Spektrʋʋʋ

ADVANCED SPECTRUM ILLUMINATION

QUICK START GUIDE

For Spektrum 90 & Spektrum 150 Models

SPEKTRUM LED LIGHTING

The Spektrum range of high-output LED lights has been specifically developed by D-D for illuminating home and all captive reef aquariums, providing the power, colour and control required for optimum growth, colour-rendition and fluorescence, making your fish and corals stand out and thrive.

SAFETY INFORMATION

THIS DEVICE AND ITS COMPONENTS ARE FOR INDOOR USE ONLY AND ARE NOT WATERPROOF.

PLEASE READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

CAUTION: When powered on the LEDs will become hot and may cause burns if touched. Placing the unit face down on a surface or close to a surface when in operation will cause damage to the optics invalidating warranty and potential damage the surface. Allow the unit to cool before attempting any maintenance or touching the device.

DO NOT LOOK DIRECTLY AT LEDS WHEN THE UNIT IS RUNNING.

DANGER: To avoid risk of an electric shock care should be taken when handling any electrical device near water. In the case of damage or unit malfunction return the appliance to an authorized service facility or discard the appliance.
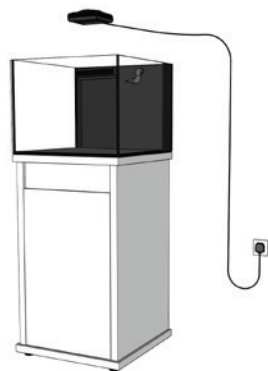
WARNING: To protect against injury, the following safety precautions should be observed:

- Do not operate any appliance that is malfunctioning or has any damage to the unit, power cable or plug.
- This appliance should not be operated by children and close supervision is necessary when used near children.
- To avoid injury, do not contact moving parts.
- Always unplug an appliance from the mains outlet when not in use, when servicing or during maintenance.
- Never pull on any of the power cables. To remove the plug from a mains power socket grasp the plug and pull to disconnect.
- Do not use an appliance for anything other than its intended use.
- The use of third party attachments or components not recommended or sold by the appliance manufacturer may cause unsafe conditions and invalidate warranty.
- Do not install or store the appliance where it will be exposed to the weather or to temperatures below freezing point.
- Make sure the appliance mounted securely and installed properly before operating it.
- Read and observe all the important notices on the appliance.

- An extension cord rated for less amperes or watts than the appliance rating may overheat.
- Care should be taken to arrange power cables so that they do not form a trip hazard, are not under tension and cannot be pulled accidentally.

To avoid the possibility of the appliance, plug or socket getting wet, you should create a '**drip loop**' for each cable connecting an aquarium appliance to a socket. The '**drip loop**' is that part of the cable below the level of the socket, or the connector. Use an extension cable, if necessary, to prevent water travelling along the cable and coming in contact with the socket.

If the plug or socket does get wet, **DO NOT** unplug the cable. Disconnect the fuse or turn off the circuit breaker that supplies power to the appliance before unplugging.

LIMITED WARRANTY

Should any defect in material or workmanship be found within 12 months of the date of purchase D-D The Aquarium Solution Ltd undertakes to repair, or at our discretion, replace the defective part free of charge.

Our policy is one of continual technical improvement and we reserve the right to modify and adjust the specification of our products without prior notification.

UNPACKING

Please check for delivery damage before unpacking. Once opened, inspect the product for any visible damage and check all parts are included. If any defects are found when unpacking, contact your retailer immediately.

Included in the box:

- D-D Spektrum light unit
- 24V Power supply
- UK power lead
- EU power lead
- Fixings bag
- Quick start guide

MOUNTING THE LIGHT

The Spektrum light should be securely mounted a minimum of 25-30cm above the waters surface in a position that is well ventilated and does not allow it to be splashed. Installation of the unit within an enclosed hood or in a position that exposes it to moisture ingress will cause damage and invalidate warranty.

The power supply and cable connections must be housed in a dry location away from water.

Various options are available that allow the light to mounted to the edge of an aquarium or suspended above it, please visit the Spektrum product page on our website **www.theaquariumsolution.com** for more information.

APP DOWNLOAD

To download the **D-D SPEKTRUM** app scan the QR code or visit the **App Store** for IOS devices or the **Google Play** store for Android devices and search for **D-D Spektrum**.

STARTING THE APP

When starting the app for the first time it will ask for permission to allow access to networks, wireless connectivity and location, these will need to be accepted for the connection with a light to be established.

After the app has been downloaded on to your mobile device, open the app and choose the option at the bottom of the page to '**Create Account**'. Enter the details that you would like to use, a valid E-Mail will be needed to retrieve the verification code to complete the account setup. Once your details have been entered tap '**Get**' in the '**Enter Verification Code**' field and the code will be sent to the E-Mail address used for your account setup. Once received enter the code and then choose the '**Save**' button at the bottom of the screen to complete the account registration.

Once this is complete log in to your account to start setting up the lights.

CONNECTING A DEVICE

Before attempting a connection make sure the light is securely mounted in a suitable location, power the light on at the mains socket and wait for the red indicator LED next to the reset button to illuminate. The green indicator LED will remain off at this stage.

NEVER POWER THE LIGHT ON WHEN IT IS FACING DOWN ON OR CLOSE TO A SURFACE AS IT WILL CAUSE DAMAGE TO THE OPTICS.

Once this is done you can connect the light to the app in one of two different ways.

Local Connection

This will allow a light to be linked directly to your mobile device if no suitable Wi-Fi network is available. When using this option you will need to be in the same room as the light to make changes or log in to its settings. Local connection does not allow remote firmware updates or the grouping of lights.

Open the app and log in, choose ➕ **Add Device** at the top right of the '**Home**' page followed by the '**Connect Locally**' button. Tap on the name of the device you would like to add then '**Connect**' to start the process.

When the connection is complete the app will return to the '**Home**' screen and the connected device is shown.

Wi-Fi Connection

The lights can be connected to a home Wi-Fi network, this will allow remote access to the light settings, firmware updates and the grouping of lights.

Please be aware the lights can only use a 2.4ghz connection, if there is only a 5ghz connection or a public Wi-Fi portal available you will need to use the Local Connection option above.

Make sure the mobile device you are using is connected to the Wi-Fi network you will be using for the light. Open the app and log in, choose ➕ **Add Device** at the top right of the '**Home**' page followed by the '**Connect to WiFi**' button and select the light or one of the lights you would like to connect to by tapping the ➕ symbol next to it.

The Wi-Fi network your mobile device is connected to should be displayed at the top of the page, carefully enter your password for this network and select '**Save**'. Connection will then start with the light you selected, if there are other lights displayed that you want to add to the same group tap the ➕ button associated with them. After the connection with all chosen lights has finished tap the '**OK**' button and then add a group name followed by the '**OK**' button to save.

When complete the app will return to the '**Home**' screen and the connected group shown.

CONTROLLING A DEVICE

The light can be controlled either manually for a constant setting, or automatically where you can set an automatic lighting schedule.

To control a connected light or group, log in to the app and go to the '**Home**' page, then select the '**Setting**' arrow for the individual light or group you want to control. This will display the main control dashboard.

If the lightbulb icon is not highlighted and displaying '**Light Off**' tap the icon to swich the light on, then follow the manual or automatic setting instructions below.

Manual Control

Manual control allows a light or group, to run constantly with a specific power and colour setting unless power is lost or the setting is changed in the app.

Press the 'Manual Control' button in the app for two to three seconds to enter the manual controls. In this page you can use the individual sliders to set a power level for each separate colour channel, or alternatively by selecting the 'Colour Temperature Control' button set an overall colour and power.

The back button in the bottom right of the screen will return you to the previous page.

Automatic Control

This setting will allow a light cycle to be set that will mimic sunrise, sunset and daytime lighting.

Tap the 'Add/Edit Schedule' button in the app. In this page you can use a preset lighting schedule or make your own custom settings.

To load an existing schedule choose the 'Preset' button, there are three factory settings available, simply tap on the one you want to use and then confirm. This will then be saved to the individual light or group.

If you want to create your own custom schedule select the 'Easy Setup' button. Using the dropdown menus under the graph, in this page you can set the time the sunrise starts, sunset ends and the time it takes the light to ramp up and down. The slider bars are then used to set the maximum power setting for each of the LED colour channels. When you have chosen your settings tap 'Save' in the top right corner.

After you have completed the settings use the back arrow in the bottom right corner to return to the main control dashboard, then activate your settings by tapping the 'Run Schedule' button.

The back button in the bottom right of the screen will return you to the 'Home' page.

ADVANCED FEATURES

It is possible to add lunar, adjust existing lighting schedules, share and create lighting presets as well as other advanced settings. For information and instructions on these please visit the product page on our website www.theaquariumsolution.com and download the Spektrum instruction manual.