## Flow of the Climate Control Algorithm:

- 0) Scan 5 codes from your AC remote using AC Remote Signal Receiver under Misc Programs.
  - a) AC ON.
  - b) The highest setting; High Fan speed and Compressor ON (or equivalent).
  - c) Medium/Low Fan Speed and Compressor ON (or equivalent).
  - d) Low Fan Speed and Compressor OFF (or equivalent).
  - e) AC OFF.

Save these codes in the arrays in ircodes.h under the main sketch folder in this same order. Ensure array size value is updated everywhere in the sketch and you remove all instances of "-", if any.

- 1) State 4 decreasing temperature values of your choice in controller\_main.ino under float *tempval*.
  - 1.1. First value should be the lowest temperature that feels too hot.
  - 1.2. Second value should a comfortable but warm temperature.
  - 1.3. Third value should be a comfortable but cool temperature.
  - 1.4. Fourth value should be the highest temperature that feels too cold.
- 2) The device will try to oscillate room temperature between the 2<sup>nd</sup> and 3<sup>rd</sup> temperature values by sending commands c) or d). The device reads room temperature and humidity every 15 seconds. Device turns off the AC after 1 minute once value #3 is reached.
- 3) If the room is too hot (i.e. over the 1<sup>st</sup> value) the device will send b). If the room gets too cold (i.e. below the 4<sup>th</sup> value) the device will send e) and go into standby for some time before resuming regular operation.
- 4) Use buttons to view the menu and change temperature values on the fly using EEPROM. "UP" button turns the screen ON when OFF and turns it OFF when at the default display. When at the default display use button "SET" to enter temperature value setting. Use "UP" and "DOWN" buttons to increase/decrease the value. Use "SET" to enter next value setting. When the screen is at the default display or when the screen is OFF, button "DOWN" manually turns the AC OFF and the device goes into standby before resuming regular operation after a while.