INITIAL STARTUP AND TEST

**Password Notes: 1111 = Programming and User Function Password
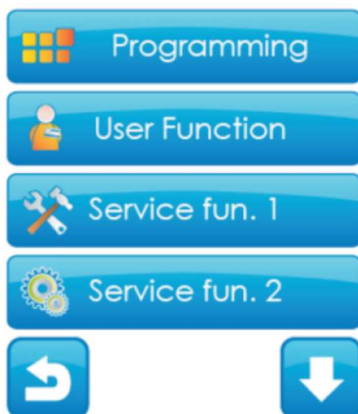2010 = Service Function 2 Password**

- With main power off, spin damper motor shafts by hand to make sure they move freely in both directions
- **Check electrical service at wall disconnect (if present) to confirm voltage prior to turning smokehouse on**
- **Remove electrical panel cover plate (top front of smokehouse). Confirm your incoming power connections**
- **Check power feed at transformer at toggle switch for controller – confirm that it's 120V not 240V prior to turning on power to the smoker**
- Open door and spin circulation fan by hand to make sure it does not rub anything
- Turn ON wall disconnect (if present) power
- Turn ON smokehouse control panel power toggle switch

Review output icons
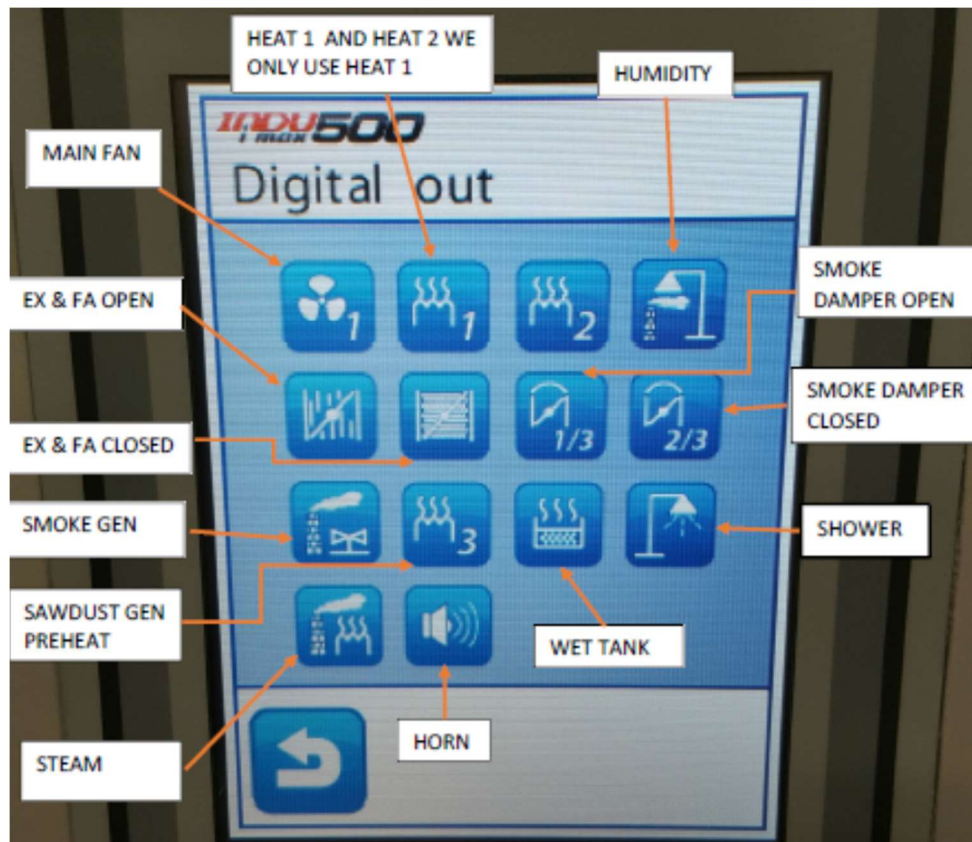

Press the Menu ICON from main screen

Select Service fun. 2

Password is 2010 for Service fun. 2
Select the DIGITAL OUTPUTS to proceed with manual checks for startup once the following is confirmed

- Power and plumbing to the smokehouse is connected.
- Exhaust and pellet generator smoke pipes are connected.
- Pellet generator is plugged into smoker control cord, and   dial is set to 5. (5 is optimal for smoke, keep at 5)

Keep hands and items away from the internal circulation fan.

- **MAIN FAN MOTOR**: Internal Circulation Fan will turn on/off by hitting icon. Click once to activate, click again to deactivate. Confirm fan rotation direction (SEE IMAGE 1, use caution)
- **HEAT 1 (only):** You will turn on the heat element. With fan off, you can confirm all OK by feeling for heat near fan area after 10-15 seconds.
- **HUMIDITY:** Will activate the humidity atomizer nozzle
- **EX&FA OPEN:** Damper, click open and you'll hear damper motor. Click the closed icon and you'll hear motor again. (fairly quiet).
- **SMOKE DAMPER**: Same as above
- **SMOKE GEN:** You should see control on pellet gen flash on. (SEE IMAGE 2 and instructions to properly adjust smoke damper setting)
- **SAWDUST GEN PREHEAT**: NA (has pellet generator)
- **WET TANK**: Should activate solenoid for wet tank fill (SEE IMAGE 3 and instructions to set wet tank fill rate)
- **SHOWER:** (only crack door open for this). Turn shower on/off. Also good to put heavy water in smoker to test drain flow and trap hold
- **STEAM:** You won't need to tests this
- **HORN:** Will activate horn. (ensure toggle switch on control panel is in up(on) position)

IMAGE 1: Circulation fan rotation direction

Keep hands and items away from the internal circulation fan. Fan blade should rotate in this direction when on.

IMAGE 2: Smoke exhaust damper adjustment

You will need to set your smoke damper exhaust for proper air flow.

Inside the control panel, is an auto-set for the smoke damper motor. (NOTE: there are 3 damper motors in total on top of your smokehouse:
Fresh Air Intake
Exhaust and
Smoke Damper. There is only an auto-adjust needed for the smoke damper

The scale of 0 – 100 shown indicates % closed.   In our image, we are at approximately 59% closed.

If you have smoke coming out of the fresh air intake on top of the smoker, you need to open this more (lower number). The best "set" method is to turn dial to 50% (50% closed). This will keep you from getting smoke in the room from the on-set. From this point, increase your number in small increments to the point where you maintain draft into the fresh air intake. Note: you can use a piece of paper. Hold that over the intake. If it has draw in, you're fine/if air is blowing out, reduce your % closed number (lower number)

Once set, you should not need to make additional adjustments, although seasonal changes in barometric pressures when air is heavier or more humid, may require you to further reduce your closed number

IMAGE 3: Setting water flow rate for wet tank fill

There is a butterfly valve on the wet tank solenoid line **(on outside wall of smoker**). At full open, your fill rate is too great. You want this set at the point that is equal to a water bubbler trickle-type setting. Once set, you do not need to adjust this butterfly valve further. Note: During smokehouse operation, every 30 minutes the wet tank solenoid will open and put water in the wet tank (to ensure accurate wet bulb readings for humidity)

On the back of your **control panel**, there are 3 toggles (HORN, RECORDER and WET TANK).

HORN is an on/off toggle. Flip to the on position unless you do not want the horn to activate upon completion of any program

RECORDER is an on/off toggle. Only applicable for systems with older 1 or 2 Pen chart recorders.

WET TANK is an over-ridge toggle. In the down (off) position, the solenoid for wet tank activates wet tank fill.   Moving the toggle to up (on) position will override wet tank solenoid and open that water line.
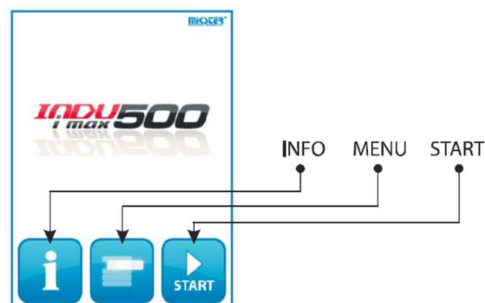You will use this toggle before every run. You want the wet tank to be filled to approx. 1/8" from the top. Once your wet tank flow rate is established (butterfly position noted in step above), flip this toggle to on position for "quick fill". Once wet tank has sufficient water return toggle to down position
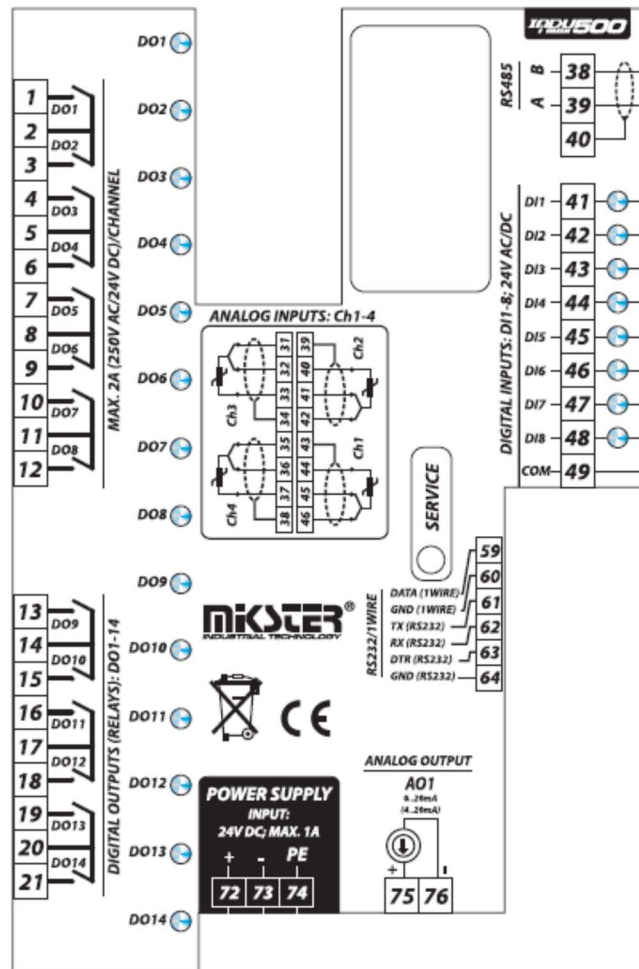
Once completed with output testing, hit the

symbol until you return to the main iMAX screen

Converter and MPC 4 install instructions

Connection of your data converter to computer requires a shielded 18-2 communication cable (not included).

Image above shows your connectors on the back of your iMAX control.   The data converter lines get connected to 38 (B) and 39 (A).

Run selected wire 1 from control connection 38 (B) to the converter box (B)
Run selected wire 2 from control connection 39 (A) to the converter box (A)

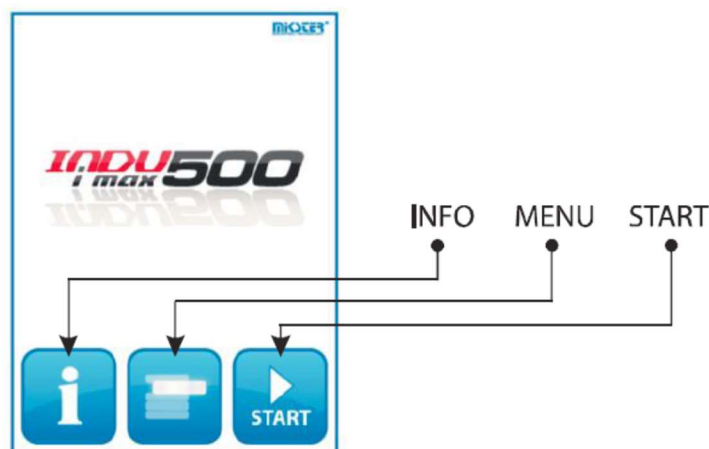Once completed, follow the instructions on following page for downloading software

1 - Install mikster USB/485/232 convertor software CDM 2.04.16 found on mini cd

2 - Install mikster MPC4 software should auto install

3 - Connect convertor to a usb port.

4 - In control panel click on system, then hardware tab, then device manager. Scroll down to ports (com &lpt) click on + symbol to open, then you should see USB serial port (on com?) in list, this is the com port for the convertor, write it down.

5 - Open mpc4 program, click on file, "log in", type Adm, the click OK..   there is no password.

6 - Click on controllers, then controllers list. Now you see the list where controls would be, but its empty. Either double click in black space under "name" or click on "add" tab then enter name of control like "smoker 1". Check the box by "active"   change com port to port number written down after step #4.   Rs485 address "1" , baud rate is 115200.   Then press "test" should now be connected correctly.

7 - Click the download green arrow tab and a box should pop up "transmission".. select the smoker name out of the drop down box, then click on "transmission", this will get the processes from the control.

8 - Click on processes green up arrow tab. The programs will be in each month as you did them. Select a date and click on the graph. You will see the graph and numeric data for that process.

To save, click on print icon, then the disk icon and save to hard drive.   You can print a hard copy to be save for filing if hard copy is needed.

To change the header to read customer info , click on print settings and change the header and footer with desired changes.
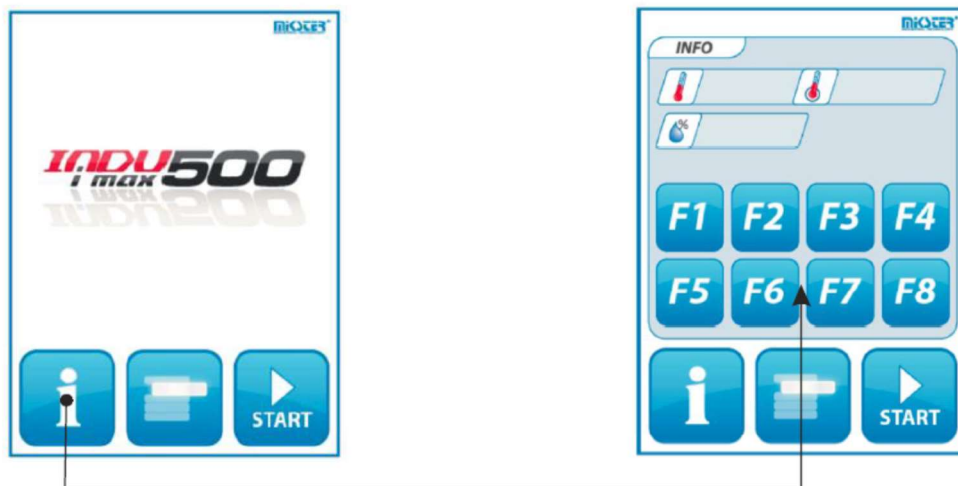
Introduction to main menu screen icons

Information provided below is intended as a quick introduction to the iMAX500 microprocessor.
Please review the iMAX500 Owner's Manual for full details on all control features.
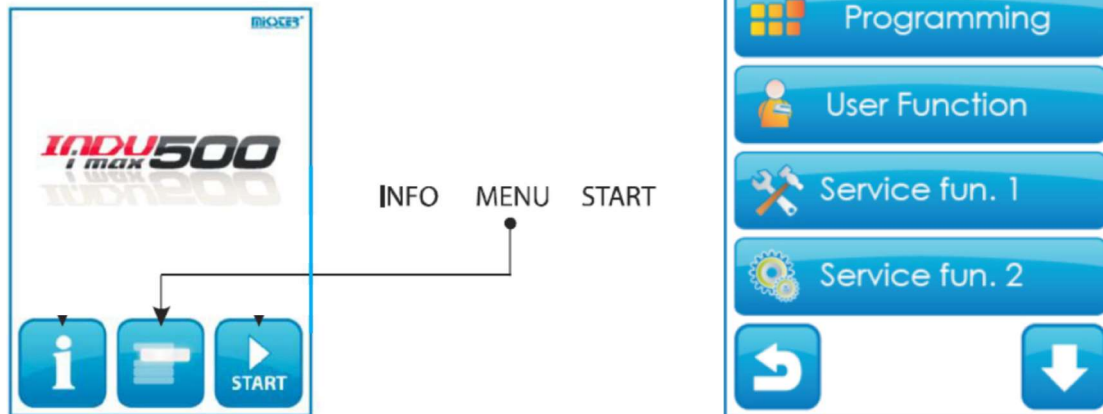

- **Info key functions**

    Selection of the INFO key results in displaying the current measurements of temperature, bar temperature, humidity and eight function keys F (F1…F8). Setting of function keys is performed the same as PAUSE and STOP mode setting (described in PARAMETER SETTING FOR PAUSE mode and STOP mode and F1…F8).
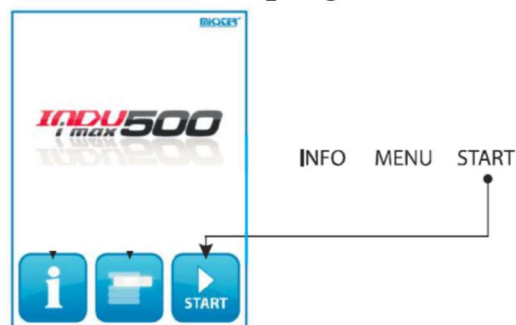
- **Menu key functions**

- o PROGRAMMING Icon: Takes you into the pre-set programs. There are 14 preset programs and 85 open (blank) options for new/custom programs. (PASSWORD IS 1111)

- o USER FUNCTION Icon: Takes you to program password change (CURRENTLY 1111) or user password change (CURRENTLY 2010), clock/date set and language

- o **REFER TO THE FULL iMAX MANUAL OR CONTACT PRO SMOKER DIRECTLY WHEN USING THE SERVICE FUN. 1 OR SERVICE FUN. 2 ICON'S!!!**

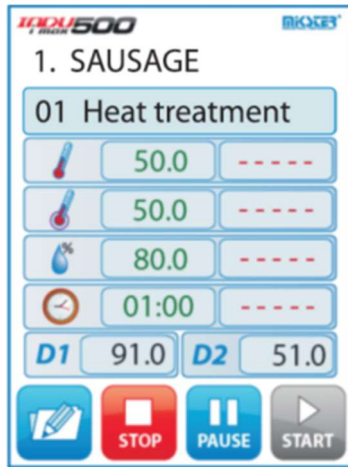 hit return icon from the PROGRAMMING MENU and you'll go back to main screen

Start key functions / Start a program

Press the START key and using the arrows you can scroll through your list of programs to select the program you want.

Hit OK button to start program.

![Pro Smoker 'N Roaster logo — EST. 1977, IRON RIDGE, WISCONSIN]

1. SAUSAGE

01 Heat treatment

🌡️ 50.0 - - - - -
🌡️ 50.0 - - - - -
💧% 80.0 - - - - -
⏱️ 01:00 - - - - -

D1 91.0 **D2** 51.0

STOP · PAUSE · START

When program is running, the header (1.SAUSAGE) will flash blue. If any other color flashes, you're either in a pause or stop mode.
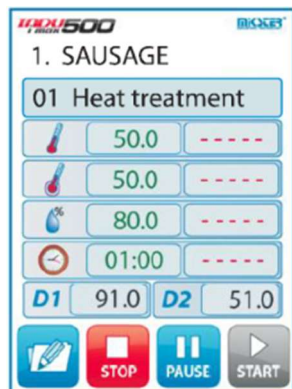The top ICON is house temperature. Green is set point, red is actual
The second ICON is internal product temp. Green is set point, red is actual
The third ICON is humidity. Green=set, red=actual
The fourth ICON is clock.
D1 & D2 are parameters you won't use

Program interruption:

1. SAUSAGE

01 Heat treatment

🌡️ 50.0 - - - - -
🌡️ 50.0 - - - - -
💧% 80.0 - - - - -
⏱️ 01:00 - - - - -

D1 91.0 **D2** 51.0
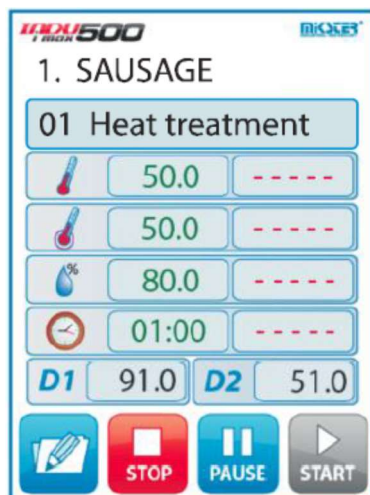
STOP · PAUSE · START

You may stop or pause a running program at any time by simply hitting the STOP or PAUSE keys.

Hitting STOP will stop/end your program.

Hitting PAUSE will pause your program temporarily. Hit START to resume a paused program.

If a program is stopped due to power outage, the controller will continue the interrupted program automatically when power supply is re-activated to the controller. If you stop a program, the controller will ask you if you wish to continue or start new. Selecting continue will resume the program where it was stopped.

Edit a program in process:

1. SAUSAGE

01 Heat treatment

🌡️ 50.0 - - - - -
🌡️ 50.0 - - - - -
💧% 80.0 - - - - -
⏱️ 01:00 - - - - -

D1 91.0 **D2** 51.0

STOP · PAUSE · START

To edit a running program, hit the CONFIGURATION button.

Your set values will start flashing in green. Select the set value you want to edit using your arrow buttons and enter in your new values. Once change is made, hit OK.

NOTE: Alterations to a running program is only a temporary change to the running program, it will not change the "set" program parameters. To permanently change a programs values, you need to do that through the Process Program edit function.

Process programs: Create a new program or edit an already existing program:

INFO MENU START

Press the MENU button

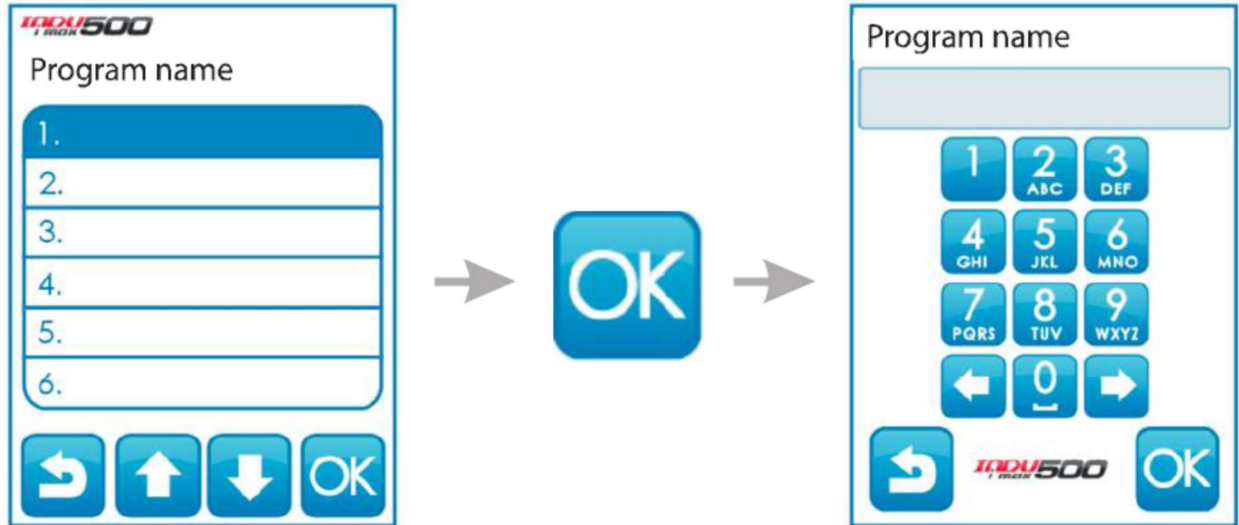|	
• Click on the Programming button • Enter the programing password (default password is: 1111)	The program list is then displayed. You can edit existing programs from here or write in new programs. The iMAX will store up to 99 different process programs.

- Select the program you wish to enter or modify by arrowing to the program name or the number and confirming with "OK"
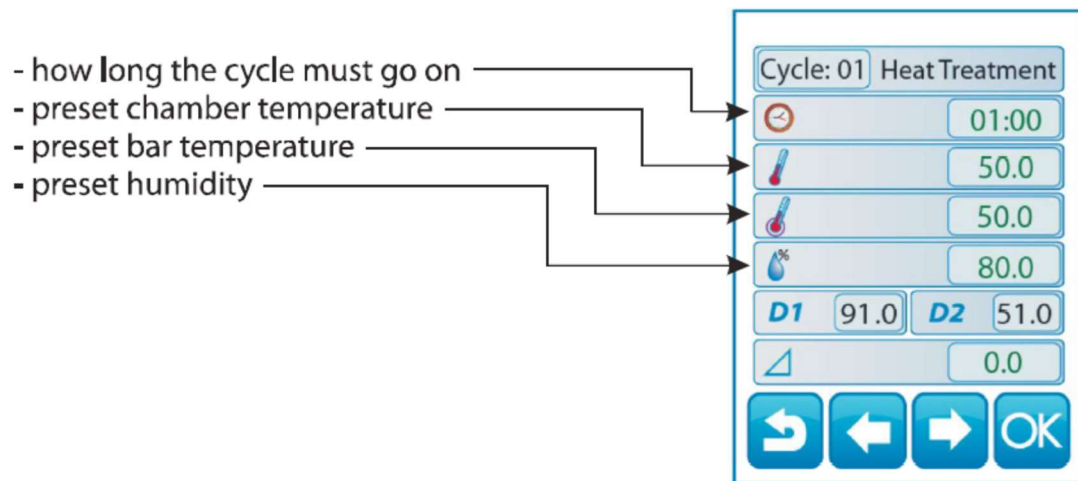

- If new program, enter the program name (letter on the position is entered by depressing the key with the selected letter the proper number of times)
- Start the process edition using the arrow keys and selecting the number in the cycle you wish to edit and hit OK.

- Once program is named, create the program by selecting your stage Cycles

- Once you've selected your cycle (Heat Treatment in example above), enter the following information:

- how long the cycle must go on
- preset chamber temperature
- preset bar temperature
- preset humidity

Cycle: 01   Heat Treatment
01:00
50.0
50.0
80.0
D1 91.0   D2 51.0
0.0

- Hit OK to set the stage parameters and enter Cycle: 02 information using the same steps as above

PLEASE REFER TO THE FULL IMAX500 USER GUIDE FOR FULL DETAILS ON CONTROL FEATURES!