Quick Guide to Programming the IntellusUltra Controller

1 Which mode is running?
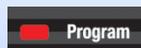
Manual-mode:

- Program LED is off

Diurnal program-mode:

- Program LED is on
- "Day" or "Night" appears in the display

```
Day      23.5C  70%RH
LT:011
```

Program-mode:

- Program LED is on
- The actual time appears in the display

```
12:30PM  23.5C  70%RH
LT:011
```

2 Which mode is of interest to you?

Manual mode:

- All parameters (temperature, light, humidity, etc.) are held constant until changed.

Diurnal program mode:

- Simple change between day and night settings.
- All lamps are turned on during the day period and off during the night period.
- Individual settings are possible for:
    - Start and end of day period
    - Day and night temperature
    - Day and night humidity (if applicable)
    - Day and night auxiliary (if applicable)

Program mode:

- Multi-step settings for all controlled parameters based on a 24-hour or countdown clock.
- Programs can run as non-ramping or ramping.
- Ability to assign names to program files.
- Ability to sequence multiple programs together.

3 How to run the different modes:

Manual mode: PROGRAM ↑↓ *"Run Manual"* ENTER

Diurnal program: PROGRAM ↑↓ *"Run Diurnal"* ENTER

A multi-step Program: PROGRAM ↑↓ *"Run Program"* ENTER

Program sequence: PROGRAM ↑↓ *"Run Sequence"* ENTER

4 How to change manual set points:

Temperature:

INPUTS ↑↓ *"Temp"* ENTER *"Manual Setpoint"* ENTER ↑↓ ENTER INPUTS — Exit Menu

Humidity (if applicable):

INPUTS ↑↓ *"RH"* ENTER *"Manual Setpoint"* ENTER ↑↓ ENTER INPUTS — Exit Menu

Auxiliary (if applicable):

INPUTS ↑↓ *"CO2" OR "LS1"* ENTER *"Manual Setpoint"* ENTER ↑↓ ENTER INPUTS — Exit Menu

Lights (if applicable):

LIGHTS *"Light 1"* ENTER ↑↓ *"On/Off or 0-100%"* ENTER ↑↓ LIGHTS — Exit Menu

"Light 2...x"

Quick Guide to Programming the IntellusUltra Controller

5 How to change basic settings:

Change system time:

[TIME] — *"Set System" Time"* — [ENTER] — [UP/DOWN] — [ENTER]

Change limit 1 high safety alarm setting:

[ALARMS] — *"Select Alarm" TEMP* — [ENTER] — *"Limit 1 High Alarm"* — [ENTER] — [UP/DOWN] — [ENTER]

Change limit 1 low safety alarm setting:

[ALARMS] — *"Select Alarm" TEMP* — [ENTER] — [DOWN] — *"Limit 1 Low Alarm"* — [ENTER] — [UP/DOWN] — [ENTER]

Change limit 2 high safety alarm setting:

[ALARMS] — *"Select Alarm" TEMP* — [ENTER] — [DOWN] — *"Limit 2 High Alarm"* — [ENTER] — [UP/DOWN] — [ENTER]

Change limit 2 low safety alarm setting:

[ALARMS] — *"Select Alarm" TEMP* — [ENTER] — [DOWN] — *"Limit 2 Low Alarm"* — [ENTER] — [UP/DOWN] — [ENTER]

6 How to enable humidification (if applicable):

[INPUTS] — [UP/DOWN] — *"RH"* — [ENTER] — [DOWN] — *"Enable Channel A"* — [ENTER] — [UP/DOWN] — [ENTER]

How to enable dehumidification (if applicable):

[INPUTS] — [UP/DOWN] — *"RH"* — [ENTER] — [DOWN] — *"Enable Channel B"* — [ENTER] — [UP/DOWN] — [ENTER]

6a How to enable Aux/CO2 (if applicable):

[INPUTS] — [UP/DOWN] — *"Input Select Aux/CO2"* — [ENTER] — [DOWN] — *"Enable Channel A"* — [ENTER] — [UP/DOWN] — [ENTER]

[INPUTS] — [UP/DOWN] — *"Input Select Aux/CO2"* — [ENTER] — [DOWN] — *"Enable Channel B"* — [ENTER] — [UP/DOWN] — [ENTER]

7 How to configure diurnal program:

Enter diurnal programming mode:

[PROGRAM] — [UP/DOWN] — *"Enter/Edit Diurnal"* — [ENTER] — Program LED blinks

Change diurnal program settings:

"Day Temperature" — [ENTER] — [UP/DOWN] — [ENTER]

[DOWN] — *"Day Humidity" (if applicable)* — [ENTER] — [UP/DOWN] — [ENTER]

[DOWN] — *"Day Aux/CO2" (if applicable)* — [ENTER] — [UP/DOWN] — [ENTER]

[DOWN] — *"Day Period Start"* — [ENTER] — [UP/DOWN] — [ENTER]

Quick Guide to Programming the IntellusUltra Controller

7a

How to configure diurnal program (continued):

⬇ "Day Period End" [ENTER] ⬆⬇ [ENTER]

⬇ "Night Temperature" [ENTER] ⬆⬇ [ENTER]

⬇ "Night Humidity" (if applicable) [ENTER] ⬆⬇ [ENTER]

⬇ "Night Aux/CO2" (if applicable) [ENTER] ⬆⬇ [ENTER]

⬇ Return to program menu

[PROGRAM] Exit program menu

8

How to enter a program:

Enter a new program:

[PROGRAM] ⬆⬇ "Create Program" [ENTER] Program LED blinks

⬆⬇ Change Character [PROGRAM] Next Character [ENTER] Accept Name

8
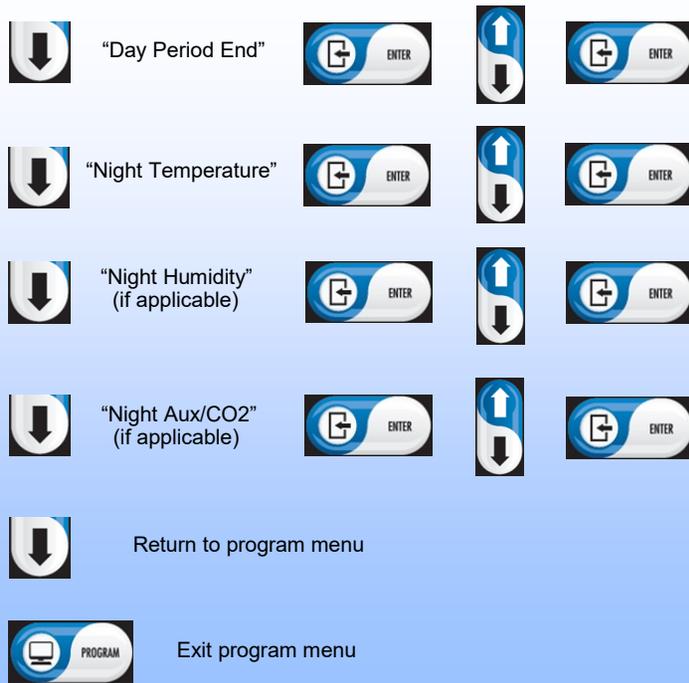
How to enter a program (continued):

"Add Step" [ENTER] "Step Time" [ENTER] ⬆⬇ [ENTER]

⬇ "Step TEMP" [ENTER] ⬆⬇ [ENTER]

⬇ "Step RH" (if applicable) [ENTER] ⬆⬇ [ENTER]

⬇ "Step Aux/CO2" (if applicable) [ENTER] ⬆⬇ [ENTER]

⬇ "Step Light 1" [ENTER] ⬆⬇ *"On/Off or 0-100%"* [ENTER]

"Light 2...x"

Add a step to the program:

⬇ [PROGRAM] "Add Step" [ENTER] Repeat process above
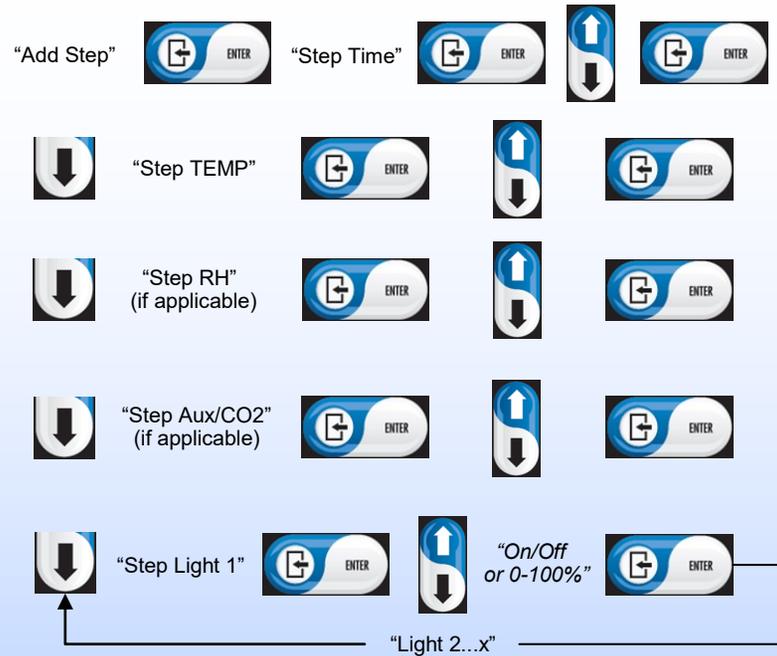
View, edit or delete steps in the program:

Make sure no parameter is flashing.... Find the step you want to edit, view or delete [PROGRAM] ⬆⬇

"Edit/View Step" or "Delete Step" [ENTER] Pressing enter on "Delete Step" automatically deletes step ⬆⬇ [ENTER]

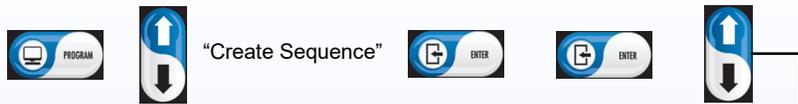**To exit the programing mode:** [PROGRAM] ⬆⬇ "Quit" [ENTER]

Quick Guide to Programming the IntellusUltra Controller
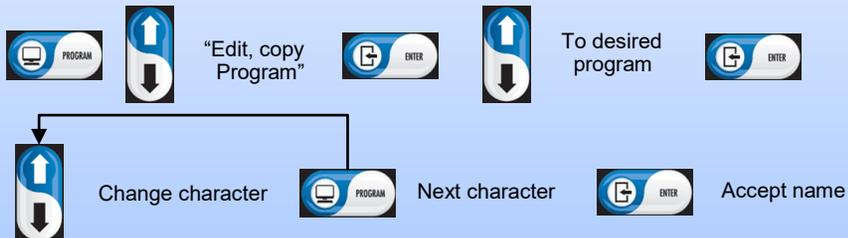
(9)

How to create, edit sequence programs:

Note: This option does not appear when sequence is running. Must be set to Manual mode or an individual program.

[PROGRAM] [▲▼] "Create Sequence" [ENTER] [ENTER] [▲▼]

Select first program in your sequence [ENTER] [▼] "Iteration" [▲▼] [ENTER] [▼] This will review the step information

[PROGRAM] [▲▼] To "Add, Delete, Edit or insert Step" [ENTER] Follow procedures above

When finished programming the sequence, use procedure to exit Programming mode on page 3

How to edit, delete and copy programs:

Edit an existing program:

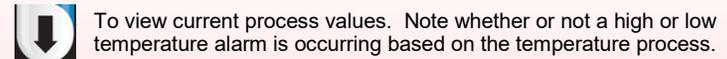[PROGRAM] [▲▼] "Edit, copy Program" [ENTER] [▲▼] To desired program [ENTER]

[▲▼] Change character [PROGRAM] Next character [ENTER] Accept name

Delete a program:

Use steps as described under **How to enter a program** to edit program.

[PROGRAM] [▲▼] "Delete Program" [ENTER] [▲▼] To desired program [ENTER]

[ENTER] [▲▼] "Yes" [ENTER]

(!)
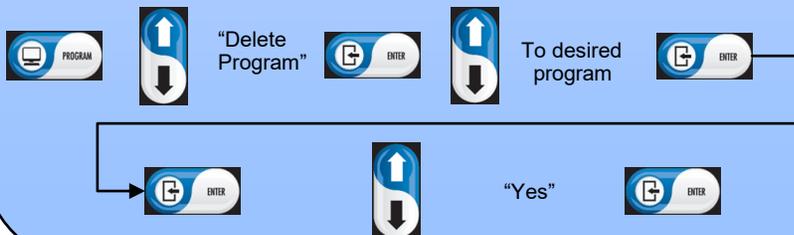
What to do if an alarm sounds?

Press any key to disable buzzer sound.

[▼] To view current process values. Note whether or not a high or low temperature alarm is occurring based on the temperature process.

If a Limit 1 high/low temperature alarm is occurring:

Use procedure in section 5 "Change limit 1 safety alarm setting" and change high safety alarm setting to a value higher or lower than the current process value.

If a Limit 2 high/low temperature alarm is occurring:

Use procedure in section 5 "Change limit 2 safety alarm setting" and change high safety alarm setting to a value higher or lower than the current process value.

The chamber will turn itself back on. If after a short time the chamber experiences another safety or if you suspect a fault with the chamber, please turn off the unit and contact us.

< Programming note >

The controller will default back to the main display when no key is pressed for one minute. Please keep this in mind when programming the controller.

Problems? Questions?

Please refer to your IntellusUltra controller manual for more information regarding using the controller. Please feel free to contact us for additional support using any of the methods below:

Percival Scientific, Inc.
505 Research Drive
Perry, IA 50220 USA
800.695.2743
515.465.9363
Fax: 515.465.9464
service@percival-scientific.com