

# TREEGERS GROWCAST

User manual

Powered by  
**TELOS**



[treegers.com](https://treegers.com)

## WELCOME

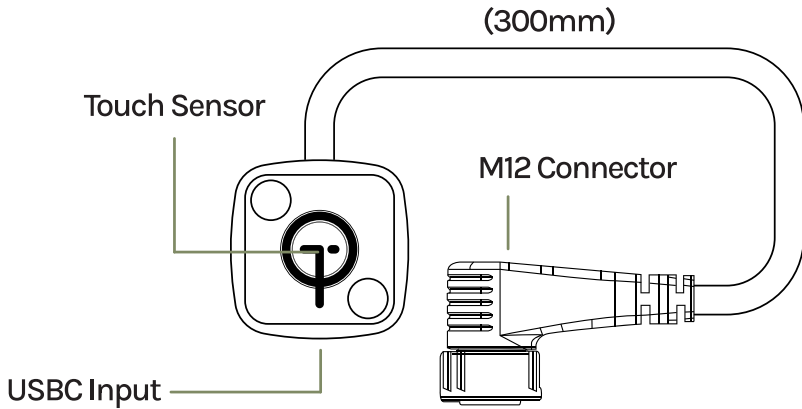
Thank you for purchasing a **Treegers Grow-cast. Powered by Telos**

These products are designed in the UK are made using the latest electrical componentry and manufacturing technologies.

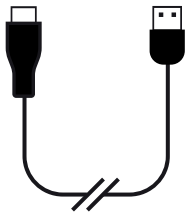
Our aim is to help growers to save energy and grow better plants with reliable, research driven lighting technologies.

# Product Details

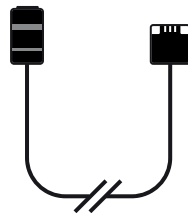
1 x Treegers Growcast Controller:



3 x Cable Adapters:



USB-A to USB-C  
(2m)



Growcast to RJ11  
adapter (30cm)  
Type 1 and Type 2

For the USBC cable, you will need a standard 5v USB power plug.

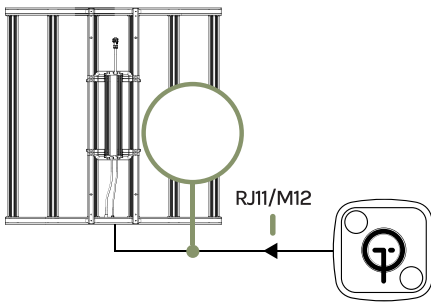
# Installation

Make sure your grow light is powered off before plugging in your Treegeers Growcast.

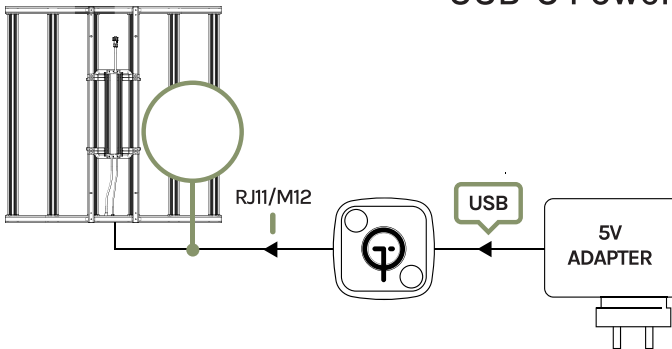
Connect your Treegeers Growcast into the “Signal In/Out” port on your chosen grow light.

Most grow lights can self power the Growcast via a 12v supply from the “Signal In/Out” port. Some grow lights will require an external power source via USB-C (cable provided).

## Grow Light Powered Setup



## USB-C Powered Setup



# Technical Information

- Compatible with many LED and HPS lighting fixtures from leading manufacturers
- Wirelessly set exact light output levels with Precise PPF™
- Control PPF values for each week of growth
- Program a 24hr on/off timing schedule for different grow cycles, replacing the need for contactors and timers
- Add an optional sunrise / sunset feature to schedules
- Daisy chain up to 50 lights to a single Growcast™ controller
- Securely connect and control multiple Growcast™ controllers together on the Telos Mesh smart phone app for Android and iOS

<b>Connection interface:</b>	M12 Push-lock connector
<b>User interface:</b>	Smart-phone app or manual control via touch sensor
<b>Dimming range:</b>	10-100% & Dim to off
<b>Dimming protocol:</b>	1-10v
<b>Input power:</b>	USBC cable or 12v supply (From LED driver)
<b>Wireless technology:</b>	Telos Mesh 5.3
<b>Control app:</b>	Telos (Android) Telos Mesh (iOS)
<b>App availability:</b>	Android and iOS
<b>Ingress Protection:</b>	IP65 (when USBC not connected)
<b>Dimensional data:</b>	32 x 32 x 22mm
<b>Weight:</b>	27g
<b>Cable length:</b>	300mm
<b>Manufacturer's Warranty:</b>	2 years

# Compatibility

Treegers Growcast is compatible with many different grow lights from a wide range of manufacturers.

Visit the Telos website at

[www.teloslighting.co.uk/growcast](http://www.teloslighting.co.uk/growcast)

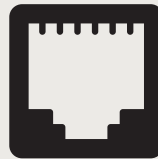
for a full list of compatible fixtures.

The Growcast has been tested with all models listed on the compatibility list to ensure that they function correctly with the Growcast. Treegers accepts no liability for damage to the Growcast, grow lights or property that arises from using the device with a light that is not listed on the compatibility list.

## Accepted Ports:



M12 Push-lock



RJ11

An adapter is available for M12 thread-lock connections.

## 1 x Steel Mounting Surface:



The 3M material is pre-mounted to the back of the Steel mounting plate. Take care to only remove the red plastic release tape and not the black foam adhesive.

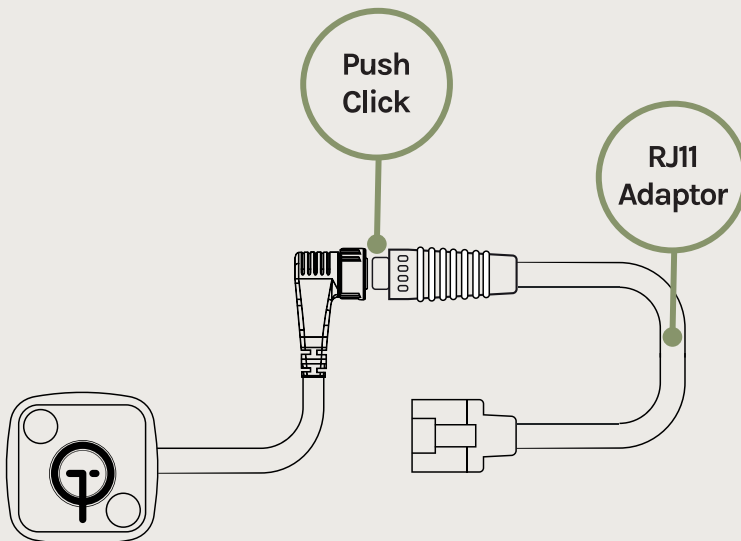
### Included in the box:

- 1 x Treegers Growcast controller
- 1 x 2m USB-C cable
- 1 x RJ11 Adapter [Type 1]
- 1 x RJ11 Adapter [Type 2]
- 1 x Steel mounting plate
- 1 x Instruction manual
- 1 x Telos Mesh Manual

## RJ11 Adaptor

Different grow light manufacturers use different “Signal-in” ports for their lighting designs. Traditionally most grow lights have been designed with an RJ11 port however many newer grow light designs use a waterproof M12 push lock connector.

The Treegers Growcast has been designed with the future in mind with the M12 connector being the native option, however, we have also included two RJ11 adapters (Type 1 and Type 2) to increase compatibility with even more fixtures.





## Mounting

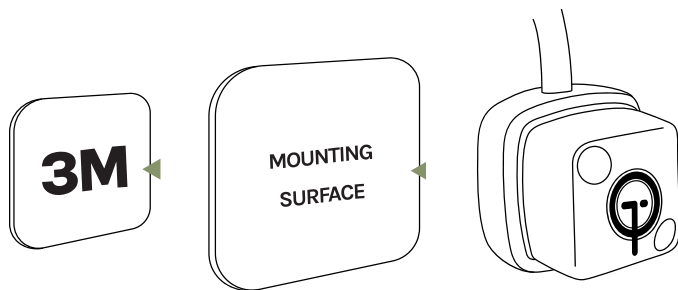
The Treegers Growcast can be mounted to the side of the grow light using the included self-adhesive pad or to a suitable alternative surface using the internal magnet.

## Magnet

The Growcast has a strong permanent magnet integrated into the product casing to allow it to be mounted onto other magnetic materials such as the included steel mounting plate.

## Mounting plate

Use the adhesive pad to attach the mounting plate to a your desired location. The growcast will connect magnetically to the backing plate and lock into position with location pins.

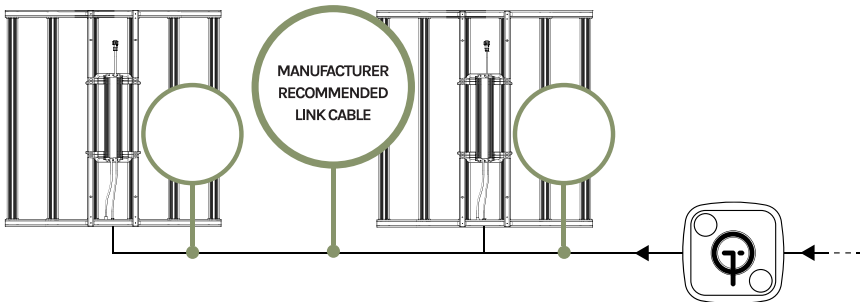


# Accessories

## Fixture Linking/Daisy-chaining

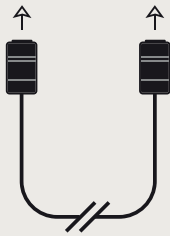
A single Treegers Growcast can control multiple connected lights by linking the fixtures together. This means that the PPF setting and schedule will be synced across all the lights which are wired together.

Install the Growcast into the dimming input port of the fixture as described on page 6. Then use the fixture linking cables recommended or included by the manufacturer to link from the Signal Output port of the first fixture to the Signal Input port of the second fixture and so on. Always refer to the original manufacturer's recommendations when linking fixtures together.

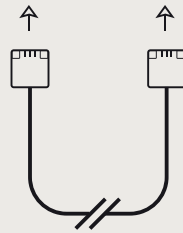


## Fixture Linking/Daisy-Chaining Cables

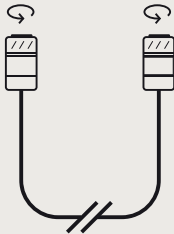
There are several different types of fixture link cables available, allowing users to link multiple fixtures together for single channel dimming. Always follow original manufacturers recommendations when selecting which cables to use.



Push-lock M12 to  
push-lock M12



RJ11 to RJ11



Twist-lock M12 to  
twist-lock M12

Example setup: In order to link 5 lighting fixtures to a single Growcast, you will need 4 x linking cables.

## Alternative Lighting Adapters

The included Growcast RJ11 (Type 1 and Type 2) adapters allows you to connect the Growcast to most major lighting brands. However, some manufacturers use non standardised connectors for their dimming ports. If you find that you are unable to connect your Growcast to your lighting fixture, please contact [support@treegers.com](mailto:support@treegers.com) to check on the availability of compatible adapters.

## Understanding the Touch Controller

The Treegers Growcast has a touch sensor which is used to change the mode or active setting. The touch sensor is activated by pressing the centre of the green Treegers logo on the Growcast.

## Understanding the Status LED

Press the touch sensor to cycle through the pre-set light output settings. The status LED at the base of the cap will change colour depending on the current mode.

Status LED Colour:	Meaning
Blue Flashing:	Bluetooth ready to pair
Blue:	Bluetooth mode (paired)
Green:	Standby
Yellow:	25% Output intensity
Orange:	50% Output intensity
Deep orange:	75% Output intensity
Red:	100% Output intensity
Purple:	Network lock mode

## Enabling Bluetooth Mode

Enable Bluetooth Mode before attempting to add your lights to the Telos Mesh app.



### Step 1

Cycle through to Bluetooth mode by pressing the touch sensor repeatedly until the status LED turns blue. Wait at least 5 seconds before attempting to connect.



### Step 2

The status LED will flash blue and the light will start broadcasting the Bluetooth advertising signal.

## Waking the Growcast from Sleep

Wake your Growcast from sleep. To prevent accidental changes, the Growcast will go to sleep after 15 seconds of inactivity.



### Step 1

Push and hold the touch sensor for 3 seconds. The status LED will dim down and the touch sensor will reactivate.

# Resetting the Growcast

The Growcast can be fully reset using the touch sensor on the driver. Resetting will erase any connection settings and saved schedules.

## Step 1

First, wake the Growcast from sleep. Refer to previous page.



## Step 2

Press and hold the touch sensor for 3 seconds. The status LED will flash red.



## Step 3

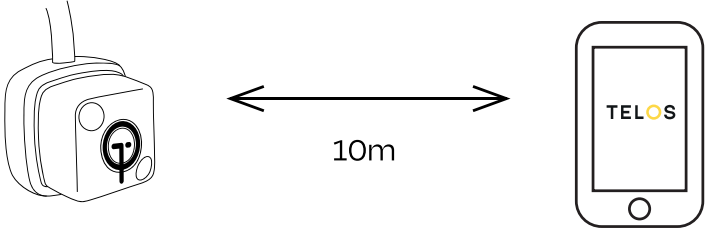
Release, then press and hold the touch sensor again for another 3 seconds. And release.



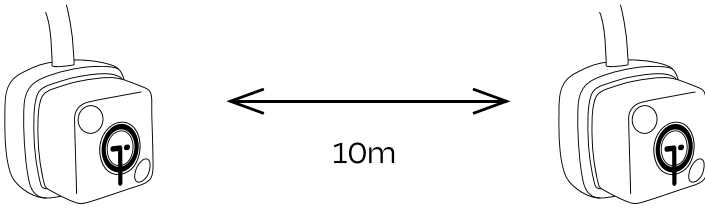
## Complete

The entire light (lamp section) should flash brightly 3x.

# Wireless Connection Distances



Recommended distance between Growcast to smart device.



Recommended distance between Growcast to Growcast.  
When connecting and controlling the network with a smart device, we recommend that you are in the same room or within 10 meters of the Growcast to ensure the strongest connection.