



## WIRELESS FLEX DIMMING 0-10 V Adapter And Receiver

### FEATURES AND BENEFITS

- No more wiring, tremendous labor cost savings due to much faster installation
- Easy to scale up and reconfigure for future grow space expansion, up to thousands of lights per installation
- Fully compatible with any 0-10V dimmer or environmental controllers on the market
- No need to use a lift or hire an electrician to reconfigure light control zones
- Reliable and secure operation via qualified Bluetooth® mesh technology enabled by SILVAIR.
- Low maintenance - IP 66 for wet locations and easy cleaning, and no batteries!
- 5-year warranty



**Fluence's Wireless Flex Dimming** delivers simplicity, flexibility, and cost savings to your grow operation by replacing dimming cables to each light fixture with wireless control. Wireless Flex Dimming realizes tremendous labor cost savings from reduced installation time and eliminating potential wiring errors. Simply plug a Wireless Flex Dimming Receiver into the dimming port of each Fluence light fixture, install a Wireless Flex Dimming 0-10V Adapter, and connect the 0-10V dimming control.

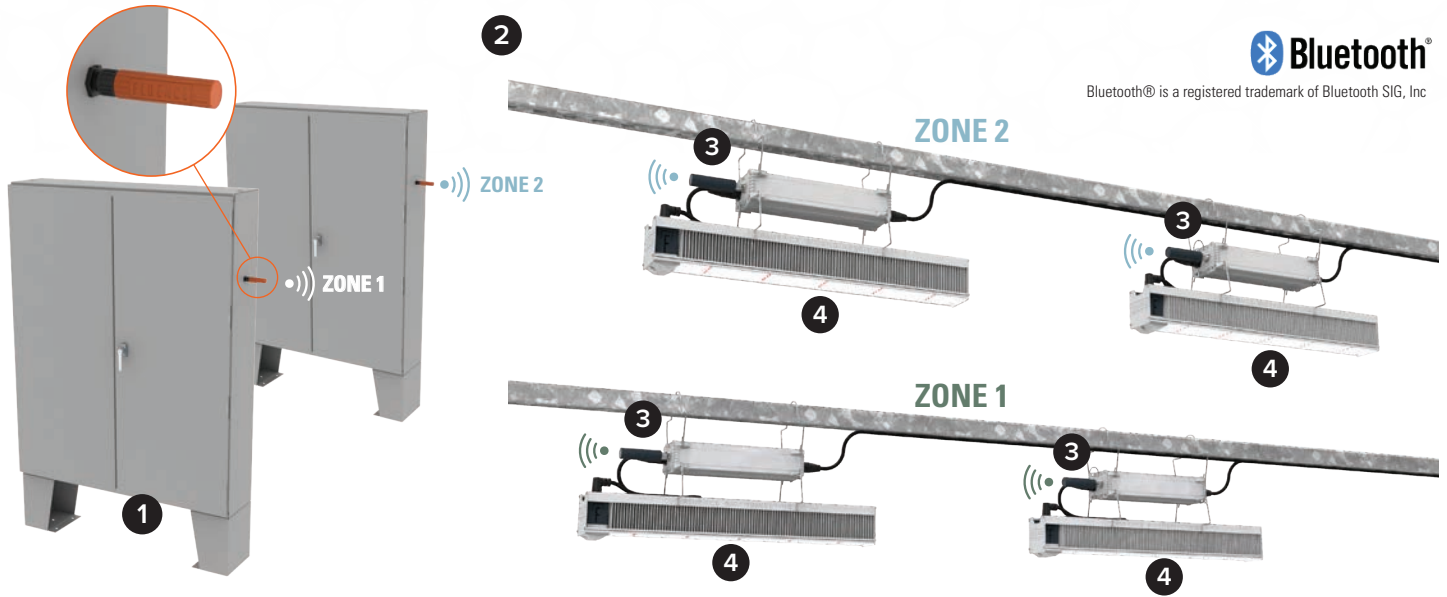
Wireless Flex Dimming is fully compatible with any climate computer or scheduler with a 0-10V output, so it can be used with a variety of best-in-class solutions that match the grower's needs and preferences, now and in the future.

# WIRELESS FLEX DIMMING

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## SYSTEM DIAGRAM (TWO ZONES)



## COMPONENTS

- 1 Any Lighting Controller with an industry standard 0-10 V DC output and 12-24 V DC power source
- 2 Wireless Flex Dimming 0-10 V Adapters (1 required per zone)
- 3 Wireless Flex Dimming Receivers (1 per power supply/light fixture)
- 4 Fluence Light Fixture

## 0-10 V ADAPTER PIN ASSIGNMENTS

PIN	PIN Assignment	Lead Color
1	Ground/DIM-	Gray
2	DC Input (12-24 V DC)	Red
3	DIM+ (0-10 V DC)	Purple
4	No Connection	N/A

## WIRELESS RECEIVER PIN ASSIGNMENTS

PIN	PIN Assignment	Lead Color
1	Ground/DIM-	Gray
2	DC Input (12 V DC)	Red
3	DIM+ (0-10 V DC)	Purple

# WIRELESS FLEX DIMMING

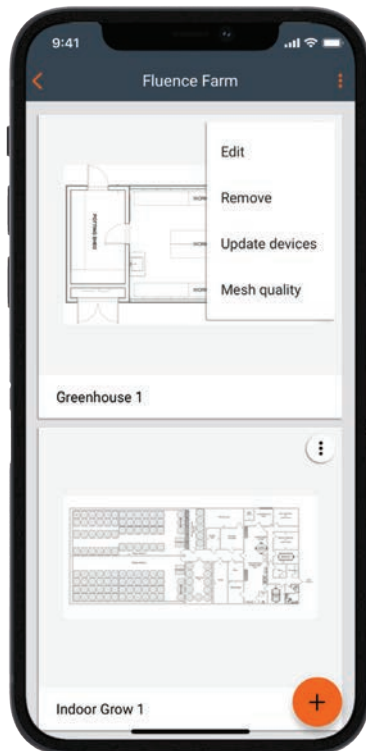
0-10 V Adapter and Receiver



## ORDERING INFORMATION

	Descriptions	Ordering Code
<b>A</b>	Wireless Flex Dimming Receiver for Fixture with M12 dimming port	<b>WFDM-10538-01</b>
<b>B</b>	Wireless Flex Dimming Receiver for Fixture with M16 dimming port	<b>WFDM-10537-01</b>
<b>C</b>	Wireless Flex 0-10V Adapter (includes transceiver and panel mount connector with pigtails)	<b>WFDM-10539-01</b>
<b>D</b>	3.9 in (10 cm) Wireless Flex Dimming Receiver Mating Connector, Pigtail, Panel Mount M12 Connector (for use in external relay application)*	<b>WFDM-M12RXPIGTAIL</b>
<b>E</b>	3.9 in (10 cm) Wireless Flex Dimming Receiver Mating Connector, Pigtail, Panel Mount M16 Connector (for use in external relay application)*	<b>WFDM-M16RXPIGTAIL</b>

\*For more details, please see the [Wireless Flex Dimming External Relay Implementation Guide](https://www.fluence.science/wirelessflex) available at <https://www.fluence.science/wirelessflex>.



## 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>



### Mobile App



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

**Complete Product Information, Quick Start Guide, and Installation Videos:**

<https://www.fluence.science/wirelessflex>

**Support and Application Assistance:**  
[support@fluence.science](mailto:support@fluence.science)



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

# WIRELESS FLEX DIMMING

0-10 V Adapter and Receiver



## WIRELESS 0-10 V ADAPTER SPECIFICATIONS

WFDM-10539-01



### SPECIFICATIONS

Number of Channels	1
Max # of Receivers Per Wireless 0-10V Adapter	300
Input Signal Type	0-10 V DC Analog, Linear
Input Signal (at panel connector)	Sinking (225 $\mu$ A)
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), Up to 8 hops through the mesh
DC Input Power (at panel connector)*	+10 – 50 V DC
Max length of input dimming signal wires	50 feet / 15.24 m
Recommended +12 V DC Input Power Supply	Phihong PSAA12A-120L6
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
Panel Mount Connector Pigtail Length	19.69" / 500 mm
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	Indoor/Outdoor, IP66
Mounting	Adapter M16 4-pin push-lock to panel mount connector. Threaded/Locknut Panel mount connector to 0.7" -0.885" (17.78 mm – 22.48 mm) diameter drilled hole or knockout.
Compliance Marks	CE, FCC, IC, Bluetooth®
Warranty	5 Year Limited

Bluetooth® is a registered trademark of Bluetooth SIG, Inc

\*Adequate surge protection must be provided.



# WIRELESS FLEX DIMMING

0-10 V Adapter and Receiver



## WIRELESS RECEIVER SPECIFICATIONS



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), 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	Indoor/Outdoor, IP66
Mounting	M12 (Threaded) or M16 (Push-lock) 3-pin Dimming Port on Light Fixture Power Supply
Compliance Marks	CE, FCC, IC, Bluetooth®
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. All rights reserved.

### 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** and **EU Declaration of Conformity** available at <https://www.fluence.science/wirelessflex>

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support@fluence.science   
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# WIRELESS FLEX DIMMING

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## INSTALLATION NOTES

The Wireless Flex Dimming Receiver and Wireless Flex Dimming Adapter contain a two-part product label. One part is permanently attached to the device and one part, containing the device serial number in barcode format, is designed to be removed from the device and applied to a facility map or other record of the device installation location. **The tear-off portion of the label must be removed and retained prior to final installation.**

## 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.

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# WIRELESS FLEX DIMMING

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FLUENCE

BY OSRAM

## COMPLIANCE AND WARNING STATEMENTS

**CE** D CE-Kennzeichen: Hiermit erklärt OSRAM, dass dieses Produkt den grundlegenden Anforderungen und den relevanten Vorschriften der europäischen Richtlinien entspricht. GB CE marking: OSRAM declares that this product conforms with the basic requirements and relevant provisions of the European guidelines. F Marquage CE: OSRAM declare que ce produit répond aux exigences de base et aux dispositions applicables des directives européennes. I Marchio CE: OSRAM dichiara che questo prodotto è conforme ai requisiti di base e i provvedimenti pertinenti secondo le linee guida europee. E Marca CE: OSRAM declara que este producto cumple con los requisitos básicos y las disposiciones relevantes de las directrices europeas. P Marca CE: A OSRAM declara que este produto esta em conformidade com os requisitos básicos e as disposições relevantes das diretrizes europeias. GR Σήμανση CE: Η OSRAM δηλώνει ότι το προϊόν αυτό συμμορφώνεται με τις βασικές απαιτήσεις και τις σχετικές διατάξεις των ευρωπαϊκών οδηγιών. NL CE-markering: OSRAM verklaart dat dit product voldoet aan de basisvereisten en relevante bepalingen van de Europese richtlijnen. S CE-markning: OSRAM tillkännager att den här produkten uppfyller de grundläggande kraven och relevanta bestämmelserna i de europeiska riktlinjerna. FIN CE-merkintä: OSRAM takaa, että tämä tuote täyttää Eurooppalaiset perusvaatimukset ja muut tarkeat vaatimukset. N CE-merking: OSRAM erklærer at dette produkt oppfyller krav og relevante bestemmelser i de europeiske retningslinjene. DK CE-merking: OSRAM erklærer, at dette produkt overholder de grundlæggende krav og relevante bestemmelser i de europæiske vejledninger. CZ Značka CE: Společnost OSRAM prohlašuje, že tento výrobek splňuje základní požadavky a ustanovení evropských směrnic. RUS Маркировка CE: компания OSRAM заявляет, что данный продукт отвечает основным требованиям и соответствующим положениям Европейских директив. KZ CE belgici: OSRAM kompaniasy bұл өнімнің Еуропалық нұсқаулықтардың негізгі талаптары мен қатысты ережелеріне сай екенін жариялайды. H CE jelölés: Az OSRAM kijelenti, hogy a termék teljesíti az Európai irányelvek alapvető követelményeit és vonatkozó előírásait. PL Oznaczenie CE: firma OSRAM oświadcza, że niniejszy produkt jest zgodny z podstawowymi wymogami i odpowiednimi postanowieniami wytycznych europejskich. SK Označenie CE: Spoločnosť OSRAM týmto deklaruje, že tento produkt vyhovuje základným požiadavkám a relevantným predpisom evropských smerníc. SLO Označenie CE: Družba OSRAM izjavlja, da ta izdelek izpolnjuje osnovne zahteve in ustrezna določila evropskih smernic. TR CE işareti: OSRAM, bu urunun Avrupa kılavuz ilkelere uygunluk ve temel gerekliliklerine uygun olduğunu beyan eder. HR Oznaka CE: tvrtka OSRAM ovim izjavljuje da je ovaj proizvod u skladu s osnovnim zahtjevima i relevantnim odredbama evropskih direktiva. RO Marcaj CE: OSRAM declară că acest produs respectă cerințele de bază și prevederile relevante ale standardelor europene. BG Маркировка „CE“: OSRAM декларира, че този продукт съответства на основните изисквания и приложимите разпоредби на европейските насоки. EST CE-margis: OSRAM kinnitab, et antud toode vastab Euroopa suuniste pohinouetele ja asjakohastele satetele. LT CE ženkinimas: OSRAM pareiškia, kad šis prietaisas atitinka pagrindinius Europos gairių reikalavimus ir atitinkamas nuostatas. LV CE marķējums: OSRAM paziņo, ka šis produkts atbilst Eiropas vadlīniju pamata prasībām un saistītiem nosacījumiem. SRB CE označavanje: OSRAM izjavljuje da je ovaj proizvod u saglasnosti sa osnovnim zahtevima i važećim propisima evropskih smernica. UA Маркування CE: компанія OSRAM засвідчує,



D WEEE-Gerätezeichen: Nicht in den Hausmüll werfen! Sachgerechte Entsorgung der Produkte und Verpackung nach geltendem Landesrecht vornehmen. GB WEEE device identification: Do not dispose of in domestic waste! Proper disposal of the product and packaging must be done in accordance with the applicable national law. F Identification WEEE du dispositif : ne pas jeter avec les déchets ménagers ! Le produit et son emballage doivent être éliminés conformément à la législation nationale en vigueur. I Identificazione RAEE del dispositivo: Non smaltire con i rifiuti domestici! Lo smaltimento corretto del prodotto e dell'imballaggio deve essere effettuato secondo la legge nazionale applicabile. E Identificazione RAEE del dispositivo: No desechar con los residuos domésticos. El desecho adecuado del producto y el embalaje deberá llevarse a cabo de conformidad con la ley nacional aplicable. P Identificacao do dispositivo REEE: Nao deite fora no lixo domestico! A eliminacao adequada do produto e da embalagem deve ser feita em conformidade com a legislacao nacional aplicavel. GR Αναγνώριση συσκευής WEEE: Μην απορρίπτετε με τα οικιακά απορρίμματα! Η απόρριψη του προϊόντος και της συσκευασίας πρέπει να γίνεται σύμφωνα με την ισχύουσα εθνική νομοθεσία. NL WEE-apparaatidentificatie: niet weggoeien bij het huishoudelijke afval! Correcte verwijdering van het product en verpakking dient te gebeuren overeenkomstig de toepasselijke nationale wetgeving. S Enhetens identifikation for WEEE: Slang inte bland hushallsoppor! Produkten och förpackningen måste slängas på ett korrekt sätt i enlighet med gällande nationell lag. FIN WEEE-laitetunnus: Älä hävittää kotitalousjätteen seassa! Tuotteen ja pakkauskannan asianmukainen hävittäminen on suoritettava soveltuvin paikallisten lakien mukaisesti. N WEEE Enhetsidentifikasjon: Skal ikke kastes i husholdningsavfall! Riktig avhending av produktet og emballasjen må gjøres i henhold til gjeldende nasjonale lover. DK WEEE enhedsidentifikasjon: Ma ikke bortskaffes med husholdningsaffald! Korrekt bortskaffelse af produktet og emballagen skal ske i overensstemmelse med gældende national lovgivning. CZ Označení zařízení podle systému WEEE: Nevyhazovat do domovního odpadu! Správná likvidace výrobku a obalu musí být provedena v souladu s platnými národními legislativními předpisy. RUS Идентификация устройства в соответствии с Директивой ЕС (WEEE) об отходах электрического и электронного оборудования: Не выбрасывайте продукт вместе с бытовыми отходами! Продукт и упаковку необходимо утилизировать надлежащим образом в соответствии с действующим национальным законодательством. KZ WEEE құрылғы идентификаторы: үй қорқысымен бірге тастамаңыз! Бұл өнім мен оның қаптамасының тасталуы қолданыстағы ұлттық заңға сай дұрыс орындалуы тиіс. H WEEE keszulek azonosító: Kommunális hulladékba helyezni tilos! A termék es a csomagolás megfelelő artalmatlanítását a hatályos nemzeti szabályozás szerint kell elvégezni. PL Identyfikacja urządzenia WEEE: Urządzenia nie wolno wyrzucać wraz ze zwykłymi odpadami domowymi! Właściwe usuwanie produktu i opakowania musi odbywać się zgodnie z obowiązującym prawem krajowym. SK Označenie zariadenia WEEE: Nelikvidujte v rámci komunálneho odpadu! Riadna likvidácia tohto produktu a obalov sa musí vykonať v súlade s národnými právnymi predpismi. SLO Identifikacija izdelka v smislu OEEO: Ne zavržite med gospodinske odpadke! Izdelek in embalažo je treba med odpadke zavreči ustrezno in v skladu z veljavno nacionalno zakonodajo. TR WEEE cihaz kimliği: Evsel atıkları dahil etmeyin! Ürün ve ambalajın doğru biçimde imhası ilgili ulusal yasaya uygun olarak gerçekleştirilmelidir. HR Oznaka WEEE na uređaju: ne odlažite u kućni otpad! Proizvod i pakiranje potrebno je ispravno odložiti u skladu s primjenjivim zakonom države. RO Identificarea dispozitivelor WEEE: Nu eliminați produsul în gunoii menajer! Eliminarea corectă a produsului și ambalarea se vor face în conformitate cu legea națională aplicabilă. BG Идентификация на устройството по WEEE: Да не се изхвърля с битовите отпадъци! Правилното третиране на продукта и опаковката му като отпадъци трябва да става в съответствие с приложимото национално законодателство. EST WEEE-seadme identifitseerimine: Arge visake olmejaatmetesse! Toote ja pakendite nouetkohane korvaldamine peab toimuma kooskolas kehtivate siseriiklike oigusaktidega. LT WEEE įrenginio identifikacija: nešalinti kartu su buitinėmis atliekomis! Gaminio ir pakuotės šalinimas turi būti atliekamas pagal šalys galojančius įstatymus. LV WEEE ierīces identifikācija: neizmest sadzīves atkritumos! Produkts un iepakojums jāizmet atbilstoši piemērojama valsts likumam. SRB Identifikacija WEEE uređaja: Nemojte da odlažete u otpad iz domaćinstva! Proizvod i pakovanje morate da odložite u otpad u skladu sa važećim nacionalnim zakonom. UA Ідентифікація пристрою відповідно до Директиви ЄС (WEEE) щодо відпрацьованого електричного й електронного обладнання: Не викидайте продукт разом з іншим домашнім сміттям! Продукт та упаковку слід утилізувати належним чином відповідно до діючого національного законодавства.

### ⚠ 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)

FC CE IP66



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