

SHYFT

LIGHT SCHEDULER



CONTROL BRIGHTNESS AND GAIN CONSISTENCY, ACCURACY, AND EFFICIENCY

SHYFT Light Scheduler is the user-friendly solution for feature-rich automation of the Fluence LED Light Fixtures in your grow operation. Fluence patented Photoacclimation feature protects plant health by gradually adjusting crops to new brightness levels for different growth stages. SHYFT enables accurate and repeatable results through consistent photoperiods and dimmed brightness levels that facilitate increased crop yields and more growing cycles in a season.

FEATURES AND BENEFITS

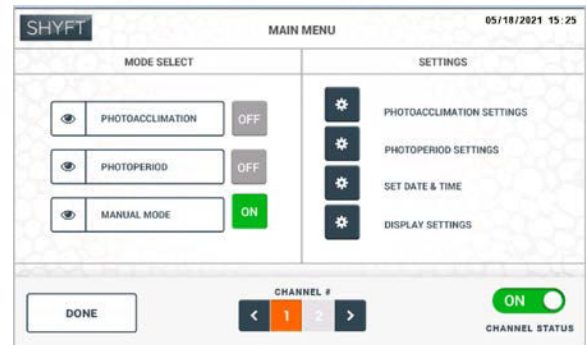
- Large Full-Color Touch Screen and Simple Interface
- 2 fully independent control zones, compatible with any Fluence light fixture
- Photoacclimation mode gently adapts crops to a new brightness level
- Photoperiod mode repeats a daily on/off schedule and brightness level
- Optional simulation of Sunrise and Sunset at the start and end of the Photoperiod
- Manual dimming mode (set a brightness level and hold it)
- Suitable for installation in wet locations
- Flexible mounting (Wall or 35 mm DIN rail)
- Internal battery that retains the configuration during a power loss
- On-screen dimming channel fault indicators signal need for attention
- 2 Year Limited Warranty

SHYFT LIGHT SCHEDULER



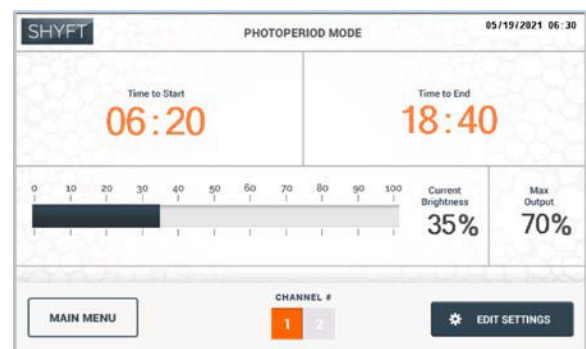
USER-FRIENDLY LIGHT CONTROL

Select one of the **3 different operating modes**, change settings, and switch between the 0-10V control zones via the simple-to-use touch interface.



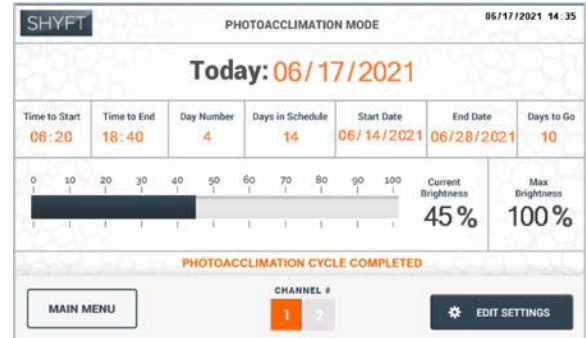
PHOTOPERIOD MODE

Photoperiod mode functions like a 24-hour timer clock, but with additional advanced features. You set a time to turn the zone on and off, a brightness level, and an optional simulated sunrise (ramp up) when the cycle starts, and sunset (fade down) before turning off. The same Photoperiod schedule repeats every 24 hours.



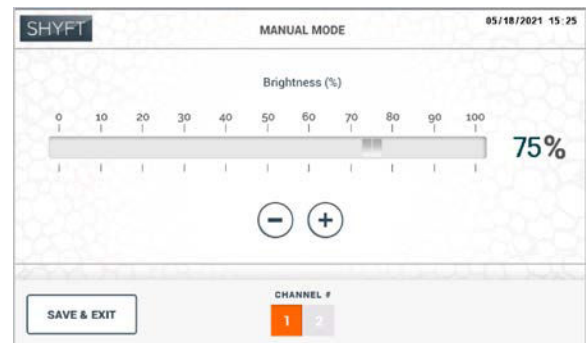
PHOTOACCLIMATION MODE

Photoacclimation mode protects plant health by preventing shock to plants with a sudden change in brightness level for a new growth stage. The Photoacclimation cycle incrementally changes the Photoperiod brightness level until the target brightness level at the end of the cycle is reached. Use the built-in settings or customize each day of the cycle. The Photoperiod will continue to repeat at the last target brightness level after the Photoacclimation cycle ends.



MANUAL MODE

Manual mode lets you dim the lights like a traditional wall dimmer with an intuitive slider button. The brightness level holds until you change it.



Contact **FLUENCE** @
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The Photoacclimation feature in SHYFT is covered by U.S. Patent 10,798,879 B1.
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SHYFT LIGHT SCHEDULER



SPECIFICATIONS	
Number of Channels	2
Signal Type	0-10 V
Signal Strength (per channel)	Source/Sink 100/30 mA DC
Max # of Fixture Controlled (per channel)	50 fixtures, or up to 100 mA max dimming current capacity
Max Signal Wire Length (per channel)	200-300 feet max 60-90 meters max
10V Output Control	0-10 V +/- 0.1 V
AC Adapter Input Power	100 V – 240 V 50/60 Hz
DC Input Power	15 V – 24 V DC at 0.4 A 10 W, Sourced Wall Power
Light Control	0%-100% Light Intensity, Automatic Time Schedules (24 Hour Photoperiod and 20-day Max Photoacclimation Cycle), Manual Dimming (Set and Hold)
User Interface	LCD Touch Screen
Min./Max. Ambient Operating Temperature	32 °F/0 °C - 122 °F/50 °C
Min./Max. Ambient Storage Temperature	-4 °F/-20 °C - 140 °F/60 °C
Environmental Rating	Indoor/Outdoor (Type 3R), IP65 0 – 90 % Relative Humidity, Non-Condensing
Mounting	Wall/Surface or 35 mm DIN Rail
Compliances	cULus, FCC
Warranty	2 Years Limited
Region	Americas

DIMENSIONS WEIGHT MOUNTING OPTIONS			
Length	Width	Height	Weight
7.95" 202 mm	5.36" 136 mm	1.46" 37 mm	2.0 lb 0.9 kg

Wall/Surface

35 mm DIN Rail

WHAT'S INCLUDED

1. SHYFT Light Scheduler unit
2. Wall/35 mm DIN rail mounting bracket
3. Drywall anchors and #10 Phillips head screws
4. 120 V AC Plug-in Power Adapter

Dimming cables to light fixtures sold separately



ORDERING INFORMATION

Description	Regional Commercial Code	Ordering PN 12NC (-S)	Ordering PN 12NC (-B)	Bulk Pack Quantity
SHYFT, 0-10V 2 CHANNEL, 120V	SH1AA-2CC7TBFTAP	912401701776	NA	NA
SHYFT, SPARE MOUNTING BRACKET	SH1XA-SMBXXXXXXX	912401701774	912401701775	10
SHYFT, SPARE AC POWER ADAPTER 120V	SH1AA-SPA2L2XTAP	912401701772	912401701773	10
SHYFT, SPARE WIRE COVER GASKET	SH1AA-SGKXXXXXXX	912401701762	912401701763	10
WFD, WIRELESS ADAPTER FOR SHYFT	WF1DA-SW14L4XP6M	912401701790	912401701791	20
WFD, SHYFT ADAPTER DUST CAP	WF1XA-DST4P6FXXX	912401701788	912401701789	40

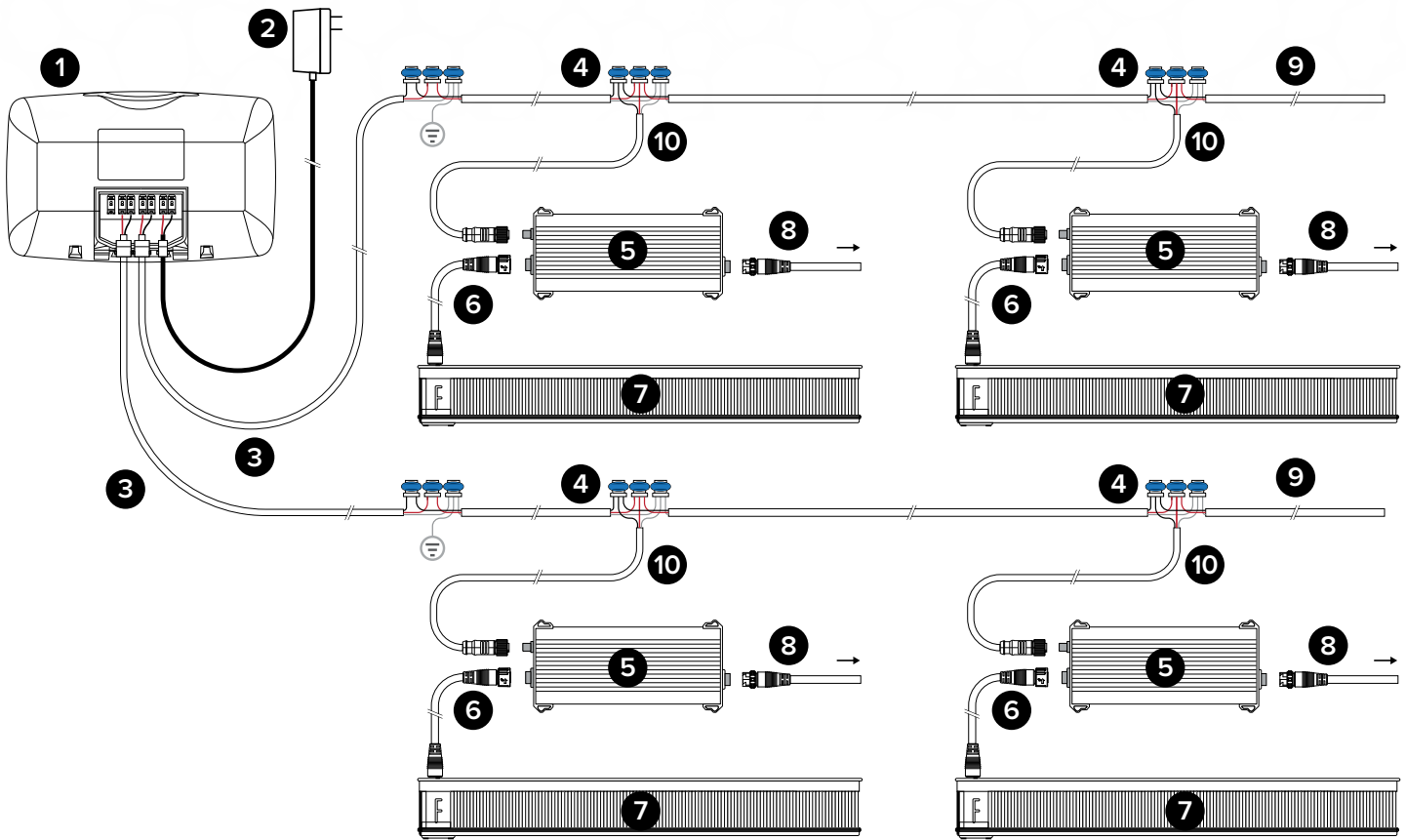


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WIRING DIAGRAMS Custom Dimming Cables

SHYFT can be wired with custom dimming cable. Two conductors are required for each branch and main trunk for each channel, DIM (+), DIM (-), plus a ground drain. 18 AWG stranded 2C twisted shielded cable is recommended. A single point of grounding to earth at the controller is required for each channel.



COMPONENTS

- 1 SHYFT Light Scheduler
- 2 120 V AC Plug-in Power Adapter
- 3 2-Conductor plus Ground Drain Dimming Cable
- 4 Wire Splice Connectors
- 5 Power Supply for Light Fixture
- 6 DC Power Cable to Light Fixture
- 7 Light Fixture
- 8 AC Power Cable to Power Supply
- 9 Dimming cable to next Light Fixture or terminate
- 10 Power Supply dimming pigtail cable

SPECIFICATIONS

Min. Wire Gauge	18 AWG / 0.75 mm ²
Conductor QTY.	2
Recommended Cable	Belden, PN: 5340F1
Recommended Wire Splice Connector	3M PN: 314 Scotchlok IDC Connectors 22-14 AWG
Max QTY. Connected Light Fixtures (per channel)	50, or up to 100 mA max dimming current capacity
Max Recommended Distance First to Last Light Fixture	200-300 ft 61-91.5 m

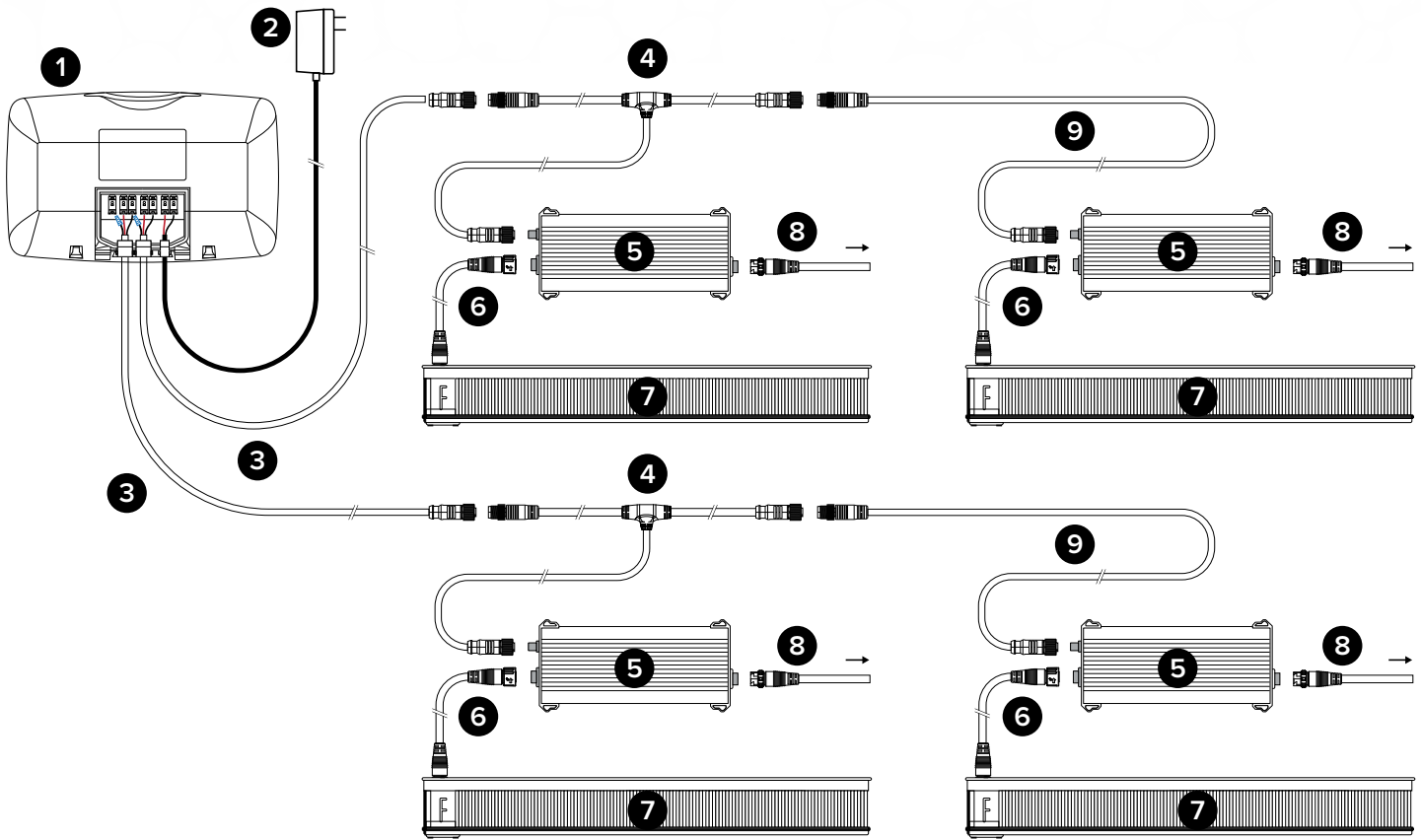
NOTES

Maintain the polarity at all dimming connections, (+) wire to (+) wire and (-) wire to (-) wire.

A single point grounding to earth at the controller side is recommended for each channel. Only one connection to ground is allowed.

WIRING DIAGRAMS DC Flex Dimming Cable (M12 Connector)

SHYFT can be wired with DC Flex Dimming cable by Fluence. Three-conductor trunk and T-cables with threaded A-code connectors make the cable installation simple and error-free. A single point of grounding to earth is required for each channel. This is accomplished by installing a grounded termination cable to the last fixture in the channel (see # 9 below). Only the DIM (+) and DIM (-) wire terminations are connected at the leader cable to SHYFT. **The drain wire of the leader cable must be cut.**



COMPONENTS

- 1 SHYFT Light Scheduler
- 2 120 VAC Plug-in Power Adapter
- 3 DC Flex Pigtail Trunk Extension Cable
5 FT (DFUPT-XL3X4T2F1.5) or 75 FT (DFUPT-XL3X4T2F22)
- 4 DC Flex T-Connector Cable to Light Fixture Power Supply
5 FT (DFU1T-4T2M3T2F1.5) or 10 FT (DFU1T-4T2M3T2F3.0)
- 5 Power Supply for Light Fixture
- 6 DC Power Cable to Light Fixture
- 7 Light Fixture
- 8 AC Power Cable to Power Supply
- 9 DC Flex Termination Cable with Ground Connection to last Light
Fixture 3.5 FT (DFUTG-4T2M3T2F1.0)

SPECIFICATIONS

Max QTY. Connected Light Fixtures (per channel)	50, or up to 100 mA max dimming current capacity
Max Recommended Distance First to Last Light Fixture	200-300 ft 61-91.5 m

NOTES

Do not ground the wiring system at the controller side. Only one connection to ground is allowed.

Please refer to the **DIM Flex Wiring System (M12 1-Channel) Specification Sheet** for wiring details.