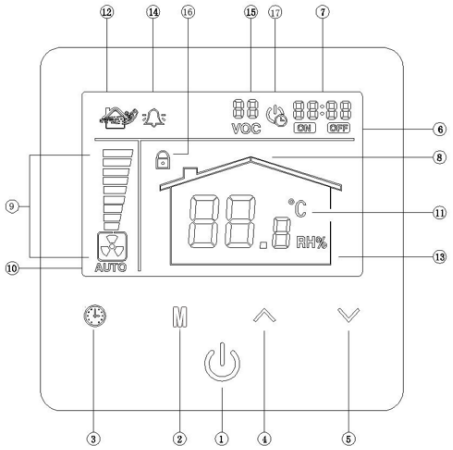
The Armoire LCD Quick Setup for both 2.0 and 2.1 controllers



Feature	Description
1	POWER BUTTON. Tap to turn the controller on or off manually.
2	MODE / TIME DELAY BUTTON. This button performs different functions depending upon whether the fan is ON or OFF. When the fan is ON, tap once to display the Delay Value. Each press will increase 1 minute and totally 30 minutes. When the fan is OFF, long press to switch between Manual and Automatic modes (#10 will show “AUTO” or not).
3	CLOCK BUTTON: The time is entered in 24-hour notation (HH:MM).
4	UP ARROW. When the fan is ON, tap once to increase the wind speed by one gear (represented by horizontal bars).
5	DOWN ARROW. When the fan is ON, tap once to reduce the wind speed by one gear (represented by horizontal bars).
6	Indicator for timer on/off value during settings.
7	Clock (in 24-hour HH:MM format) or delay value (HH:MM) depending on currently selected mode.
8	The shape of the house represents indoor. You will see this when the fan is ON. It disappears when the fan is OFF.
9	CURRENT FAN SPEED. This indicates the current fan speed. The more horizontal bars, the greater the air volume moved.
10	Automatic Mode Indicator. Indicates automatic mode when it says “AUTO”, or manual mode when it disappears.
11	Shows C when temperatures are shown in centigrade, or F when show in Fahrenheit
12	Ventilation Indicator.
13	Relative Humidity Indicator.
14	Locked Rotor Warning. Hopefully you never see this!
15	TVOC display position. We largely ignore this for use in The Armoire.
16	CHILD LOCK INDICATOR. Press and hold the UP ARROW for 4s to toggle the child lock.
17	DELAY ICON. This indicates that the displayed time is a delay time.

The fan controller that comes with your grow cabinet is extremely powerful, packed with a lot of nifty features so that it can be deployed in a wide variety of uses / settings, which is why it is not super intuitive for us -- there are a lot of cool features that we don't need or really even want when cultivating in The Armoire. So, we made this Quick Start Guide to zero-in on the settings we care about.

A few notes first:

1. **POWER.** Unless you physically unplug the controller, it doesn't literally "turn off." The concept of "OFF" and "ON" are relative, more like "sleeping" and "awake". When "OFF" the fan motor does shut down, but the LCD Controller screen just dims and many of the images and icons disappear, but there's still power to the screen and the temperature will show. While the fan goes on and off, the controller screen never fully powers down. So, when reading these instructions, please understand that "off" does NOT imply true off, as if it were disconnected from power. Also note that the LCD Controller only controls the external exhaust fan that it's connected to – the internal fans are designed to be always-on at a fixed speed and completely independent of the controller.

2. **CLOCK.** All times are specified in HH:MM format, and are based upon 24-hour (aka "Military") format if representing a 24-hour actual clock time. The clock can be slightly confusing because the same clock area can be used to represent three different values, depending upon the context from other settings – it could show current time, it could show a delay value before auto turn-off (a feature we don't use) or it can show on/off times in automatic mode (another feature we don't use). So, it can be a little confusing at first when not setup yet, but once we're done it will be set to show current time. If you see "ON" and "OFF" under the clock, that does NOT mean the timer is on or off. That means it's showing you the time it will go back ON, or go back OFF in auto mode – if you see ON/OFF then it's not set up properly yet for our needs.

3. **TEMPERATURE READ-OUT.** The temperature sensor is located in the controller, not in the fan. Thus, it might show a little warmer (1 or 2 degrees) when mounted up high, or a little cooler when placed on the floor of The Armoire. When run OUTSIDE of The Armoire for convenience, please keep in mind the temperature reading will show the room temperature outside The Armoire and not be useful for measuring the temperature inside The Armoire.

Here's our Quick Start process:

1. **PLUG IN YOUR FAN.** There are two cords coming out of your fan – the black power cord, and the white data cable that connects to the LCD controller. First, feed the black power cord out of the Armoire through the grommet at the bottom, and then plug it directly into the surge protector. Next, thread the white "headphone jack" cable through the hole in the top of the mounting box, and then plug it into your LCD controller. If you wind the cable into the mounting box along the edges leaving room in the center to snap the controller in, it WILL all fit, but there's a lot of cable, so some folks make a loop of some of it and tie it off and hang it behind the top of the quarter panel and feed the rest into the box so it's not quite so tight. If you do that, just don't let the cord hang down into the fan below – you don't want it to obstruct the internal fans behind the quarter panel. <u>Make sure the controller is fully plugged in - four of five problems with the controller are from the cable not being 100% seated in the back.</u>

2. **SET THE CURRENT TIME.** This is where we set the actual current time, in 24-hour (HH:MM) format (aka “Military Time”). So, for example, if it’s 2:15pm in the afternoon, then you’ll set it to 14:15.

   With the power OFF, tap the CLOCK BUTTON. The minutes portion of the time will flash. Press the UP ARROW or DOWN ARROW to adjust the minutes. After the adjustment is completed, tap the CLOCK BUTTON again, and the hour portion of the clock flashes. Press the UP ARROW and DOWN ARROW to adjust the hour to the current time. After the adjustment is completed, tap the CLOCK BUTTON again to exit and save.

3. **SET THE TEMPERATURE READ-OUT TO FAHRENHEIT.** With the fan OFF (tap the power button to turn off if necessary), press and hold the “M” button (Mode / Timer Delay Button – Figure 1, Feature #2) for about 5 seconds to edit parameters for the controller. You will see it display a large “01” on the screen. **SPECIAL NOTE:** There’s two versions of firmware for this controller. You can tell which version you have by TAPPING THE M BUTTON until you reach option “03” and see if there is a C or F flashing along with it. If there is not a C or F, go to SECTION A of this step. If there is, go to SECTION B of this step.
   a. Keep tapping the M BUTTON until you reach option “06.” You should see a flashing C or F on the right, beside the numbers. Tap the UP ARROW or DOWN ARROW to toggle between C and F (Celsius and Fahrenheit). When you see “F” you’re done. No need to tap anything else - just do nothing for about 5 seconds and it should end and show you that you’ve changed your temperature measurement to Fahrenheit.
   b. On option “03,” you’ll see a flashing C or F on the right, beside the numbers. Tap the UP ARROW or DOWN ARROW to toggle between C and F (Celsius and Fahrenheit). When you see “F” you’re done. Now tap the M BUTTON twice more and it should be set, saved, and done.

4. **SET THE TIMERS.** <u>We really do NOT want to use the timers, but it’s easy to accidentally engage them, so we suggest setting them and then turning them off.</u> If they ever get turned on accidentally it won’t cause a problem because we preemptively programmed them to be effectively useless. We will set the fan to go off every day at 3am, and then back on at 3:01am. This will be in the middle of the night. If the timer is ever accidentally engaged, it won’t matter – it’ll briefly go off for a minute in the middle of the night, then back on a minute later. Here’s how to do it:

   Turn the fan ON by tapping the POWER BUTTON in the middle of the device. Now, tap the CLOCK BUTTON once (Figure 1, Feature #3) to edit the timer settings. First you set the time to power ON. The time is specified in 24-hour time format (HH:MM) – that’s an absolute clock time (like 2:30am). You will see "ON" displayed (Figure 1, Feature #6) and the minutes will blink. Use the UP ARROW and DOWN ARROW to adjust the minutes to 01. Press the CLOCK BUTTON again to switch to the hour flashing. Similar to setting the minutes, use the UP ARROW and DOWN ARROW to set the hour value to 03. That sets the ON time to 03:01. Then, repeat this for the time of day to turn OFF, setting it to 03:00. It’s a little confusing that we’re doing them backwards, but the controller has you set ON time, and then OFF time. So we’ll set ON at 3:01am and off at 3:00am, so that if it ever goes off at 3am, it’ll come right back on at 3:01am.

5. **TURN THE TIMER OFF:** We really didn't want to use the timer anyway, so now we will disable it. While the fan is ON, press and hold the CLOCK BUTTON to turn off the timing function. You will see the clock change to the actual current time, and turn off the "ON / OFF" indicator (Figure 1, Feature #6). If you hold it too long, it will go back to the timer setting - so be sure to watch for the change.

6. **TURN OFF AUTO MODE:** This step is also dependent on which version of the LCD controller you have. If you set your Fahrenheit / Celsius settings in option "03," then go to step A. If you set your Fahrenheit / Celsius setting in option "06," then go to step B.
    a. While the fan is ON, simply tap the "M" button (Mode / Timer Delay Button – Figure 1, Feature #2) to toggle AUTO on and off. When you see the AUTO indicator (Figure 1, Feature #10) go off – that's what we want.
    b. While the fan is ON, press and hold the "M" button (Mode / Timer Delay Button – Figure 1, Feature #2) for about 5 seconds to toggle AUTO on and off. When you see the AUTO indicator (Figure 1, Feature #10) go off – that's what we want.

7. **SET WIND SPEED:** Use the UP ARROW and DOWN ARROW to set the fan speed where you want it. About ½ to ⅔ power is most likely appropriate, but will heavily depend upon your specific temperature situation. If, while your LED has been on for a few hours, the temperatures get above 82F, you'll want to increase the power of your fan. If you cannot increase the power - you're at maximum - and the temperature is still above 82F, then you will likely need to find a way to cool the room the Armoire is in.

    PLEASE NOTE: If your seedling only just popped and you have a very small plant, having temperatures hitting up to 85F is still acceptable, if not ideal. You want to try to maintain 75-80F temperatures, but when the plant is very smell it will generally be 3-5 degrees warmer in the box because it cannot absorb the radiation from the light the same as a bigger plant can, so radiation is just bouncing around inside the box warming up the air instead of being absorbed by the plant and used for photosynthesis. As the plant grows, the temperature will come down 3-5 degrees on its own. 77 degrees is the perfect temperature for germination, initially.

    If you still have issues keeping your grow chamber cool, contact Concierge Services for advice.

8. **LOCK THE CONTROLS:** To make sure we don't accidentally bump the panel and mess up some setting, we can activate the "Child Lock" feature. With the fan ON, press and hold the UP ARROW until the lock icon 🔒 appears (Figure 1, Feature #16) just over the chimney. If you need to make any changes to your system later on, you will need to disengage the child lock by pressing and holding the up arrow again.

PLEASE KEEP IN MIND that in the case of a power outage or unplugging the power to your LCD controller, you may need to quickly reprogram these settings back in place.