (outside temperature): 0 - 3.
0 > Blanks outside temperature reading on touchscreen.
1 - 3 > address of electronic sensor. (default 1)

FRONT & REAR: 0 - 4 and 99.
0 > Use temperature provided by the control module.
1 - 3 > address of electronic temperature sensor.
4 > Use temperature provided by the touchscreen. (default)
99 > Sensor fault, use the other inside sensor (front or rear). The display changes color to a light red and shows the temperature of the good sensor. Both displays show the same temperature (the good sensor) (SEE ITEM 4 in the above screen shot, The front temperature, 82, is actually the rear temperature)

A temperature display of -99 (minus 99) indicates a problem with the temperature sensor / source. Always check the Temp Source first to ensure correct configuration.

Corrections – Corrections (calibrations) for temperature (default 0). DC Voltage calibration, Provides for a correction range of 3.0 volts in 0.1 volt increments.

SHED Sequence – If set to REAR or FRONT, will always SHED that unit first. If set to AUTO, toggles back and forth between the front and rear units. (default REAR)

Pre-SHED may force a unit to SHED. Example: The SHED Sequence is set to REAR. The rear compressor is running and the front compressor isn't. If the system wants to turn on the front compressor, it first performs a Pre-SHED check to verify there's enough amps available. IF there isn't enough amps available (i.e. someones running a hair drier) the system will force the rear unit to SHED to reduce the amps load. It then performs the Pre-Shed test again to see if there's now enough amps available to turn on the front compressor.

SHED MINUTES – Sequence must be in AUTO. Sets the maximum time one compressor is allowed to run if the other compressors is waiting in a Pre-SHED mode. "---" disables the SHED MINUTES function.

Example: SHED MINUTES set to 30. There's not enough amps to run both compressors so the rear SHEDs and the front continues to run. After 30 minutes of running, if the rear compressor is in a Pre-SHED mode (it wants to run, but there isn't enough amps), The SHED MINUTES will SHED the front compressor and allow the rear compressor to start. As long as there isn't enough amps to run both compressors, it will toggle back and forth, running each compressor for 30 minutes, SHED it, then allow the other compressor to run for 30 minutes, etc, etc, etc..

Brightness – What time to start day / nite dimming. If in AUTO, Day/ Nite is approximate sunup/sundown.

MIN – The minimum brightness to use for Day and Nite brightness. The MIN levels are not percentages or linear, i.e. 10 isn't twice as bright as 5. 100 seems to work for the day, 5 to 15 work for the nite. A low number may not be able to see the screen at all. Set the nite to lowest number that the screen can still be seen in a dark room.

NOTE – SHED time and Hard Start Delay time are both two minutes (120 seconds).