Multilingual Index

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Individually Addressable

SK6812 IC RGBW LED Strip

USER'S MANUAL SMD-SK6812-RGBW-01-EN

Product parameters:

LED Type:	SK6812 IC RGBW LED Strip
View Angle:	120°
Input Voltage:	DC5V/DC12V Constant voltage
FPCB Width:	30LEDs/m, 60LEDs/m-10mm width PCB, 144LEDs/m-12mm width PCB
Color Rendering Index:	RA>90
Total Length:	3.2ft/1m, 16.4ft/5m
LED Quantity:	30LEDs/m, 60LEDs/m, 144LEDs/m
IC Chip Quantity:	30IC/m(30LEDs/m),60IC/m(60LEDs/m), 144IC/m(144LEDs/m)
Color:	RGB+Pure White (Warm White/Natural White/Cool White)
Waterproof Level:	IP30 Non-waterproof/IP65 Silicone layer waterproof/IP67 Silicone tube waterproof
Wattage:	Max 6W/Meter(5V-30LEDs/m) Max 11W/Meter(5V-60LEDs/m) Max 25W/Meter(5V-144LEDs/m) Max 12W/Meter(12V-60LEDs/m)
Recommended Power Supply for DC5V LED Strip:	DC5V10A(Sold Separately)
Recommended Power Supply for DC12V LED Strip:	DC12V10A(Sold Separately)
3PIN Connecting:	**+V:** +12/24V~~Red Wire **DAT:** Data~~Green Wire **GND:** -V~~White Wire **DI:** Data Input **DO:** Data Output

Precautions:

1. Before use, ensure the power supply's output voltage matches the LED strip's working voltage (e.g., a 5V LED strip requires a 5V power supply; a 12V LED strip requires a 12V power supply).
2. Actual power consumption varies with strip length. Extended lengths may induce a voltage drop.
3. LEDs at the distal end may exhibit reduced brightness due to inherent resistance and voltage drop, an unavoidable physical characteristic common to all LED strips.

Factors Affecting Brightness:

① Length: Voltage drop may occur with extended strip lengths.
② Power Requirement: Ensure the power supply's wattage rating meets or exceeds the total power consumption of the LED strip.
③ Lighting Mode: Full-white mode (RGB-mixed white) consumes significantly more power than single-color modes.
④ Brightness Level: Higher brightness settings increase power consumption.

Solutions:

①Voltage Compensation: Inject additional power every 5 meters (16.4ft).
②Reduce Brightness: Lower brightness to decrease power demand.
③Adequate Power Supply: Use a power source with sufficient wattage.
④Avoid Full-White Mode: Minimize RGB-mixed white to reduce energy usage.
⑤Refer to the Manual: Follow the "Series Connection & Voltage Supplementation" guide for optimal setup.
⑥Other Measures: Additional adjustments may be required based on installation conditions.

Recommend Controllers (Controller Sold Separately)

You can find these products by searching for ASIN on Amazon.com

Controller Compatibility Notice

1. Controller Capacity Requirement:

The controller must support an equal or greater number of IC chips than the LED strip. Insufficient controller capacity will result in partial illumination.

Note: Verify the IC chip count on both the LED strip and controller before purchase.

2. Power Supply Specification:

Use a high-current power supply that matches the LED strip's operating voltage to prevent:

- Signal interruption
- Unstable operation
- System freezing

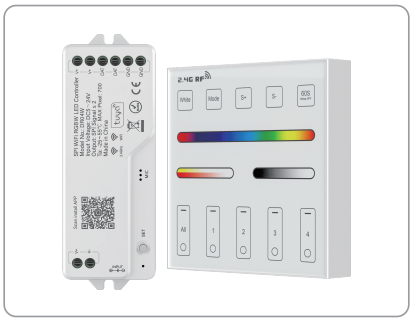
SP630E+RB3
Bluetooth APP
Group Controller
Control 450 IC

SP530E+RB3
Bluetooth+WiFi
Alexa APP Controller
Control 900 IC

SP617E RGBW Bluetooth
Music Controller
Each port control 450 IC

DR04W Smart Life/Tuya Alexa APP Controller Control 700 IC

DR04W+RC03RFB Tuya WIFI RF Remote Alexa APP Controller



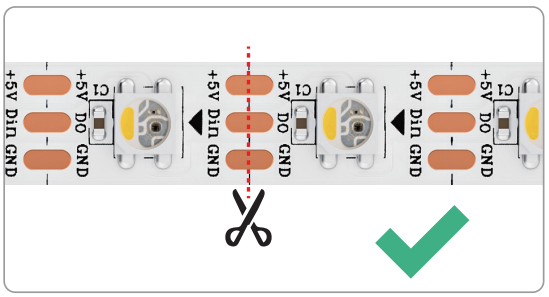
DR04W+WR01RF Tuya WIFI 86-RF Panel Alexa APP Controller

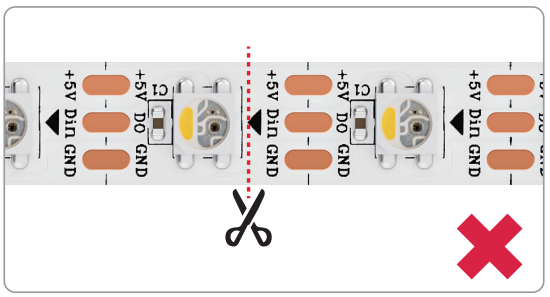
DIY Connectors (Sold Separately)

Data Direction: Ensure correct alignment of the data input direction during connection to prevent malfunction.

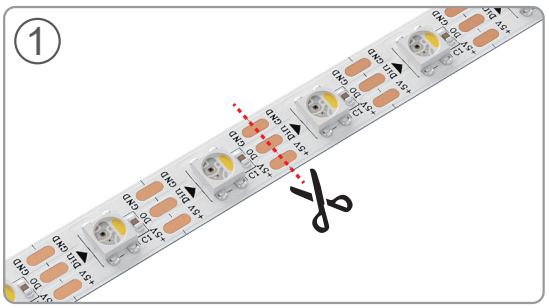
Installation Note:

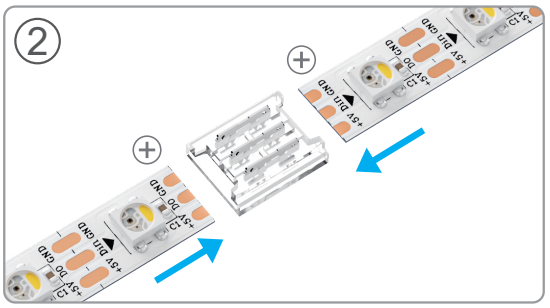
10mm SK6812 IC RGBW LED Strip (60LEDs/m)

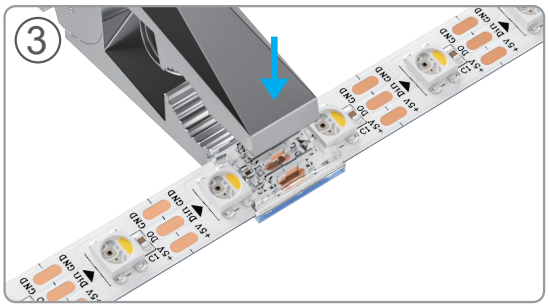


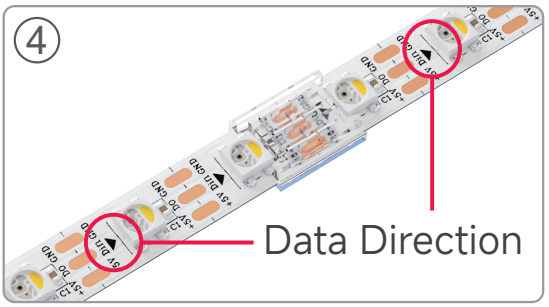


Strip to Strip Connection

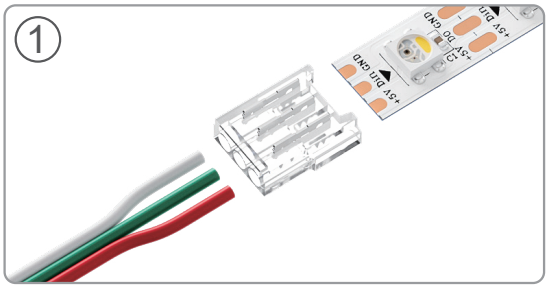


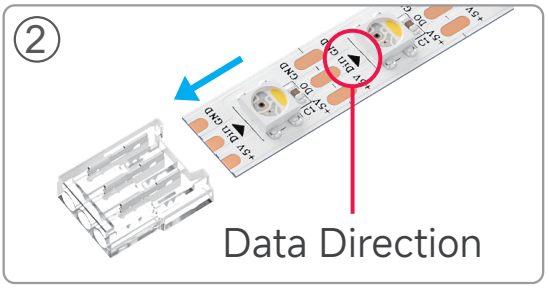


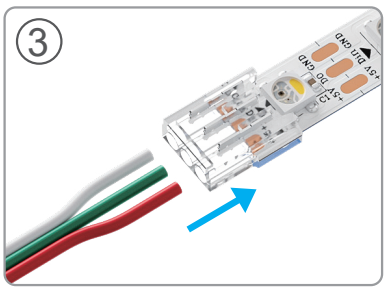


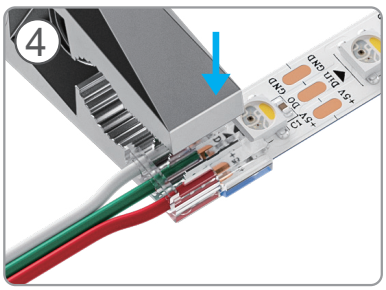


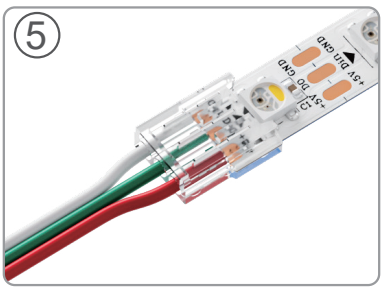
Strip to Wire Connection

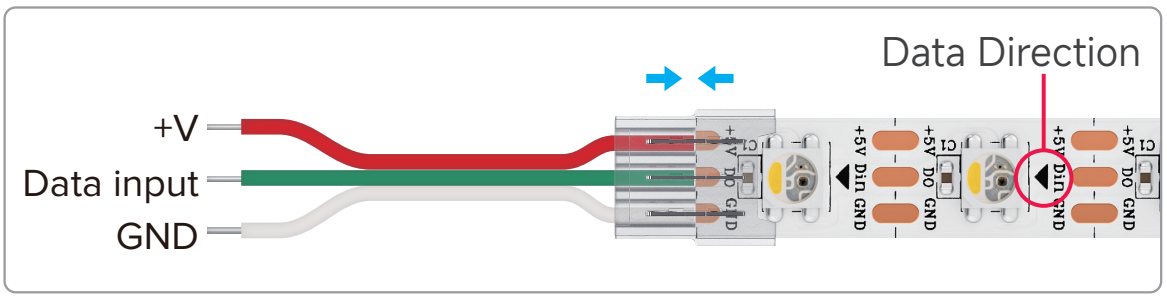


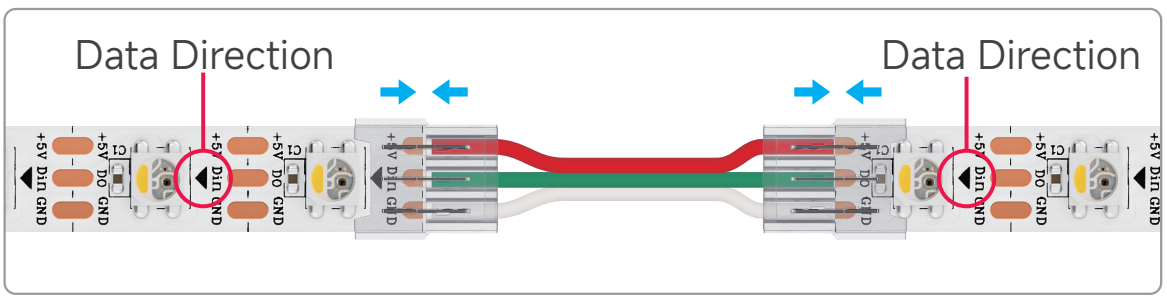




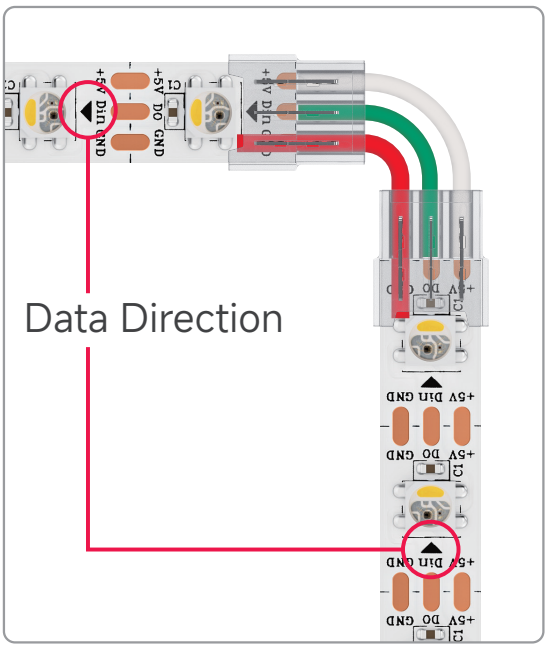


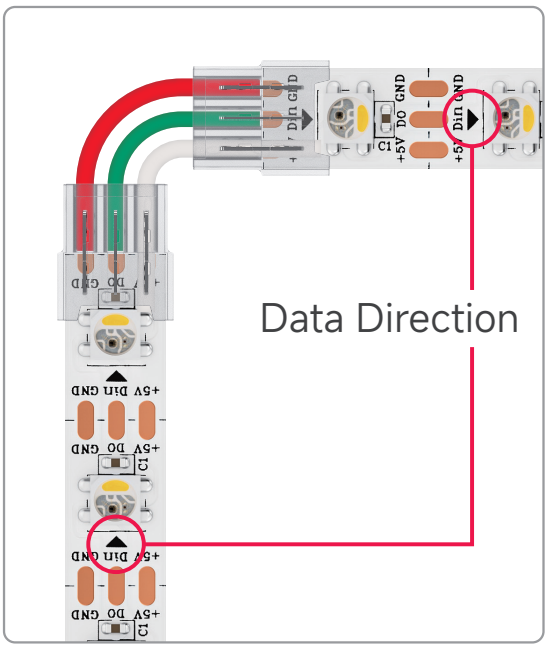


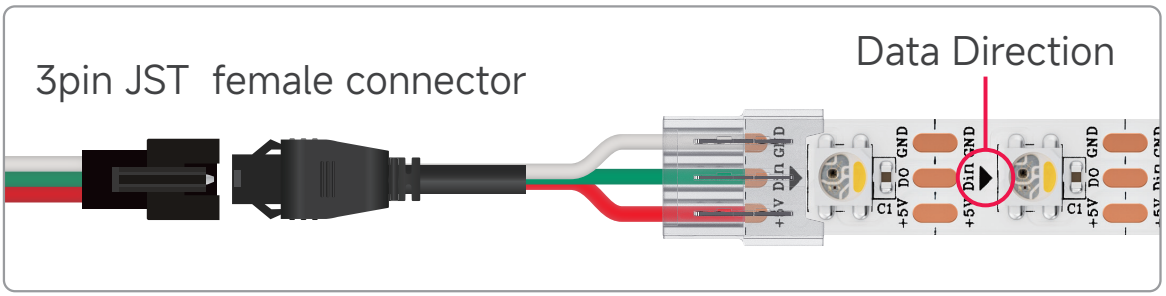


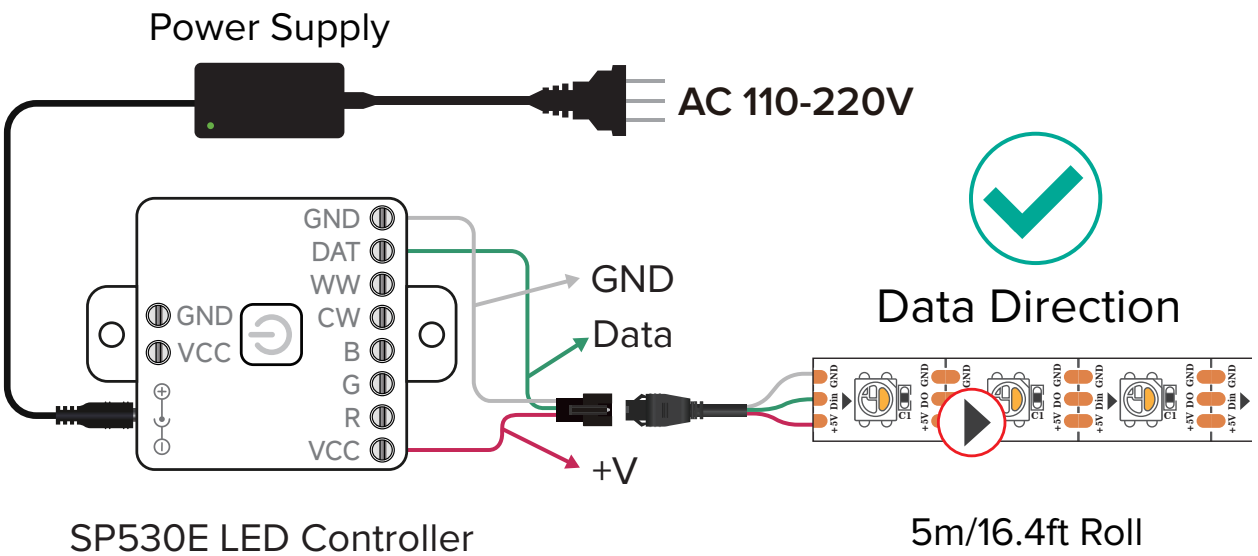


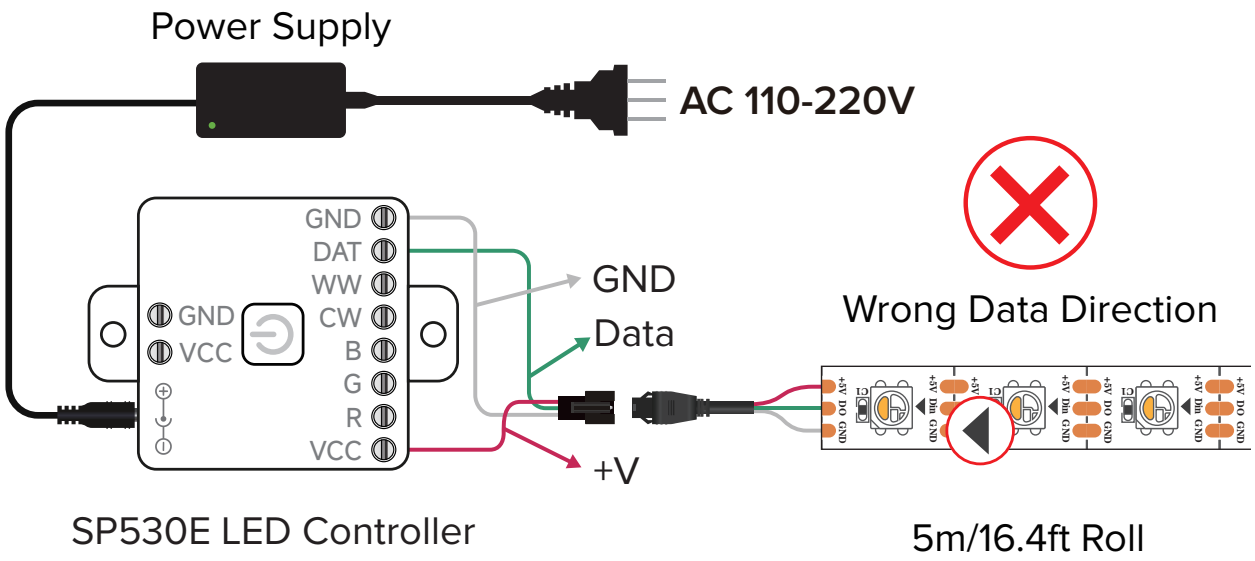
L-shaped Connection







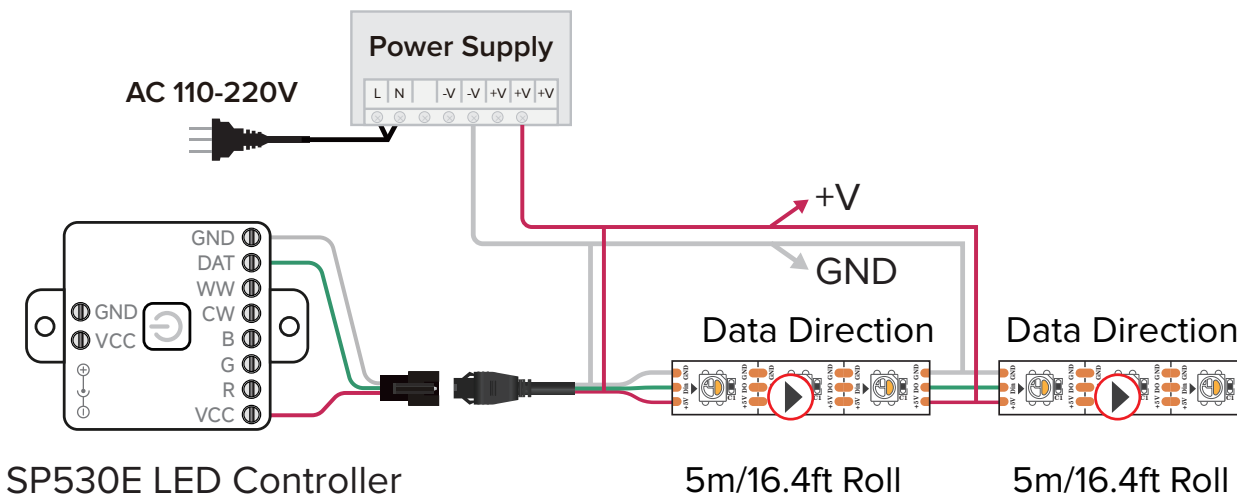


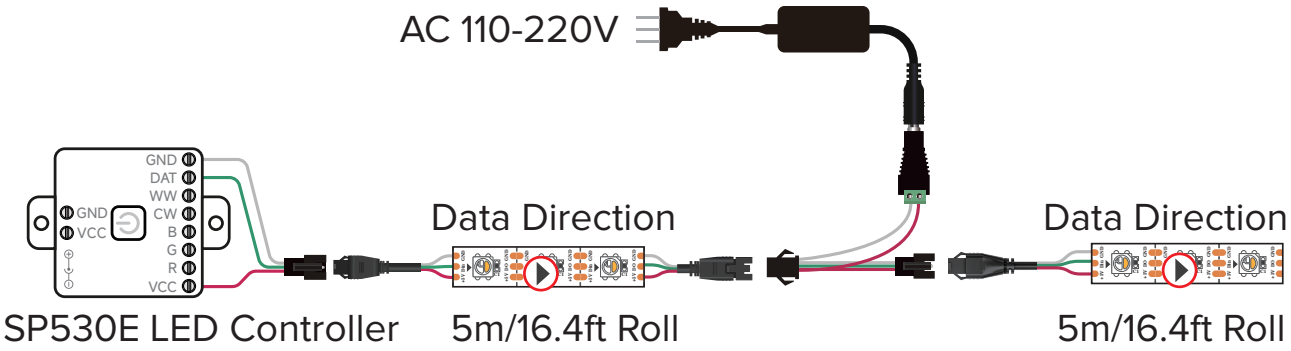


- Data Direction:
  The black arrow on the FPCB indicates the data flow direction. Connect wiring strictly according to the arrow direction to ensure proper illumination.

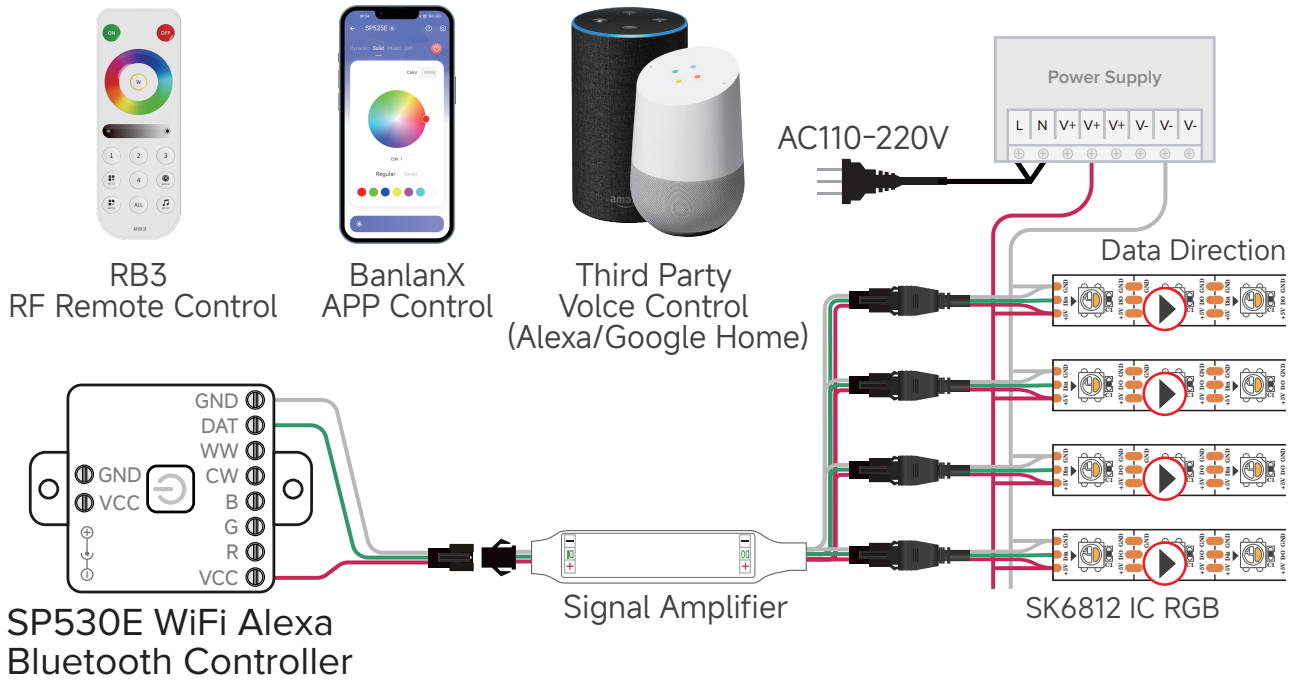
- Power supply output voltage matches strip specifications
- Warning: Incorrect voltage may cause strip burnout.

Series Connection & Voltage Supplementation

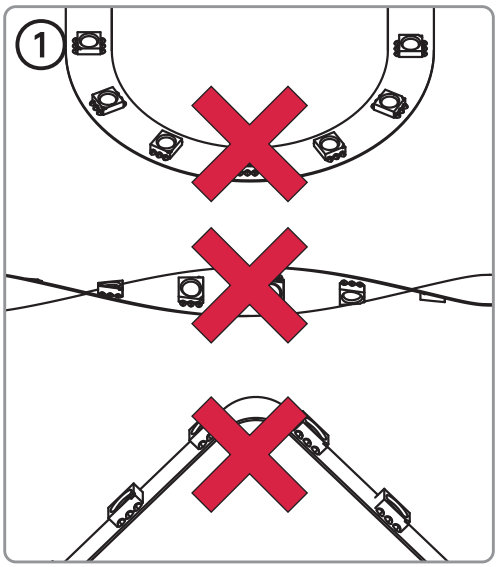




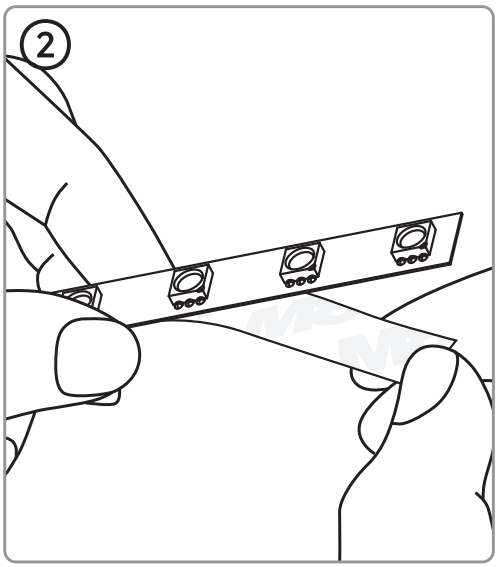
Parallel Connection & Voltage Supplementation



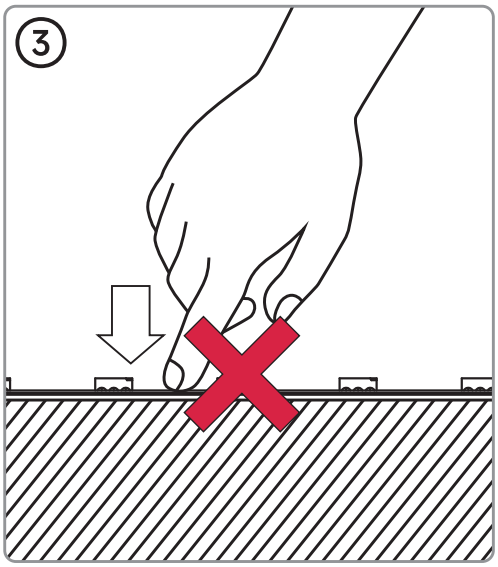
Installation Notes



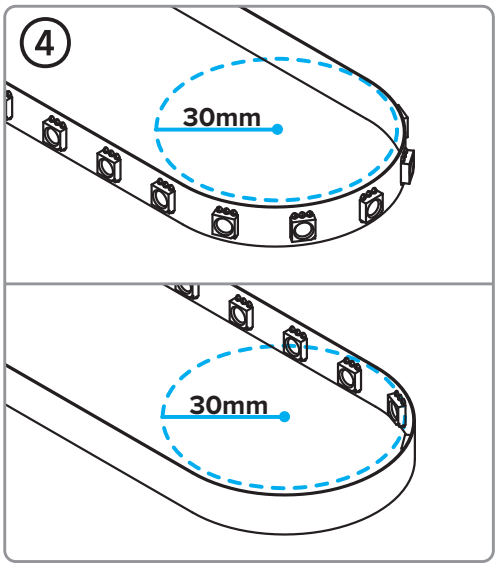
Do not bend, fold or crease the LED strip/tape in a horizontal direction.



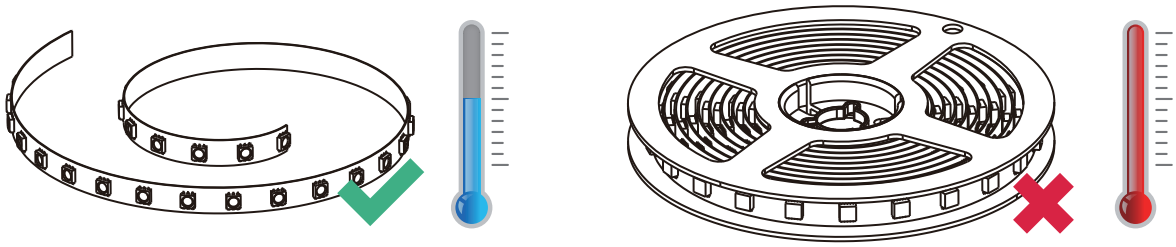
Please peel off the tape gently, otherwise it may tear due to over-stretching.



Please take proper anti-static measures, gently press the PCB board, not the LEDS surface, otherwise it may cause chemical reaction as time goes by.



Do not over bend the LED strip to make the circuit break even the strip works fine after over-bending the hot and cold contrast may cause PCB board disfunction either
Bending radius>30mm(1.2in)



Precaution for Use(EN)

LED Strips do not dissipate heat well when rolled up. This may result in damage to LED Strip.(EN)

Précaution d'emploi(FR)

Les bandes de LED ne dissipent pas bien la chaleur lorsqu'elles sont enroulées. Cela peut endommager la bande de LED.(FR)

✉ Global customer service: **contact@btf-lighting.com**
US Amazon customer service: **support@btf-lighting.com**

EC REP

Business name: XDH Tech
Business address: 2 Rue Coysevox Bureau 3, Lyon, 69001, France
Email: axdh.tech@outlook.com

UK REP

Business name: GSG CONSULTING GROUP LIMITED
Business address: Montague houses unit 3 Matthew street, Manchester, M12 5bb, United Kingdom
Email: GSG--GROUP@outlook.com

UL Certification Notice

This LED strip light is UL certified for North America, which confirms its full compliance with U.S. and Canadian electrical safety standards.

BTF-LIGHTING

c UL US LISTED

Individuell adressierbar

SK6812 IC RGBW LED Streifen

BENUTZERHANDBUCH SMD-SK6812-RGBW-01-DE

Produktparameter:

LED-Typ:	SK6812 IC RGBW LED Streifen
Ansichtswinkel:	120°
Eingangsspannung:	DC5V/DC12V Konstantspannung
FPCB-Breite:	10 mm(30LEDs/m, 60LEDs/m), 12 mm(144LEDs/m)
Farbwiedergabeindex:	RA>90
Gesamtlänge:	1m, 5m
LED-Anzahl:	30LEDs/m, 60LEDs/m 144LEDs/m
Anzahl der IC-Chips:	30IC/m(30LEDs/m), 60IC/m(60LEDs/m), 144IC/m(144LEDs/m)
Farbe:	RGB+Reines Weiß (Warmweiß/Naturweiß/ Kaltweiß)
Wasserdichtigkeit:	IP30 Nicht wasserdicht/IP65-Silikonbeschichtung Wasserdicht/IP67-Silikonschlauch Wasserdicht
Leistung:	Max 6W/Meter（5V-30LEDs/m） Max 11W/Meter（5V-60LEDs/m） Max 25W/Meter（5V-144LEDs/m） Max 12W/Meter（12V-60LEDs/m） (Die Leistungsaufnahme der LED-Leiste ist nicht festgelegt. Sie variiert je nach Beleuchtungseffekt und Länge des LED-Streifens. Dauerhaftes Weißlicht mit maximaler Helligkeit wird nicht empfohlen.)
Empfohlenes Netzteil für DC5V-LED-Streifen:	DC5V10A (separat erhältlich)
Empfohlenes Netzteil für DC12V-LED-Streifen:	DC12V10A (separat erhältlich)
3PIN Anschluss:	**+V:** +5V/12V--Roter Draht **DAT:** Data--Grüner Draht **GND:** +V--Weißer Draht **DI:** Dateneingang **DO:** Datenausgang

Sicherheitshinweise:

1. Vor der Verwendung sicherstellen, dass die Ausgangsspannung des Netzteils der Betriebsspannung des LED-Streifens entspricht (z.B. ein 5V-LED-Streifen erfordert ein 5V-Netzteil; ein 12V-LED-Streifen erfordert ein 12V-Netzteil).
2. Der tatsächliche Leistungsverbrauch variiert mit der Länge des Streifens. Bei großen Längen kann es zu einem Spannungsabfall kommen.
3. LEDs am entfernten Ende des Streifens können aufgrund des inhärenten Widerstands und Spannungsabfalls eine reduzierte Helligkeit aufweisen. Dies ist ein unvermeidbares physikalisches Merkmal, das allen LED-Streifen gemeinsam ist.

Schlüsselfaktoren für Helligkeit:

① Streifenlänge: Spannungsabfall bei längeren Schaltkreisen

② Stromversorgungskompatibilität: Nennleistung muss dem Gesamtverbrauch entsprechen oder diesen übertreffen

③ Beleuchtungsmodus: RGB-Weißmischung(Rot+Grün+Blau) verbraucht mehr Leistung als reines Weiß (Warmweiß/Naturweiß/ Kaltweiß)

④ Helligkeitseinstellung: Direkte Korrelation mit dem Leistungsverbrauch

Lösungsstrategien:

① Spannungskompensation: Einsatz von Signalverstärkern zur Leistungsergänzung

② Helligkeitsanpassung: Reduzierung zur Leistungsoptimierung

③ Leistungsbereitstellung: Passend dimensionierte Netzteile wählen

④ Standardinstallation: “Reihenschaltung mit Spannungsnachführung” beachten

⑤ Adaptive Konfiguration: Parameterkalibrierung basierend auf Installationsdaten

Funktioniert mit SPI RGBW-Steuerung
(Controller separat erhältlich)

Kompatibilitätshinweis für Controller:

1.Controller-Kapazität:

Der Controller muss eine gleich große oder größere Anzahl an IC-Chips unterstützen als der LED-Streifen. Eine unzureichende Controller-Kapazität führt zu teilweiser Beleuchtung.

Hinweis: Vor dem Kauf die Anzahl der IC-Chips sowohl auf dem LED-Streifen als auch auf dem Controller überprüfen.

2.Netzteil-Spezifikation:

Verwenden Sie ein hochstromfähiges Netzteil, das der Betriebsspannung des LED-Streifens entspricht, um Folgendes zu verhindern:

- Signalunterbrechung
- Instabilen Betrieb
- Systemabstürze

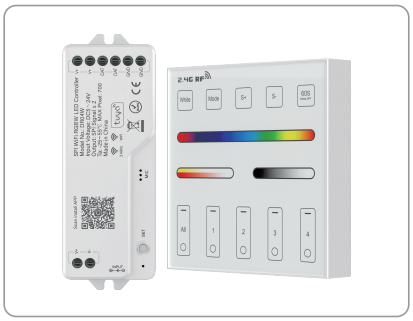
SP630E+RB3
Bluetooth APP
Group Controller
Control 450 IC

SP530E+RB3
Bluetooth+WiFi
Alexa APP Controller
Control 900 IC

SP617E RGBW Bluetooth
Music Controller
Each port control 450 IC

DR04W Smart Life/Tuya Alexa APP Controller Control 700 IC

DR04W+RC03RFB Tuya WIFI RF Remote Alexa APP Controller



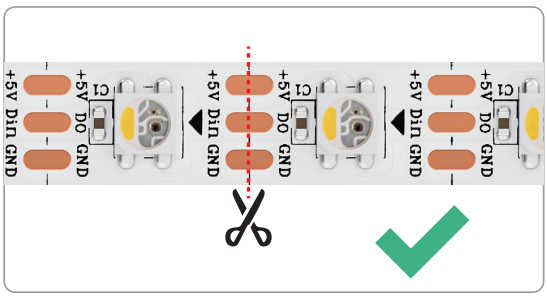
DR04W+WR01RF Tuya WIFI 86-RF Panel Alexa APP Controller

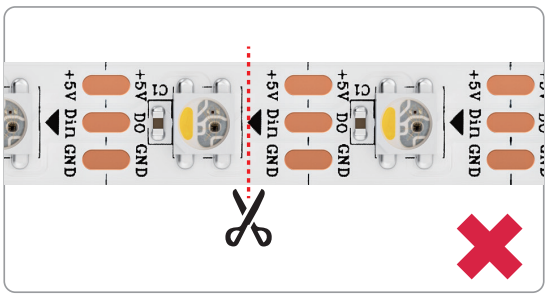
DIY-connectors (Separat erhältlich):

Datenrichtung: Stellen Sie während des Anschlusses sicher, dass die Datenrichtung korrekt ausgerichtet ist, um Fehlfunktionen zu verhindern.

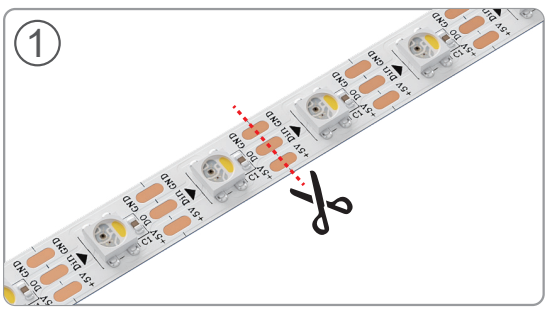
Montagehinweis:

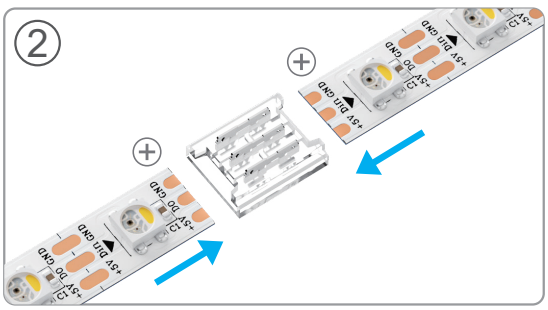
3pin 10mm Breite für 30LEDs/m oder 60LEDs/m SK6812 IC RGBW LED Streifen

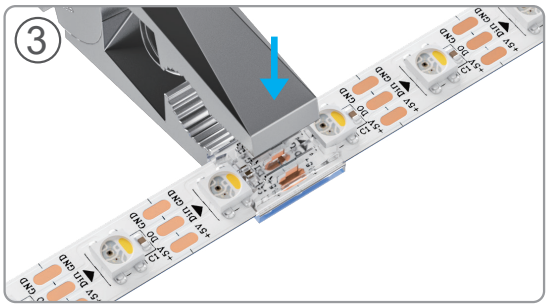


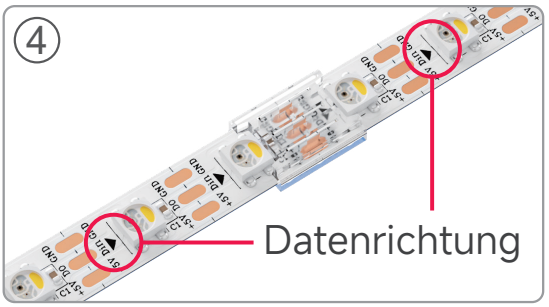


Streifen-zu-Kabel-Anschluss

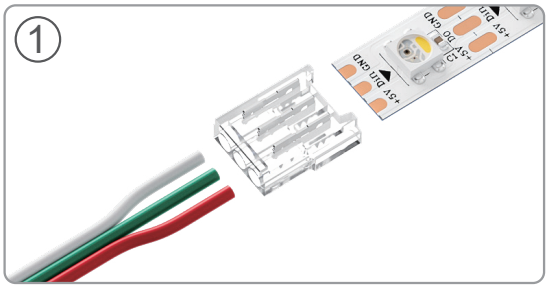


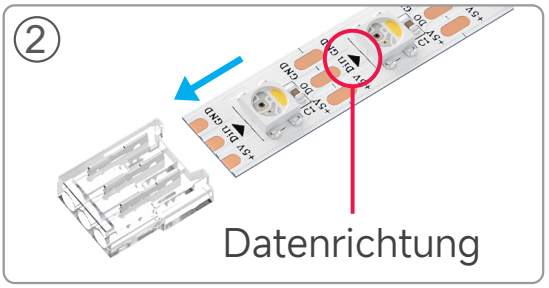


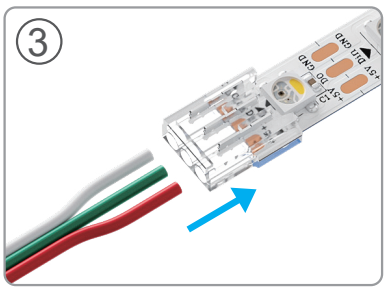


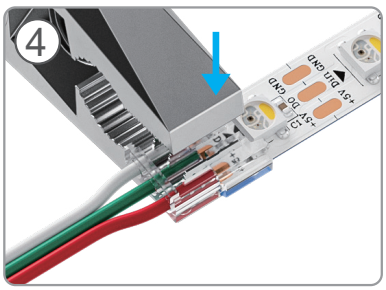


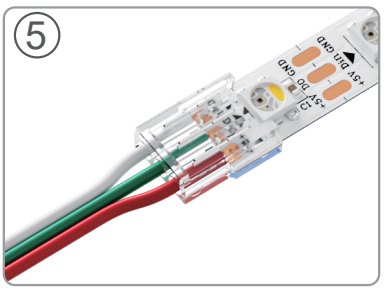
Streifen-zu-Streifen-Anschluss

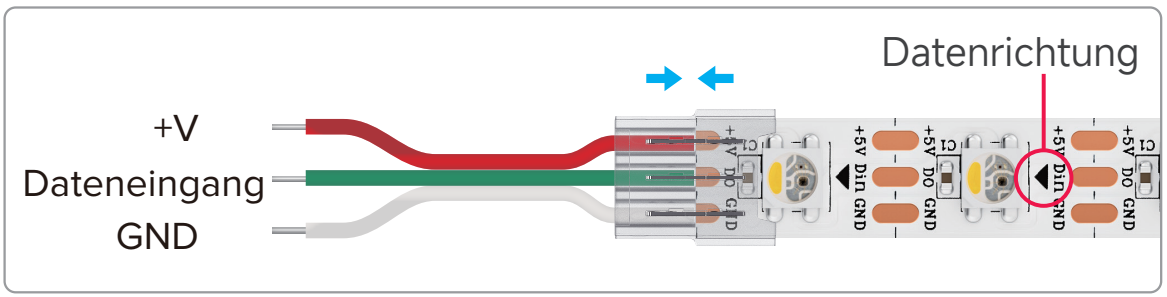


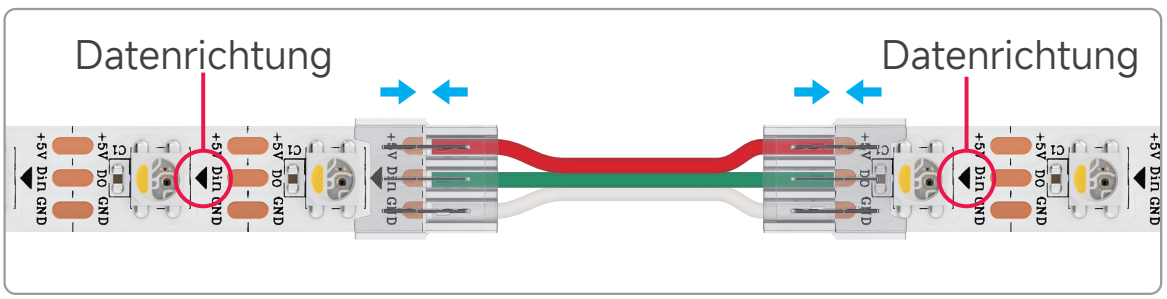




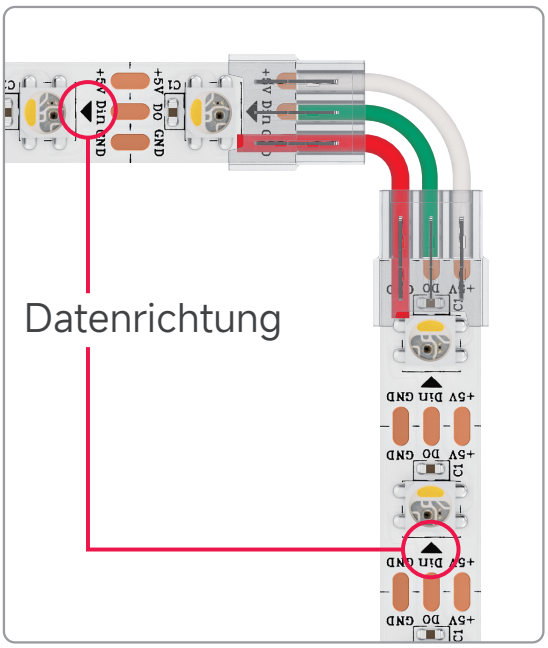


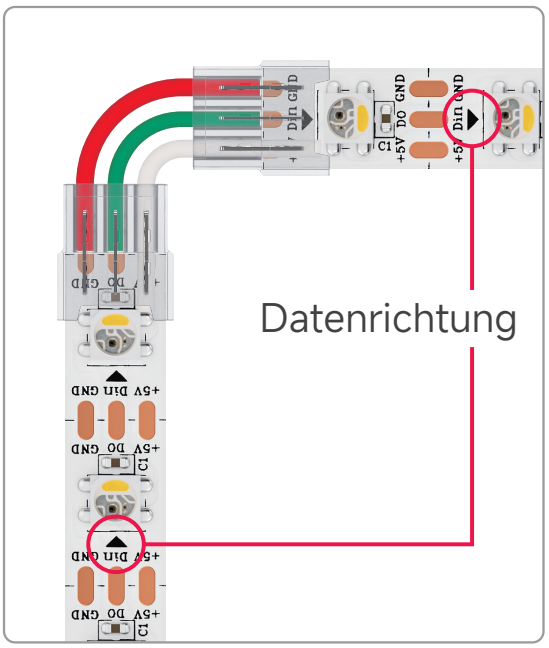


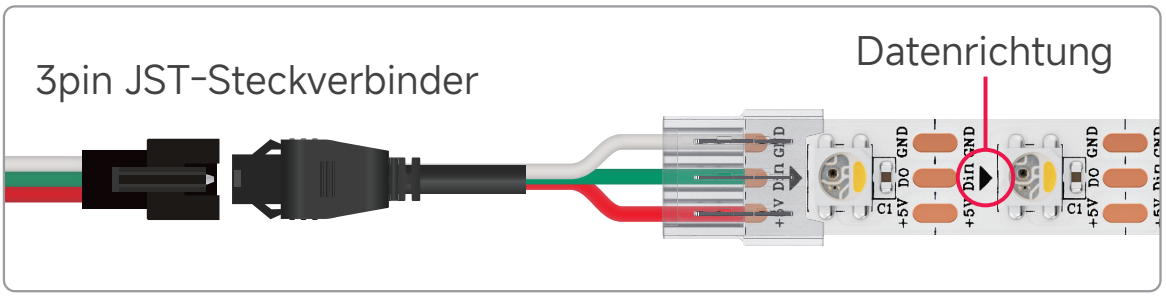


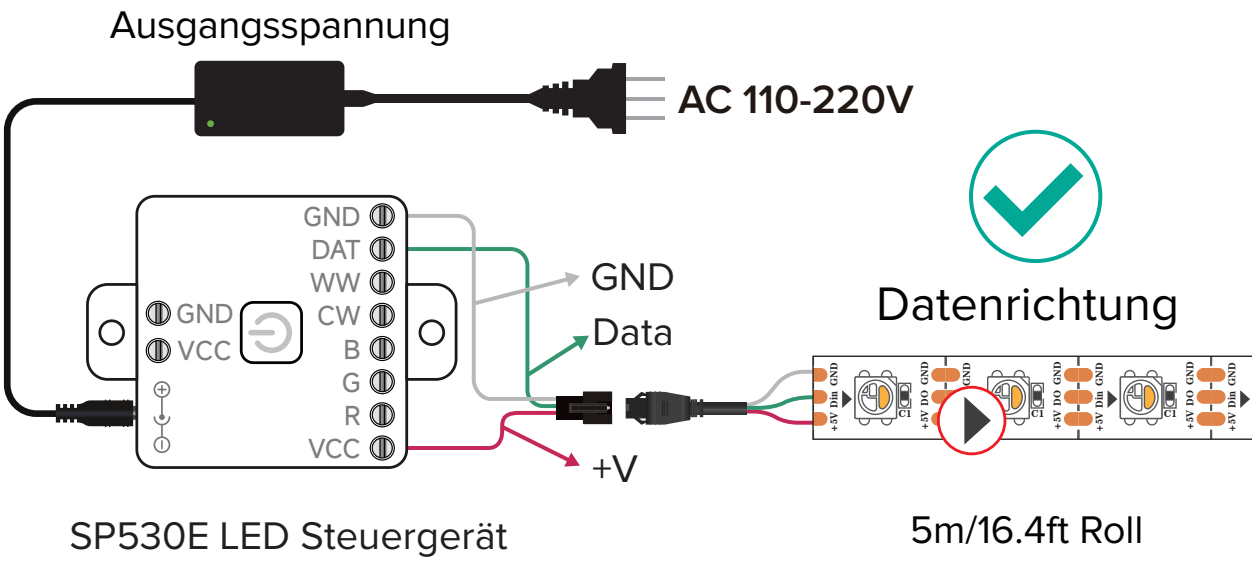


L-förmiger-Anschluss



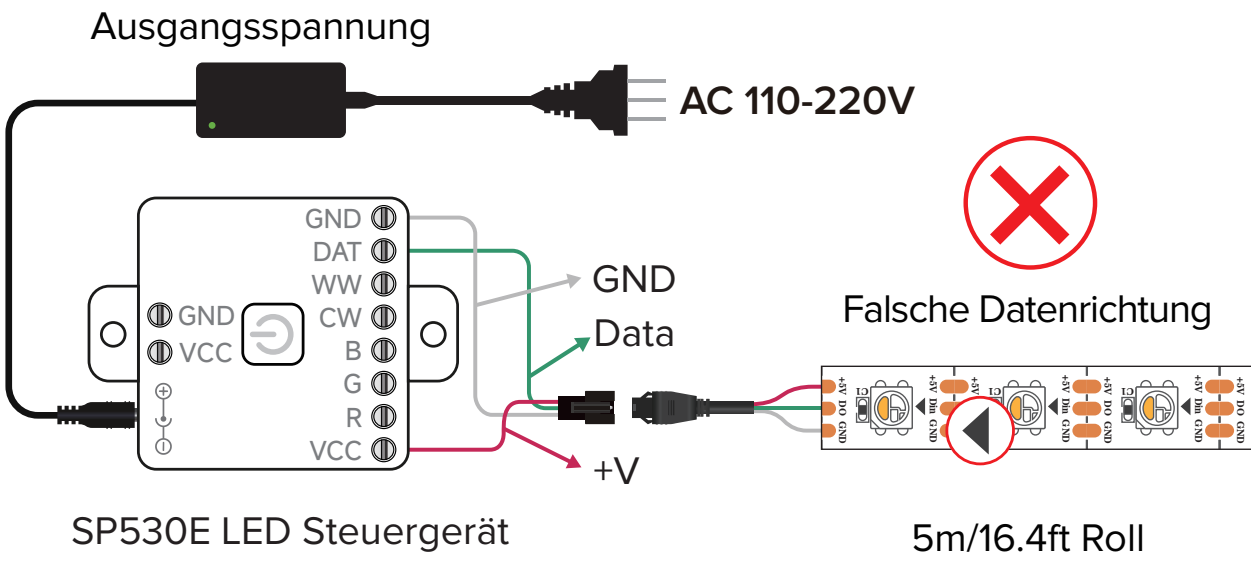






SP530E LED Steuergerät

5m/16.4ft Roll

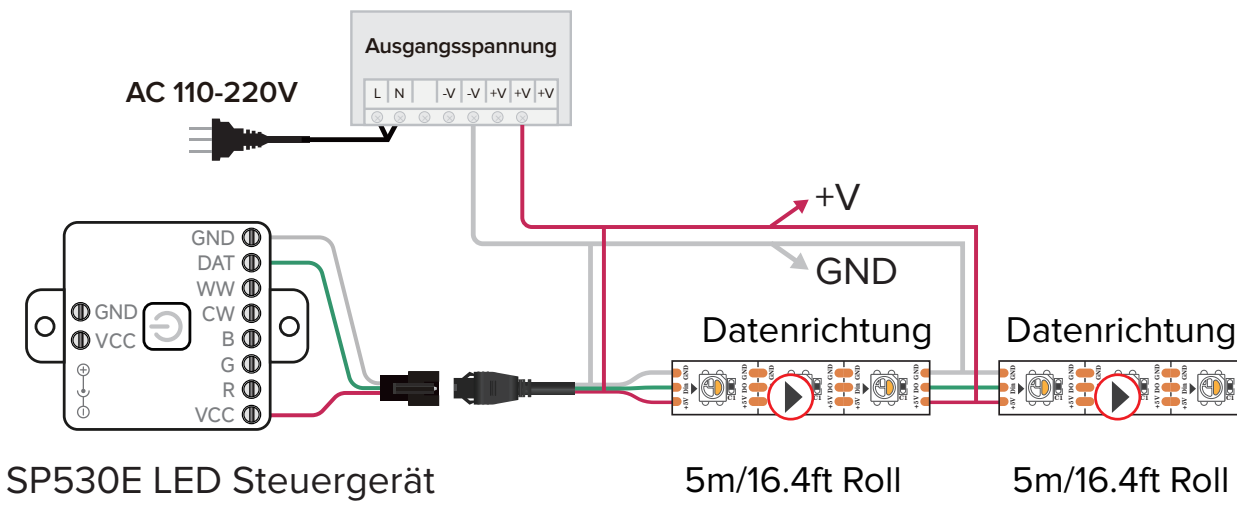


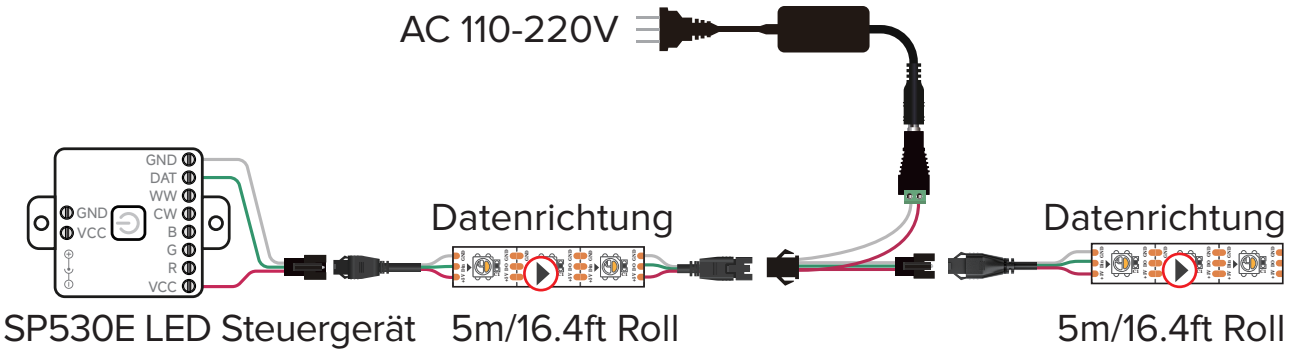
- Datenrichtung:

  Der schwarze Pfeil auf der FPCB (Flexiblen Leiterplatte) zeigt die Richtung des Datenflusses an. Schließen Sie die Verkabelung strikt entsprechend der Pfeilrichtung an, um eine ordnungsgemäße Beleuchtung zu gewährleisten.

- Die Ausgangsspannung des Netzteils muss den Streifenspezifikationen entsprechen.
- Warnung: Eine falsche Spannung kann zum Durchbrennen des Streifens führen!

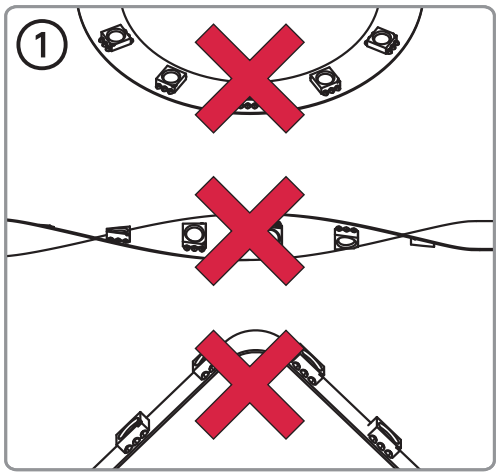
Reihenschaltung & Spannungsergänzung



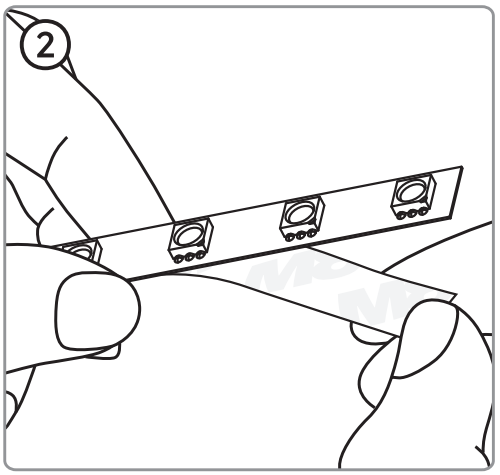


Parallelschaltung & Spannungsergänzung

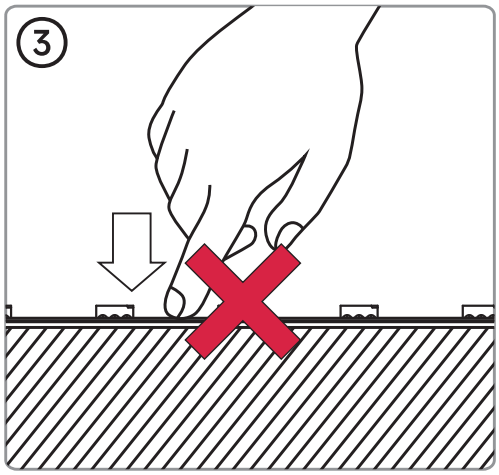
Hinweise zur Installation



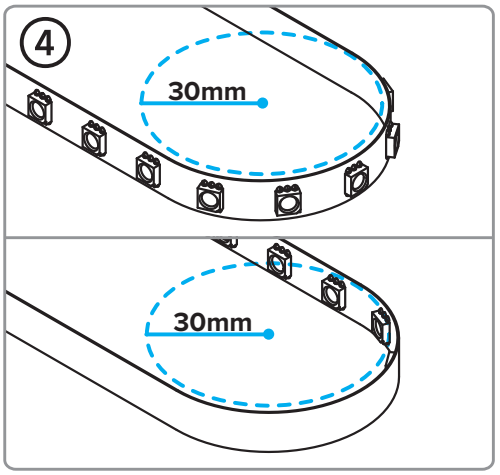
Biegen, falten oder knicken Sie den LED-Streifen/das Band nicht in horizontaler Richtung.



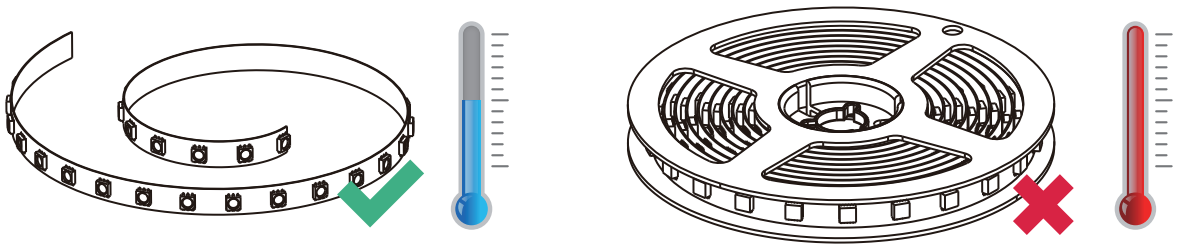
Bitte ziehen Sie das Band vorsichtig ab, da es sonst durch Überdehnung reißen kann.



Bitte ergreifen Sie geeignete antistatische Maßnahmen und drücken Sie vorsichtig auf die Platine, nicht auf die LED-Oberfläche, da es sonst im Laufe der Zeit zu chemischen Reaktionen kommen kann.



Biegen Sie nicht über die LED-Streifen, um die Schaltung zu brechen, auch der Streifen funktioniert gut nach über-Biegen der heißen und kalten Kontrast kann PCB-Board Fehlfunktion entweder Biegeradius>30mm (1.2in) verursachen



Vorsichtsmaßnahmen für die Verwendung

LED-Streifen leiten die Wärme nicht gut ab, wenn sie aufgerollt sind. Dies kann zu einer Beschädigung des LED-Streifens führen.

✉ Weltweite Kundenbetreuung: **contact@btf-lighting.com**
DE Amazon-Kundendienst: **rachel@btf-lighting.com**

EC REP

Business name: XDH Tech
Business address: 2 Rue Coysevox Bureau 3, Lyon, 69001, France
Email: axdh.tech@outlook.com

UK REP

Business name: GSG CONSULTING GROUP LIMITED
Business address: Montague houses unit 3 Matthew street, Manchester, M12 5bb, United Kingdom
Email: GSG--GROUP@outlook.com

BTF-LIGHTING

c UL us LISTED

Tira LED RGBW SK6812 IC

direccionable individualmente

MANUAL DEL USUARIO SMD-SK6812-RGBW-01-ES

Parámetros del producto:

Tipo de LEDs:	Tira LED RGBW SK6812 IC
Ángulo de visión:	120°
Voltaje de entrada:	DC5V/DC12V Voltaje constante
Ancho de la FPCB:	10mm(30LEDs/m, 60LEDs/m), 12mm(144LEDs/m)
Índice de reproducción cromática:	RA>90
Longitud total:	3.2ft/1m, 16.4ft/5m
Cantidad de LEDs:	30LEDs/m, 60LEDs/m, 144LEDs/m
Cantidad de chips IC:	30IC/m(30LEDs/m), 60IC/m(60LEDs/m), 144IC/m(144LEDs/m)
Color:	RGB + Blanco puro (Blanco cálido / Blanco natural / Blanco frío)
Nivel de impermeabilidad:	IP30 No impermeable/IP65-Recubrimiento de silicona Impermeable/IP67-Tubo de silicona Impermeable
Leistung:	Máximo 6W/metro(5V-30LEDs/m) Máximo 11W/metro(5V-60LEDs/m) Máximo 25W/metro(5V-144LEDs/m) Máximo 12W/metro(12V-60LEDs/m) (La potencia de la tira LED no es fija. Variará según el efecto de iluminación y la longitud de la tira LED. No se recomienda el uso de luz blanca a brillo completo de forma continua.)
Fuente de alimentación recomendada para tira LED DC5V:	DC5V10A (Vendida por separado)
Fuente de alimentación recomendada para tira LED DC12V:	DC12V10A (Vendida por separado)
Conexión de 3 pin:	**+V:** +5V/12V--Cable rojo **DAT:** Data--Cable verde **GND:** +V--Cable blanco **DI:** Entrada de datos **DO:** Salida de datos

Precauciones:

1. Antes de usar, asegúrese de que el voltaje de salida de la fuente de alimentación coincida con el voltaje de funcionamiento de la tira LED (por ejemplo, una tira LED de 5V requiere una fuente de alimentación de 5V; una tira LED de 12V requiere una fuente de alimentación de 12V).

2. El consumo real de energía varía según la longitud de la tira. Longitudes extendidas pueden provocar una caída de voltaje.

3. Los LED en el extremo distal pueden presentar un brillo reducido debido a la resistencia inherente y a la caída de voltaje, una característica física inevitable común a todas las tiras LED.

Factores clave de luminosidad:

① **Longitud:** Atenuación de voltaje en circuitos extensos

② **Compatibilidad eléctrica:** La capacidad de la fuente debe igualar o superar el consumo total

③ **Modo de iluminación:** La luz blanca mixta(rojo+verde+azul) consume más que el blanco puro (blanco cálido/blanco natural/ blanco frío)

④ **Configuración de brillo:** Consumo directamente proporcional al nivel de luminosidad

Estrategias de solución:

① **Compensación de voltaje:** Implementar amplificadores de señal para suplemento energético

② **Ajuste de luminosidad:** Reducir brillo para optimizar consumo

③ **Dimensionamiento eléctrico:** Seleccionar fuentes con capacidad adecuada

④ **Instalación estandarizada:** Seguir "Conexión en serie con suplemento de voltaje"

⑤ **Configuración adaptativa:** Calibrar parámetros según datos de instalación

Funciona con controlador SPI RGBW
(controladores vendidos por separado)

Aviso de compatibilidad del controlador:

1.Requisito de capacidad del controlador:

El controlador debe admitir un número igual o mayor de chips IC que la tira LED. Una capacidad insuficiente del controlador resultará en una iluminación parcial.

Nota: Verifique el recuento de chips IC tanto en la tira LED como en el controlador antes de la compra.

2.Especificación de la fuente de alimentación:

Utilice una fuente de alimentación de alta corriente que coincida con el voltaje de funcionamiento de la tira LED para prevenir:

- Interrupción de la señal
- Funcionamiento inestable
- Bloqueos del sistema

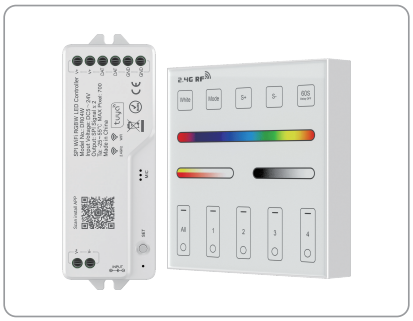
SP630E+RB3
Bluetooth APP
Group Controller
Control 450 IC

SP530E+RB3
Bluetooth+WiFi
Alexa APP Controller
Control 900 IC

SP617E RGBW Bluetooth
Music Controller
Each port control 450 IC

DR04W Smart Life/Tuya Alexa APP Controller Control 700 IC

DR04W+RC03RFB Tuya WIFI RF Remote Alexa APP Controller



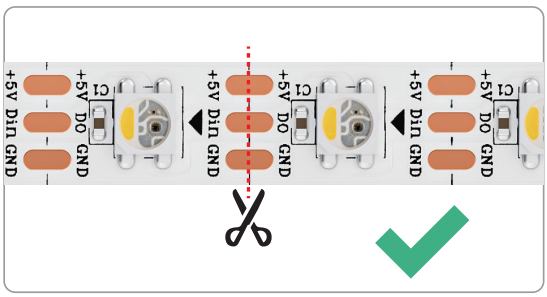
DR04W+WR01RF Tuya WIFI 86-RF Panel Alexa APP Controller

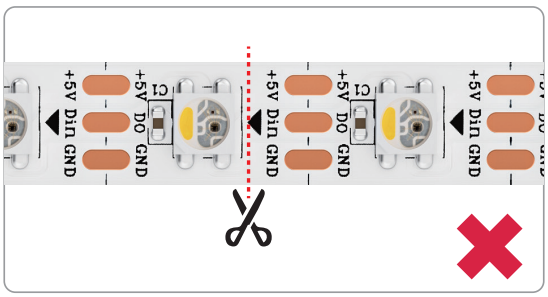
Conectores DIY(se venden por separado):

Dirección de los datos: Asegure la alineación correcta de la dirección de entrada de datos durante la conexión para evitar mal funcionamiento.

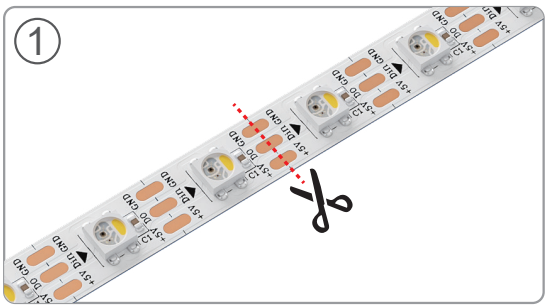
Nota de instalación:

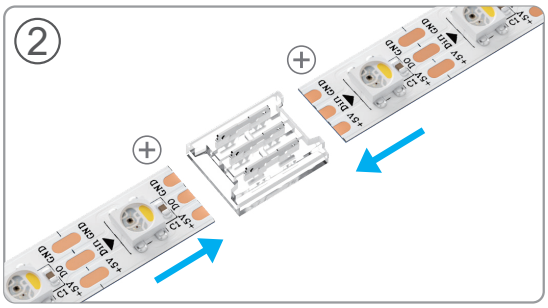
3pin 10mm de ancho para tiras LED RGBW SK6812 IC de 30LEDs/m o 60LEDs/m

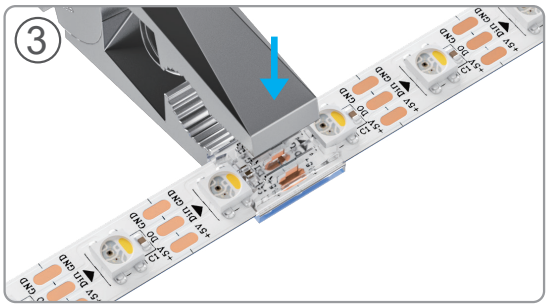


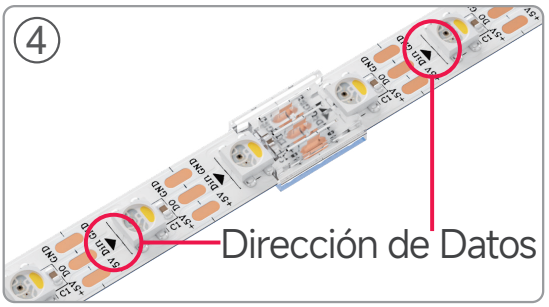


Conector tira-cable

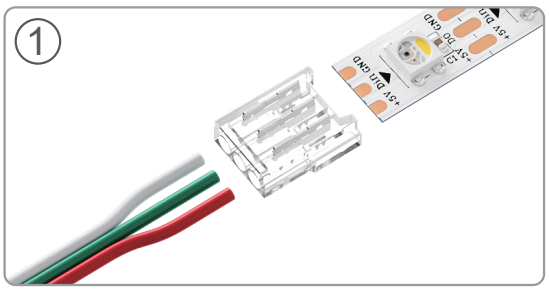


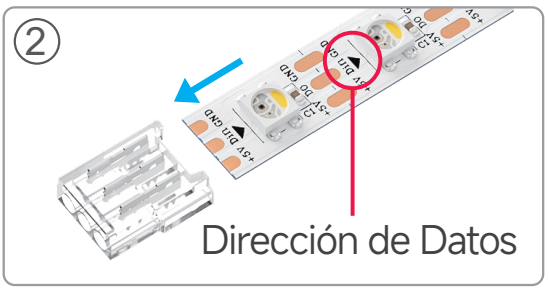


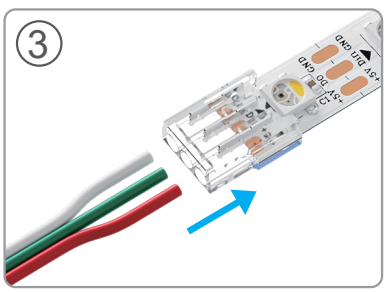


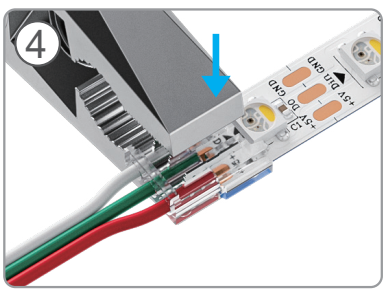


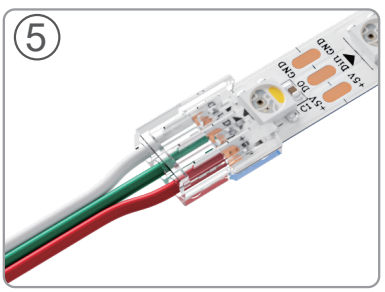
Conector tira-tira

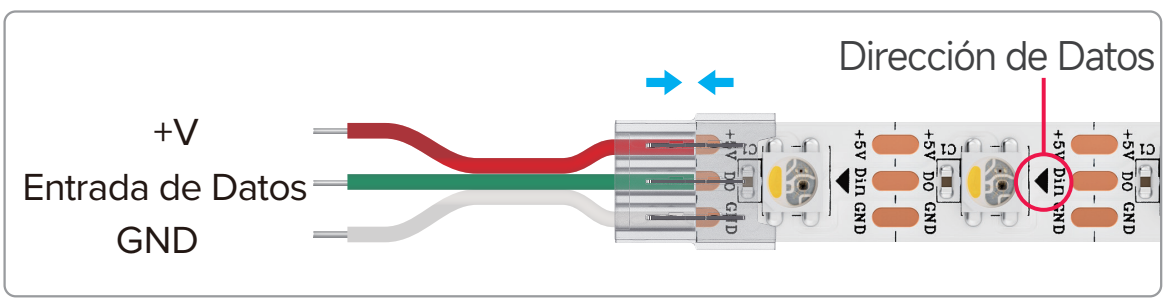


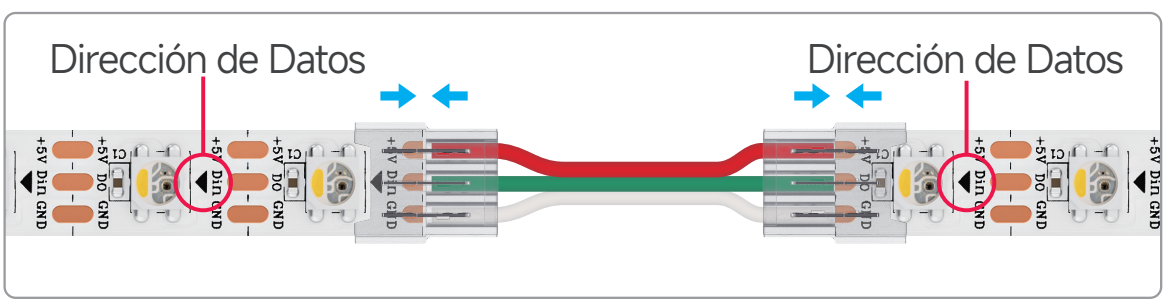




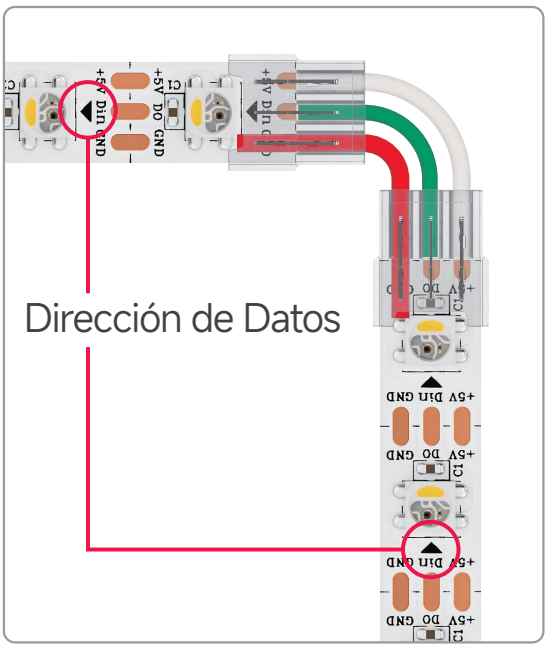


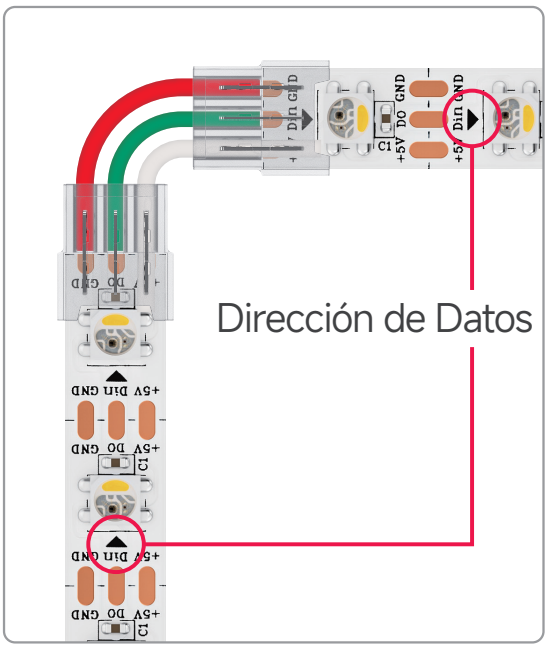


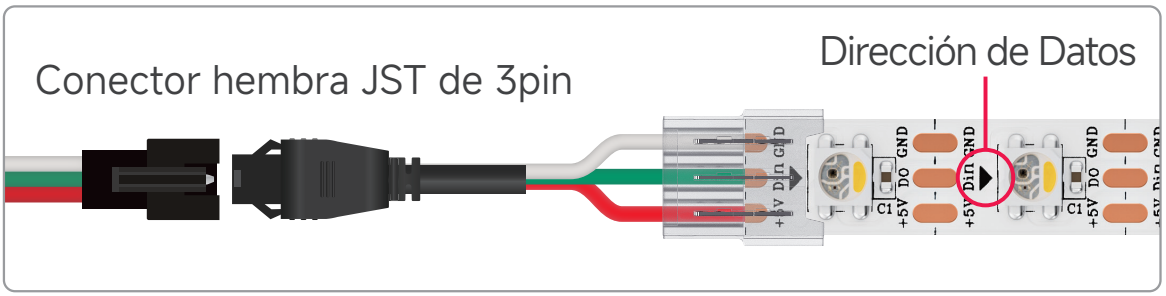


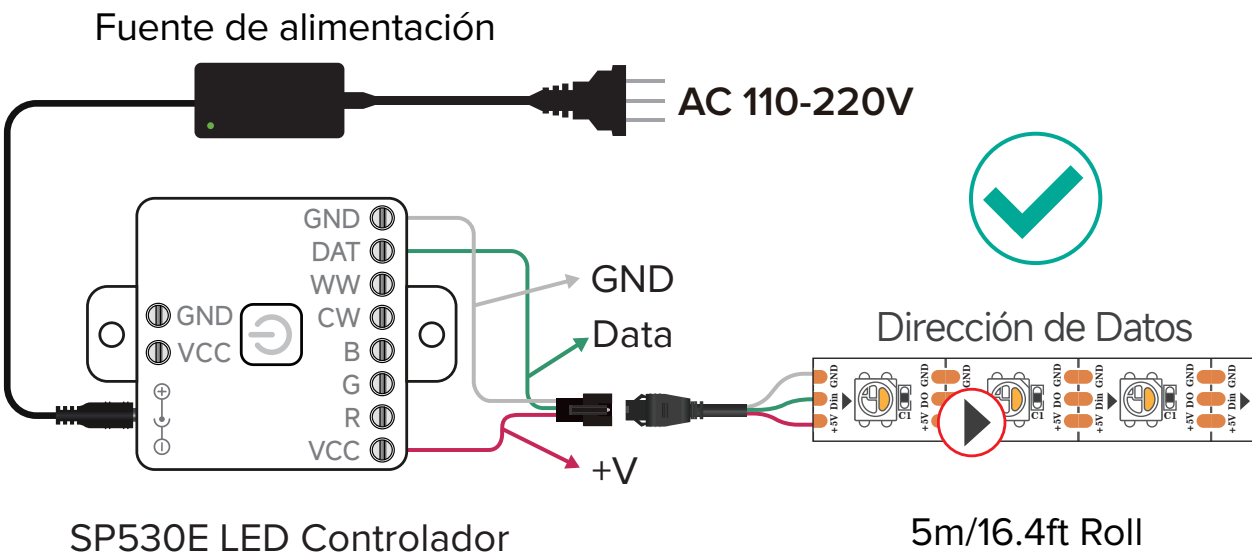


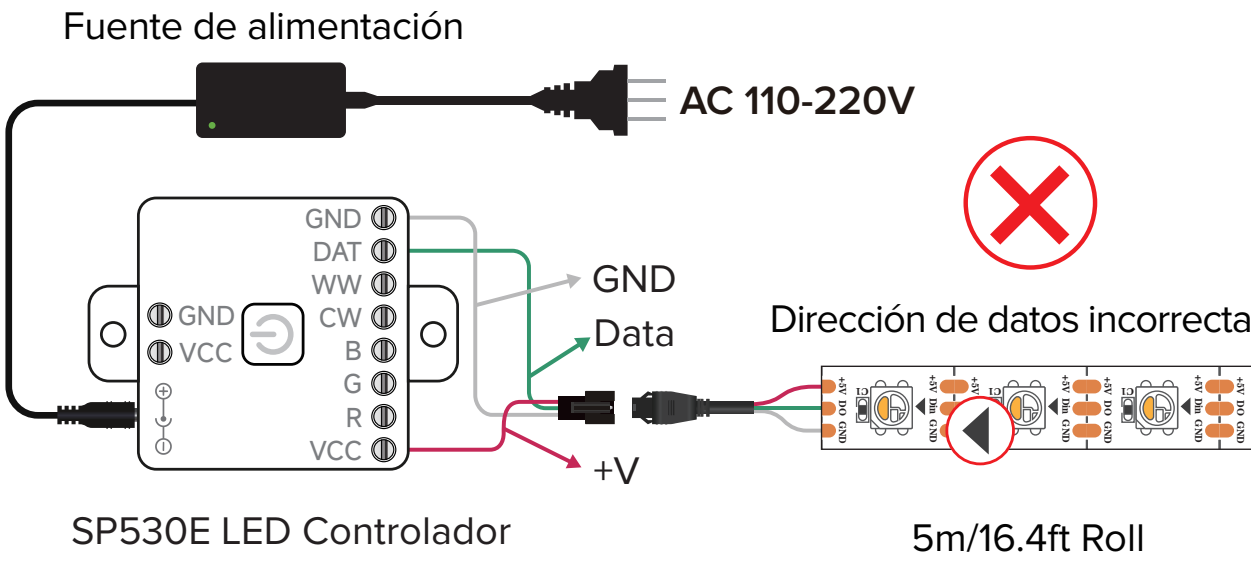
Conector en L









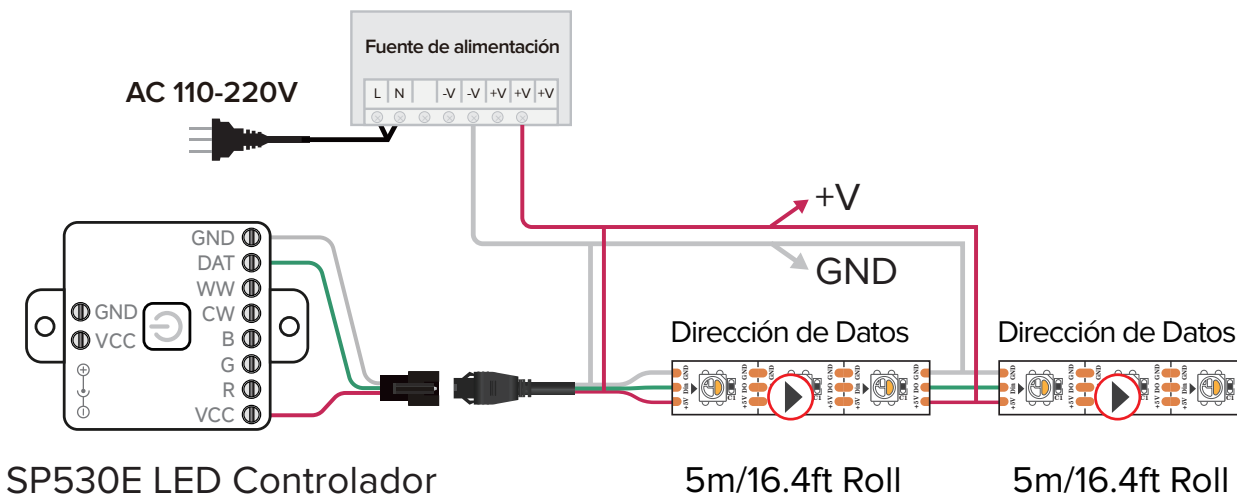


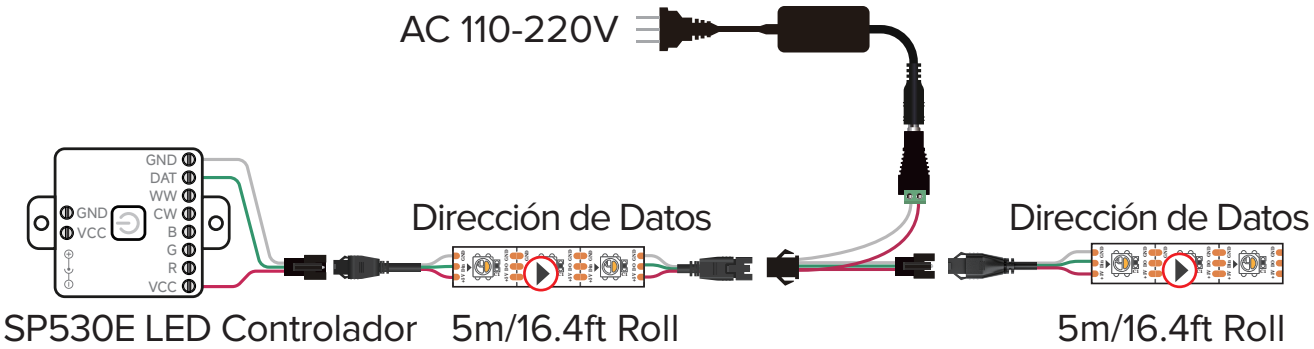
- Dirección de los datos:t

  La flecha negra en la FPCB (Placa de Circuito Impreso Flexible) indica la dirección del flujo de datos. Conecte el cableado estrictamente según la dirección de la flecha para garantizar una iluminación adecuada.

- El voltaje de salida de la fuente de alimentación debe coincidir con las especificaciones de la tira.
- Advertencia! Un voltaje incorrecto puede quemar la tira.

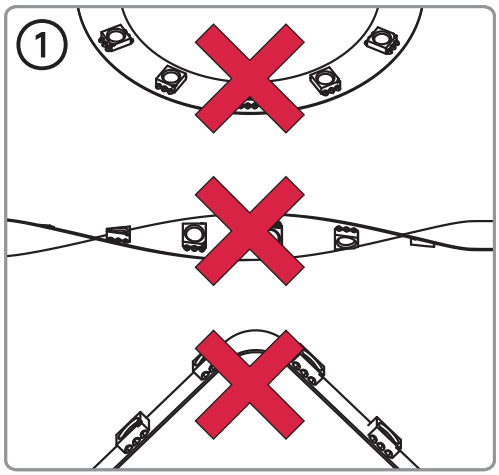
Conexión en Serie & Suplementación de Voltaje



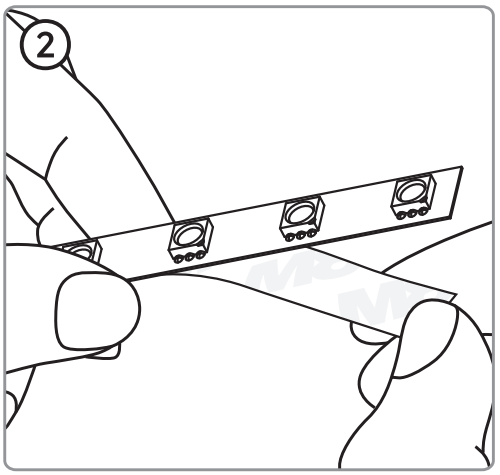


Conexión en Paralelo & Suplementación de Voltaje

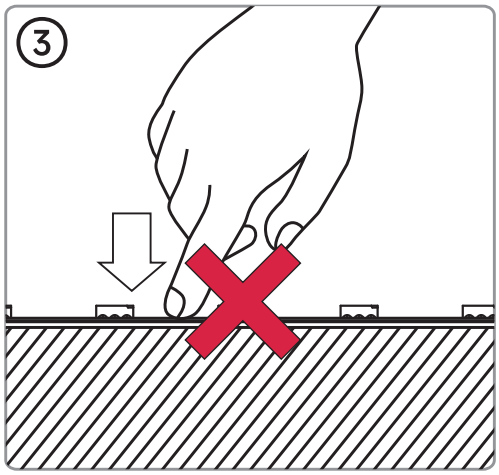
Notas de instalación



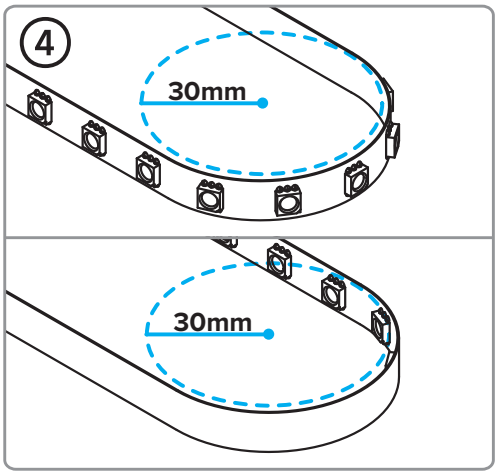
No doble, pliegue ni arrugue la tira/cinta de LED en sentido horizontal.



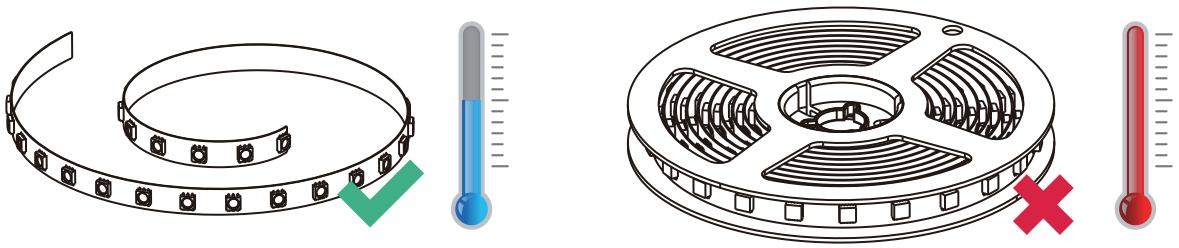
Despegue la cinta con cuidado, de lo contrario podría romperse por estiramiento excesivo.



Adopte las medidas antiestáticas adecuadas, presione suavemente la placa de circuito impreso, no la superficie de los LED, de lo contrario podría producirse una reacción química con el paso del tiempo.



No doble demasiado la tira de LED para que el circuito se rompa incluso la tira funciona bien después de doblar demasiado el contraste caliente y frío puede causar el mal funcionamiento de la placa PCB ya sea Radio de curvatura>30mm(1.2in)



Precauciones de uso

Las tiras LED no disipan bien el calor cuando están enrolladas. Esto puede provocar daños en la tira LED.

✉ Servicio global de atención al cliente: **contact@btf-lighting.com**
Servicio de atención al cliente de ES Amazon: **rachel@btf-lighting.com**

EC REP

Business name: XDH Tech
Business address: 2 Rue Coysevox Bureau 3, Lyon, 69001, France
Email: axdh.tech@outlook.com

UK REP

Business name: GSG CONSULTING GROUP LIMITED
Business address: Montague houses unit 3 Matthew street, Manchester, M12 5bb, United Kingdom
Email: GSG--GROUP@outlook.com

BTF-LIGHTING

c UL us LISTED

Ruban LED RGBW SK6812 IC

adressable individuellement

MANUEL D'UTILISATION SMD-SK6812-RGBW-01-FR

Paramètres du produit:

Type de LED:	Bande LED RGBW SK6812 IC
Angle de vue:	120°
Tension d'entrée:	DC5V/DC12V Tension constante
ALargeur de la FPCB:	10mm(30LEDs/m, 60LEDs/m), 12mm(144LEDs/m)
Indice de rendu des couleurs:	RA>90
Longueur totale:	1m, 5m
Quantité de LED:	30LEDs/m, 60LEDs/m, 144LEDs/m
Nombre de puces IC:	30IC/m(30LEDs/m), 60IC/m(60LEDs/m), 144IC/m(144LEDs/m)
Couleur:	RGB + Blanc pur (Blanc chaud / Blanc naturel / Blanc froid)
Niveau d'étanchéité:	IP30 Non étanche / IP65 Étanche à Revêtement Silicone / IP67 Étanche à immersion par Tube Silicone
Puissance:	Max 6W/mètre(5V-30LED/m) Max 11W/mètre(5V-60LED/m) Max 25W/mètre(5V-144LED/m) Max 12W/mètre(12V-60LED/m) (La puissance de la bande LED n'est pas fixe. Elle variera en fonction de l'effet d'éclairage et de la longueur de la bande LED. Il n'est pas recommandé d'utiliser la lumière blanche en pleine luminosité en permanence.)
Alimentation recommandée pour la bande LED DC5V:	DC5V10A (Vendue séparément)
Alimentation recommandée pour la bande LED DC12V:	DC12V10A (Vendue séparément)
Connexion 3pin:	**+V:** +5V/12V--Fil rouge **GND:** +V--Fil blanc **DI:** Entrée de données **DAT:** Data--Fil vert **DO:** Sortie de données

Précautions:

1.Avant utilisation, assurez-vous que la tension de sortie de l'alimentation correspond à la tension de service de la bande LED (par exemple, une bande LED 5V nécessite une alimentation 5V; une bande LED 12V nécessite une alimentation 12V).
2. La consommation électrique réelle varie en fonction de la longueur de la bande. Des longueurs importantes peuvent induire une chute de tension.
3. Les LED situées à l'extrémité distale peuvent présenter une luminosité réduite en raison de la résistance inhérente et de la chute de tension, une caractéristique physique inévitable commune à toutes les bandes LED.

Facteurs clés de luminance:

① **Longueur de bande:** Atténuation tensionnelle dans les circuits longs.

② **Compatibilité électrique:** La capacité d'alimentation doit couvrir la consommation totale

③ **Mode d'éclairage:** Le blanc mixte(rouge+vert+bleu) consomme plus que le blanc pur (blanc chaud/blanc naturel/blanc froid)

④ **Réglage de luminosité:** Consommation proportionnelle au niveau d'éclairement

Stratégies de résolution:

① **Compensation de tension:** Utiliser des amplificateurs de signal pour suppléance énergétique

② **Ajustement lumineux:** Réduire la luminosité pour optimiser l'énergie

③ **Alimentation:** Choisir des blocs d'alimentation correctement dimensionnés

④ **Installation standardisée:** Appliquer le "Branchement série avec suppléance tensionnelle"

⑤ **Configuration adaptive:** Effectuer un calibrage paramétrique selon les données d'installation

Fonctionne avec un contrôleur SPI RGBW
(contrôleurs vendus séparément)

Avis de compatibilité du contrôleur:

1.Exigence de capacité du contrôleur:

Le contrôleur doit prendre en charge un nombre de puces IC égal ou supérieur à celui de la bande LED. Une capacité de contrôleur insuffisante entraînera un éclairage partiel.

Remarque: Vérifiez le nombre de puces IC sur la bande LED et sur le contrôleur avant l'achat.

2.Spécification de l'alimentation:

Utilisez une alimentation à fort courant correspondant à la tension de service de la bande LED pour éviter :

- Une interruption du signal
- Un fonctionnement instable
- Un blocage du système

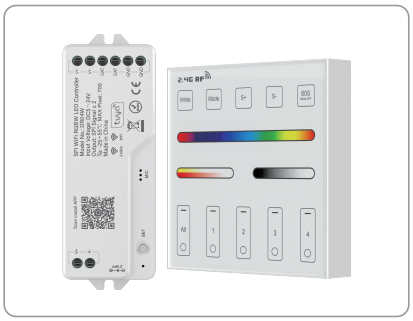
SP630E+RB3
Bluetooth APP
Group Controller
Control 450 IC

SP530E+RB3
Bluetooth+WiFi
Alexa APP Controller
Control 900 IC

SP617E RGBW Bluetooth
Music Controller
Each port control 450 IC

DR04W Smart Life/Tuya Alexa APP Controller Control 700 IC

DR04W+RC03RFB Tuya WIFI RF Remote Alexa APP Controller



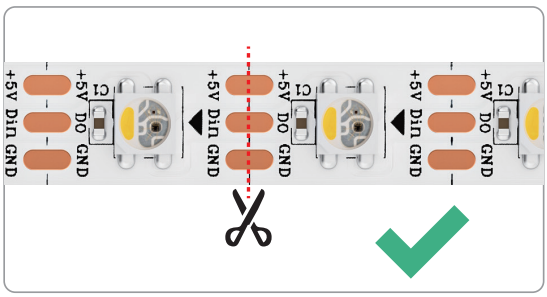
DR04W+WR01RF Tuya WIFI 86-RF Panel Alexa APP Controller

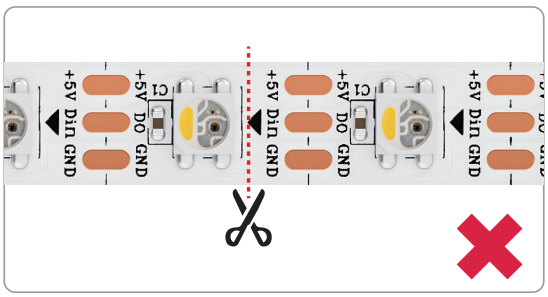
Connecteurs DIY (vendus séparément):

Sens des données: Assurez-vous du sens correct et de l'alignement de la connexion d'entrée des données pendant le raccordement pour éviter un dysfonctionnement.

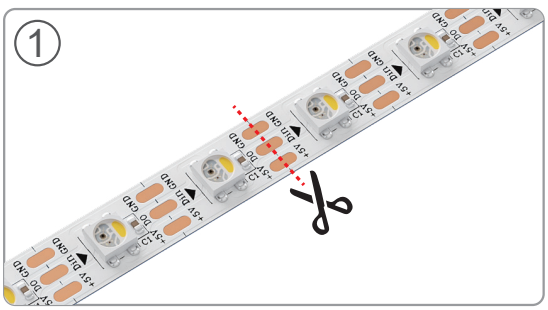
Note d'installation:

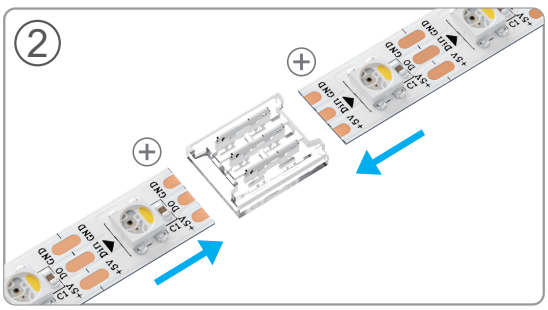
3pin 10mm de largeur pour 30LEDs/m ou 60LEDs/m Bande LED RGBW IC SK6812

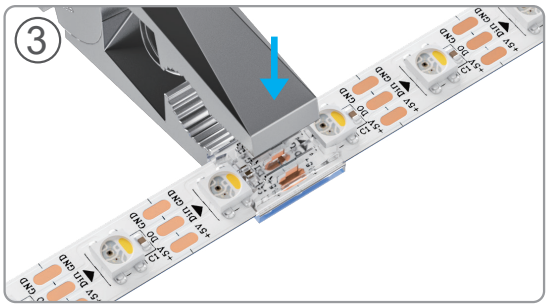


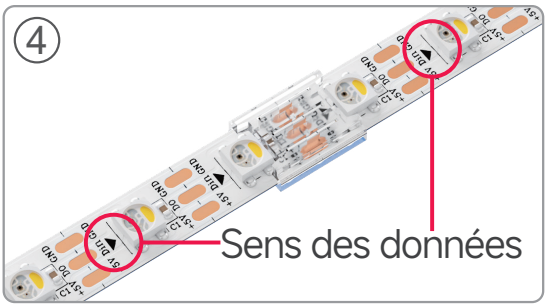


Connecteur bande-fil

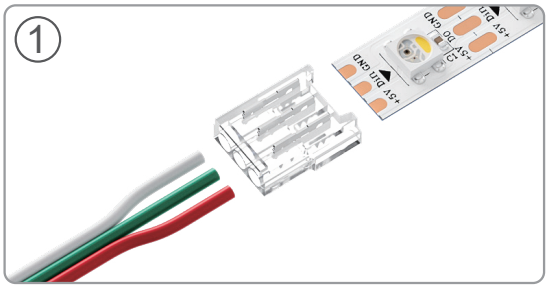


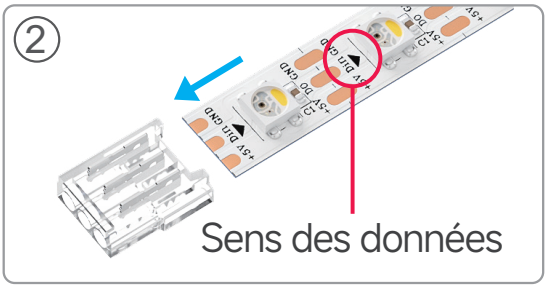


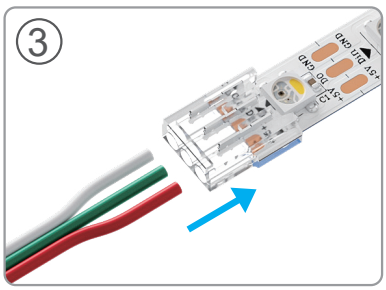


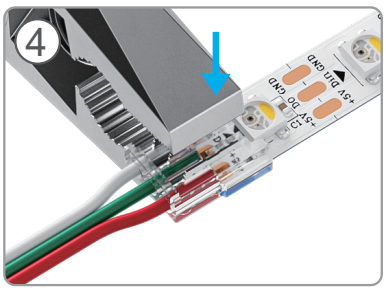


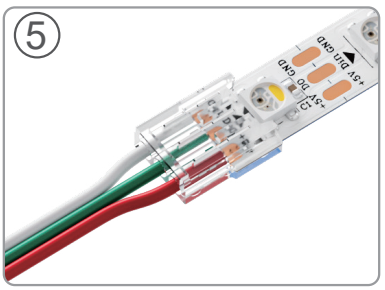
Connecteur bande-bande

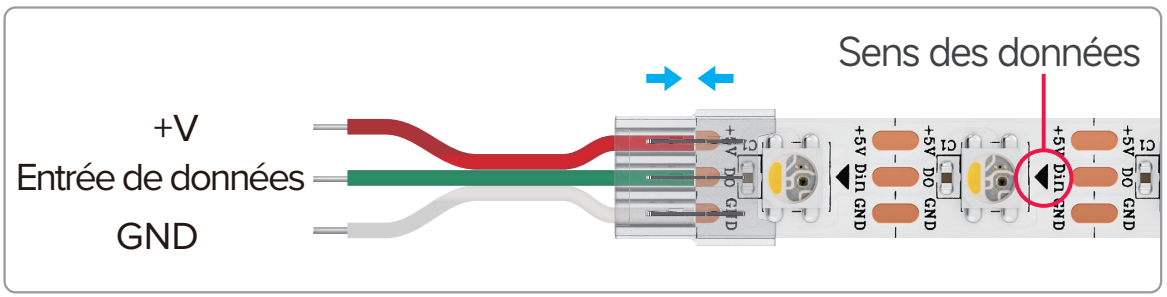


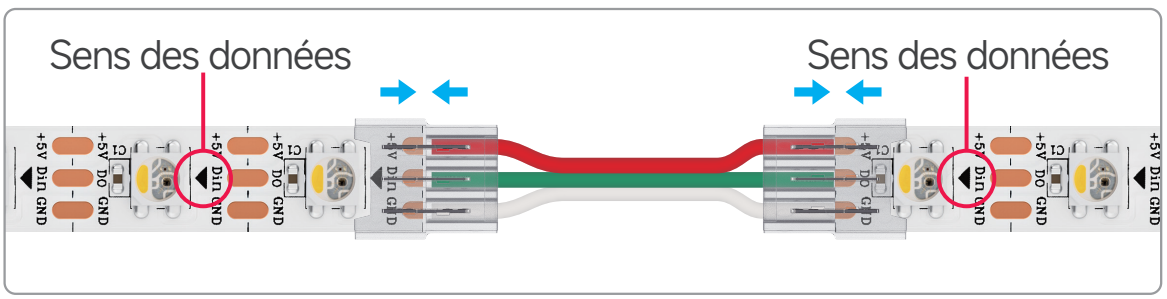




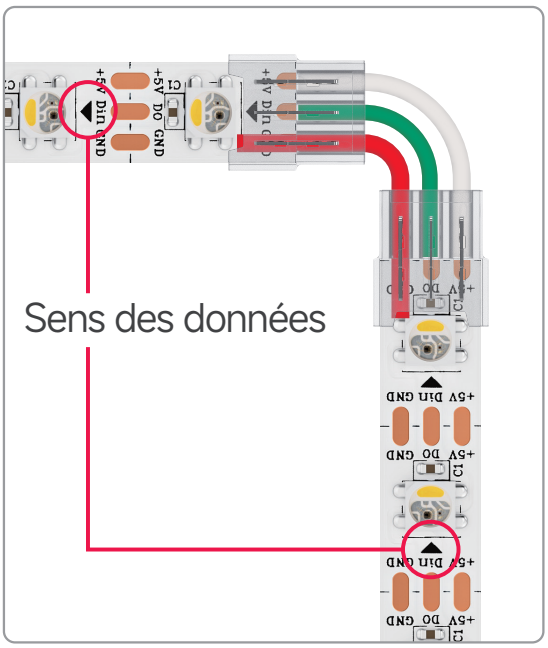


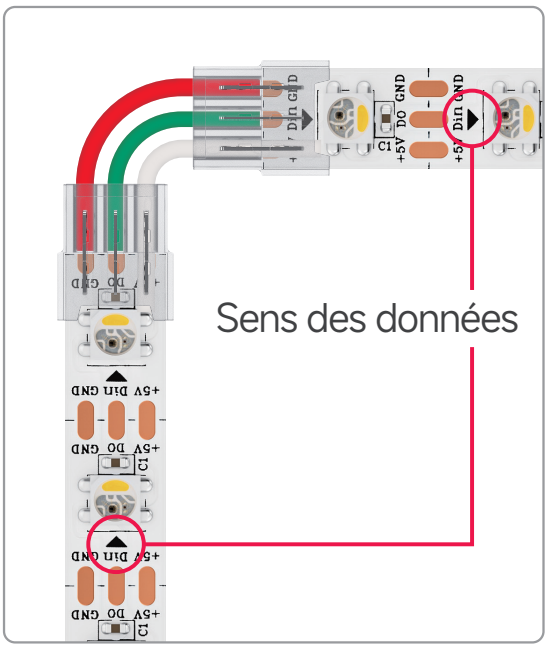


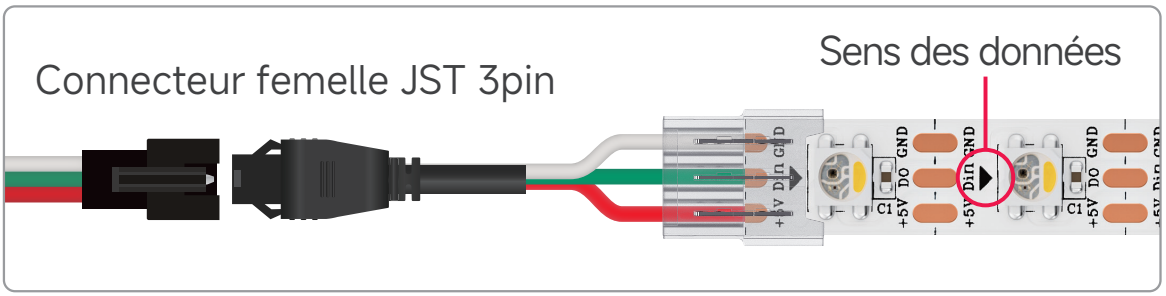


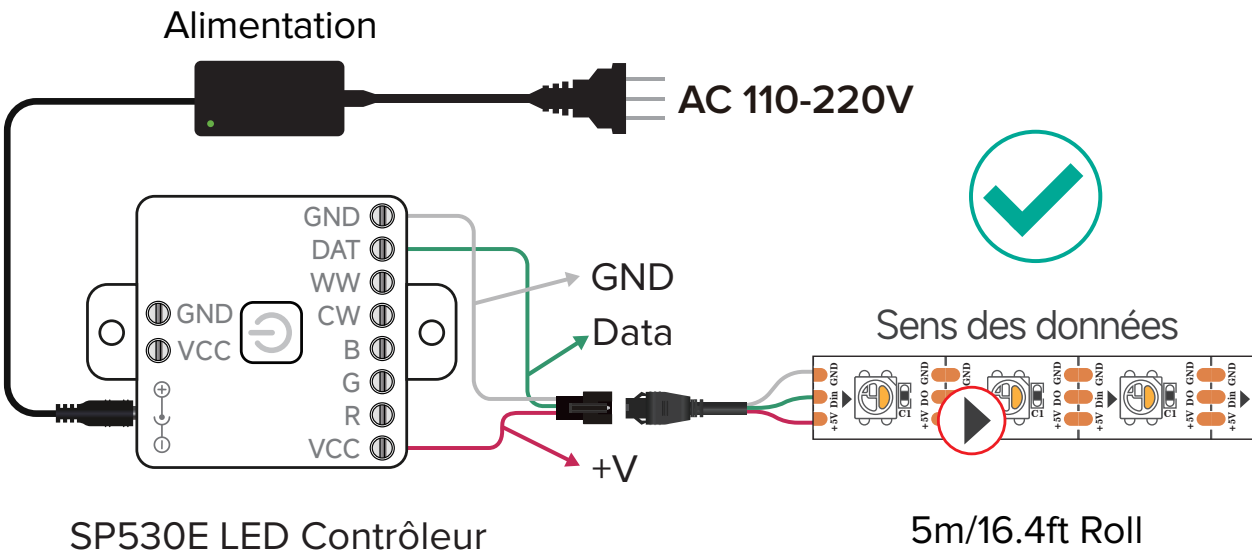


Connecteur en L



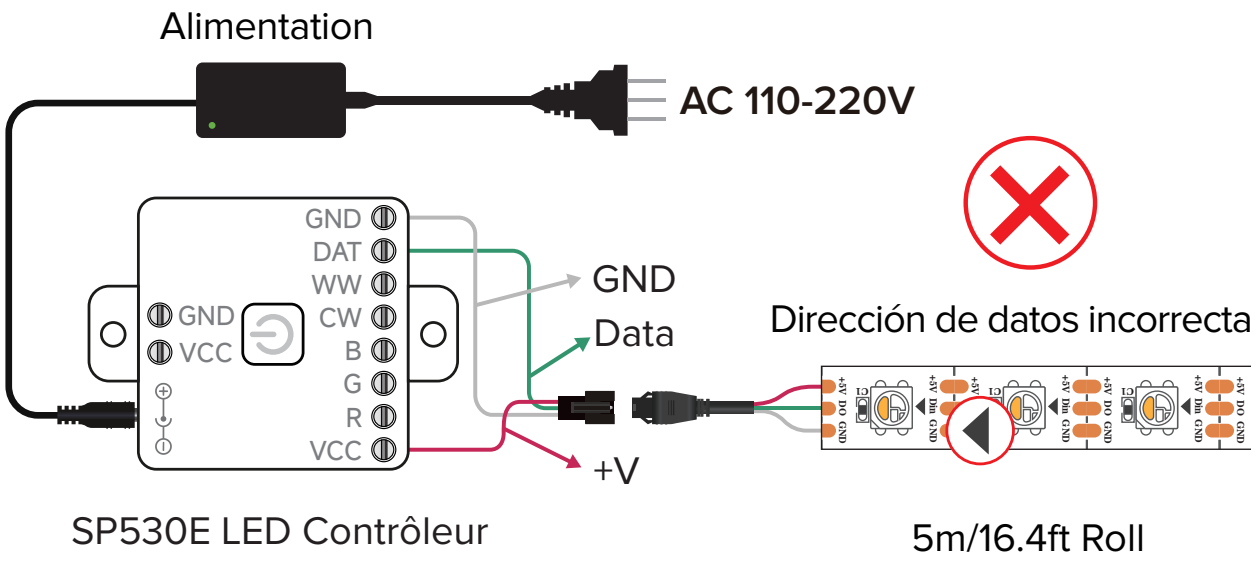






SP530E LED Contrôleur

5m/16.4ft Roll

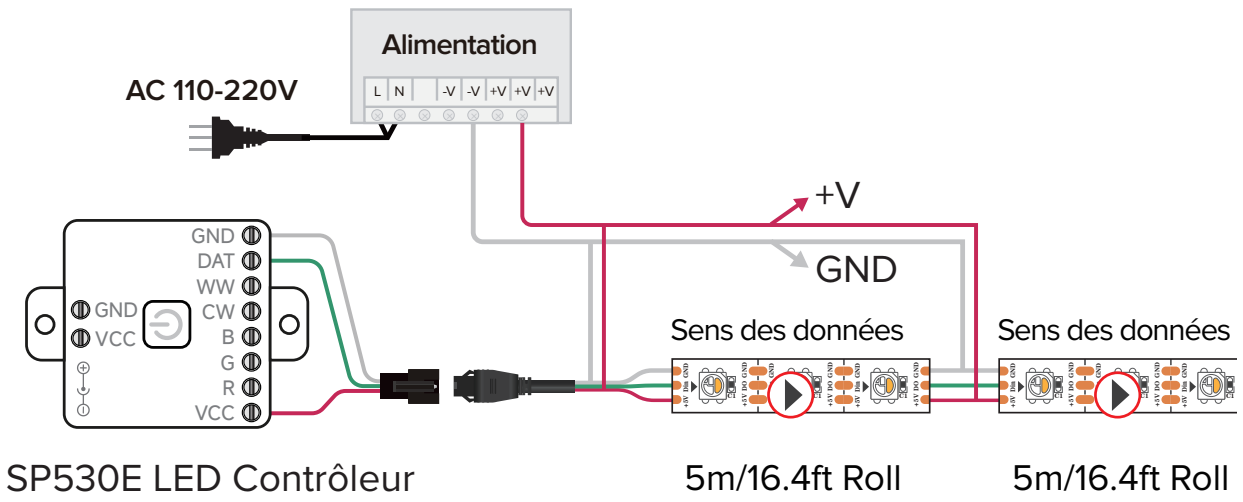


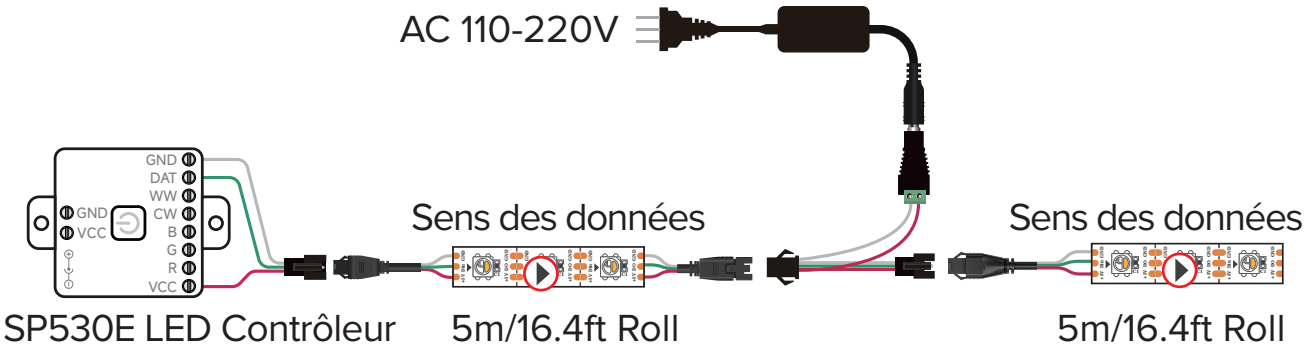
- Sens des données:

  La flèche noire sur le FPCB (Circuit Imprimé Flexible) indique le sens du flux de données. Branchez le câblage strictement dans le sens de la flèche pour garantir un éclairage correct.

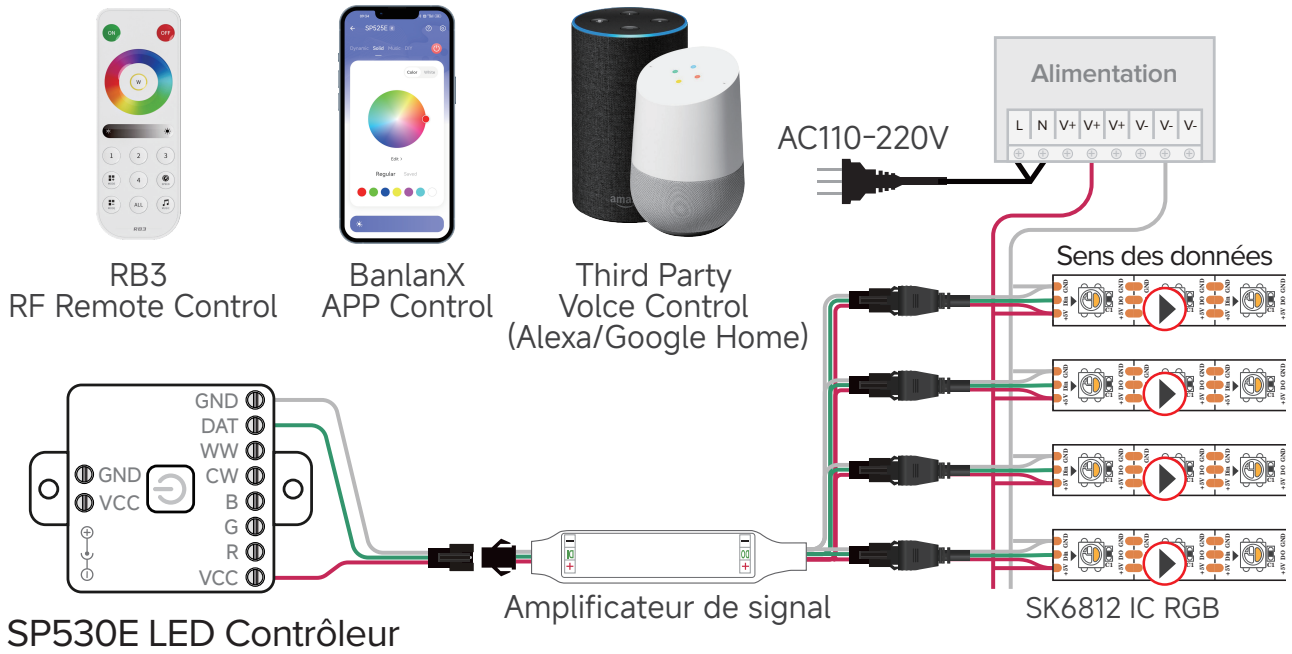
- La tension de sortie de l'alimentation doit correspondre aux spécifications de la bande.
- Avertissement ! Une tension incorrecte peut griller la bande.

Connexion en Série & Supplémentation en Tension

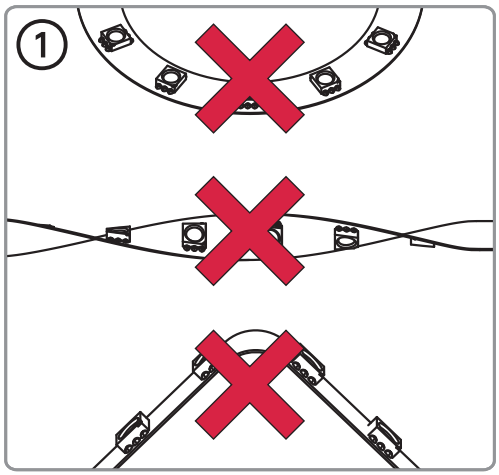




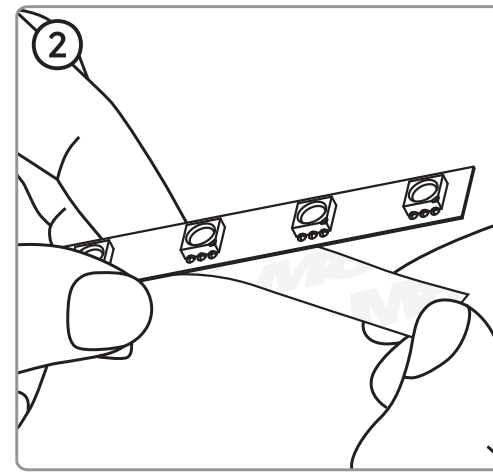
Connexion Parallèle & Supplémentation en Tension



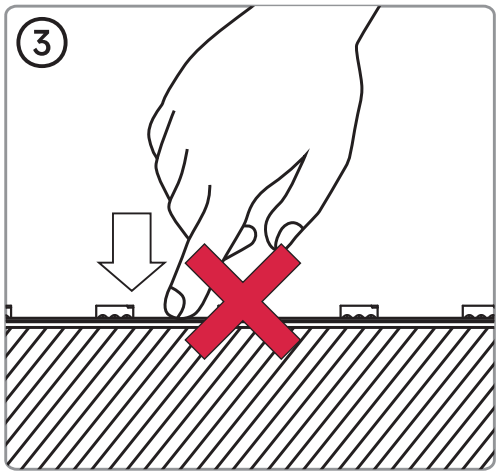
Remarques concernant l'installation



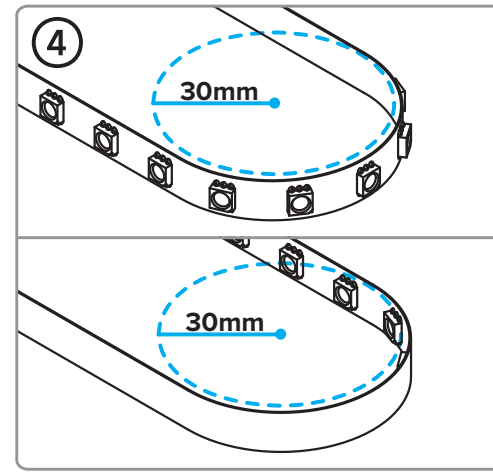
Ne pas plier, plier ou froisser la bande LED dans le sens horizontal.



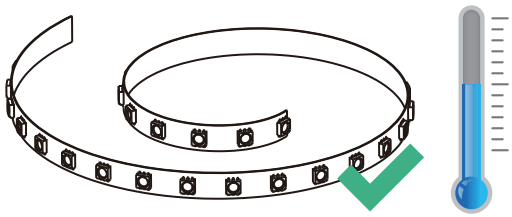
Décollez délicatement la bande, sinon elle risque de se déchirer en raison d'un étirement excessif.

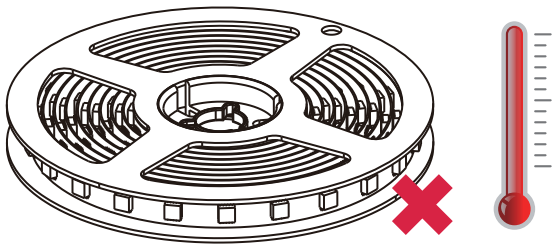


Prenez des mesures antistatiques appropriées, appuyez doucement sur le circuit imprimé, et non sur la surface des DEL, car cela pourrait provoquer une réaction chimique au fil du temps.



Ne pliez pas trop la bande de LED pour ne pas casser le circuit, même si la bande fonctionne bien après avoir été trop pliée, le contraste chaud et froid peut provoquer un dysfonctionnement de la carte PCB ou Rayon de courbure>30mm(1.2in)





Précaution d'emploi

Les bandes de LED ne dissipent pas bien la chaleur lorsqu'elles sont enroulées. Cela peut endommager la bande de LED.

✉ Service clientèle mondial : **contact@btf-lighting.com**
Service clientèle FR Amazon: **chris@btf-lighting.com**

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Business name: XDH Tech
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Email: axdh.tech@outlook.com

UK REP

Business name: GSG CONSULTING GROUP LIMITED
Business address: Montague houses unit 3 Matthew street,
Manchester, M12 5bb, United Kingdom
Email: GSG--GROUP@outlook.com

BTF-LIGHTING

c UL US LISTED

Striscia LED RGBW SK6812 IC

indirizzabile individualmente

MANUALE D'USO

SMD-SK6812-RGBW-01-IT

Parametri del prodotto:

Tipo di LED:	Striscia LED RGBW SK6812 IC
Angolo di visione:	120°
Tensione di ingresso:	DC5V/DC12V Tensione costante
Larghezza della FPCB:	10 mm(30LEDs/m, 60LEDs/m), 12 mm(144LEDs/m)
Indice di resa cromatica:	RA>90
Lunghezza totale:	1m, 5m
Quantità di LED:	30LEDs/m, 60LEDs/m, 144LEDs/m
Quantità di chip IC:	30IC/m(30LEDs/m), 60IC/m(60LEDs/m), 144IC/m(144LEDs/m)
Colore:	RGB + Bianco puro (Bianco caldo / Bianco naturale / Bianco freddo)
Livello di impermeabilità:	IP30 Non impermeabile/IP65 Rivestimento in silicone impermeabile/IP67 Tubo in silicone impermeabile
Potenza:	Max 6W/metro(5V-30LEDs/m) Max 11W/metro(5V-60LEDs/m) Max 25W/metro(5V-144LEDs/m) Max 12W/metro(12V-60LEDs/m) (La potenza della striscia LED non è fissa. Varierà in base all'effetto di illuminazione e alla lunghezza della striscia LED. Non è raccomandato l'utilizzo della luce bianca a luminosità massima in modo continuo.)
Alimentazione consigliata per striscia LED DC5V:	DC5V10A (Venduta separatamente)
Alimentazione consigliata per striscia LED DC12V:	DC12V10A (Venduta separatamente)
Collegamento a 3 pin:	**+V:** +5V/12V--Filo rosso **GND:** +V--Filo bianco **DI:** Ingresso dati **DAT:** Data--Filo verde **DO:** Uscita dati

Precauzioni:

1.Prima dell'uso, assicurarsi che la tensione di uscita dell'alimentatore corrisponda alla tensione di lavoro della striscia LED (ad es., una striscia LED da 5V richiede un alimentatore da 5V; una striscia LED da 12V richiede un alimentatore da 12V).

2.Il consumo energetico effettivo varia in base alla lunghezza della striscia. Lunghezze estese possono causare una caduta di tensione.

3. I LED all'estremità distale possono presentare una luminosità ridotta a causa della resistenza intrinseca e della caduta di tensione, una caratteristica fisica inevitabile comune a tutte le strisce LED.

Fattori chiave della luminosità:

① **Lunghezza striscia:** Atenuazione di tensione nei circuiti estesi.

② **Compatibilità elettrica:** La potenza dell'alimentatore deve soddisfare il consumo totale.

③ **Modalità illuminazione:** La luce bianca mista(rosso+verde+blu) consuma più del bianco puro (bianco caldo/bianco naturale/ bianco freddo).

④ **Impostazione luminosità:** Consumo direttamente correlato al livello d'illuminamento.

Strategie risolutive:

① **Compensazione tensione:** Implementare amplificatori di segnale per supplemento energetico.

② **Regolazione luminosità:** Ridurre l'intensità per ottimizzare l'energia.

③ **Dimensionamento alimentazione:** Scegliere alimentatori adeguatamente dimensionati.

④ **Installazione standard:** Seguire "Connessione serie con supplemento tensione".

⑤ **Configurazione adattiva:** Effettuare calibrazione parametrica in base ai dati d'installazione.

Funziona con controllore SPI RGBW
(controllori venduti separatamente)

Avviso di compatibilità del controller:

1.Requisito di capacità del controller:

Il controller deve supportare un numero di chip IC uguale o maggiore rispetto alla striscia LED. Una capacità del controller insufficiente comporterà un'illuminazione parziale.

Nota: Verificare il numero di chip IC sia sulla striscia LED che sul controller prima dell'acquisto.

2.Specifica dell'alimentatore:

Utilizzare un alimentatore ad alta corrente che corrisponda alla tensione di lavoro della striscia LED per prevenire:

- Interruzione del segnale
- Funzionamento instabile
- Blocchi del sistema

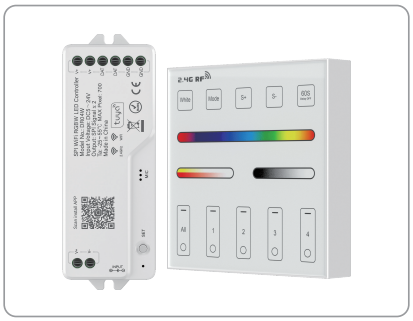
SP630E+RB3
Bluetooth APP
Group Controller
Control 450 IC

SP530E+RB3
Bluetooth+WiFi
Alexa APP Controller
Control 900 IC

SP617E RGBW Bluetooth
Music Controller
Each port control 450 IC

DR04W Smart Life/Tuya Alexa APP Controller Control 700 IC

DR04W+RC03RFB Tuya WIFI RF Remote Alexa APP Controller



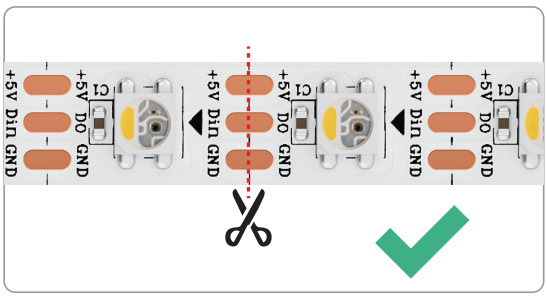
DR04W+WR01RF Tuya WIFI 86-RF Panel Alexa APP Controller

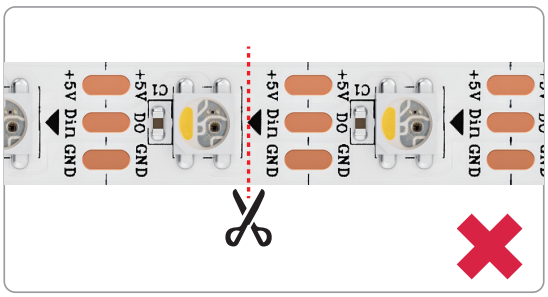
Connettori DIY (venduti separatamente):

Direzione del flusso dati: Assicurarsi del corretto allineamento della direzione di ingresso dei dati durante il collegamento per evitare malfunzionamenti.

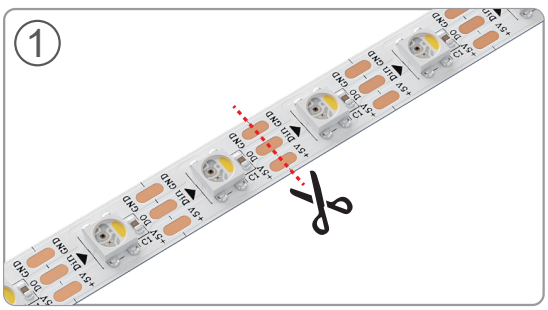
Nota di installazione:

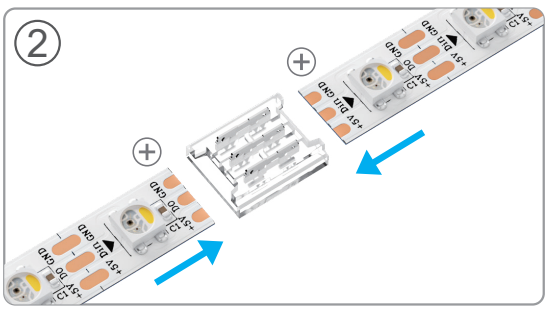
3pin 10mm di larghezza per 30LEDs/m o 60LEDs/m Striscia LED RGBW IC SK6812

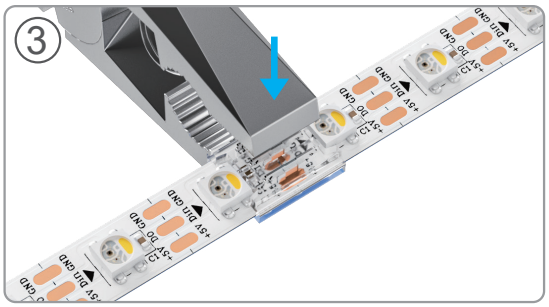


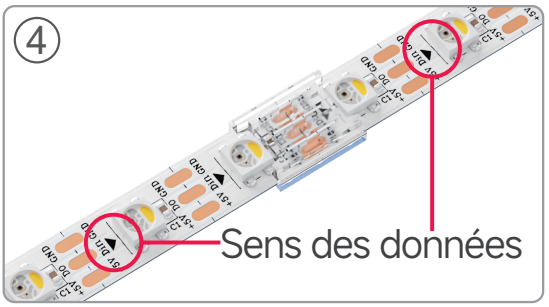


Connettore striscia-cavo









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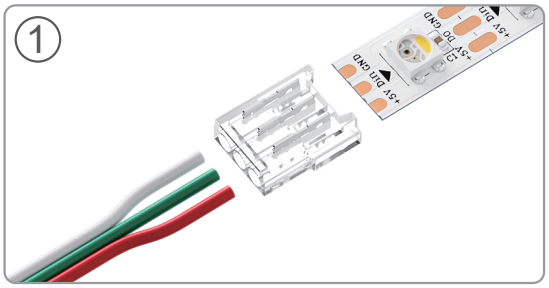
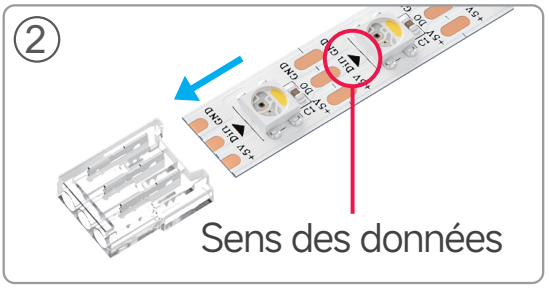
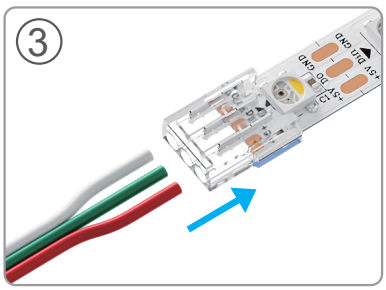
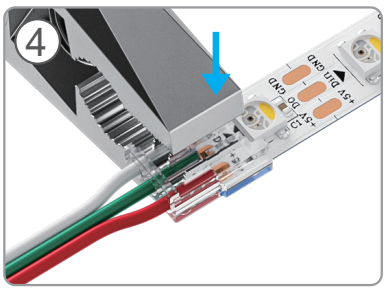
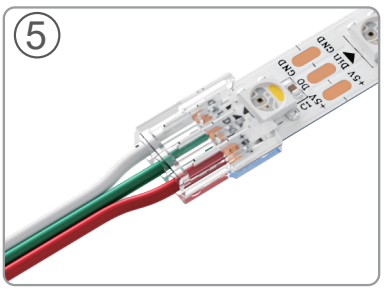
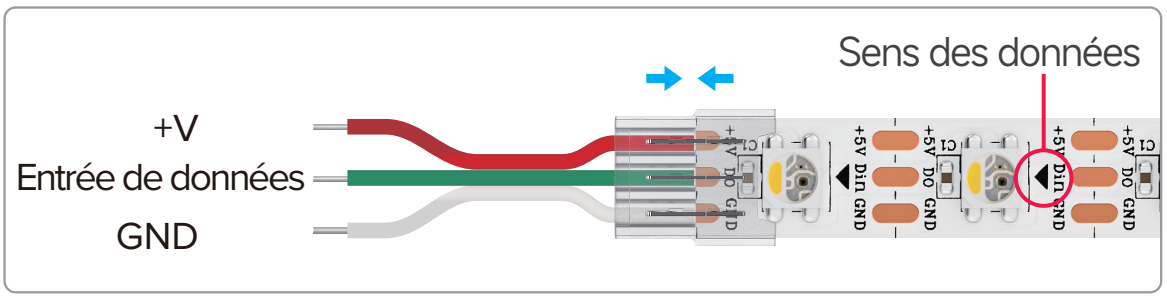


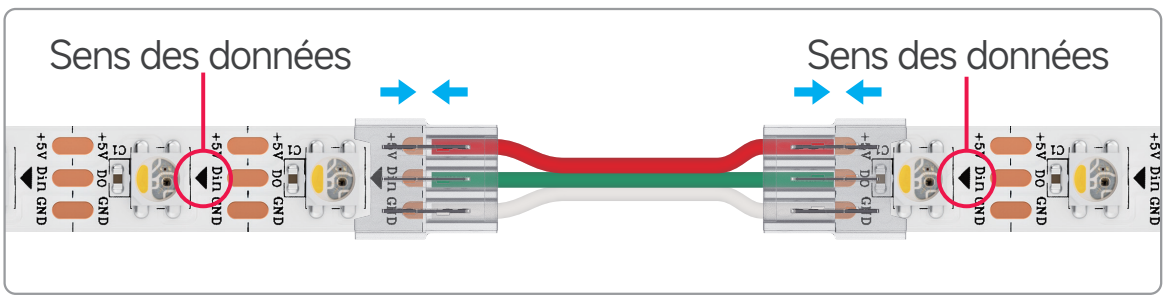




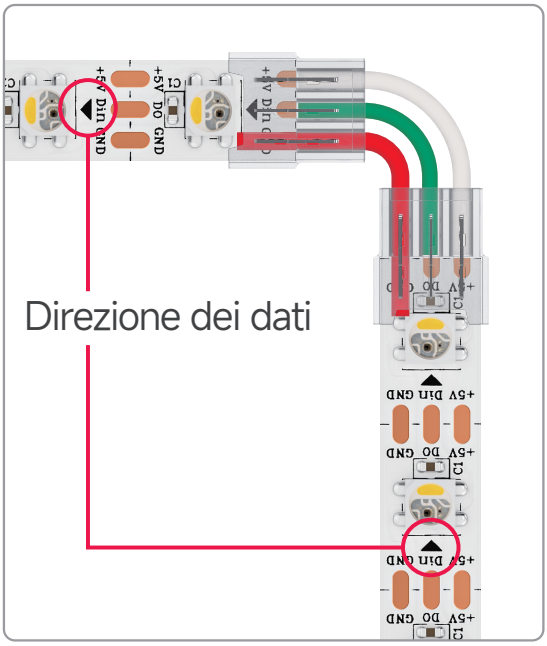


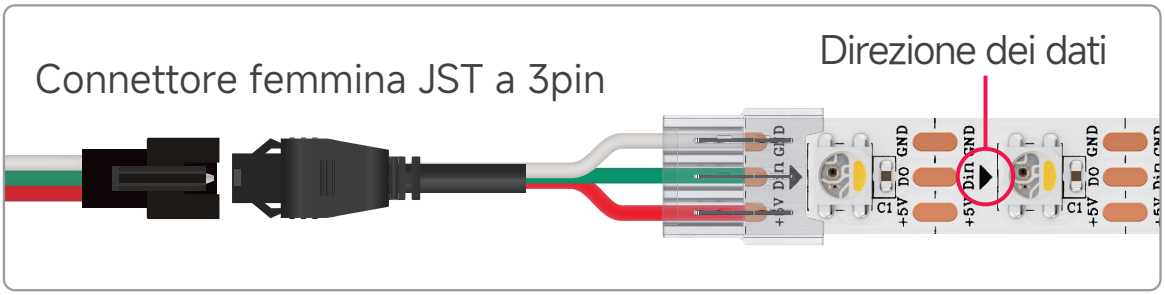


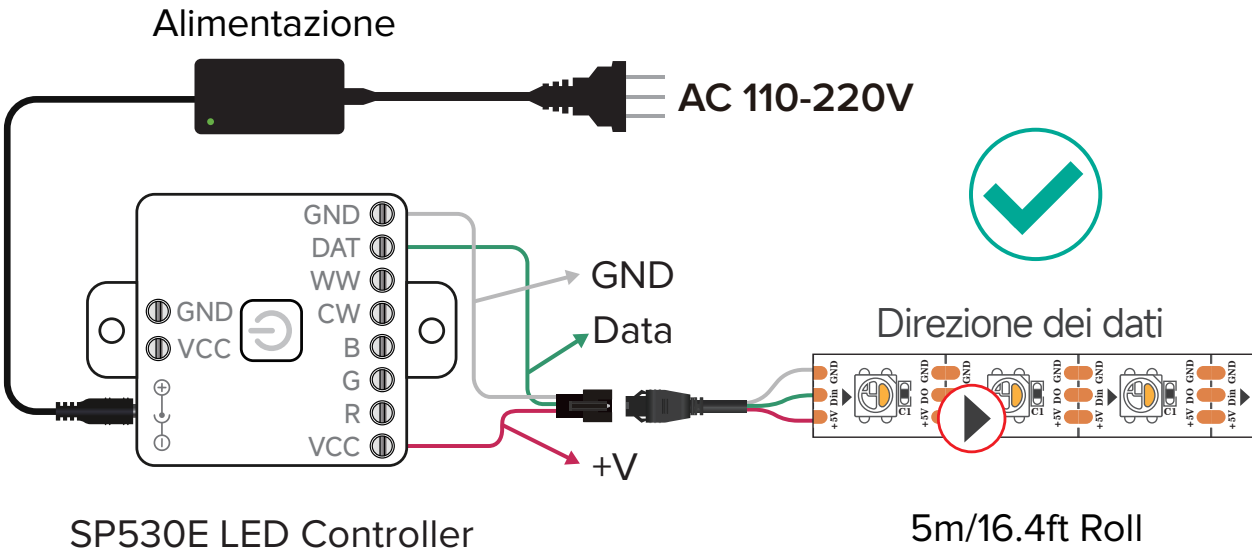


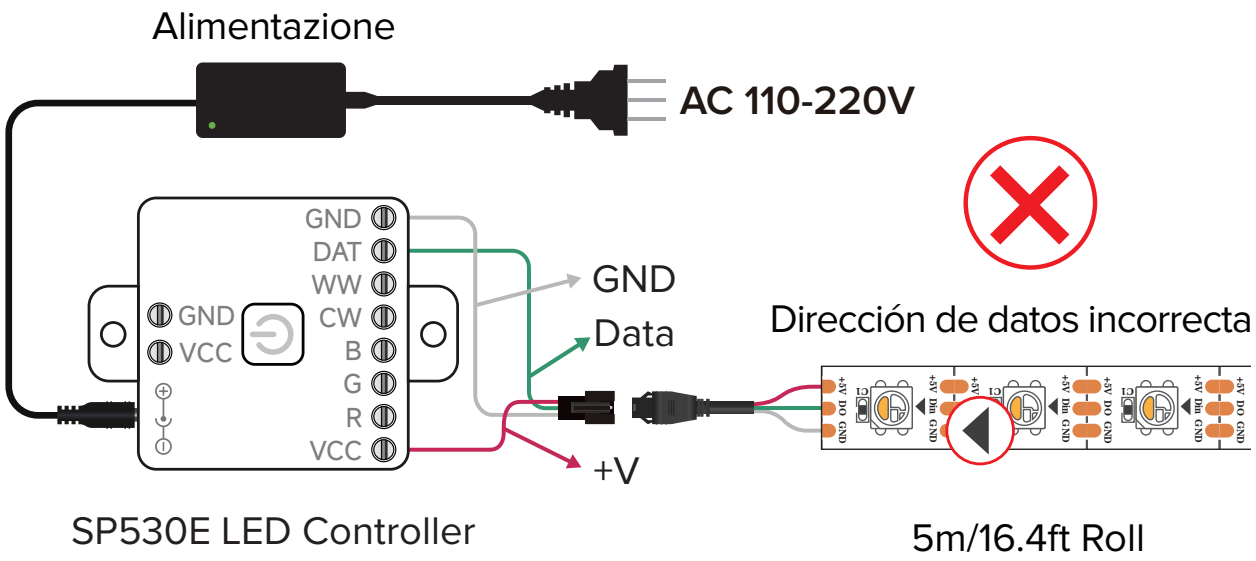


Connettore a L







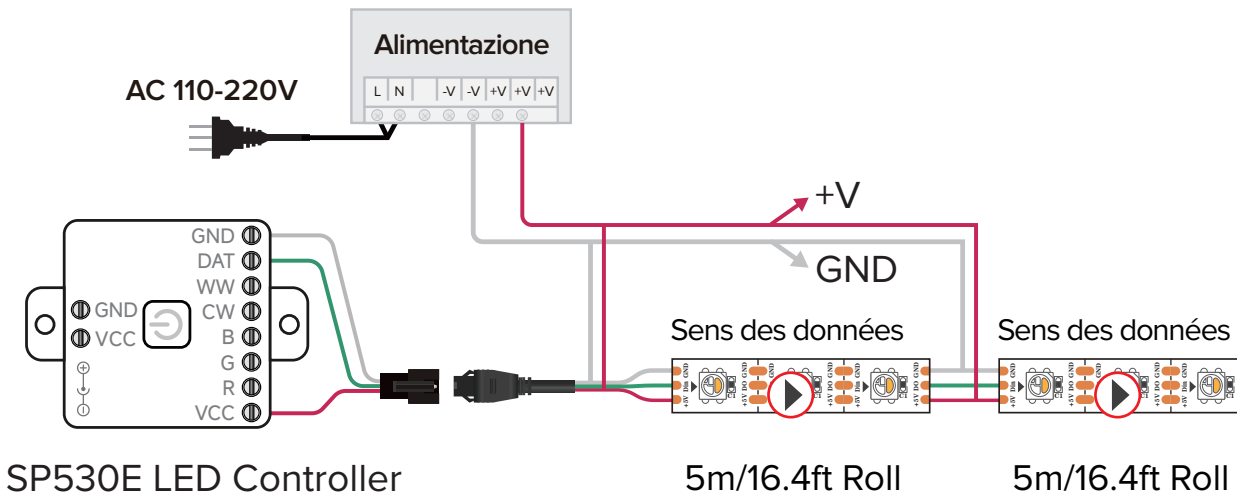


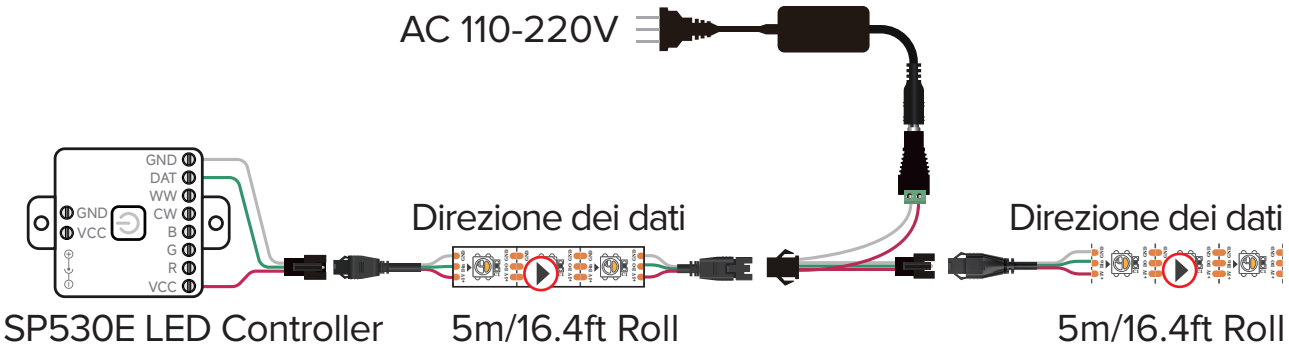
- Direzione dei dati:

  La freccia nera sull'FPCB (Scheda a Circuito Stampato Flessibile) indica la direzione del flusso dati. Collegare il cablaggio rigorosamente secondo la direzione della freccia per garantire un'illuminazione corretta.

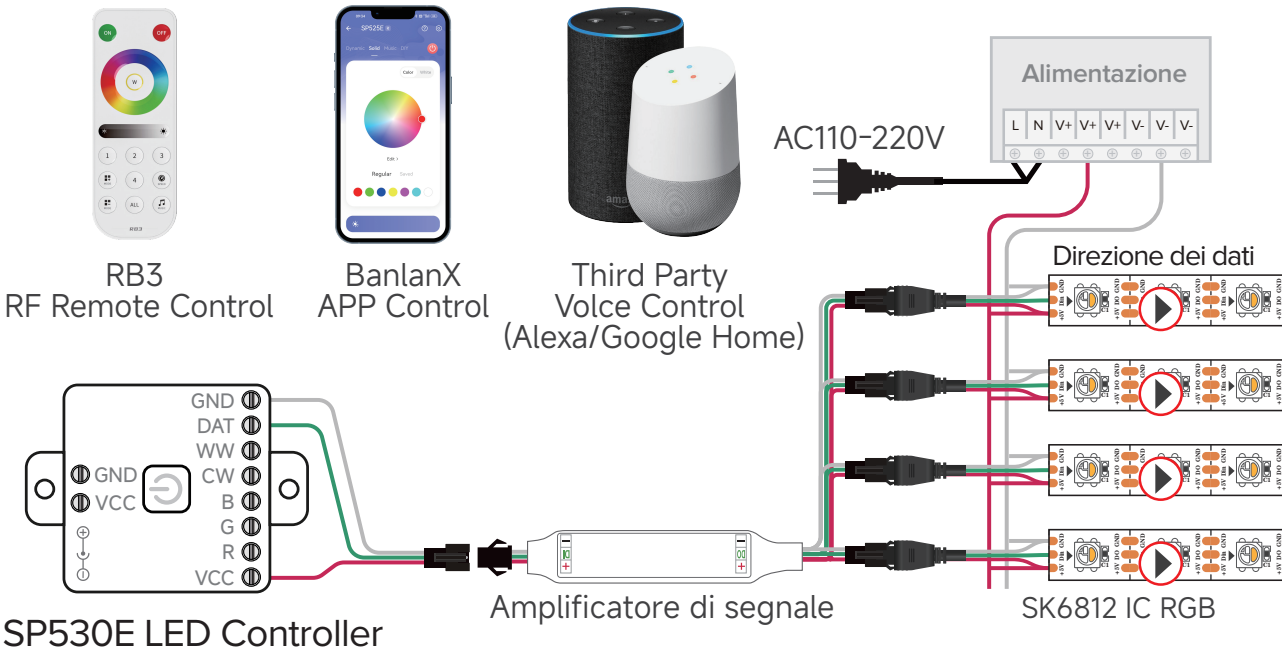
- La tensione di uscita dell'alimentatore deve corrispondere alle specifiche della striscia.
- Avvertenza! Una tensione errata può bruciare la striscia.

Collegamento in Serie & Supplementazione di Tensione

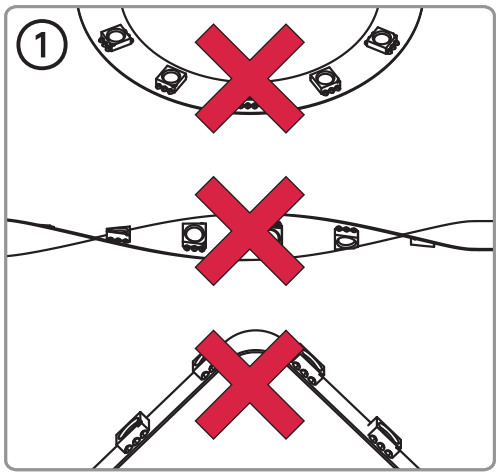




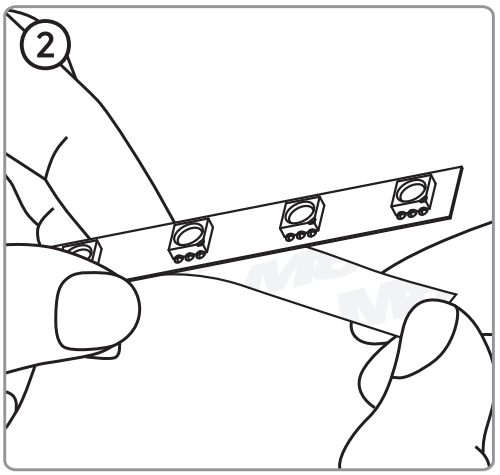
Collegamento in Parallelo & Supplementazione di Tensione



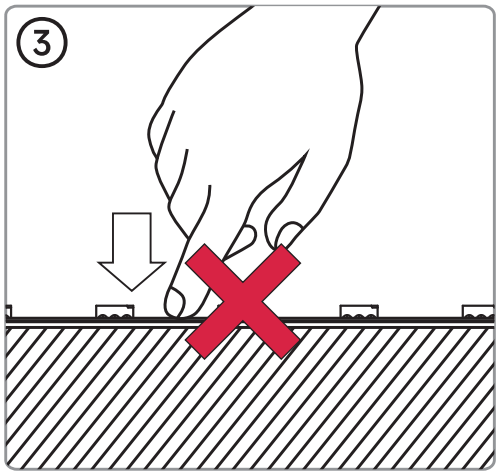
Note sull'installazione



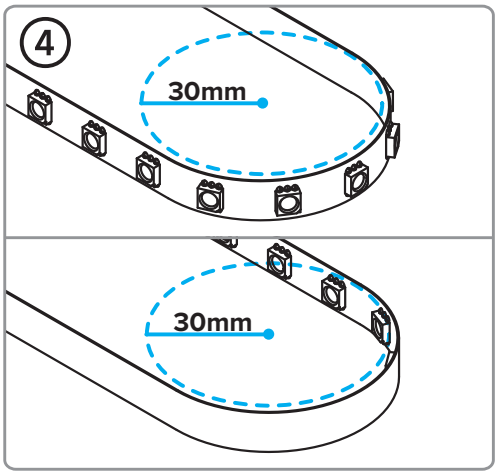
Non piegare, piegare o sgualcire la striscia/nastro LED in direzione orizzontale.



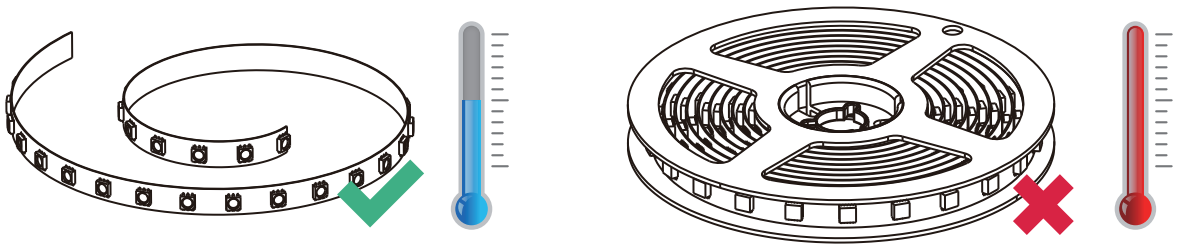
Staccare delicatamente il nastro, altrimenti potrebbe strapparsi a causa dell'eccessivo allungamento.



Adottare misure antistatiche adeguate, premendo delicatamente la scheda PCB e non la superficie dei LED, altrimenti potrebbe verificarsi una reazione chimica con il passare del tempo.



Non piegare eccessivamente la striscia di LED per rendere il circuito rotto anche la striscia funziona bene dopo aver piegato eccessivamente il contrasto caldo e freddo può causare la disfunzione della scheda PCB sia Raggio di curvatura>30mm (1.2in)



Precauzioni per l'uso

Le strisce LED non dissipano bene il calore quando sono arrotolate. Ciò potrebbe danneggiare la striscia LED.

✉ Servizio clienti globale: **contact@btf-lighting.com**
Servizio clienti IT Amazon: **chris@btf-lighting.com**

EC REP

Business name: XDH Tech
Business address: 2 Rue Coysevox Bureau 3, Lyon, 69001, France
Email: axdh.tech@outlook.com

UK REP

Business name: GSG CONSULTING GROUP LIMITED
Business address: Montague houses unit 3 Matthew street, Manchester, M12 5bb, United Kingdom
Email: GSG--GROUP@outlook.com

BTF-LIGHTING

c UL US LISTED

Individueel adresseerbaar

SK6812 IC RGBW LED-strip

GEBRUIKERSHANDLEIDING SMD-SK6812-RGBW-01-NL

Productparameters:

LED-type:	SK6812 IC RGBW LED-strip
Zichthoek:	120°
Invoerspanning:	DC5V/DC12V Constant spanning
Breedte FPCB:	10mm(30LEDs/m, 60LEDs/m), 12mm(144LEDs/m)
Kleurweergave-index:	RA>90
Totale lengte:	1m, 5m
Aantal LED's:	30LEDs/m, 60LEDs/m, 144LEDs/m
Aantal IC-chips:	30IC/m(30LEDs/m), 60IC/m(60LEDs/m), 144IC/m(144LEDs/m)
Kleur:	RGB + Rechter wit (Warm wit / Natuurlijk wit / Koud wit)
Waterdichtheid:	IP30 Niet-waterdicht/IP65-Siliconencoating Waterdicht/IP67- Siliconenbuis Waterdicht
Wattage:	Max 6W/Meter（5V-30LEDs/m） Max 11W/Meter（5V-60LEDs/m） Max 25W/Meter（5V-144LEDs/m） Max 12W/Meter（12V-60LEDs/m） (Het vermogen van de LED-strip is niet vast. Het zal variëren afhankelijk van het lichteffect en de lengte van de LED-strip. Continu wit licht op volledige helderheid wordt niet aanbevolen.)
Aanbevolen voeding voor DC5V LED-strip:	DC5V10A (Afzonderlijk verkrijgbaar)
Aanbevolen voeding voor DC12V LED-strip:	DC12V10A (Afzonderlijk verkrijgbaar)
3pin aansluiting:	**+V:** +5V/12V--Rode draad **DAT:** Data--Groene draad **GND:** +V--Witte draad **DI:** Data-ingang **DO:** Data-uitgang

Veiligheidsmaatregelen:

1.Controleer voor gebruik of de uitgangsspanning van de voeding overeenkomt met de werkspanning van de LED-strip (bijv. een 5V LED-strip vereist een 5V voeding; een 12V LED-strip vereist een 12V voeding).

2. Het werkelijke stroomverbruik varieert met de lengte van de strip. Grote lengtes kunnen spanningsval veroorzaken.

3. LED's aan het uiteinde van de strip kunnen een verminderde helderheid vertonen door inherente weerstand en spanningsval, een onvermijdelijke fysieke eigenschap die alle LED-strips gemeen hebben.

Belangrijkste factoren voor luminantie:

① **Strip lengte:** Spanningsverlies bij langere circuits.

② **Stroomcompatibiliteit:** Voedingscapaciteit moet totaalverbruik dekken.

③ **Verlichtingsmodus:** Gemengd wit(rood+groen+blauw) verbruikt meer energie dan puur wit (warmwit/natuurwit/koelwit).

④ **Helderheidsinstelling:** Directe correlatie met stroomverbruik.

Oplossingsstrategieën:

① **Spanningscompensatie:** Signaalversterkers inzetten voor vermogenssuppletie.

② **Helderheidsaanpassing:** Intensiteit verlagen voor energieoptimalisatie.

③ **Vermogensvoorziening:** Geschaalde voedingen selecteren.

④ **Gestandaardiseerde installatie:** "Serieschakeling met spanningssuppletie" volgen.

⑤ **Adaptieve configuratie:** Parameters kalibreren op basis van installatiegegevens.

erkt met SPI RGBW-controller
(controllers worden apart verkocht)

Compatibiliteitsmelding Controller:

1.Controllercapaciteit vereist:

e controller moet een gelijk of groter aantal IC-chips ondersteunen dan de LED-strip. Onvoldoende controllercapaciteit resulteert in gedeeltelijke verlichting.

Let op: Controleer voor aankoop het aantal IC-chips op zowel de LED-strip als de controller.

2.Voedingsspecificatie:

Gebruik een hoogstroomvoeding die overeenkomt met de werkspanning van de LED-strip om te voorkomen:

- Signaalonderbreking
- Onstabiele werking
- Systeembevriezingen

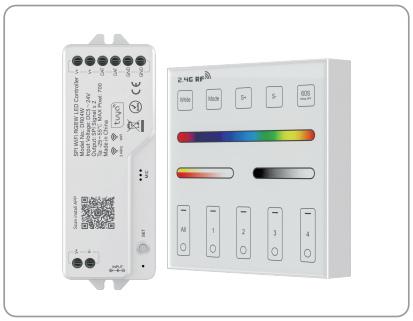
SP630E+RB3
Bluetooth APP
Group Controller
Control 450 IC

SP530E+RB3
Bluetooth+WiFi
Alexa APP Controller
Control 900 IC

SP617E RGBW Bluetooth
Music Controller
Each port control 450 IC

DR04W Smart Life/Tuya Alexa APP Controller Control 700 IC

DR04W+RC03RFB Tuya WIFI RF Remote Alexa APP Controller



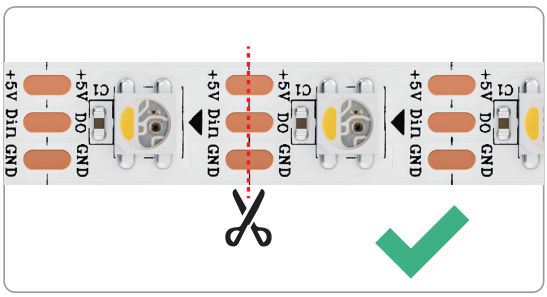
DR04W+WR01RF Tuya WIFI 86-RF Panel Alexa APP Controller

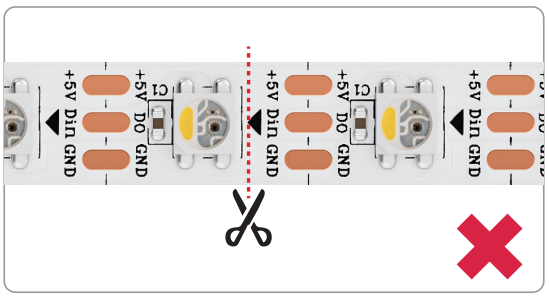
DIY-connector (apart verkrijgbaar)

Data Richting: Zorg voor correcte uitlijning van de datainvoerrichting tijdens het aansluiten om storingen te voorkomen.

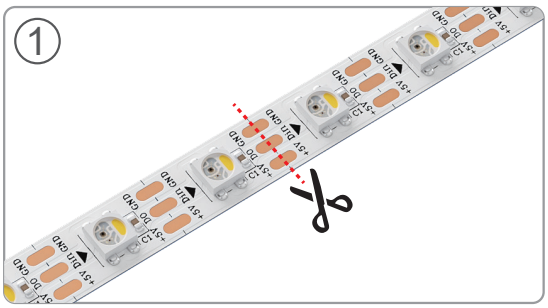
Installatieopmerking:

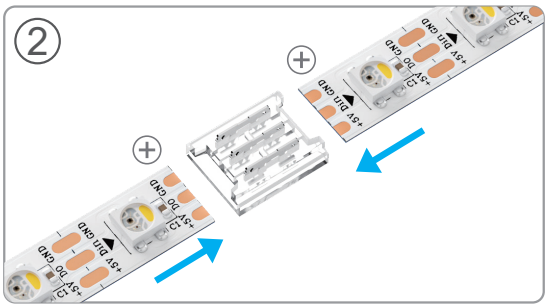
3pin 10mm breed voor 30 LEDs/m of 60 LEDs/m SK6812 IC RGBW LED-strip

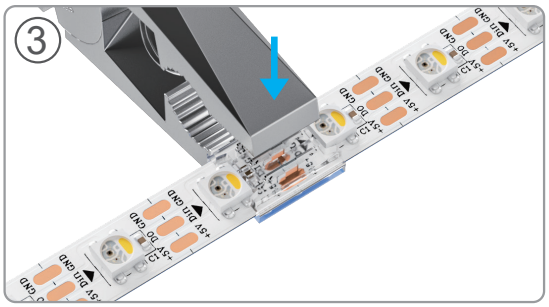


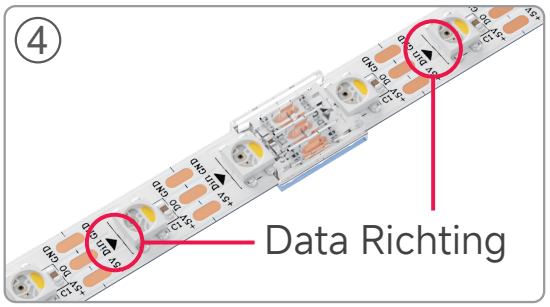


Strip-naar-draad connector

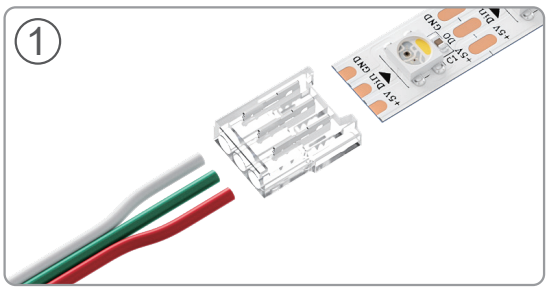


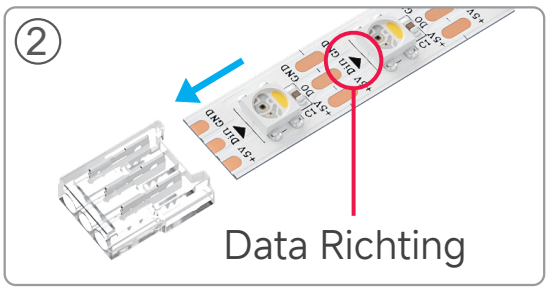


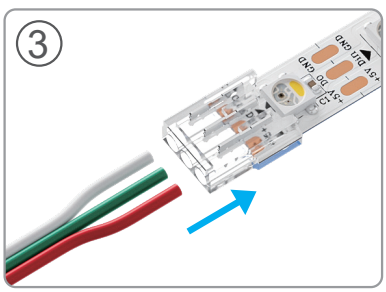


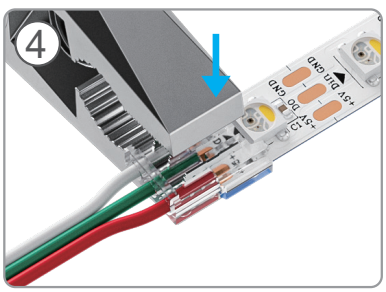


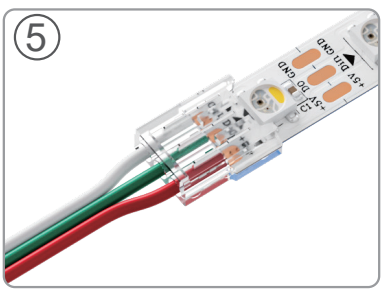
Strip-naar-strip connector

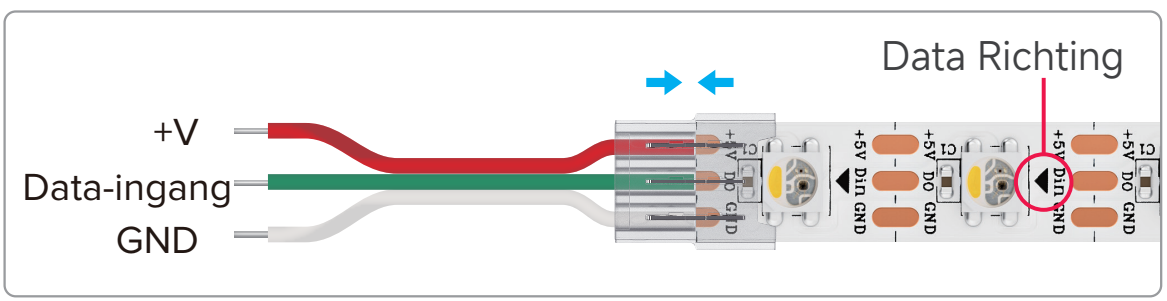


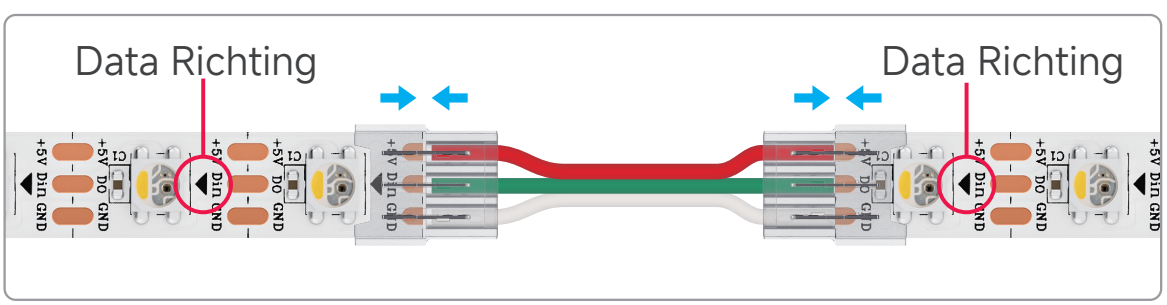




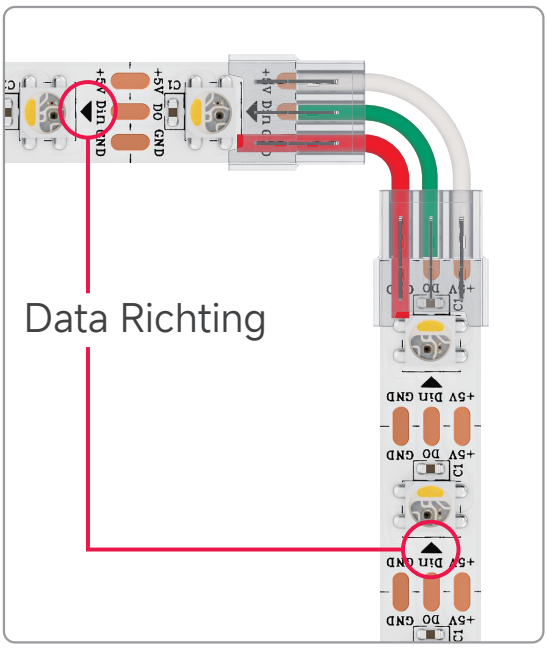


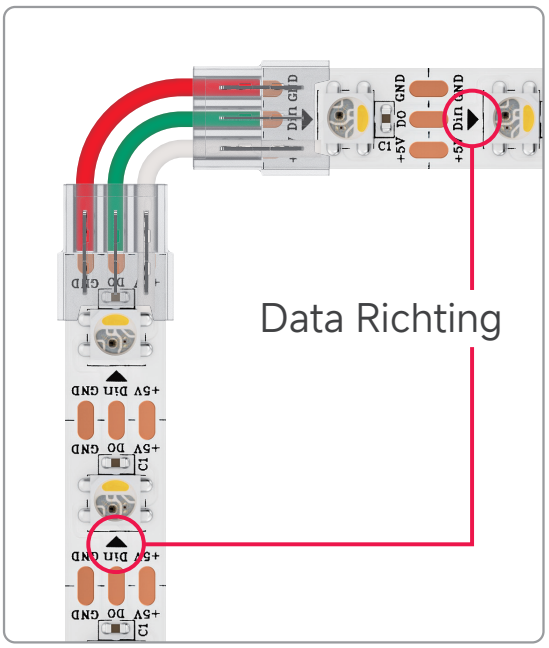


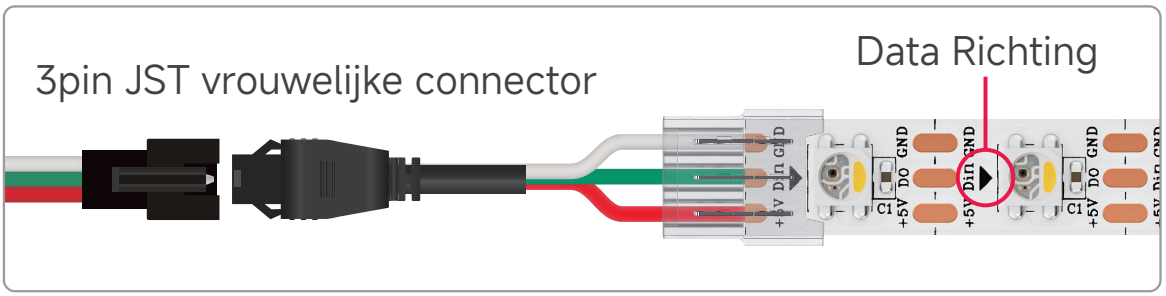


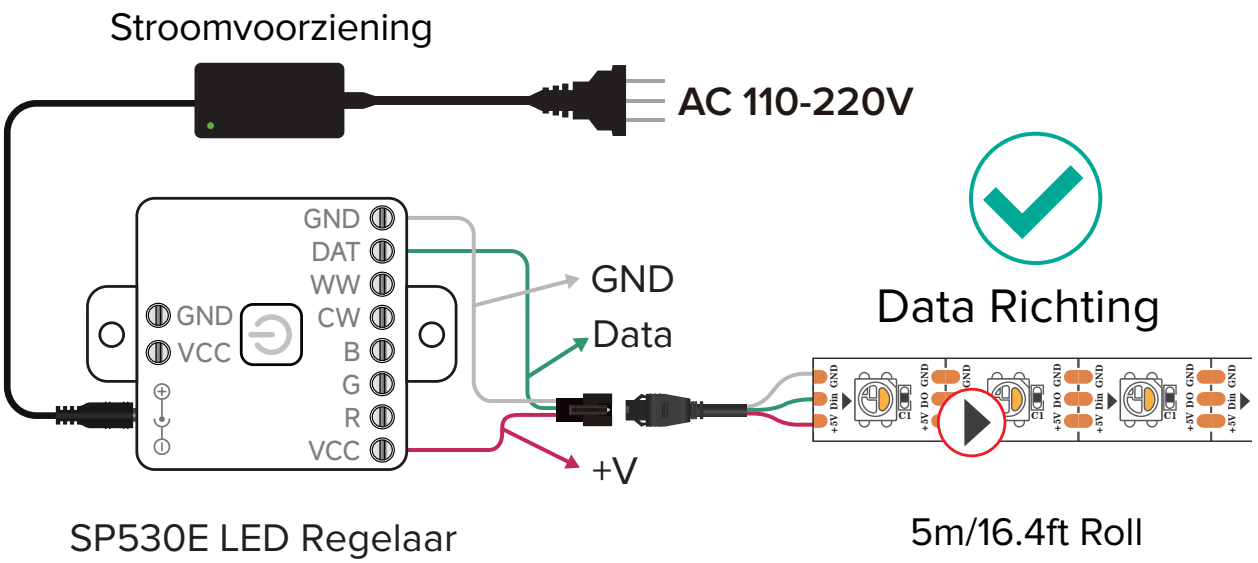


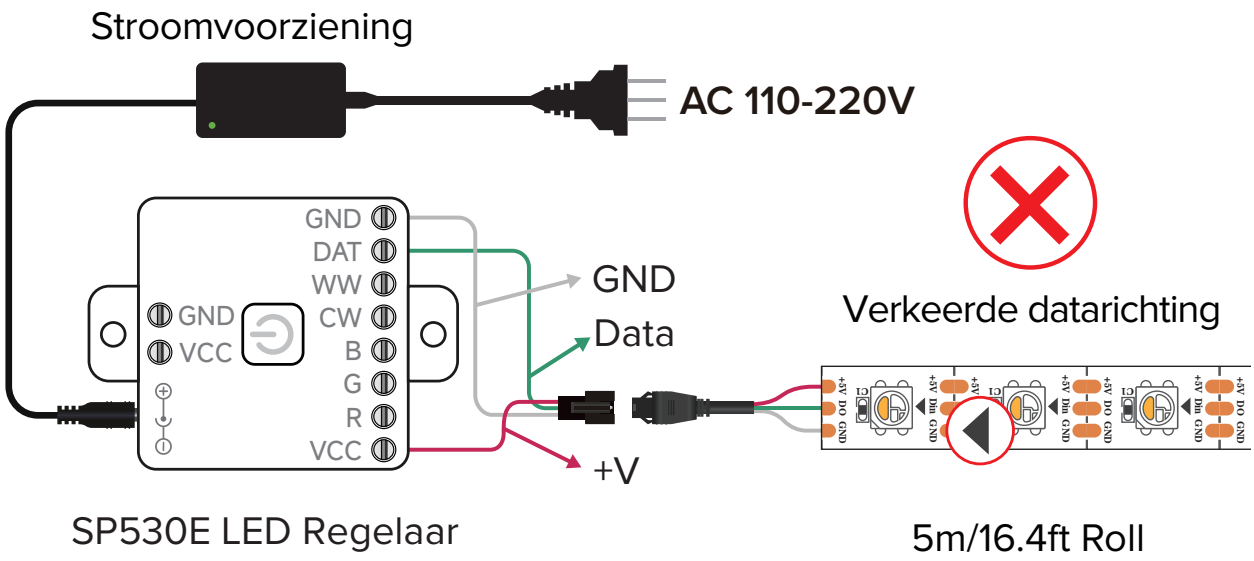
L-vormige connector









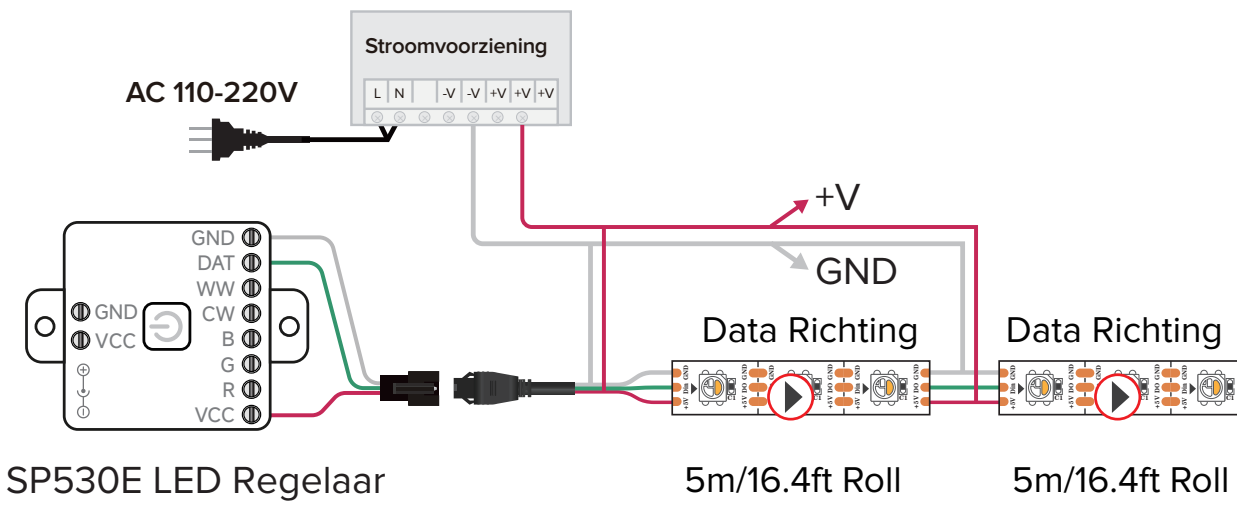


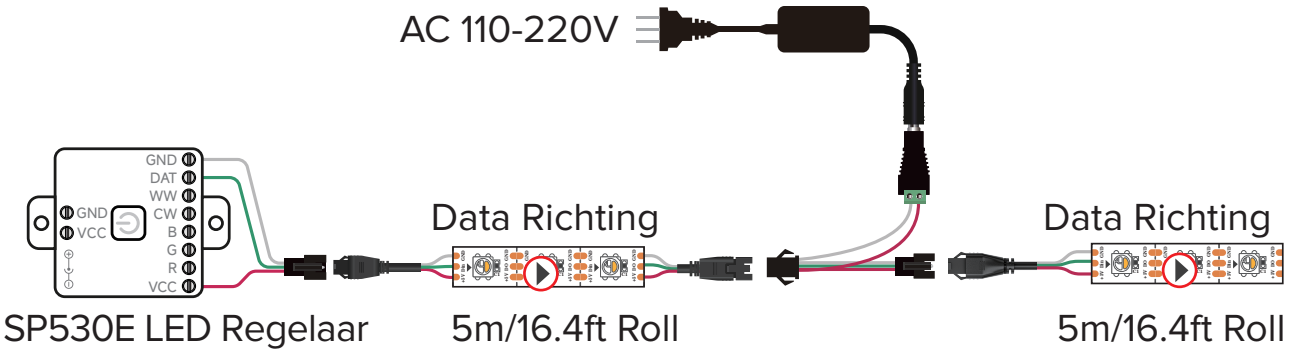
- Data Richting:

  De zwarte pijl op de FPCB (Flexibele Printplaat) geeft de richting van de dataflow aan. Sluit de bedrading strikt volgens de pijlrichting aan om correcte verlichting te garanderen.

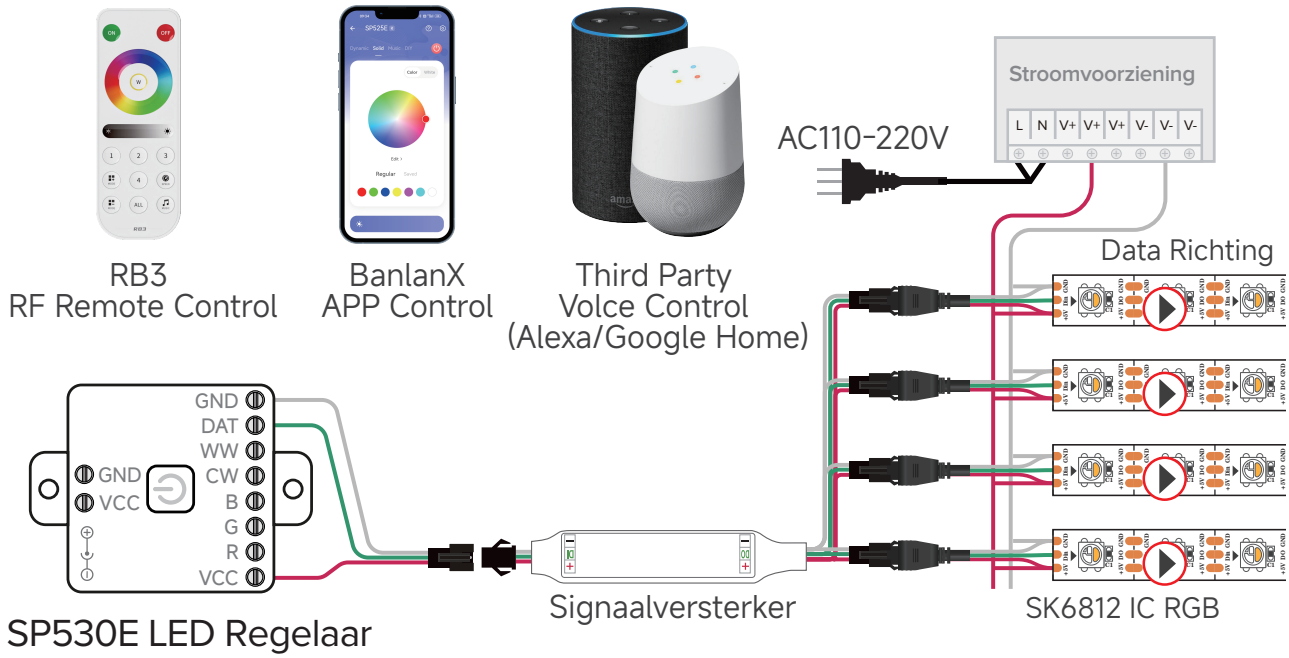
- De uitgangsspanning van de voeding moet overeenkomen met de stripspecificatie.
- Waarschuwing! Onjuiste spanning kan de strip doen doorbranden.

Serieschakeling & Spanningsaanvulling

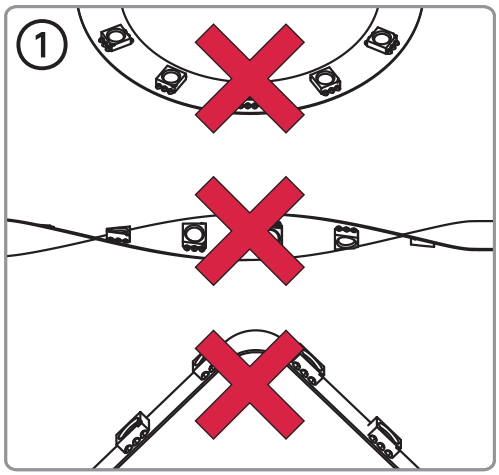




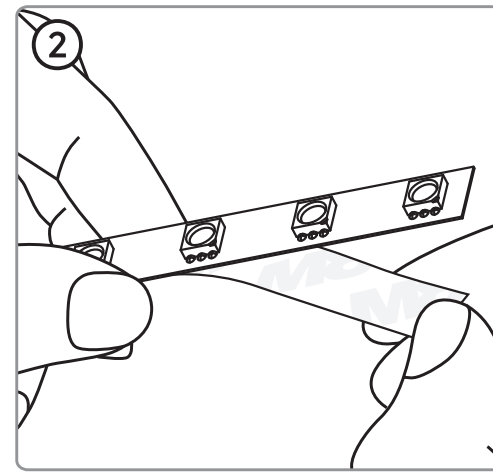
Parallelschakeling & Spanningsaanvulling



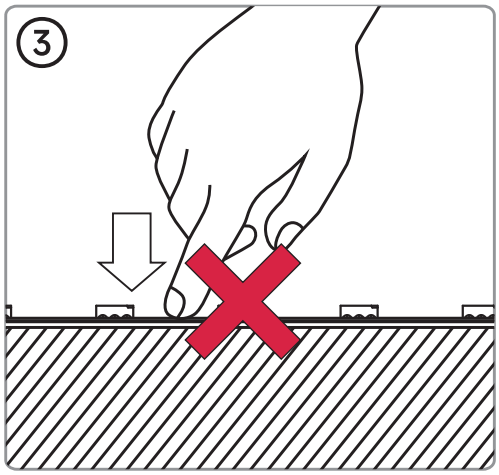
Installatie-opmerkingen



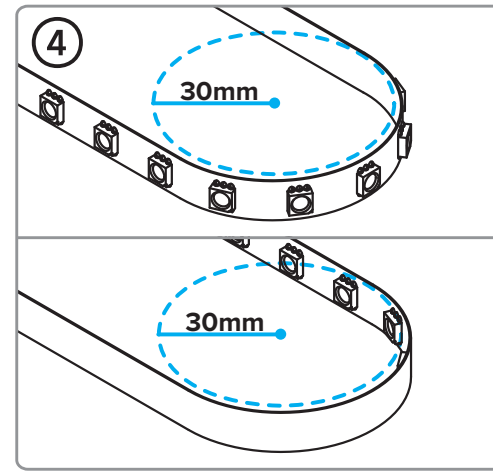
Buig, vouw of kreuk de LED-strip/tape niet in horizontale richting.



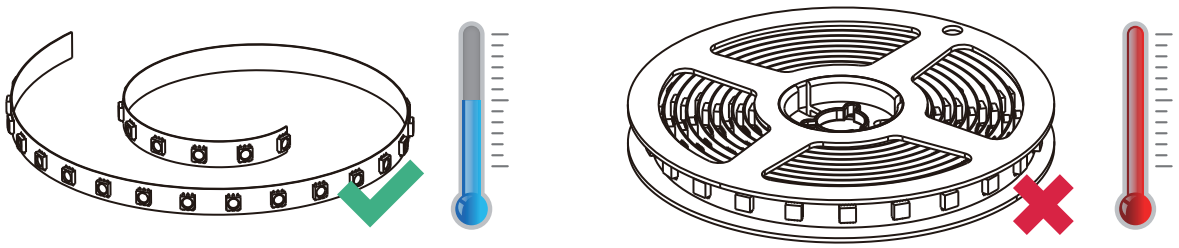
Trek de tape voorzichtig los, anders kan deze scheuren door te veel rek.



Neem de juiste antistatische maatregelen, druk zachtjes op de printplaat, niet op het oppervlak van de LED's, anders kan dit na verloop van tijd een chemische reactie veroorzaken.



Buig de LED-strip niet te veel om het circuit te verbreken, zelfs de strip werkt prima na het te veel buigen van het warme en koude contrast kan leiden tot disfunctioneren van de printplaat Buigradius>30mm (1.2in)



Voorzorgsmaatregelen voor gebruik

LED Strips voeren warmte niet goed af wanneer ze opgerold zijn.
Dit kan leiden tot schade aan de LED Strip.

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