



LVC300

Manual

Ver 1.0
4/17/2013

LVC300 Layout

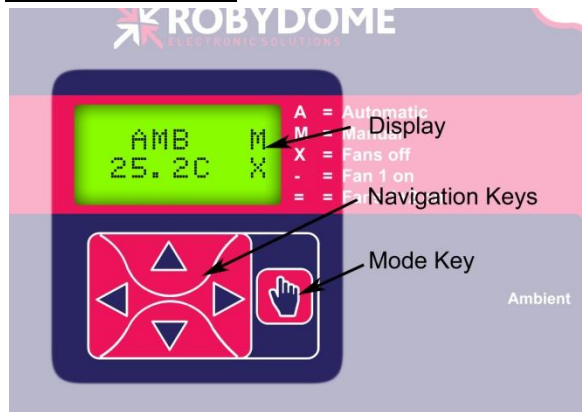


fig.1

The normal screen shows on the top line AMB (ambient) followed by an A for auto mode, M for manual mode, or F for faulty probe, and on the bottom line the ambient temperature in degrees °C followed by an X for fan not running, - for fan 1 running, or = for fan 1 and 2 running. See fig.1 above for an example.

Mode Selection

To change the mode the unit is currently in press the Mode Key, the display will then show AUTO, MAN OFF or MAN ON you can switch between these modes using the up and down keys. Press the Mode Key again to revert to the normal screen.

Settings

Press the left and right keys to move between the setting screens. The display will revert back to the normal screen if no key has been pressed in 20 seconds.

The setting screens are.



- 1. Differential:** The screen will show DIFF T and a set point of between 0.0°C and 20.0°C that can be changed with the up and down keys, this is the temperature differential used in differential control mode. (Please note that this screen will not be shown unless the unit is in Differential control mode. For more information see the Differential control mode section of this manual.)
- 2. Target Temperature:** The screen will show TARGET and a set point of between 0.0°C and 50.0°C that can be changed with the up and down keys, in Differential control mode this is the target temperature that you are trying to cool the crop down to and the fans will not run if the crop is below this value, whereas in Ambient control mode it is the highest temperature that you will allow the fans to pull into the store and the fans will not run if the ambient temperature is above this value.
- 3. Crop Sensor Screen:** The screen will show CROP, the number of the probe you are currently viewing followed by the temperature that probe is reading. You can change probes using the up and down keys. (This screen will only be displayed in Diff mode.)

4. **Differential Control Sensor:** The screen will show CONTROL: followed by AVERAGE for the average temperature of all the crop probes, HIGHEST for the highest temperature of all the crop probes or CROP 1, 2 etc for a specific crop probe. These can be set using the up and down arrows. (This screen will only be displayed when in Diff mode. For more information see the Differential control mode section of this manual.)
5. **State of Control:** This screen will show the current state that the unit is at within its control program. For more information see the flow diagrams at the back of this manual.

Secret Settings

To enter the secret settings menu press and hold the left and right keys for 5 seconds and then release, move between the setting screens using the left and right keys, to revert back to the normal screen press the Mode Key.

The secret setting screens are.

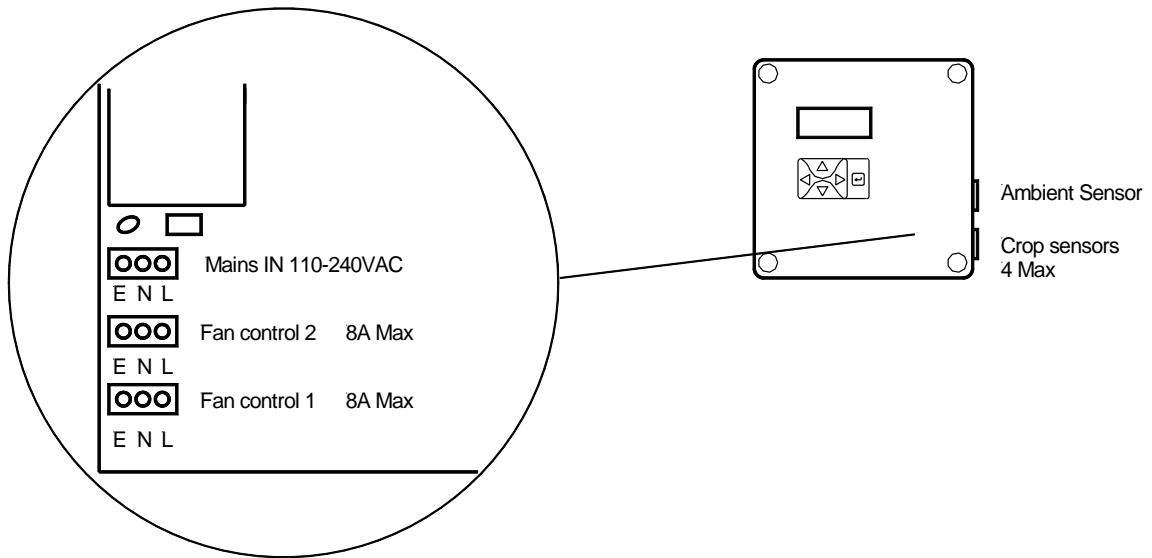


1. **Min Fan runtime:** The screen will show Min. Fan followed by a time in minutes that you can set using the up and down keys, this is the minimum amount of time that the fans will run for if they are called to run, even if the temperature should fall outside of the settings that would want the fan to run it will not turn off until it has run it's minimum amount.
2. **Fan start delay:** The screen will show FAN 1to2 followed by a time in seconds that you can set using the up and down keys, this is the delay between the two outputs starting.
3. **Control Mode:** The screen will show either DIFF CONTROL or AMB CONTROL depending upon which mode the unit is currently in. you can switch between modes using the up and down keys.

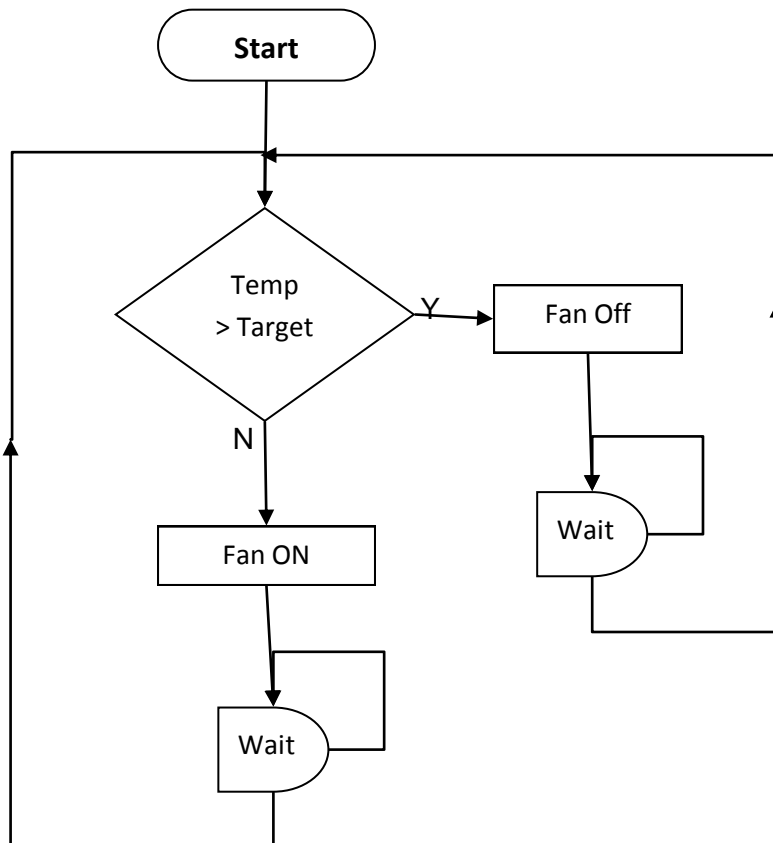
Differential Control Mode: In differential mode the unit will compare the ambient temperature with the Differential control sensor temperature (for more information see Differential control Sensor above) and will only call the fans to run if the ambient air is cooler than the crop by at least the Differential and the crop is above the target temperature.

Ambient Control Mode: In ambient control mode the unit will call the fans to run if the ambient temperature is below the target temperature.

Wiring Diagram



Ambient Control Program Flowchart



Differential Control Program Flowchart

