

# Schröder

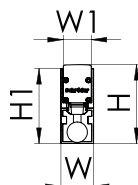
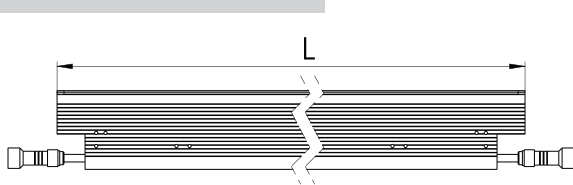
## ILUM MARK

ENG	INSTALLATION INSTRUCTIONS	ITA	ISTRUZIONI DI INSTALLAZIONE	NLD	INSTALLATIE INSTRUCTIES	DAN	INSTALLATIONSVEJLEDNING	HUN	TELEPÍTÉSI ÚTMUTATÓ
DEU	INSTALLATIONSANLEITUNG	POL	INSTRUKCJE MONTAŻU	RUS	Инструкции по установке	RON	INSTRUCȚIUNI DE INSTALARE	CHI	安装说明
FRA	INSTRUCTIONS DE MONTAGE	SPA	INSTRUCCIONES DE INSTALACIÓN	POR	INSTRUÇÕES DE INSTALAÇÃO	SWE	INSTALLATIONSANVISNING	UKR	Інструкції з монтажу
SRP	UPUTSTVA ZA INSTALACIJU	AR	تعليمات التركيب						



ta:50°C	IEC EN 60598				DC 24V	IK 10	IP 66/67
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### Assembly dimensions

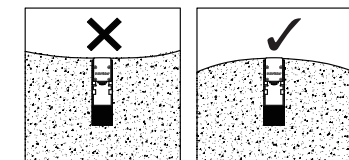
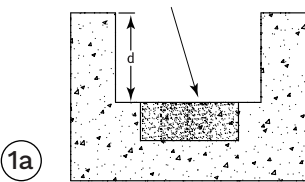


	L (mm)	W (mm)	W1 (mm)	H (mm)	H1 (mm)	Weight (kg)
ILUM MARK 1	500	35	30	84	80	1.42
ILUM MARK 2	1000	35	30	84	80	2.79

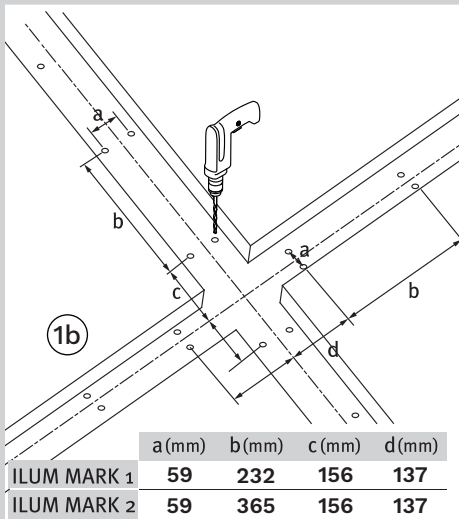
### Recessed ground installation

Always create a drainage area for water accumulation!

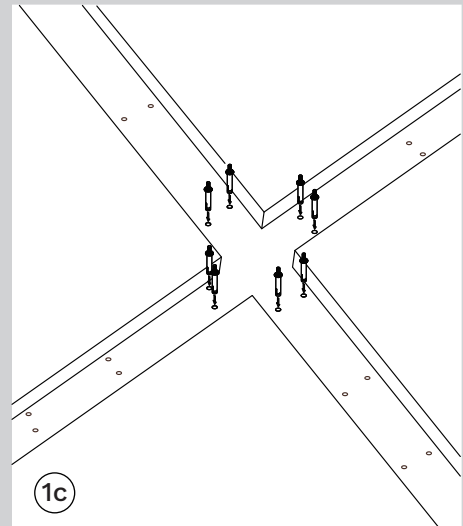
	d (mm)
ILUM MARK 1	84
ILUM MARK 2	84



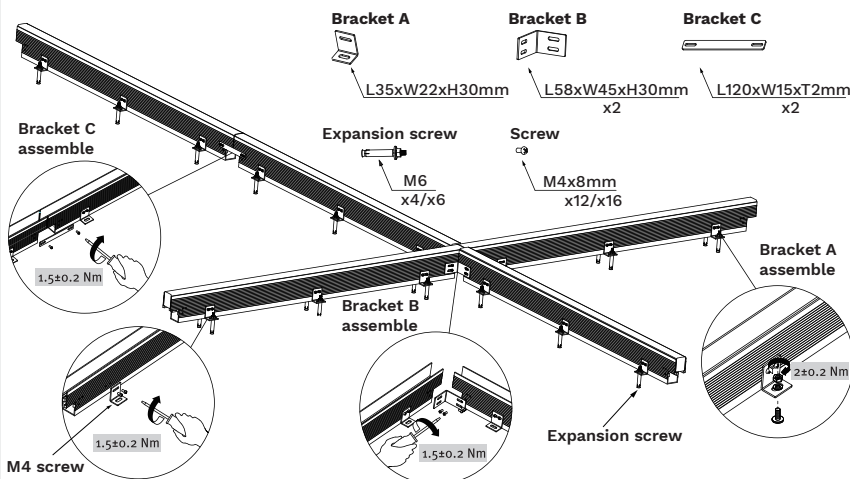
Reserve a space 475x120x75mm for driver box. Avoid to pour driver box into concrete.



	a (mm)	b (mm)	c (mm)	d (mm)
ILUM MARK 1	59	232	156	137
ILUM MARK 2	59	365	156	137



**Remark:** Do not install the luminaire into the recessed box at start! Recommended to use a cover cap for protection.



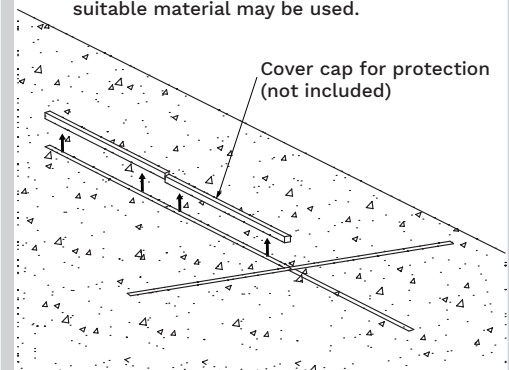
1. Use brackets A, B and C to assemble the recess box into the desired shape
2. Use expansion screw to fasten the recess box to the ground

3. Insert cover cap
4. Casting concrete
5. Remove cover cap after concrete dries

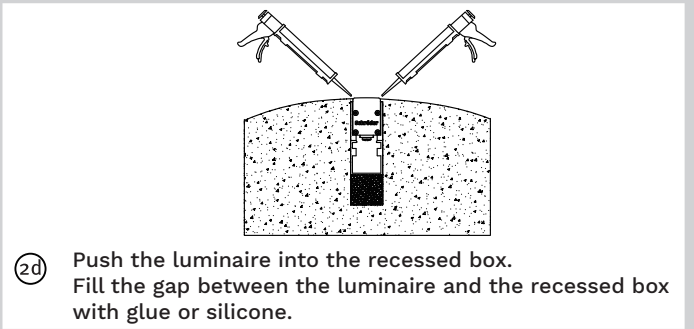
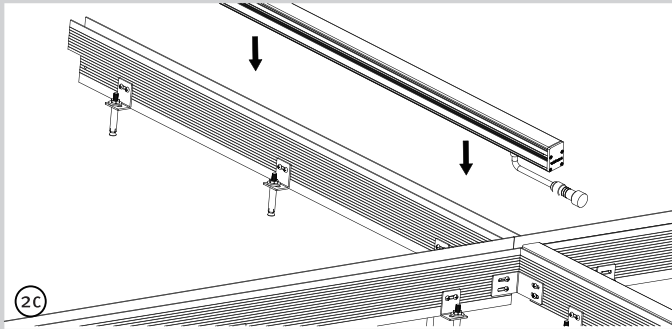
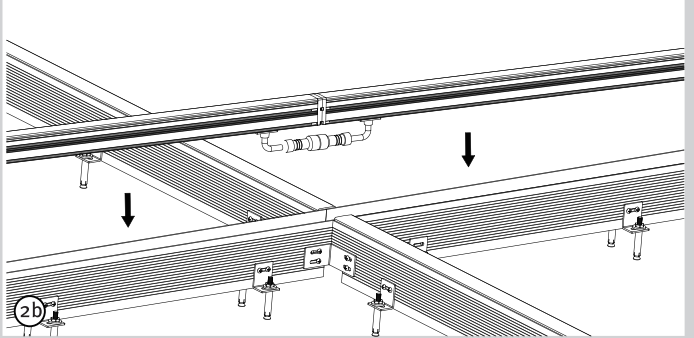
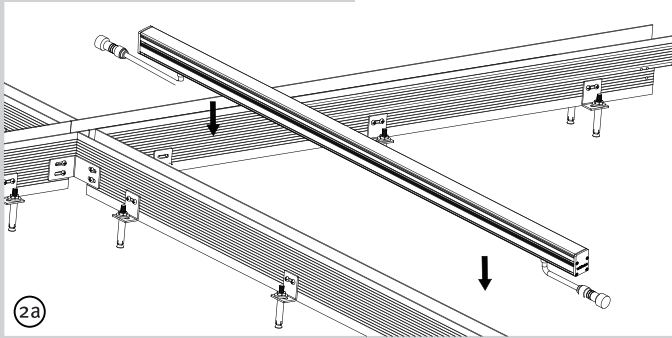
**Remark:**

During the installation process, it is recommended to use a suitable cover cap inside/on top of the recessed box to protect the internal surfaces from damages and contamination.

No specific accessories for cover cap, any suitable material may be used.

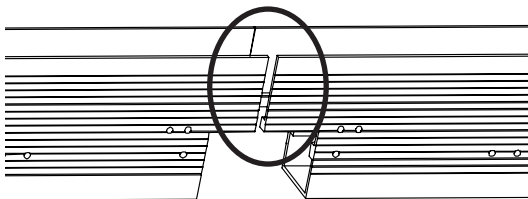


## Luminaire installation

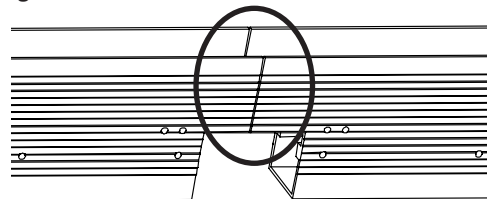


Make sure to put two recessed boxes together correctly, leaving the **small gap** on one side for the removal tool!

If the module is turned at 180°, the two boxes fit together perfectly, however **it won't be possible to remove the luminaires anymore**. Total length will also decrease, causing further issues.

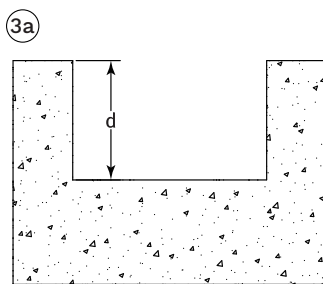


Correct installation

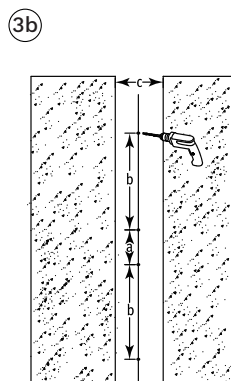


Incorrect installation

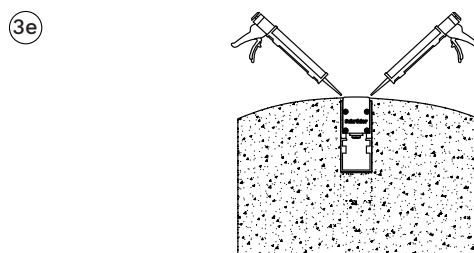
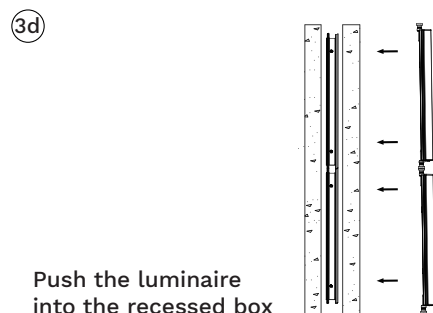
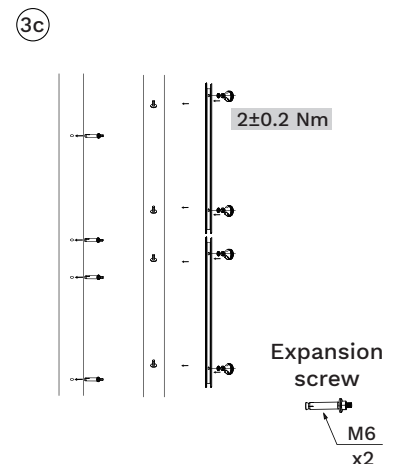
## Wall installation



	d (mm)
ILUM MARK 1	84
ILUM MARK 2	84



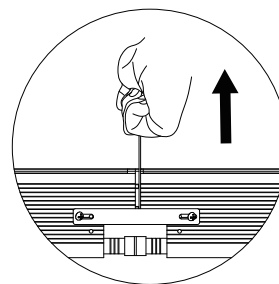
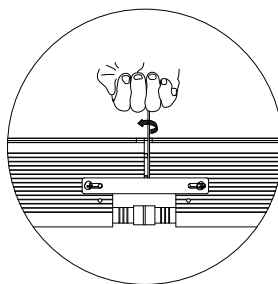
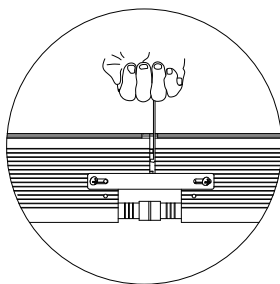
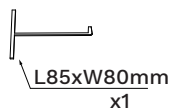
	a (mm)	b (mm)	c (mm)
ILUM MARK 1	254	246	40
ILUM MARK 2	360	640	40



Fill the gap between the luminaire and the recessed box with glue or silicone

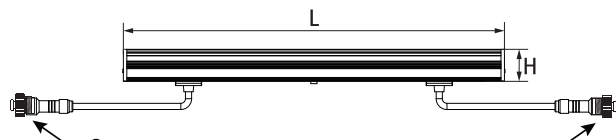
## Maintenance

### Removal tool



Use the J-shaped hook tool to remove the luminaire from the recessed box.

## Luminaire dimensions



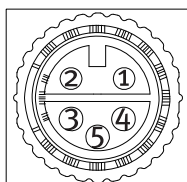
	L (mm)	W (mm)	H (mm)	Weight (kg)
ILUM MARK 1	500	30	40.8	0.82
ILUM MARK 2	1000	30	40.8	1.549



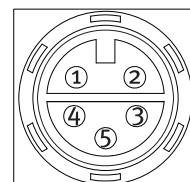
Closing caps provided by default, remove them just before making the electrical connection!

## DMX connector

INPUT  
Male



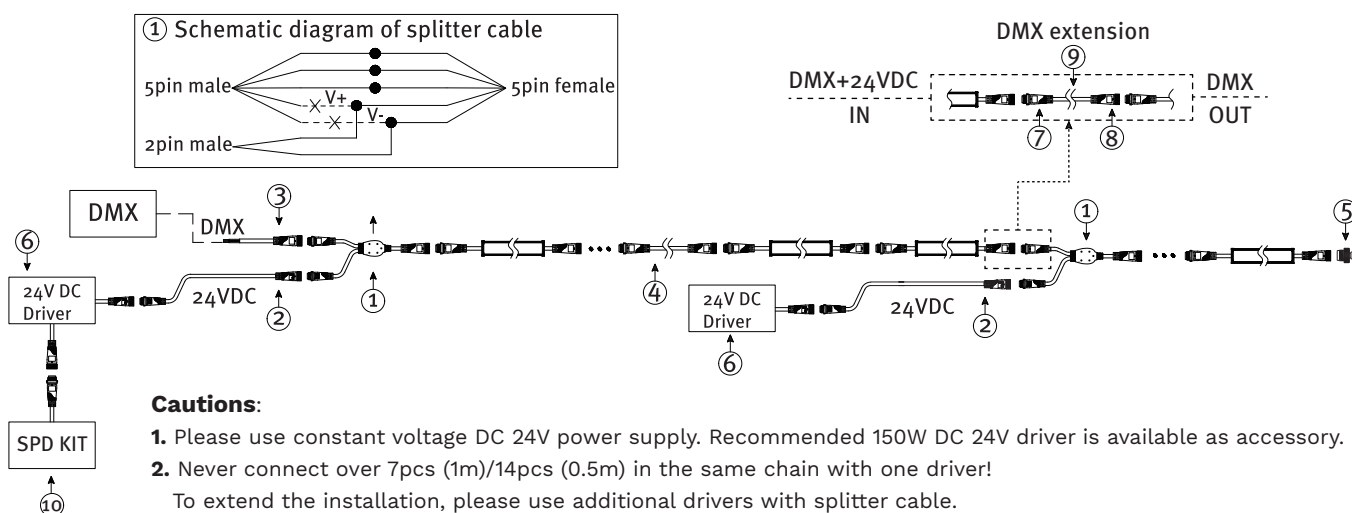
PIN	PIN CONNECTION	CABLE COLOR
1	V+	RED
2	V-	BLACK
3	DMX-	BLUE
4	DMX+	WHITE
5	DMX GND	YELLOW



OUTPUT  
Female

Specification	Male	Female
5P DMX connector	D18±0.5mm, L55±2mm	D18±0.5mm, L49±2mm






## System connection diagram - DMX



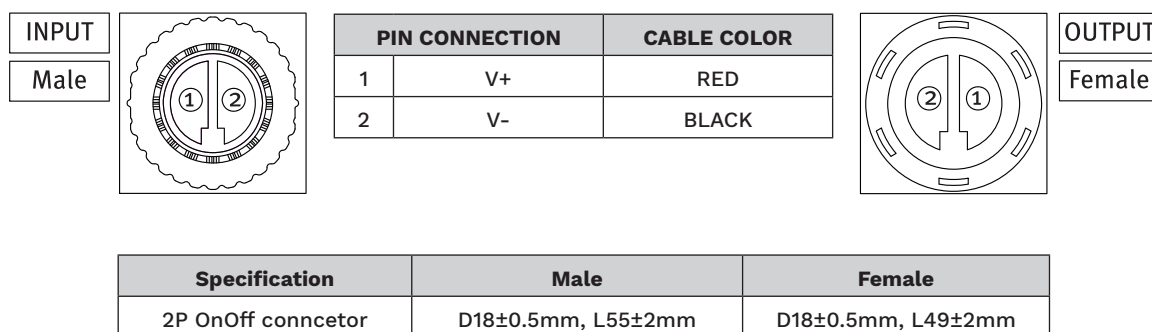
### Cautions:

- Please use constant voltage DC 24V power supply. Recommended 150W DC 24V driver is available as accessory.
- Never connect over 7pcs (1m)/14pcs (0.5m) in the same chain with one driver!  
To extend the installation, please use additional drivers with splitter cable.  
Use DMX extension accessories between the chains up to the limit of DMX chain.  
Max connection for 1 DMX chain is 42m (42pcs 1m or 84pcs 0.5m ILUM MARK).  
Data is only for reference. The specific quantity may vary according to different installation environments.
- Use a closing cap at female connector of the last luminaire.
- DMX extension: the cable connection must be placed in an IP protected junction box (min IP67), 24V DC is not carried over the DMX extension.
- SPK KIT: must be connected between mains and driver (Operating voltage range: 220-320V AC).
- The failure of the PCBA in one luminaire does not affect the proper work of the other luminaires in the chain.
- All the luminaires in the chain need to receive at least 20.5V in order to avoid visible flux drop.
- In case of 1m long ILUM MARK, the 11th luminaire in the chain will receive 22.5V from the power supply.

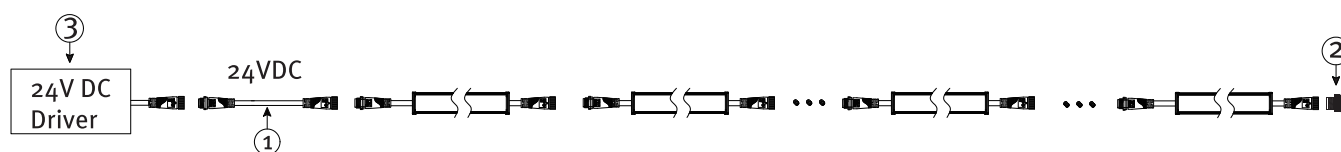
## DMX connection Accessories

- ① **Splitter cable**  5-pin Data/Power IP68 connector to 5-pin DMX/2-pin Power, 0.3m length
- ② **24V Extension cable**  2-pin IP68 connectors, 1 or 3 or 5m length
- ③ **DMX input cable**  5-pin IP68 connector to 5-pin bare ends, 3m length
- ④ **Extension cable**  5-pin IP68 connectors, 2 or 5m length
- ⑤ **Closing cap**  The closing cap can be used on both 2-pin and 5-pin cable
- ⑥ **Power supply:** recommended 150W DC 24V IP67 driver with IP68 connector with plastic enclosure
- ⑦ **DMX Extension Cable with male connector**
- ⑧ **DMX Extension Cable with female connector**
- ⑨ **Standard 3 core DMX cable** (recommended product: ProPlex PC224P\*) + 2x Junction box with terminals  
 - not part of ILUM MARK product, must be purchased locally (recommended products: Wiska SHARK 315 Gel joint\*\* or OBO T 60 M20\*\*\*)  
 \* <https://tmb.com/proplex-dmx-portable-cables/>  
 \*\* <https://www.wiska.co.uk/en/30/pde/10109265/shark-315w.html>  
 \*\*\* <https://www.obo.global/products/industrial-installations/junction-boxes/t-series/t60-junction-box-with-knock-out-entries-and-3-x-v-tec-vm20-locknuts.html>
- ⑩ **SPD KIT**

## Standard NoDim connector





## System connection diagram - NoDim



### Cautions:

1. Please use constant voltage DC 24V power supply. Recommended 150W DC 24V driver is available as accessory.
2. Never connect over 11pcs (1m)/22pcs (0.5m) in the same chain! Only one driver can be used for the same chain.
3. Use a closing cap at female connector of the last luminaire.

## NoDim connection Accessories

- ① **24V Extension cable**  2-pin IP68 connectors, 1 or 3 or 5m length
- ② **Closing cap**  The closing cap can be used on both 2-pin and 5-pin cable
- ③ **Power supply:** recommended 150W DC 24V IP67 driver with IP68 connector with plastic enclosure



- This lighting fixture must be installed, connected and tested by a qualified electrician.
- For safety reasons, always ensure that power supply is disconnected before installation or maintenance.
- Always ensure that each installation process step is fully completed.
- Don't drop or impact the luminaire during the installation process.
- Don't pull the wires.
- For safety reasons, always ensure that all of the screws are tightened correctly.
- Maximum surface temperature of 85°C , minimum static load capacity of 2t.
- In case of incorrect installation or improper use, the product warranty is not valid anymore.
- When using multiple power supplies, ensure that they are connected to the same phase and the same earth to minimize the risk of common mode voltage damage to the DMX drivers. If this is not feasible for any reason, please make use of opto isolation on the DMX bus before connecting the DMX splitter. Damages caused by this issue or non compliance with the above instructions will be your responsibility and will not be covered by Schröder warranty.
- For safety during the installation, wearing protective gloves is strongly recommended.

## DMX addressing

**ILUM MARK** supports auto addressing of the fixtures by using a 3-address DMX shift register.

Every zone of 25cm in a fixture takes the first 3 DMX addresses for R, G and B from the DMX-bus and passes the remaining data on to the next zone or next fixture.

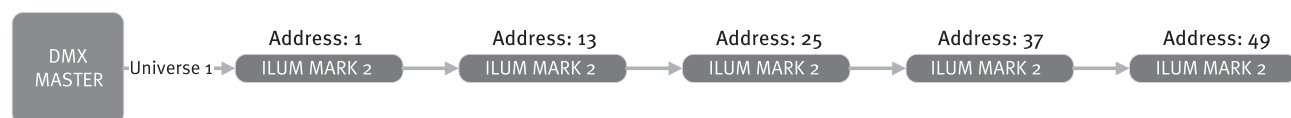
- |                      |   |         |   |                              |
|----------------------|---|---------|---|------------------------------|
| - ILUM MARK 1 (0.5m) | - | 2 zones | - | 6 DMX addresses per fixture  |
| - ILUM MARK 2 (1m)   | - | 4 zones | - | 12 DMX addresses per fixture |

This functionality implies that in every DMX universe that contains one or more ILUM MARK fixtures, the first ILUM MARK on the DMX-bus that receives a DMX-signal will automatically take addresses 1-2-3 for the first zone and so forth. If you have other fixtures that require DMX addressing and you want to be able to control them individually, you can either:

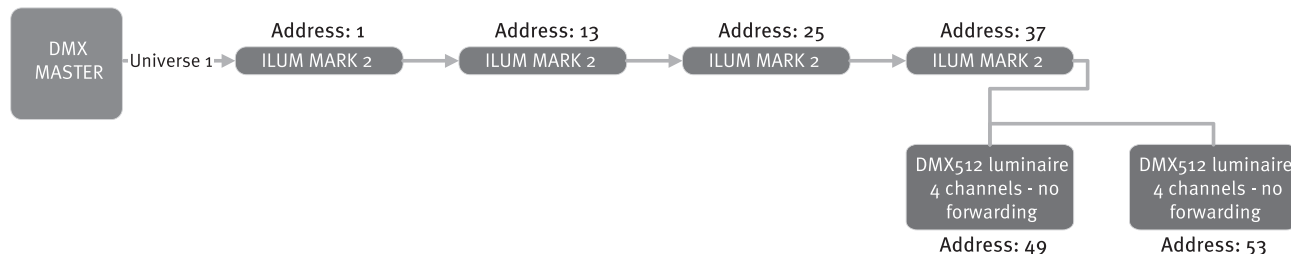
- Use another Universe in the DMX controller
- In the same Universe (as the ILUM MARK fixtures) you can:
  - a, Use a DMX splitter to separate the physical lines of ILUM MARK fixtures and other DMX controlled luminaires
  - b, Assign all other luminaires to an address that lies further than the last ILUM MARK (e.g. 10 fixtures of 1m each occupy DMX addresses 1 to 120 by using the shift register. The first one of the rest of the luminaires can be assigned to address no. 121 in order to control it separately.)

## Examples of DMX addressing

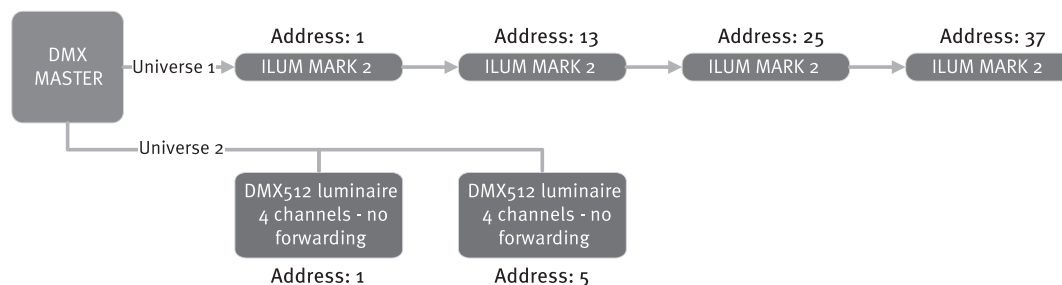
### Connecting 6pcs of ILUM MARK 2 (1m)



### Connecting 4pcs of ILUM MARK 2 (1m) and 2pcs DMX512 luminaires (4 CH) in the same universe



### Connecting 4pcs of ILUM MARK 2 (1m) and 2pcs DMX512 luminaires (4 CH) in different universes



<b>ENG</b>	<b>RISK GROUP 1</b> Connect to the power supply in accordance with national regulation. Installation may require advice from a qualified person. For indoor and outdoor use. The product must be grounded. Make sure the construction is strong enough to support the product.  The light source fitted in this luminaire shall only be replaced by a Schröder employee or agent or a similar qualified person.	<b>ITA</b>	<b>GRUPPO DI RISCHIO 1</b> Connettere all'alimentazione in accordo con i regolamenti nazionali. L'installazione può richiedere l'ausilio di personale qualificato. Per uso interno ed esterno. Il prodotto deve essere messo a terra. Assicurarsi che la struttura sia abbastanza solida per sostenere i prodotti.  La sorgente luminosa montata in questo apparecchio potrà essere sostituita esclusivamente da un addetto Schröder o da una persona parimenti qualificata.	<b>NLD</b>	<b>RISICOGROEP 1</b> Houd de nationale regelgeving in acht bij het aansluiten op de voedingsbron. Bij de installatie kan advies van een gekwalificeerd persoon benodigd zijn. Voor gebruik binnen en buiten. Het product moet geaard zijn. Wees er zeker van dat de constructie sterk genoeg om de producten te ondersteunen.  De lichtbron in dit verlichtings toestel zal alleen vervangen worden door een medewerker, agent of vergelijkbaar gekwalificeerd persoon van Schröder.	<b>TUR</b>	<b>RISK GRUBU 1</b> Güç kaynağına ulusal mevzuata uygun şekilde bağlayınız. Kurulum nitelikli bir kişinin gözetiminde veya tavsiyesiyle yapılabilir. İç ve dış mekan kullanımı içindir. Ürün topraklanmalıdır. Yapının bu ürünleri destekleyebilecek yeterli güce sahip olduğundan emin olun.  Bu armatüre yerleştirilmis olan ışık kaynağı, sadece bir Schröder çalışanı veya agentisi veya benzer nitelikli bir kişi tarafından değiştirilebilir.
<b>DEU</b>	<b>RISIKOGRUPPE 1</b> Schließen Sie die Spannungsversorgung gemäß den nationalen Vorschriften an. Die Installation kann die Beratung durch eine qualifizierte Person erfordern. Geeignet für die Innen- und Außenbeleuchtung. Achten Sie darauf, dass das Produkt geerdet ist. Stellen Sie sicher, dass der Aufbau in jeder Hinsicht eine ausreichende Festigkeit aufweist, um die Produkte zu unterstützen.  Die eingebaute Lichtquelle in der Leuchte sollte nur von einem Schröder Mitarbeiter oder Vertreter oder einer ähnlichen qualifizierten Person ersetzt werden.	<b>POL</b>	<b>GRUPA RYZYKA 1</b> Podłączenie do sieci zasilającej wykonać zgodnie z krajowymi przepisami. Przewód ochronny powinien być właściwie podłączony. Oprawy mogą być montowane tylko przez wykwalifikowane osoby posiadające odpowiednie uprawnienia elektryczne. Oprawy do zastosowania wewnętrzznego i zewnętrznego. Przed montażem upewnić się, że konstrukcja do której mocuje się oprawę jest odpowiednio wytrzymała.  Źródło światła zamontowane w tej oprawie może być tylko wymienione przez pracownika Schröder lub przez inną wykwalifikowaną osobę.	<b>RUS</b>	<b>ГРУППА РИСКА 1</b> Подключение к источнику питания в соответствии с национальными правилами. Установка может потребовать консультацию у квалифицированного специалиста. Для эксплуатации внутри и вне помещений. Продукт должен быть заземлен. Убедиться, что конструкция достаточно прочная, чтобы выдержать вес светильника.  Источник света, установленный в этом светильнике, должен заменяться только сотрудником Schröder, или специалистом аналогичной квалификации.	<b>UKR</b>	<b>ГРУПА РИЗИКУ 1</b> Підключення до електромережі відповідно до вимог локальних нормативних документів. Установка може потребувати консультації кваліфікованого спеціаліста. Світильник для зовнішнього та внутрішнього освітлення. Світильник має бути заземлений. Перевіритися, що конструкція достатньо прочна, щоб витримати вагу світильника.  Джерело світла, встановлене в цей світильник, підлягає заміні лише працівником чи агентом компанії Шредер або аналогічним кваліфікованим фахівцем.
<b>FRA</b>	<b>RISQUE GROUPE 1</b> Connectez l'alimentation en respect de la réglementation nationale. L'installation nécessite l'intervention d'une personne qualifiée. Destinée à un usage en intérieur ou en extérieur. Le produit doit être raccordé à la terre. Assurez-vous que la construction est assez solide pour supporter le poids du produit.  La source de lumière intégrée dans ce luminaire peut uniquement être remplacée par un employé de Schröder, un agent ou une autre personne qualifiée.	<b>SPA</b>	<b>GRUPO DE RIESGO 1</b> Conectado a la fuente de alimentación de acuerdo con la reglamentación nacional. La instalación puede requerir el asesoramiento de personal cualificado. Para instalación interior y exterior. El producto debe estar conectado a tierra. Asegúrese de que la fijación es lo suficientemente fuerte como para soportar los productos.  La fuente de luz instalada en esta luminaria sólo puede ser substituida por Schröder o un agente cualificado.	<b>POR</b>	<b>GRUPO DE RISCO 1</b> Ligue a fonte de alimentação em conformidade com a regulamentação nacional. A instalação deve ser executada por técnico qualificado. Para exterior e interior. O produto deve ser ligado à terra. Certifique-se que a estrutura de montagem tem a resistência necessária para suportar os produtos.  A fonte de luz montada nesta luminária só pode ser substituída por um funcionário ou agente da Schröder ou por profissional qualificado* do autorizado para o efeito.	<b>SRP</b>	<b>GRUPA RIZIKA 1</b> Povezati za izvorom struje u skladu sa nacionalnim propisima. Pri instalaciji može biti potreban savet kvalifikovane osobe. Za unutrašnju i spoljašnju upotrebu. Proizvod mora biti uzemljen. Obezbediti dovoljno čvrstu konstrukciju za montažu proizvoda.  Zamenu svetlosnog izvora ugrađenog u ovu svetiljku će izvršiti samo Schröder-ov radnik, ovlašćeni predstavnik ili slična stručna osoba.
<b>CHI</b>	<b>风险群体 1</b> 根据国家相关规定连接电源。  该灯具内的光源仅可由施莱德员工、指定代理商或具备类似资质的人员进行更换。	<b>VIE</b>	<b>RỦI RO NHÓM 1</b> Kết nối với nguồn điện cung cấp điện phù hợp với quy định quốc gia. Việc lắp đặt có thể yêu cầu tư vấn từ chuyên viên. Đối với ứng dụng chiếu sáng trong nhà và ngoài trời, sản phẩm này phải được nối đất. Cần đảm bảo rằng việc trang bị thiết bị hỗ trợ chằng chằng điện và sét lan truyền đủ mạnh cho sản phẩm.  Nguồn sáng được trang bị bên trong bóng đèn này chỉ được thay thế bởi nhân viên Schröder hoặc đại lý hoặc người có trình độ tương đương.	<b>HUS</b>	<b>KOCKAZATI CSOPORT 1</b> Csatlakoztassa a berendezést a nemzeti előírásoknak megfelelően. A telepítést csak szakképzett személy végezheti. Beltéri és kültéri használathoz. A berendezés védő földelésre minden esetben kötelező. Győződjön meg róla, hogy a szerkezet megfelel a termék fogadására.  A lámpatestbe szerelt fényforrás (LED-modul) cseréjét csak a gyártó, annak szervíz szolgálata, vagy erre kiképzett szakember végezheti!	<b>SLK</b>	<b>RIZIKOVÁ SKUPINA 1</b> Zapojení svítidla je nutno provést v souladu s národními předpisy. Zařízení může být instalováno pouze kvalifikovanou osobou. Pro venkovní i vnitřní použití. Výrobek musí být uzemněn. Ujistěte se, že konstrukce nesoucí svítidlo je dostatečně pevná vzhledem ke hmotnosti produktu.  Výměna světelného zdroje (LED modulu) je možná jen výrobcem, resp. len mi výskolenými odborníkmi!

