

BT8™ User Guide



Table of Contents

1. Introduction	2
2.Safety Information	2
3.BT8™ Contents	2
4.BT8™ Setup	3
5.Basic Operation	5
6.Maintenance & Care	6
7.Trouble Shooting & Support Information	6
8.Technical Specifications	6
9.Plant Cell Technology, Inc. Policy Information	6

1. Introduction

Introducing the companion to the BioTilt™, the BT8™ is the latest breakthrough in our product lineup, making the already simple and cost-effective tissue culture bioreactor, the BioCoupler®, even more efficient.

The BT8™ automates the rotation of your BioCouplers® at precisely timed intervals, optimizing the growth conditions for plant growth without manual intervention.

The BT8™ can accommodate up to 8 BioCouplers®, making it an ideal solution for both small-scale enthusiasts, microgrowers, and researchers looking to maximize their tissue culture throughput.

With the BT8™, the simplest and most cost-effective tissue culture bioreactor is automated, ensuring your plants grow effortlessly and efficiently.

2. Safety Information

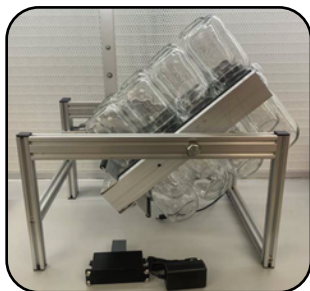
a. General Safety

The BT8™ should not be used for any other purpose other than the intended use. Ensure the BT8™ is placed on a secure, level surface, ensuring operational safety. Do not climb, sit, or use as furniture. Keep limbs away from the device when in use.

b. Electrical Safety

The BT8™ should only be operated indoors, in a well ventilated, dry area. Ensure all electrical components are enclosed, and maintain shielding before use. Do not move, or modify the BT8™ when in use and connected to a power source.

3. BT8™ Contents



BT8™



Power Supply • 1



Controller • 1

Please Note:

- If purchased outside of the USA, Mexico, Canada, or Japan, plug type will need conversion to the outlet type of your respective geography.

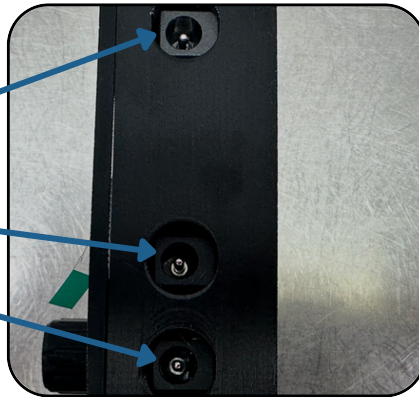
4.BT8™ Setup

The BT8™ requires very little assembly. Follow these instructions & protocols, and you will be ready to pour media in 15 minutes or less!

a.The Controller

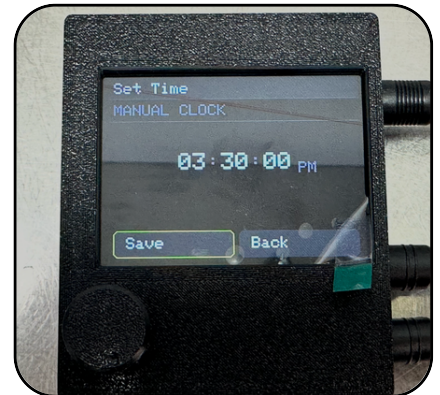
Step one: Connect the plugs.

- Top is 24 volts
- Middle is the actuator
- Bottom is the light.

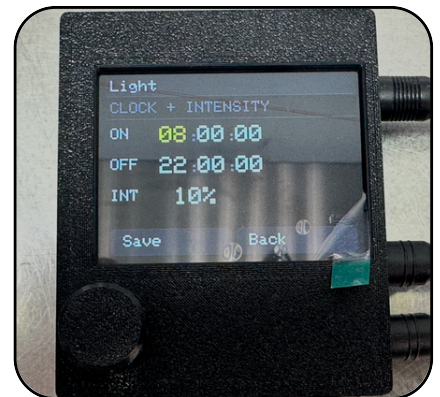


Step two: Once the controller is on, select “Time,” set the current time, and save.

Note: Example image shows Immersion setting highlighted, please make sure to navigate to “Time” the last option at the bottom.



Step three: Back at the main menu, select “Light,” set your on/off times (default is 8 a.m. to 8 p.m.), adjust intensity (default is 10%), save, and return.



4.BT8™ Setup

a.The Controller (continued)

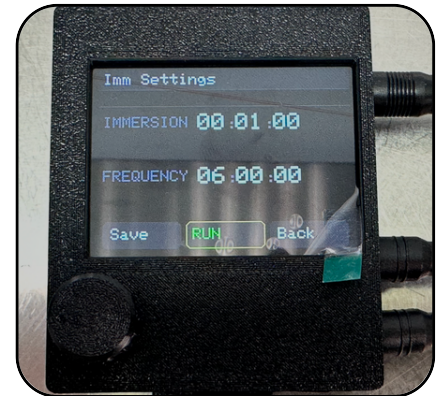
Step four: From the main menu, select “Immersion Settings”.

On the Immersion Settings menu you will be able to set immersion time and frequency.



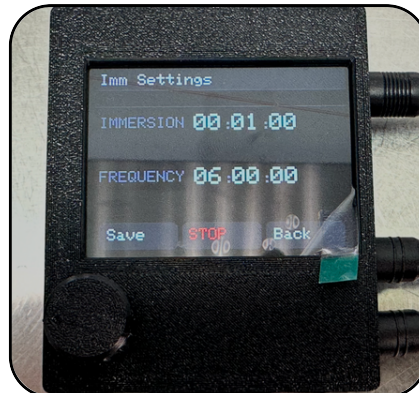
Set immersion time (for example, 1 minute) and frequency (for example, every 6 hours).

Save, then press “Run”.



When the item is running you will see the option to “STOP” colored red.

Finally, press back to return to the main menu.



You're all set!

b. Recommended Default Settings (Houseplants)

After years of testing, the most effective timing for most plants is:

- Immersion Frequency Time (L1): 60 minutes.
- Immersion Time (L2): 10 seconds.

c. Important Notes on Controller Functionality

- The timer resets if power is disconnected. When power is restored, it starts from zero.
- Minimum recommended immersion time: 10 seconds
- Maximum immersion time: 99 seconds (in seconds mode) or longer if using minutes.
- Unit starts cycling as soon as it is powered on.

c. Important Notes on Controller Functionality (continued)

Please Note:

- Different plant cell lines perform best under different immersion times, and different immersion rates per day. Ensure that you have researched the most up to date protocols for the specific cell line you are propagating before programming the timer.
- Growth performance can also be greatly influenced by media composition, PGR ratios, environmental conditions, etc.

5. Basic Operation

a. Hosting the BioCoupler® in the BT8™

Assuming BioCoupler®'s are prepared and the controller's immersion schedule is set, they are ready to be hosted by the BT8™. We recommend keeping the unit unplugged until all BioCoupler® Glass Sets are secured.

Step one: While the BT8™ is stationary in the forward position, grab the BioCoupler® Glass Sets for transferring to the BT8™



Step two: Rotate the BioCoupler® so the collar is perpendicular to the track, with the vented micron filter of the BioCoupler® facing upwards. This way the liquid media and plant propagules remain in their respective vessels.



a. Hosting the BioCoupler® in the BT8™ (continued)

Step three: Gently slide the BioCoupler® until it is cradled securely at the bottom of the track. Repeat with the remaining BioCoupler®'s.

Step four: Plug the BT8™ into a power source to begin immersion schedule.

Please Note:

- The vented micron filter on the BioCoupler® Collar must NOT come into contact with the liquid media. This creates a contamination wicking system between the air and your plants.



b. BT8™ Placement

The BT8™ should be placed in a secure, clean environment, on level ground. Keep out of direct sunlight. When handling the BT8™, firmly grasp the two Host Beams at the center of the frame, and lift with legs.

6. Maintenance & Care

The BT8™ requires little to no maintenance. To ensure optimal functionality and efficacy, routinely check to ensure no components are loose, including electrical connections, and hardware. In the event that the motor is not functioning, please refer to Sections 7 and 9 below.

In the event you are unable to use the BT8™, we recommend storing the BT8™ in the original packaging, with ample packing material, ensure that the BT8™ will not be damaged.

7. Troubleshooting & Product Support

Direct troubleshooting and product support inquiries to info@plantcelltechnology.com, or dial +1 (202) 506-5608.

8. Technical Specifications

Materials:	Aluminum, rubber.
Measurements:	21" Length • 13" Width • 17" Depth
Power Consumption:	12V DC 2A, 24W.
Weight:	18 lbs

9. Plant Cell Technology, Inc. Policy Information

Shipping Policy: <https://plantcelltechnology.com/policies/shipping-policy>

Refund Policy: <https://plantcelltechnology.com/policies/refund-policy>

Privacy Policy: <https://plantcelltechnology.com/policies/privacy-policy>

Terms of Service: <https://plantcelltechnology.com/policies/terms-of-service>