



# WIRELESS FLEX DIMMING

## Connectivity Kit for SHYFT Light Scheduler

### FEATURES AND BENEFITS

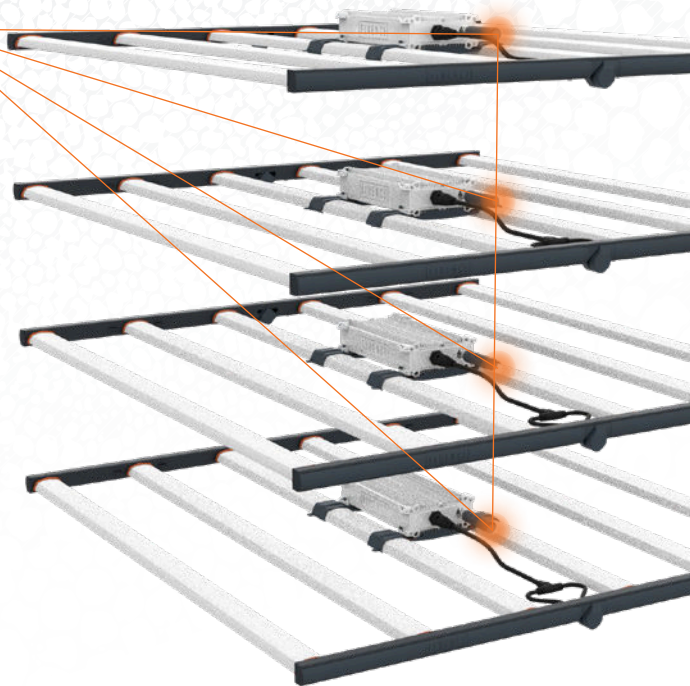
- Control up to 300 light fixtures wirelessly per zone with SHYFT Light Scheduler versus the wired 50!
- 1- or 2-Zone Connectivity Kits (additional Receivers sold separately)
- Quick hardware installation and no dimming cables to manage
- Easy setup, zone changes, and expansion via an iOS mobile app
- Reliable and secure qualified Bluetooth® mesh technology enabled by SILVAIR.
- Suitable for wet locations\* and no batteries to replace
- 5-year warranty

**Fluence's Wireless Flex Dimming Connectivity Kit for SHYFT Light Scheduler** allows you to say goodbye to wiring by replacing dimming cables to each light fixture with wireless control. The result is reduced installation time, no wiring connections or errors, and no dimming cables to get in the way! Simply plug a Wireless Flex Dimming Receiver into the dimming port of each Fluence light fixture, install a 1- or 2-Zone Connectivity Kit on SHYFT Light Scheduler, and perform the setup with an easy-to-use mobile app.

The Wireless Flex Dimming Connectivity Kit gives you even more from SHYFT Light Scheduler by enabling it to control up to 300 Fluence LED grow lights per channel with reconfigurable zones. Wireless Flex Dimming is future-proof by being able to integrate with any climate computer or scheduler with a 0-10V output when it's time to upgrade to a more advanced controlled environment agriculture solution, so it can match the grower's needs now and in the future.

Bluetooth® is a registered trademark of Bluetooth SIG, Inc.

\*Rated IP65 on SHYFT Light Scheduler and IP66 on the light fixture.

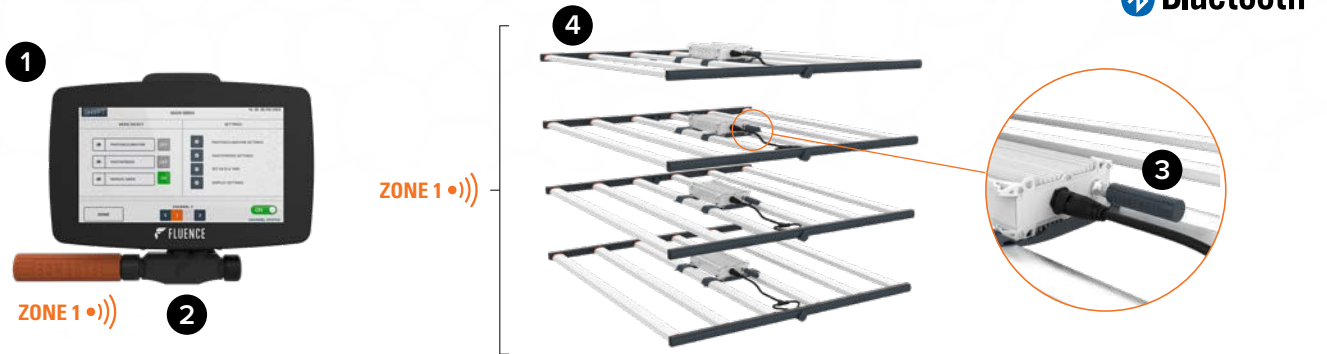


# WIRELESS FLEX DIMMING

Connectivity Kit for SHYFT Light Scheduler



## SYSTEM DIAGRAM (ONE ZONE)



## COMPONENTS

- 1 SHYFT Light Scheduler, sold separately (CTLA-SHYFT)
- 2 Wireless Flex Dimming 1 Zone Connectivity Kit for SHYFT Light Scheduler (WFDM-SHYFT-1ZONE)
- 3 Wireless Flex Dimming Receivers (1 required per power supply/light fixture, WFDM-10538-01)
- 4 Fluence Light Fixture, sold separately (SPYDR 2 shown)

## SYSTEM DIAGRAM (TWO ZONES)



## COMPONENTS

- 1 SHYFT Light Scheduler, sold separately (CTLA-SHYFT)
- 2 Wireless Flex Dimming 2 Zone Connectivity Kit for SHYFT Light Scheduler (WFDM-SHYFT-2ZONE)
- 3 Wireless Flex Dimming Receivers (1 required per power supply/light fixture, WFDM-10538-01)
- 4 Fluence Light Fixture, sold separately (SPYDR 2 shown)

# WIRELESS FLEX DIMMING

## Connectivity Kit for SHYFT Light Scheduler



### ORDERING INFORMATION

Descriptions	Ordering Code	Carton Quantity
Wireless Flex Dimming Connectivity Kit for SHYFT – 1 Zone	<b>WFDM-SHYFT-1ZONE</b>	<b>1</b>
Wireless Flex Dimming Connectivity Kit for SHYFT – 2 Zone	<b>WFDM-SHYFT-2ZONE</b>	<b>1</b>
Accessory Receiver for Fixture with M12 dimming port	<b>WFDM-10538-01-AR</b>	<b>1</b>
Accessory Receiver for Fixture with M12 dimming port 20 Pieces in Counter-top Display Box	<b>WFDM-10538-20-AR</b>	<b>20</b>

### WHAT'S INCLUDED IN THE CONNECTIVITY KIT

**NOTE:** SHYFT Light Scheduler and additional Wireless Flex Dimming Receivers are sold separately. The kit components can be ordered individually (see ordering codes below). Please refer to the Wireless Flex Dimming 0-10V Adapter and Receiver specification sheet for additional components that may be required to complete your installation.

Descriptions	Ordering Code	WFDM-SHYFT-1ZONE	WFDM-SHYFT-2ZONE
<b>A</b> Wireless Flex Dimming Adapter for SHYFT	<b>WFDM-SHYFT-ADPT</b>	1	1
<b>B</b> Wireless Flex 0-10V Adapter*	<b>WFDM-10539-01</b>	1	2
<b>C</b> Wireless Flex Dimming Receiver for Fixture with M12 dimming port	<b>WFDM-10538-01</b>	1	2
<b>D</b> Wireless Flex Dimming Adapter for SHYFT Dust Cap	<b>WFDM-M16-DUSTCAP</b>	1	N/A



\*NOTE: If purchased separately, the included panel mount connector is not used with SHYFT.



### WIRELESS FLEX DIMMING APPS:

**Web App:** <https://fluencewirelessflex.com>  
First create an account, then download the mobile app.

**Mobile App:** iOS App Store (free download)  
<https://apps.apple.com/us/app/fluence-wireless-flex/id1558821999>

**Complete Product Information, Quick Start Guide, and Installation Videos:** <https://fluence.science/products/wireless-flex-dimming/>

**Support and Application Assistance:** [support@fluence-led.com](mailto:support@fluence-led.com)  
**Telephone:** (512) 212-4544  
**Support Hours:** M – F 8:00 AM to 5:00 PM US Central Time

### Mobile App



<https://apps.apple.com/us/app/fluence-wireless-flex/id1558821999>



Contact **FLUENCE**   
[support@fluence-led.com](mailto:support@fluence-led.com)   
[www.fluence.science](http://www.fluence.science)

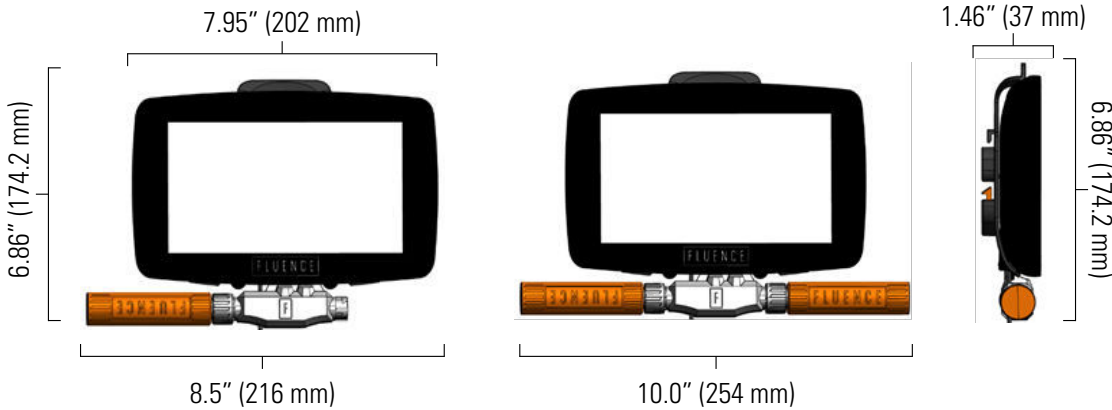
# WIRELESS FLEX DIMMING

## Connectivity Kit for SHYFT Light Scheduler



### ASSEMBLED DIMENSIONS

DIMENSIONS   WEIGHT				
Kit	Length	Height	Depth	Weight
1-Zone	8.5"	6.86"	1.46"	2.3 lb
	216 mm			1.1 kg
2-Zone	10.0"	174.2 mm	37 mm	2.5 lb
	254 mm			1.2 kg



### WIRELESS FLEX DIMMING LIGHT FIXTURE / POWER SUPPLY COMPATIBILITY

Fluence Light Fixture	Dimming Port	Wireless Flex Dimming Receiver
<p>VYPR 2p, 2x2 / 120-480V VYPR 2x / 120-400V</p> <p>VYPR 3p, 3x2 / 120-480V VYPR 3x / 120-400V</p> <p>SPYDR 2h, 2i, 2p / 120-480V SPYDR 2x / 120-480V SPYDR Fang 120-277V (replaces included dimmer)</p> <p>RAZR Modular / 120-480V</p> <p>RAPTR / 277-480V</p>	<p><b>M12</b></p>	<p><b>WFDM-10538-01</b> <b>WFDM-10538-01-AR</b> Metal Threaded /M12 Female/3-pin</p>
<p>VYPR 2p, 2x, 2x2 / 120-480V VYPR 3x / 480V</p> <p>SPYDR 2i, 2p, 2x / 120-480V</p>	<p><b>M16</b></p>	<p><b>WFDM-10537-01*</b> Plastic Push-Lock/M16 Female/3-pin</p> <p><b>*SOLD SEPARATELY</b></p>
<p>VYNE, RAY, RAZR 2/3/4, RAZRx, SPYDRx/PLUS, VYPRx</p>		<p><b>NOT COMPATIBLE</b></p>



Contact **FLUENCE** @  
support@fluence-led.com  
www.fluence.science

# WIRELESS FLEX DIMMING

## Connectivity Kit for SHYFT Light Scheduler

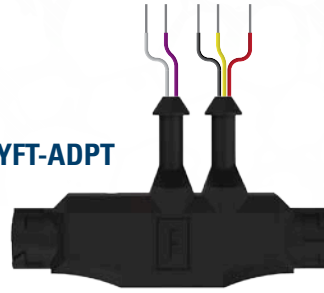


### WIRELESS 0-10 V ADAPTER SPECIFICATIONS

**WFDM-10538-01**



**WFDM-SHYFT-ADPT**



SPECIFICATIONS	
WFDM-SHYFT-ADPT Number of Channels	1 or 2
Max # of Receivers Per Wireless 0-10V Adapter	300
Input Signal Type	0-10 V DC Analog, Linear
Light Control	0%-100% Light Intensity, Linear
Output Signal Type	Qualified Bluetooth® mesh enabled by SILVAIR, 4 dBm max @ 2.4 GHz
RF Range	50 feet / 15.24 m (Line of Sight), Obstructions or electromagnetic environment may reduce the range. Up to 8 hops through the mesh
DC Input Power (at SHYFT)	+12 V DC
Status LED	Fast Blinking: not connected to the network Slow Blinking: connected to a network
Reset to Factory Defaults	Hold magnet to center of housing for 10 seconds
Wireless 0-10V Adapter Dimensions (Length x Diameter)	3.79" x 0.87" 96.15 mm x 22.17 mm
Wireless 0-10V Adapter Net Weight	1.1 oz / 31 g
Wireless 0-10V Adapter Body Color	Orange
Body Material	UV Resistant Plastic
Min./Max. Ambient Operating Temperature	14 °F/-10 °C - 140 °F/60 °C
Min./Max. Ambient Storage Temperature	-4 °F/-20 °C - 158 °F/70 °C
Operating Humidity Range	0 % - 95 % RH, Non-condensing
Environmental Rating	IP65
Mounting	M16 4-pin push-lock connector to SHYFT adapter
Compliance Marks	FCC, IC, Bluetooth®
Countries Certified for Operation (Connectivity Kit)	USA, Canada
Warranty	5 Year Limited



Contact **FLUENCE**   
[support@fluence-led.com](mailto:support@fluence-led.com)   
[www.fluence.science](http://www.fluence.science)

# WIRELESS FLEX DIMMING

## Connectivity Kit for SHYFT Light Scheduler



### WIRELESS RECEIVER SPECIFICATIONS



WFDM-10538-01



psacertified™  
level one

SPECIFICATIONS	
Number of Channels	1
Input Signal Type	Qualified Bluetooth® mesh enabled by SILVAIR, 4 dBm max @ 2.4 GHz
Light Control	0%-100% Light Intensity, Linear
Output Signal Strength (at fixture)	Sinking controller (1.2 mA max) / Sourcing controller (100 µA max)
Output Signal Type	0-10 V DC Analog
RF Range	50 feet / 15.24 m (Line of Sight), Obstructions or electromagnetic environment may reduce the range. Up to 8 hops through the mesh
DC Input Power (at fixture)	12 V DC +/- 10 %
Status LED	Fast Blinking: not connected to the network Slow Blinking: connected to a network
Reset to Factory Defaults	Hold magnet to center of housing for 10 seconds
Dimensions (Length x Diameter)	3.79" x 0.87" 96.15 mm x 22.17 mm
Net Weight	1.1 oz 31 g
Body Color	Cool Gray
Body Material	UV Resistant Plastic
Min./Max. Ambient Operating Temperature	14 °F/-10 °C - 140 °F/60 °C
Min./Max. Ambient Storage Temperature	-4 °F/-20 °C - 158 °F/70 °C
Operating Humidity Range	0 % - 95 % RH, Non-condensing
Environmental Rating	IP66
Mounting	M12 (Threaded) 3-pin Dimming Port on Light Fixture Power Supply
Compliance Marks	FCC, IC, Bluetooth®
Countries Certified for Operation (Connectivity Kit)	USA, Canada
Security	Arm PSA Certified Level 1
Warranty	5 Year Limited

Bluetooth® is a registered trademark of Bluetooth SIG, Inc.

PSA Certified and the PSA Certified and PSA Functional API Certified logos are trademarks of Arm Limited (or its subsidiaries) in the US and/or elsewhere.

### IMPORTANT:

This product is intended for use with approved Fluence power supplies only. Use of this product other than indicated in Wireless Flex Dimming product documentation will void the warranty. For all product cautions, warnings, and compliances, please refer to the **Wireless Flex Dimming Hardware Installation Guide** available at <https://fluence.science/products/wireless-flex-dimming/>

Contact **FLUENCE**   
support@fluence-led.com   
www.fluence.science



## COMPLIANCE AND WARNING STATEMENTS

### FCC Part 15, Subpart B / ICES-003 Unintentional Emissions Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules and Industry Canada ICES-003. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- **Reorient or relocate the receiving antenna.**
- **Increase the separation between the equipment and receiver.**
- **Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- **Consult the dealer or an experienced radio/TV technician for help.**

This device complies with part 15 of the FCC rules and Industry Canada ICES-003. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

**IMPORTANT!** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

**IMPORTANT!** Tous les changements ou modifications pas expressément approuvés par la partie responsable de la conformité ont pu vider l'autorité de l'utilisateur pour actionner cet équipement.

### RF Radiation Exposure Statement

This equipment complies with the FCC/IC radiation exposure limits set fourth for portable transmitting devices operation in an uncontrolled environment. End users must follow the specific operating instructions to satisfy RF exposure compliance.

- The equipment should only be used or installed at locations where there is normally at least a 20cm separation between the antenna and all persons.
- This transmitter must not be co-located or operation in conjunction with any other antenna or transmitter.
- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

**⚠ CALIFORNIA PROPOSITION ⚠**  
**65 WARNING**

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.  
**ADVERTENCIA:** Este producto contiene productos químicos reconocidos por el estado de California que provocan cáncer, defectos de nacimiento u otros daños reproductivos.

For more information:  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



Review our products, share your grow and stay abreast of the latest Fluence news and product releases through the channels below:



[@Fluence\\_Global](#) | [@Fluence\\_LED](#)

[fluence.science](https://www.fluence.science)

© Copyright 2022. Fluence Bioengineering, Inc.