



**TEMPTRON T-607**  
**OPERATION MANUAL**  
Version 8021  
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1.	<b>INSTALLATION</b>	<b>3</b>
2.	<b>OPERATION</b>	<b>3</b>
3.	<b>READING SET POINT</b>	<b>3</b>
4.	<b>CHANGE OF SET POINT</b>	<b>4</b>
5.	<b>SET POINTS</b>	<b>5</b>
6.	<b>Hidden Set up functions</b>	<b>10</b>
7.	<b>TROUBLE-SHOOTING</b>	<b>11</b>

## 1. INSTALLATION

Open the two screws on the front panel

1. Connect the **Temptron T-607** to the wall in a dry place approximately 3 feet away from the electrical cabinet.
2. Connect the Temperature Sensor to the sensor input 1 and 2 (see drawing)  
The sensors can be placed up to 600 feet from the main unit with an ordinary two-wire cable. The sensor has no polarity.
3. Connect the relay's output to the various systems. All outputs are dry contacts 2 Amp/220V NO/NC (see drawing).
4. Connect a 220V cable to the unit.
5. Connect the output 010V output to the flap motor.
6. Connect a dry contact from a water meter to the digital 1 in and com, (see drawing).
7. Close the panel with the two screws.

## 2. OPERATION

The **Temptron T-607** will display the average temperature of the connected temperature Sensors. It is possible to display each sensor separately.

Turn on power.

1. Each time power is connected to the unit "Agro Lo" will appear on the display. The **Temptron T-607** is calibrating its connected sensors.
2. After 20 Seconds the average temperature will appear on the left display.
3. To display sensor 1, press on button "1".  
The temperature of Sensor 1 will be displayed.
4. To display Sensor 2, press on button "2".  
The temperature of sensor 2 will be displayed.
5. To display the humidity, push on "5" (Only if a Humidity Sensor is connected.).

## 3. READING SET POINT

It is possible to read all the information on the **Temptron T-607** display.

The right display indicates the function number. The left display shows the set point for each function.

Each set point has a function number (see menu on the front panel). It is possible to go into the function in two ways:

1. By pressing on the "DATA" button, the function number display on the right side of the panel will increase. The preset information will appear on the data display on the left side of the panel.
2. By pressing on the "0" button, two lines will appear on the function display and "FUNC" on the data display.

Example:

If you would like to see function no.8;

- a) Push on the "0" button.
- b) Push on "0" and than on "8" button.

On the function display will appear 08 and on the data display the information.

If a function number is higher than 10, push on "0" and than the function number.

Example:

If you would like to see function no.12;

- a) Push on the "0" button.
- b) Push on 1 and 2 button.

On the function display will appear 12 and on the data display the information.

It is possible to continue from function "12" by pushing on the "DATA" button to the next function.

#### **4. CHANGE OF SET POINT**

It is possible to change each set point.

1. Go into the desired function as explained above.
2. Push on "PROG" button. The function display will start to flash.
3. Use the keyboard to enter the desired data. The new data will appear on the data display.
4. Check the display to see if the information is correct. If yes, push on the "Enter" button. The function display will stop flashing to indicate that the new information has been stored into the unit's memory.

## 5. SET POINTS

### Function

#### **01. Current Time**

**Displays the current time.**

#### **02. Required Temperature**

The required temperature is the requested temperature for the house. All set points (except the cool temperature set point) are set as a differential above or below the required temperature.

#### **03 Heat**

Heat set point is the temperature differential below the requested room temperature that the heating system will turn on.

Example: **Heat** set point = 1.0

If the room temperature should drop 1.0° below the **Room temperature** (function 02) setting then the heating system will start to run.

#### **04. Fan 1**

Fan 1 set point is the temperature differential above the required temperature at which time fan 1 will operate nonstop. Fan group 1 alone may be used as a minimum ventilation fan group or it may be used together in a rotating manner together with the other 4 fan groups (see hidden function #39 Fan mode).

#### **05. Fan 2**

Fan 2 set point is the temperature differential above the required temperature at which time fan 2 will operate nonstop. Fan group 2 may be programmed to work as a minimum ventilation fan group (see hidden function #39 Fan mode).

#### **06. Fan 3**

Fan 3 set point is the temperature differential above the required temperature at which time fan 3 will operate nonstop. Fan group 3 may be programmed to work as a minimum ventilation fan group (see hidden function #39 Fan mode).

#### **07. Fan 4**

Fan 4 set point is the temperature differential above the required temperature at which time fan 4 will operate nonstop. Fan group 4 may be programmed to work as a minimum ventilation fan group (see hidden function #39 Fan mode).

**08. Fan 5**

Fan 5 set point is the temperature differential above the required temperature at which time fan 3 will operate nonstop. Fan group 5 may be programmed to work as a minimum ventilation fan group (see hidden function #39 Fan mode).

**09. Fan On Time**

Fan on time is set in minutes. This is the length of time the minimum ventilation fans will run during minimum ventilation cycle.

**10. Fan Off Time**

Fan off time is set in minutes. This is the length of time the minimum ventilation fans will be off during minimum ventilation cycle.

**11. Fan Hum Set**

Fan humidity set is set in percentage. If the humidity reading in the house reaches the set humidity as set here, the unit will automatically bring into operation the next fan group.

**Example:**

Function #	Setting
02. Requested temperature	75°
04. Fan 1	1.0
05. Fan 2	2.0
06. Fan 3	3.0
07. Fan 4	4.0
08. Fan 5	5.0
09. Fan on time (minutes)	1
10. Fan off time (minutes)	2

If the current average temperature in the house is 75° or less, then the unit will be working in the minimum ventilation mode.

Fan 1 will be working in minimum ventilation cycle. Fan one will run 1 minute and be off 2 minutes (function 09 and 10)

Once the temperature reaches 76° (function 02 + function 04), fan 1 will run continuously. The unit will no longer be in the minimum ventilation cycle.

When the temperature reaches 77.0° (function 01 + function 04), ) fan 2 will start.

Now both fans 1 and 2 will be operating nonstop.

This procedure will continue with fan 3, 4 and 5 as the temperature raises.

The reverse procedure will apply when the temperature starts to drop.

## **12. Cool Temp.(ABS)**

Enter here the temperature that when reached in the house the cooling system will start to run in its cycle mode. This temperature is set as an absolute temperature.

## **13.Cool On Time: mm:ss**

This is the ON time period, set in minutes and seconds, which the cooling system will run.

## **14.Cool Off Time: mm:ss**

This is the off time period, set in minutes and seconds, which the cooling system will be off during the cooling system cycle.

Example:

Function:	Value:
12. Cool Temp. ABS	77.0°
13. Cool On Time mm:ss	02:00
14. Cool Off Time mm:ss	05:00

If the house temperature reaches 77° the cooling system will start to operate. The cooling system will run for 2 minutes (function 13), and be off for 5 minutes (function 14).

## **15. Low alarm**

Alarm high set point is the temperature differential above the requested room temperature.

Example: If 5.0° is entered in the alarm high function, then if the temperature raises 5.0° above the required room temperature (function 01), then the alarm relay will be activated.

## **16. High alarm**

Cold alarm set point is the temperature differential below the requested room temperature.

Example: If 5.0° is entered in the alarm low function, then if the temperature falls 5.0° below the required room temperature (function 01), then the alarm relay will be activated.

## **17.. Water Clock**

If a water meter is attached to the unit then it is possible to see here the amount of water consumed in liters.

## **18. Feed Multiply**

The feed multiply is the total feed in that is brought into the house over one minute when the auger motor is on. This is needed in order to calculate the amount of feed being used. This amount of feed will be assumed to have been brought into the house for each minute that the auger runs.

### 19. Daily Feed Consumption

A display of the current total feed consumption over the last 24 hours (from reset time to reset time).

### 20. Total Feed Consumption

A display of the total feed consumption since the start of the flock.

### 21. Temperature Day 1.

Temperature day 1 is the room temperature (code 02) for the first day of growing. It is the temperature that will appear as required room temperature (code 02) when grow day (code 31) is equal to day 1. The room temperature will be reduced according to the temperature table as explained below.

### 22 – 30 automatic reduction table

It is possible to set a temperature table to reduce automatically the room temperature each day during the raising period. It is possible to set up to 9 Groups. Length of each group can be up to 9 days. Each Group can be reduced up to 9.9°C.

Example: day 1 temp. 82°. (code 21)

Growth day 1 (code 31)

Room temp. will be 82° (code 02)

Group 1= reduction over 7 days of 2°.

By day 7 - the room temp. will be 80°.

Group 2= reduction over 3 days of 1.5°.

By day 10 the room temperature will be 78.5°. This will continue for the 9 possible settings.

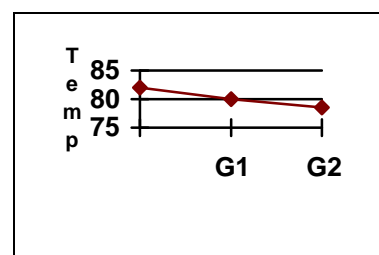
Example:

To Enter temperature reduction of 2°C over 7 days, enter code 35, press on the program button, press on 7 and than on 2 than on 0 and than on enter. On the display will appear: **7 2.0 G1**

Push on data key, next group will appear.

To enter temperature reduction of 1.5°C in 3 days, push on 3 than on 1 than on 5 than on enter.

On the display will appear: **3 1.5 G2.**



It is **important** to enter data in all 9 groups. If a group is not in use than put one day and 0°C. as a reduction temp.

### 31. Grow Day

This is the current grow day of the flock. At the beginning of the flock enter here 1. The room temperature (code 02) will automatically receive the value as entered in Grow day1 temp. (code 34).

### **32. Lock Code**

It is possible to enter a 4-digit function, which will lock the **Temptron T-607**. Enter a 4-digit function and press enter. This will be the code necessary in order to enter information into the Temptron T-607.

Once the code has been entered, after a ten minute period, if no information has been entered the unit will relock. It is possible to see all the information in the unit, but not possible to make any changes.

In order to unlock the unit, first enter the 4 digit code and then continue in the usual manner to enter information.

Example:

- A. Enter 4-digit function
- B. Push the Prog.
- C. Enter function number and press enter.
- D. Enter desired value and press enter.

**If no lock code is desired enter in 0000 as the lock code.**

### **33. Alarm Type**

Here is shown the alarm type in a numerical fashion.

Number 1 = Low alarm. Low alarm means its cold in the house (see function 15).

2 = High alarm. High alarm means its hot in the house ( see function 16).

3 = Memory alarm. Memory alarm means that one or values in the control unit have been changed not by the user. Please recheck all values after an memory alarm.

4 = All sensors alarm. This alarm means that all the sensors have ceased to function. In order for the unit to operate at least one sensor is needed.

5 = One sensor alarm. If one sensor becomes faulty the alarm will be activated.

### **34. Digital Input Readout**

This is a display of the current digital inputs being used in a bin format

### **35. Reset Time**

The **Temptron T-607** collects all its information on a 24 hours basis. It is possible to set the reset time. The grow day also changes after this time is passed. All information, temperature, humidity, water count and feed consumption will reset at this time.

## 6. Hidden Set up functions

Functions 36-41 are hidden functions and cannot be accessed unless the hidden function code is entered:

A. Go to the time function (function 01)

B. Push on "PROG"

C. Enter "3331" and then press "Enter".

Now the hidden functions may be accessed.

### 36. Sensor Average

It is necessary to define the number of temperature sensors that will be used for the average temperature reading.

Enter the number of sensors. If two sensors are used enter the value 2.

It is possible to enter up to 4 sensors for the average temperature

### 37. Net Name

It is possible to connect the **Temptron T-607** to a PC computer with the help of the "ChickPro" software package. It is possible to manage up 99 Temptron 607 units.

Each unit needs a net name.

Set the net name 1 for house one, 2 for house 2 and so on.

### 38. Feed Mode

The 607 unit can measure feed consumption in two ways. One is as explained in function 18, by converting time into amount.

The second way is for the unit to receive a dry contact pulse from a weighing machine. Each pulse represents a preset amount of feed.

Enter 0(zero) to measure by time.

Enter 1(one) to measure by pulse.

### 39. Fan Mode

Set the required fan order for minimum ventilation as explained below.

It is possible to program which group or groups will run in the minimum ventilation mode. It is possible to choose fan group 1 only or fan group 1 alternating with other fan groups. Example: If you enter here the value 1 then only fan group 1 will run in the minimum ventilation cycle. If you enter 2 then in the first minimum ventilation cycle fan group 1 will run. In the second cycle fan group 2 will run. The two fans groups will run alternately during the minimum ventilation cycle.

If you enter 3 then fan groups 1, 2 and 3 will run alternately during the minimum ventilation cycle.

If you enter 4 then fan groups 1, 2, 3 and 4 will run alternately during the minimum ventilation cycle.

If you enter 5 then fan groups 1, 2, 3, 4 and 5 will run alternately during the minimum ventilation cycle.

#### 41. Version

**A.** Go to the time function (function 01).

**B.** Push on "PROG"

**C.** Set "998" and "Enter".

The number shown is the version number for your unit.

## **7. TROUBLE-SHOOTING**

1. If a temperature sensor or its cable is disconnected, the sensor reading will show **OPEN**.

2. If a temperature sensor or its cable is shorted, the sensor reading will show **SHORT**

3. If both sensors are disconnected, the unit will show open as average and activate the alarm.

If one sensor is disconnected, the system will automatically work on the remaining sensor.