HatchSense Operation

Here are a few notes about HatchSense workings.

- There must be at least 10 steps available in the profile before HatchSense button can be turned on (i.e. there must be fewer than 20 lines used)

- There will be 3 IP+ steps and 6 H+ steps. These are fixed and no lines can be added or deleted. If fewer steps are needed then simply enter exactly the same setpoints into them

- As many additional non-HatchSense setpoint lines as required may be added. Steps whose day-in-cycle is less than the IP Timeout (as programmed in the HatchSense setup screen) will appear above the special HatchSense steps, all others will appear below the HatchSense steps

- For a profile to be valid four conditions must be met:
        - the first line must be at day 0.0 (this is the case for non-HatchSense profiles as well)
        - the first IP+ line must be + 0 hours
        - the first H+ line must be + 0 hours
        - at least one non-HatchSense line must appear after the HatchSense section of profile
(for example at day 21.0)

- The profile will go through the following steps as it runs the program:

1. Until day 19.16 (19d:4h) the hatcher will run profile as normal with the HatchSense module in test mode where motion in one of the sensors blinks the corresponding light for a few seconds
2. At day 19.16 the HatchSense module activates and will activate its lights (30 min on, 30 min off) looking for motion
3. When motion from at least 2 levels is detected the program will go to first IP+ step (IP +0h in profile)
4. If profile reaches the IP timeout day in cycle programmed in HatchSense setup screen without seeing movement, it will automatically change to the first IP+ step
5. All 3 IP+ steps will execute in sequence
6. Once the third IP+ step is active, the machine will look for the humidity peak. The actual humidity has to go above setpoint by amount programmed in setup screen (1st peak number) then stay at that level for some time, then go below peak humidity by amount programmed in setup screen (2nd peak number)
7. When peak is detected the program will go to first H+ step and the HatchSense module lights are turned off
8. If profile reaches the H timeout day in cycle programmed in HatchSense setup screen without seeing peak, it will automatically change to the first H+ step
9. All 6 H+ steps will execute in sequence, unless the next condition occurs
10. When day in cycle reaches the first non-HatchSense step after the special HatchSense section, these will be executed immediately, even if not all H+ steps have finished

Default HatchSense setup and recommended profile are as follows:

HatchSense Setup

Global	Timeout	**20.00**
OK	Timeout	**20.75**
Cancel	Hum Peak	▲ **4.0** ▼ **2.0**

🗓 Day	🌡 Temp	💧 Humidity	📉 Damper
0.00	98.3	40.0	30
18.00	98.2	40.0	35
18.50	98.0	40.0	4500p
19.00	97.8	40.0	4000p
+ 0h	96.0	50.0	3000p
+ 8h	98.0	55.0	8500p
+ 12h	98.0	60.0 ✗	8500p
+ 0h	97.0	58.0 ✗	3000p
+ 2h	98.0	56.0 ✗	6500p
+ 4h	97.0	56.0 ✗	3000p
+ 6h	96.5	54.0 ✗	6000p
+ 7h	96.0	54.0	3000p
+ 8h	95.5	52.0	3000p
21.00	95.0	48.0	100