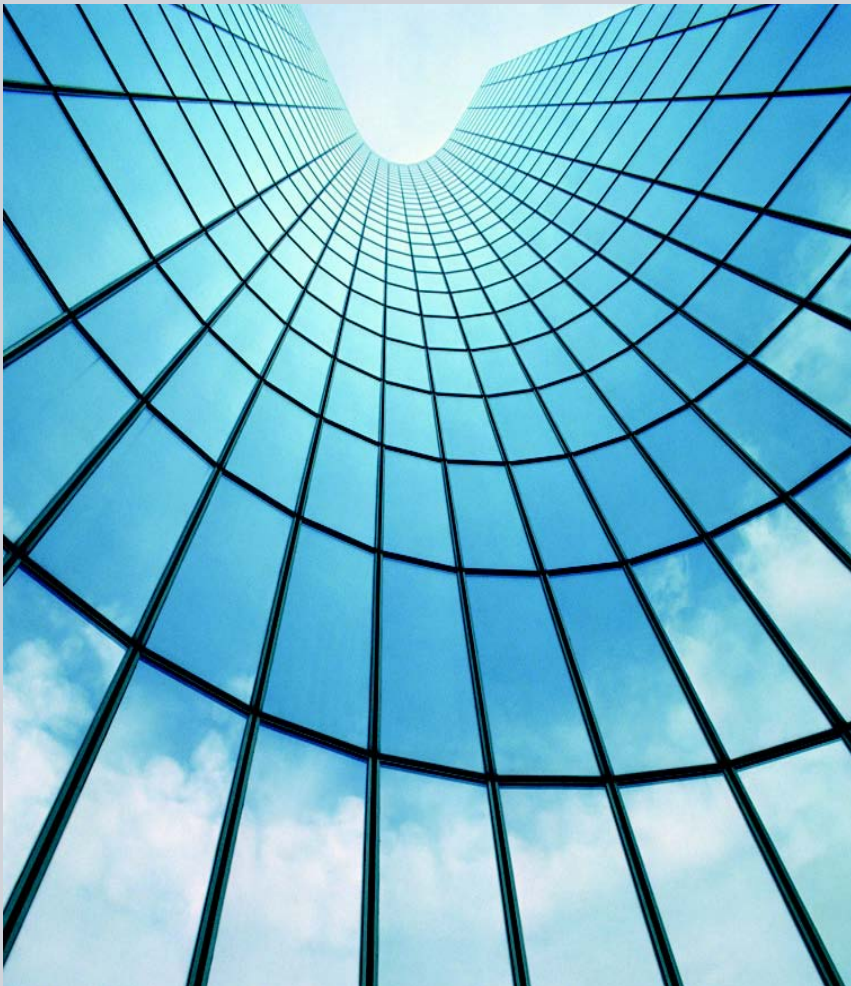




The world's only open STANDARD
for home and building control!

Home and Building Control

Overview of content



- KNX Concept
- DALI
- Building Application
- Infrastructure Application
- Home Application

KNX CONCEPT - Worldwide STANDARD for Home and Building Control



- Definition of **testing and quality standards** via working and expert groups (KNX Specifications)
- **Technical Hotline** for manufacturers developing KNX compatible devices
- Issue of **KNX Trademark** on the basis of specifications through KNX Certification
- National and International **Standardization** Activities
- Promotion of **training** measures by certification of training centers
- **Promotional activities** (web site, trade fairs, brochures, ...)
- Encouraging forming of **national groups**
- **Scientific Partnership** for Technical institutes
- Rest specification work/promotion/certification of **legacy systems**

KNX International Standard

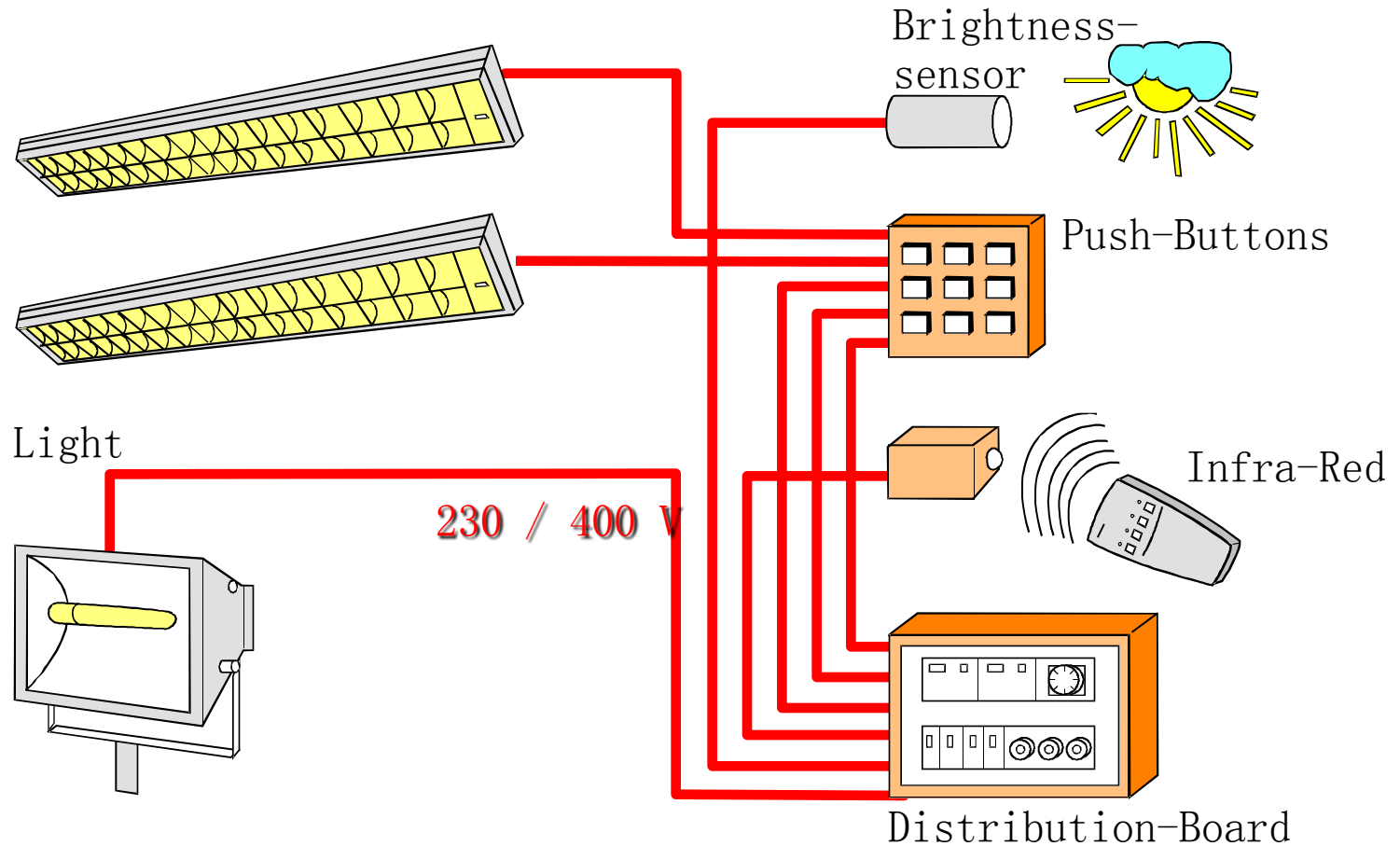


- Approved the KNX technology as the International Standard ISO/IEC 14543-3 in 2006.
- Approved the KNX technology as the European Standard EN 50090 in 2003.
- Approved the KNX technology as EN 13321-1 (as a mere reference to EN 50090) and EN1332-2 (KNXnet/IP) in 2006
- Approved the KNX technology as the Chinese Standard GB/Z 20965 in 2007
- Approved the KNX technology as the US Standard ANSI/ASHRAE 135 in 2005

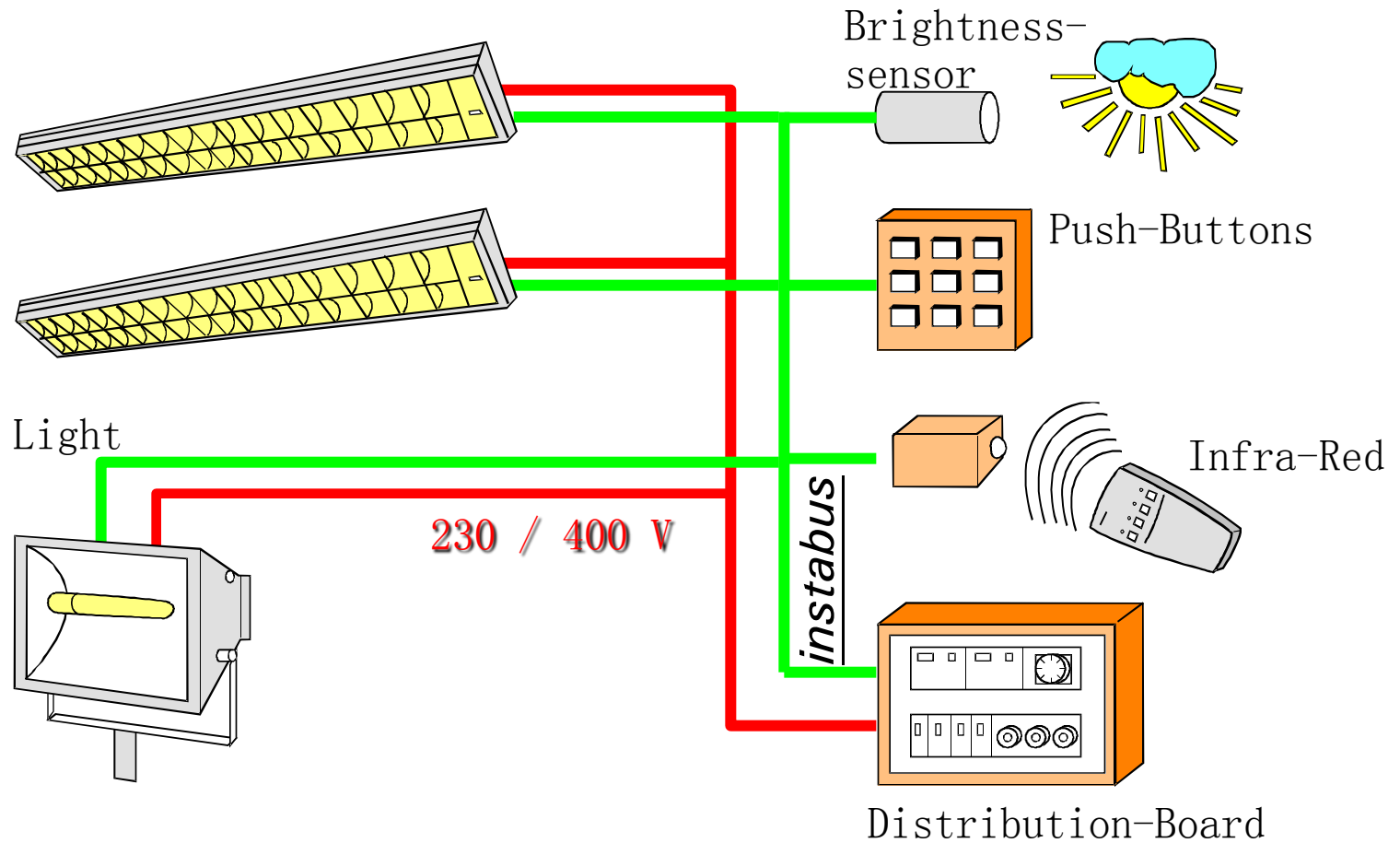
Reference

- **more than 10,000 registered and certified products (including legacy solutions)**
- **more than 100 manufacturers**
- **more than 90 recognised training schools**
- **more than 5 European test sites**
- **more than 80,000 implemented projects**
- **more than 20 million installed products**

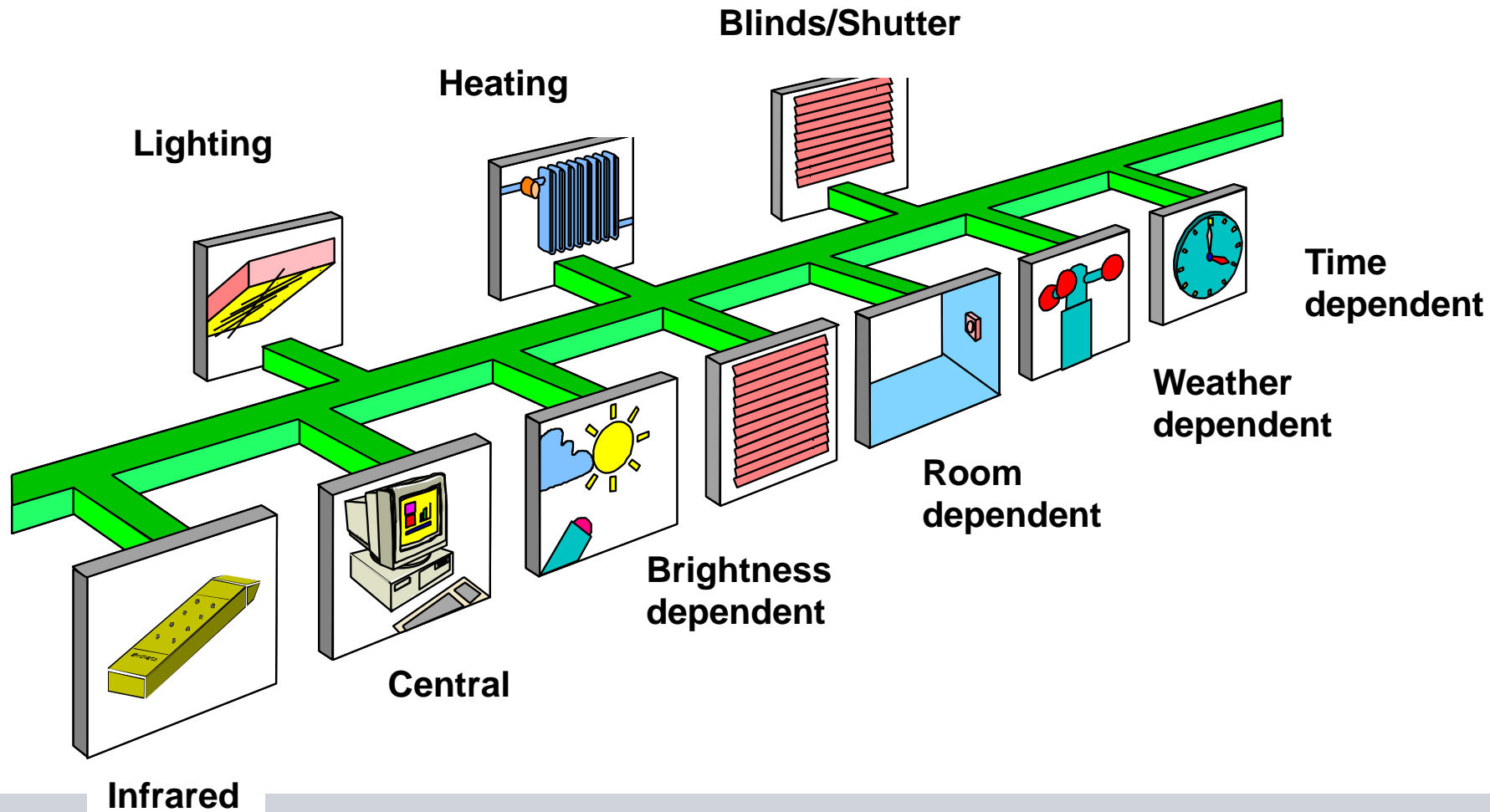
Conventional: Confusing, rigid wiring



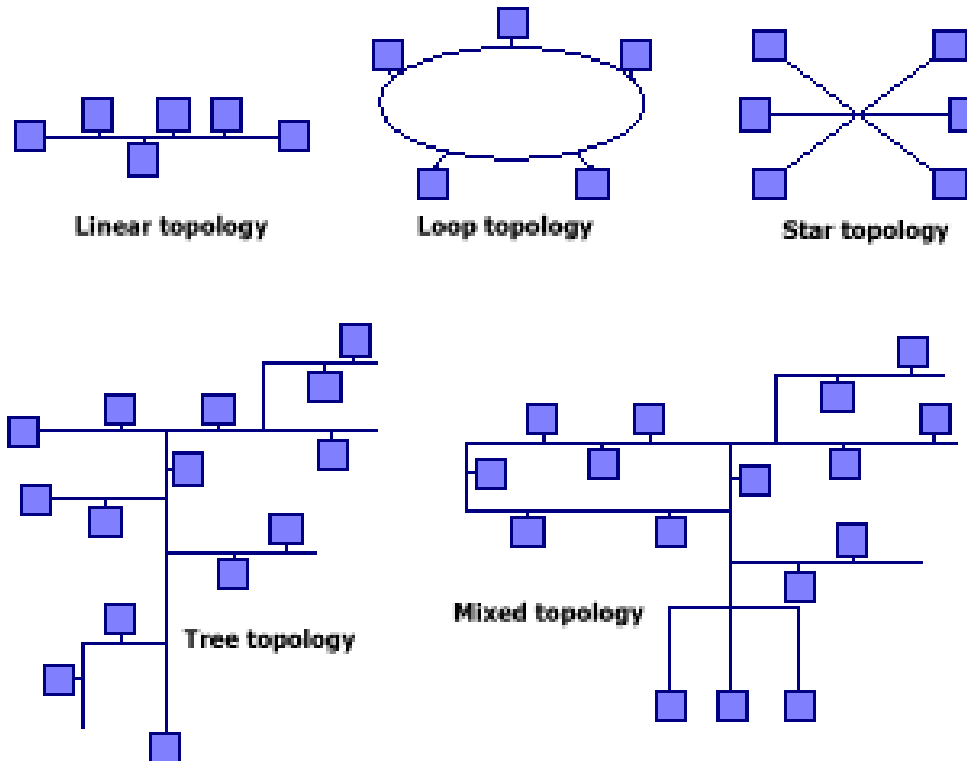
KNX: Simple wiring



EIB/KNX – Technology



Network wiring without restrictions



Standard Tool

ETS3 Tester

starter version without possibility to access the bus.

ETS3 Starter

for users, who did not participate to a certified training,
version limited to installations with maximum 64 devices.

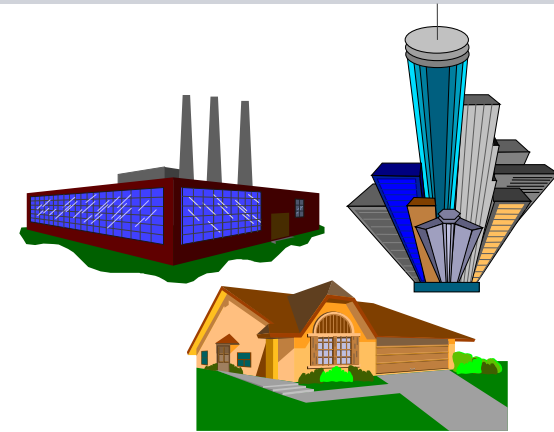
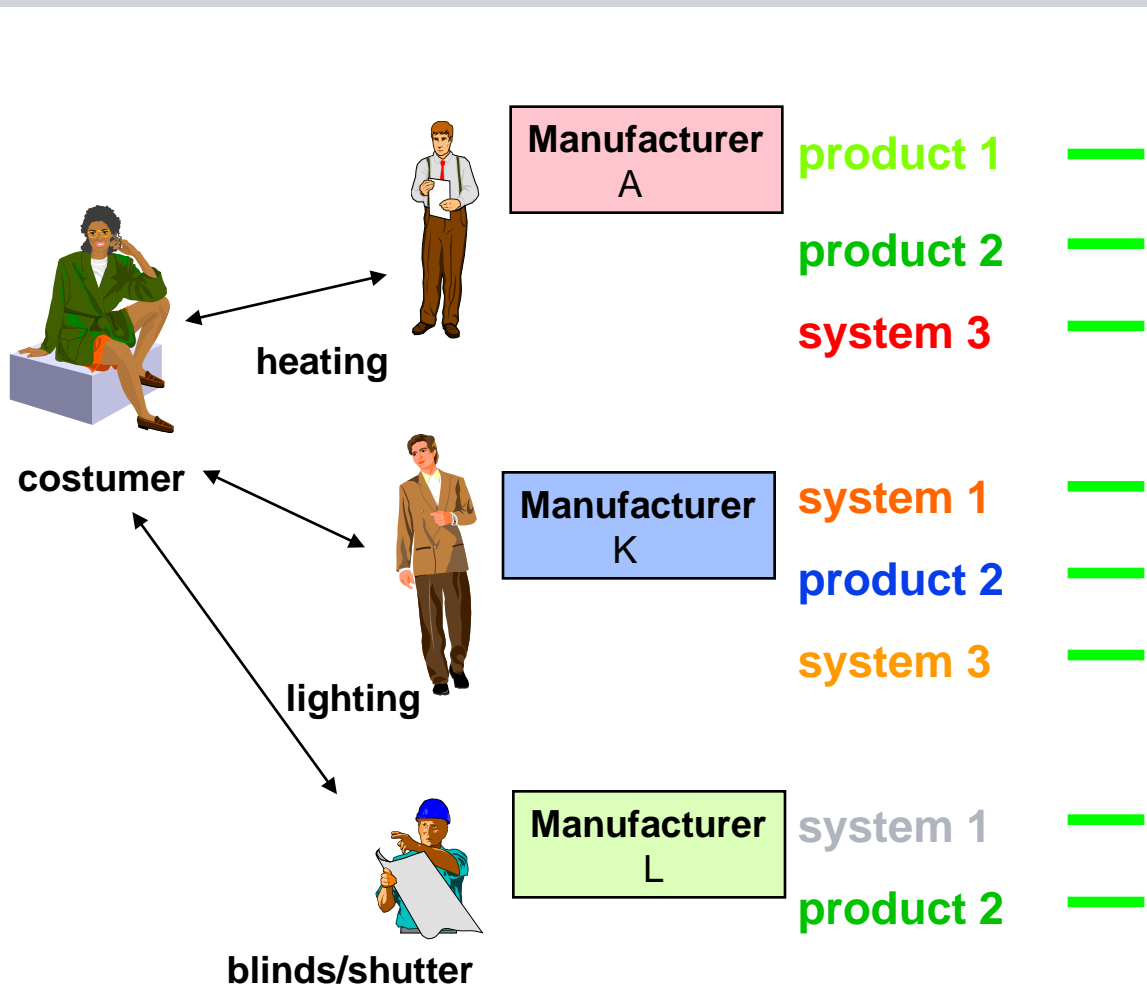


ETS3 Professional

for users with certified training, version without limitations.



Multi Vendor



- simple
- economical
- clear
- flexible

KNX certified partner



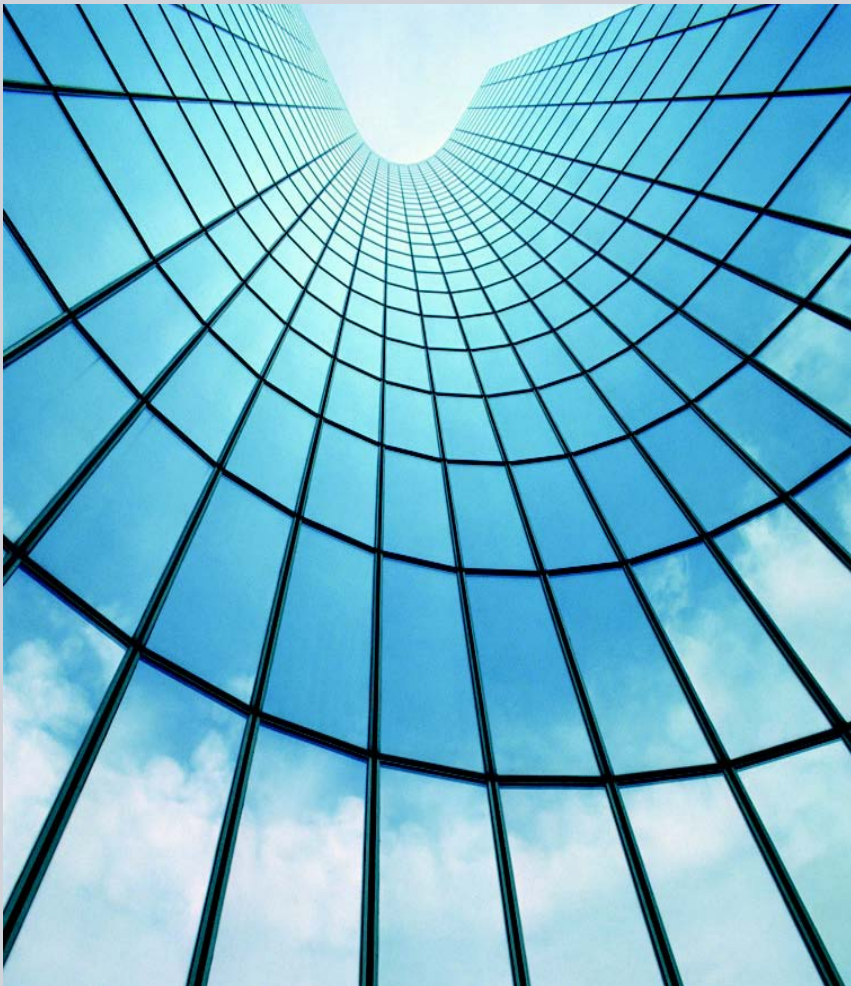
Easy to find partner anywhere in the world

KNX Partners result

Limited to Hong Kong Ordered by company (click headers to order)

[Search again](#)

Info	Company	(type Company or Lastname) Search	Name	Country	Zip + City
More info			Lee Man Sing Michael	Hong Kong	Hong Kong
More info	Easy System Company Ltd.		Kin Hong Wong	Hong Kong	00852 Hong Kong
More info	Hager Electro Ltd		Chan Cherish	Hong Kong	Tsim Sha Tsui Kowloon
More info	LIVING TECH LIMITED		Yeung KaHo	Hong Kong	Hong Kong.
More info	Nixon Technology Company Ltd		Simon Leung	Hong Kong	N/A Hong Kong
More info	Passion Living Accessories Ltd		Wong Thomas	Hong Kong	Hong Kong
More info	Schneider Electric (Hong Kong) Limited		Ip Man Ming	Hong Kong	Hong Kong
More info	Schneider Electric (Hong Kong) Limited		Leung Chun Yip	Hong Kong	Hong Kong
More info	Schneider Electric Asia Pacific Limited		Yeung William	Hong Kong	Hong Kong
More info	Siemens Ltd.		Wang Peter	Hong Kong	Kwun Tong
More info	The Hong Kong Polytechnic University		Kai Tai Yung	Hong Kong	Hung Hom, Kowloon
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Digital Addressable Lighting Interface (DALI)



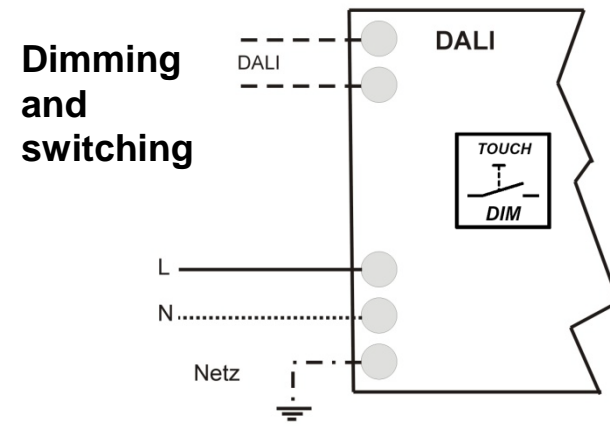
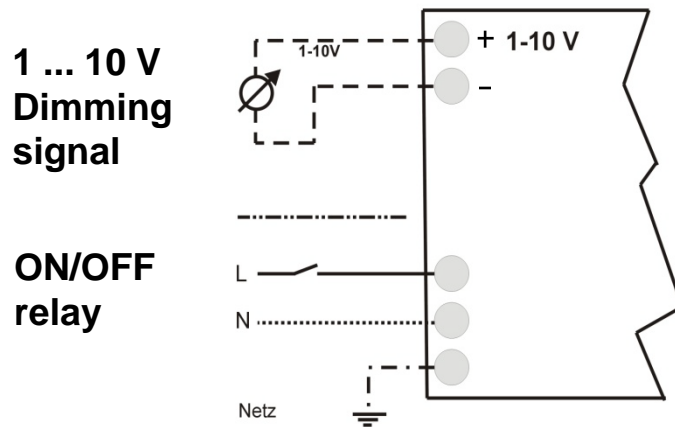
*

* Trade name of the DALI Working Group

- **Standard: EN 60929: 2006-11** "AC and/or DC-supplied electronic control gear for tubular fluorescent lamps – Performance requirements"
- **Standard series: IEC 62386**
"Digital addressable lighting interface"
(work in process)

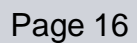
Advantage:
Bidirectional communication
enables, for example,
the reporting of lighting
equipment failures

Digital Addressable Lighting Interface (DALI) Comparison with 1 ... 10 V



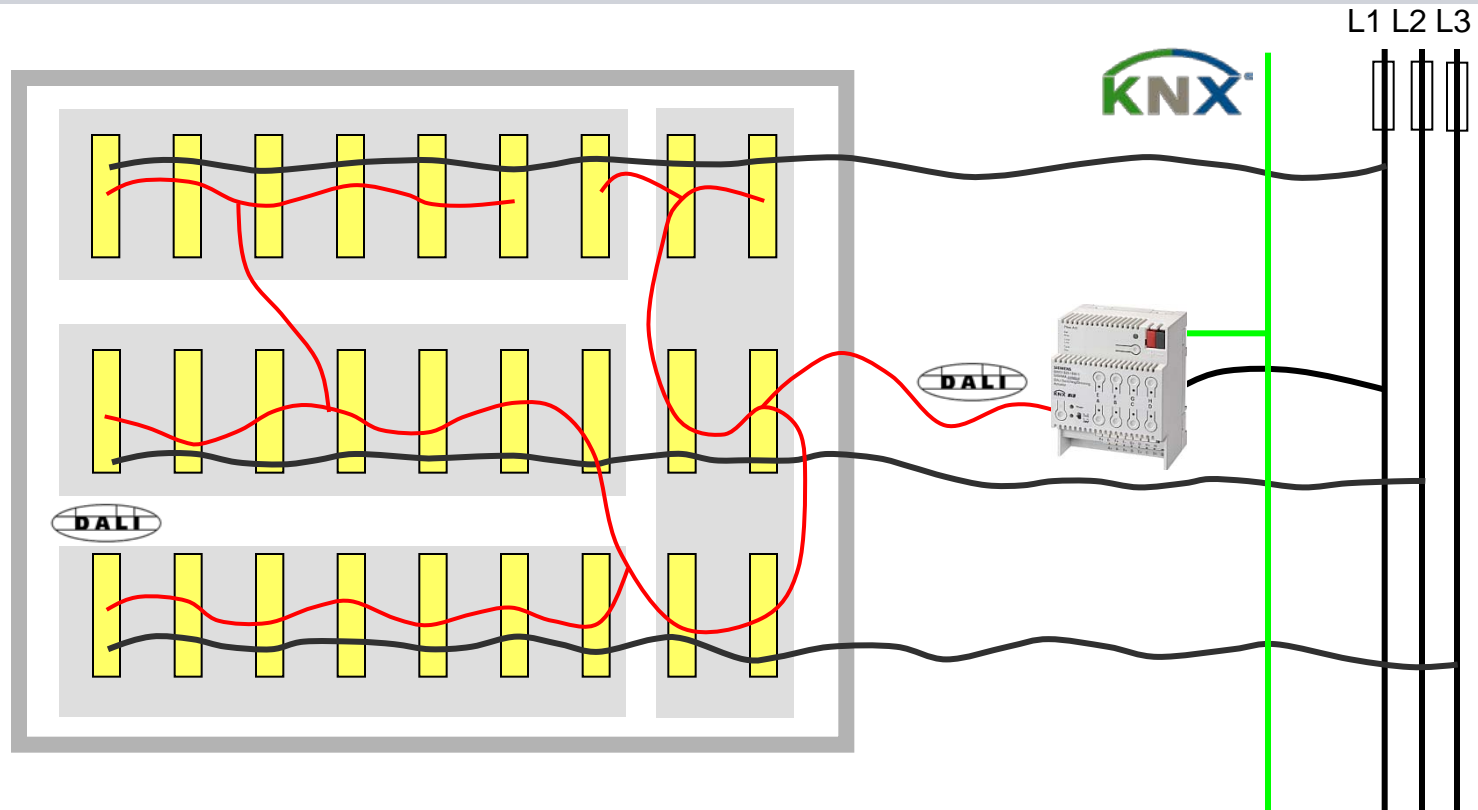
1 ... 10 V - ECG

 - ECG



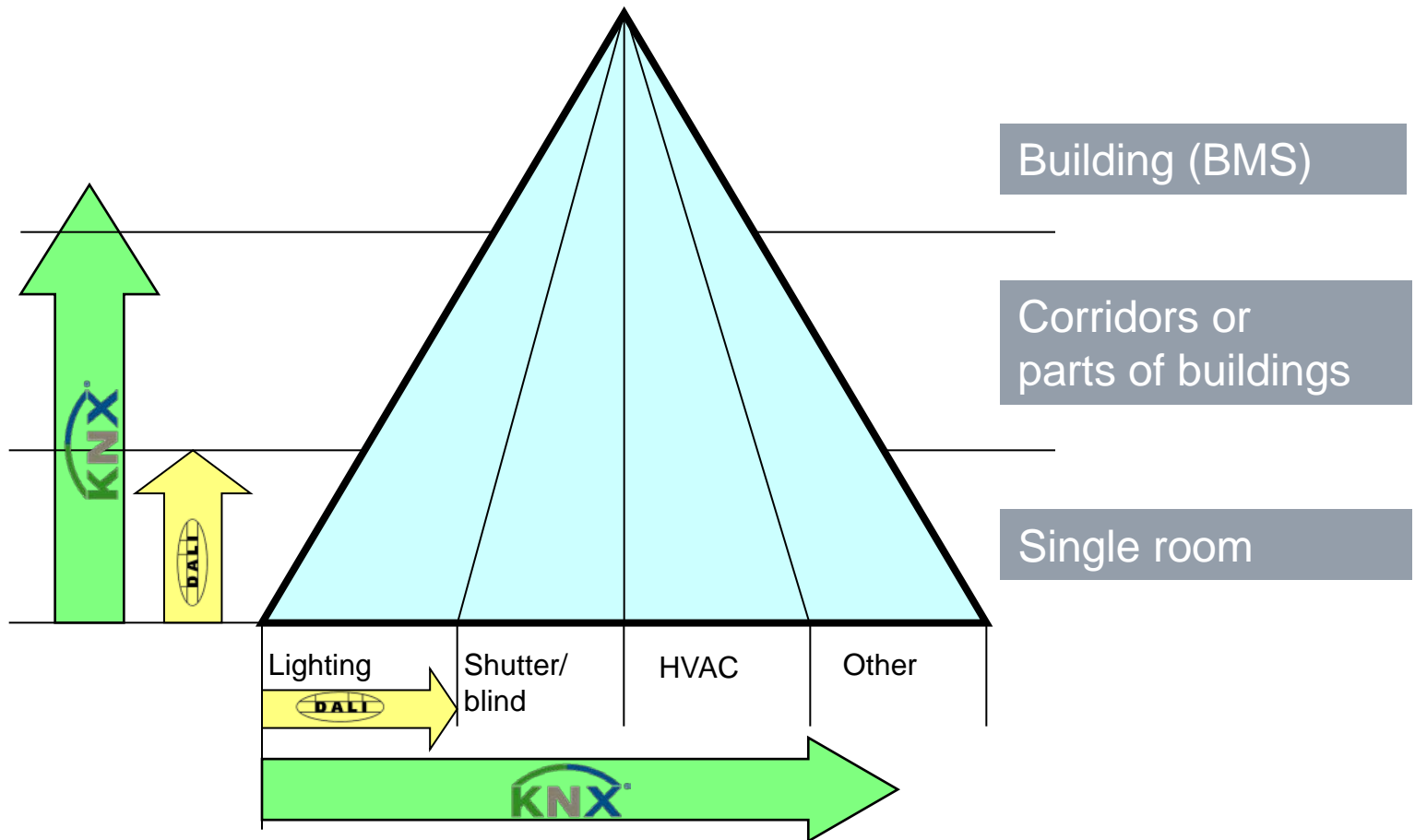
DALI principle

Installation notes for the control line

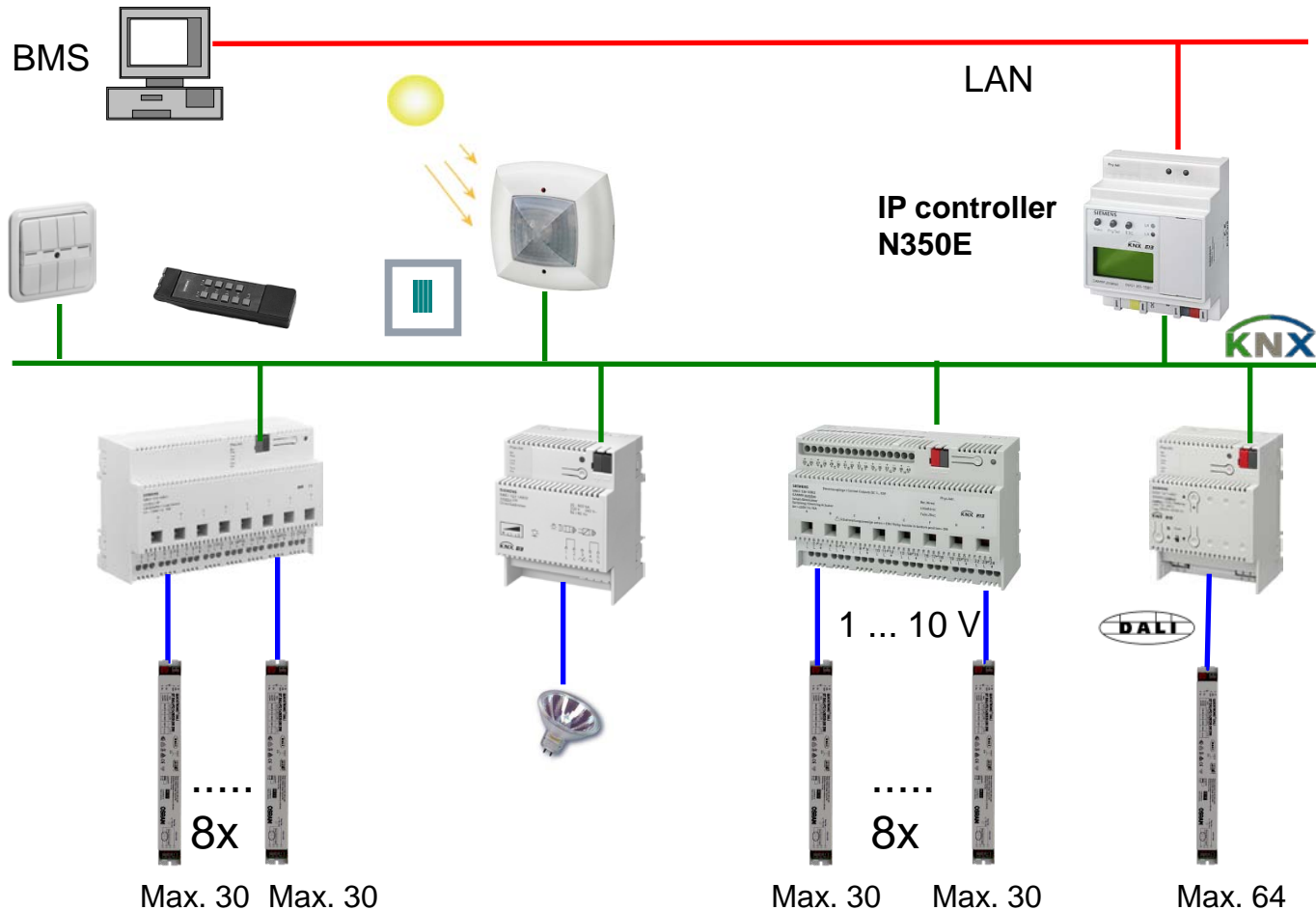


- Up to 64 DALI ECGs per control line
- Control line, free topology, (no loop), max. 300 m with 1.5 mm²
- Types of addressing: All, by groups, individually

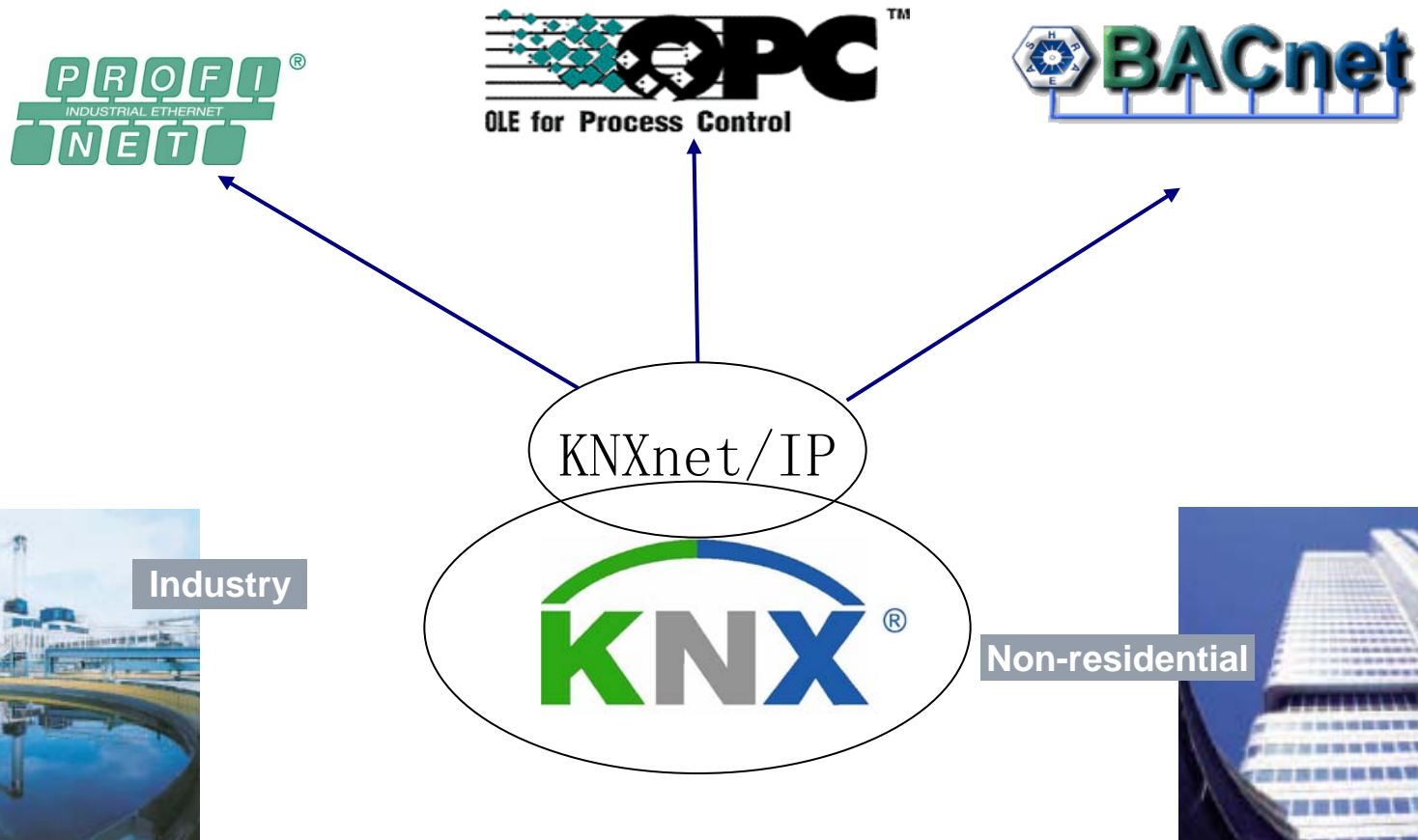
Positioning of KNX and DALI in building systems and application fields



Presence-dependent lighting control



Integration into building management and facility management



- KNX Concept
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**Time-dependent
lighting control**

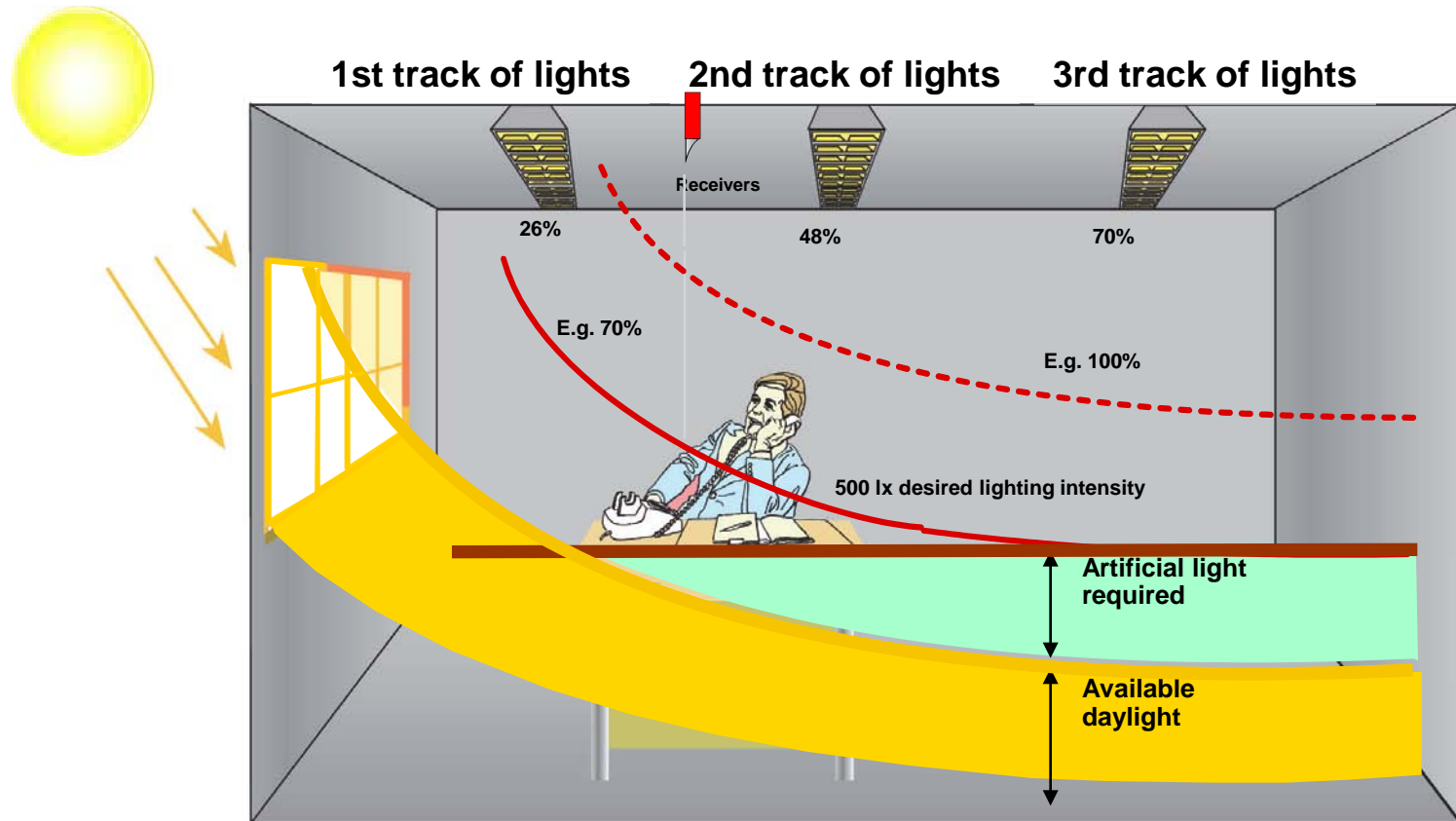


**Daylight-dependent
lighting control**

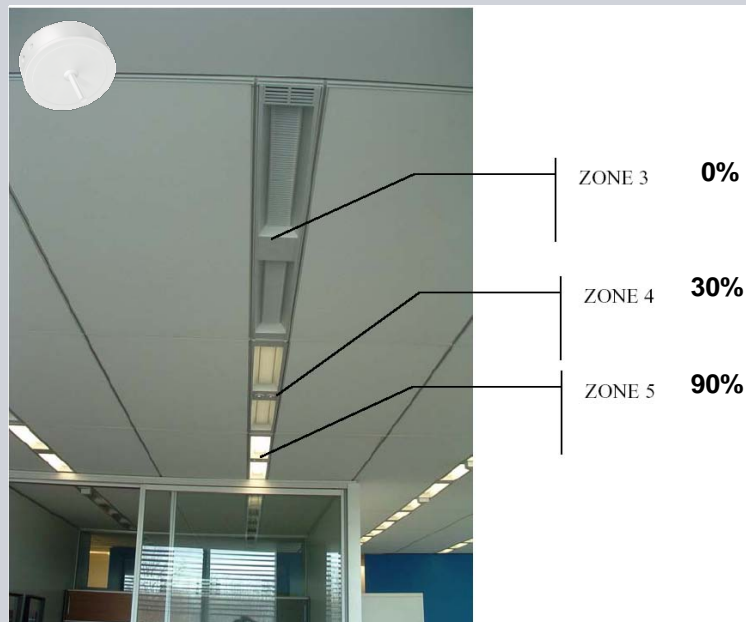


**Presence-dependent
lighting control**

Daylight-dependent lighting control – constant light level control



Daylight-dependent lighting control – constant light level control



Utilization of daylight

- Reduced energy expense for lighting
- Utilization of the difference between the design value and the maintenance value of the light intensity
- If ECGs from noteworthy manufacturers are used, the service life of the lamps is not influenced by dimming.

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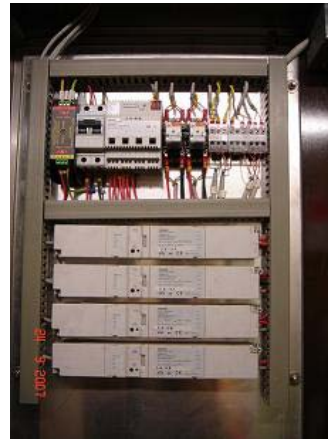


Tunnel Lighting Control

- Stage control based on exterior daylight level
- Avoid drivers experiencing the hazardous “Black Hole” effect
- EIB/KNX Integrate with DALI ballast
- Down to luminance fault detection
- Fail-safe control



Eagle Nest Route 8

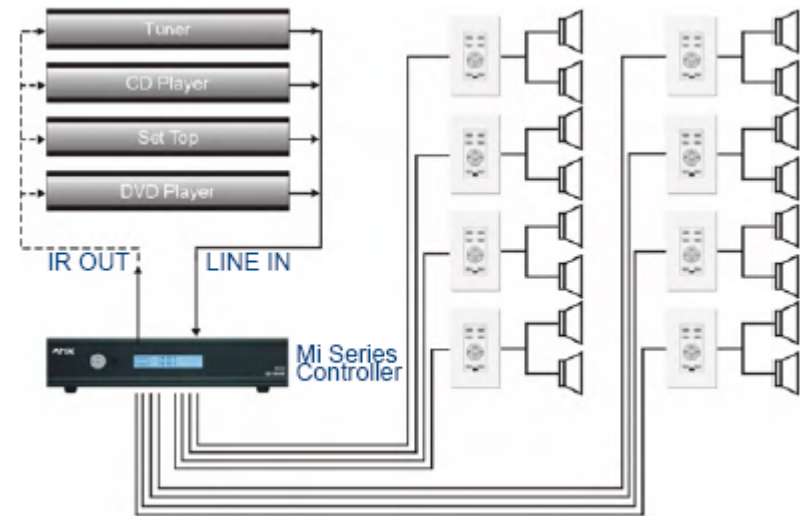
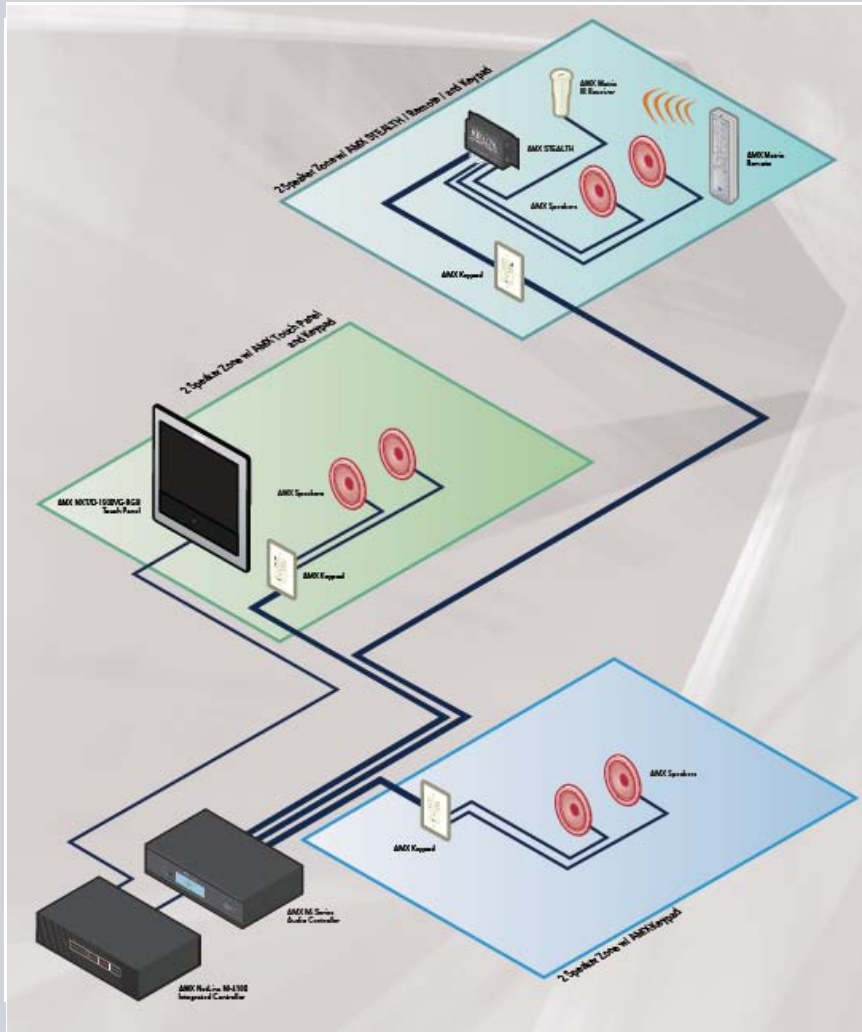


Cross Harbour

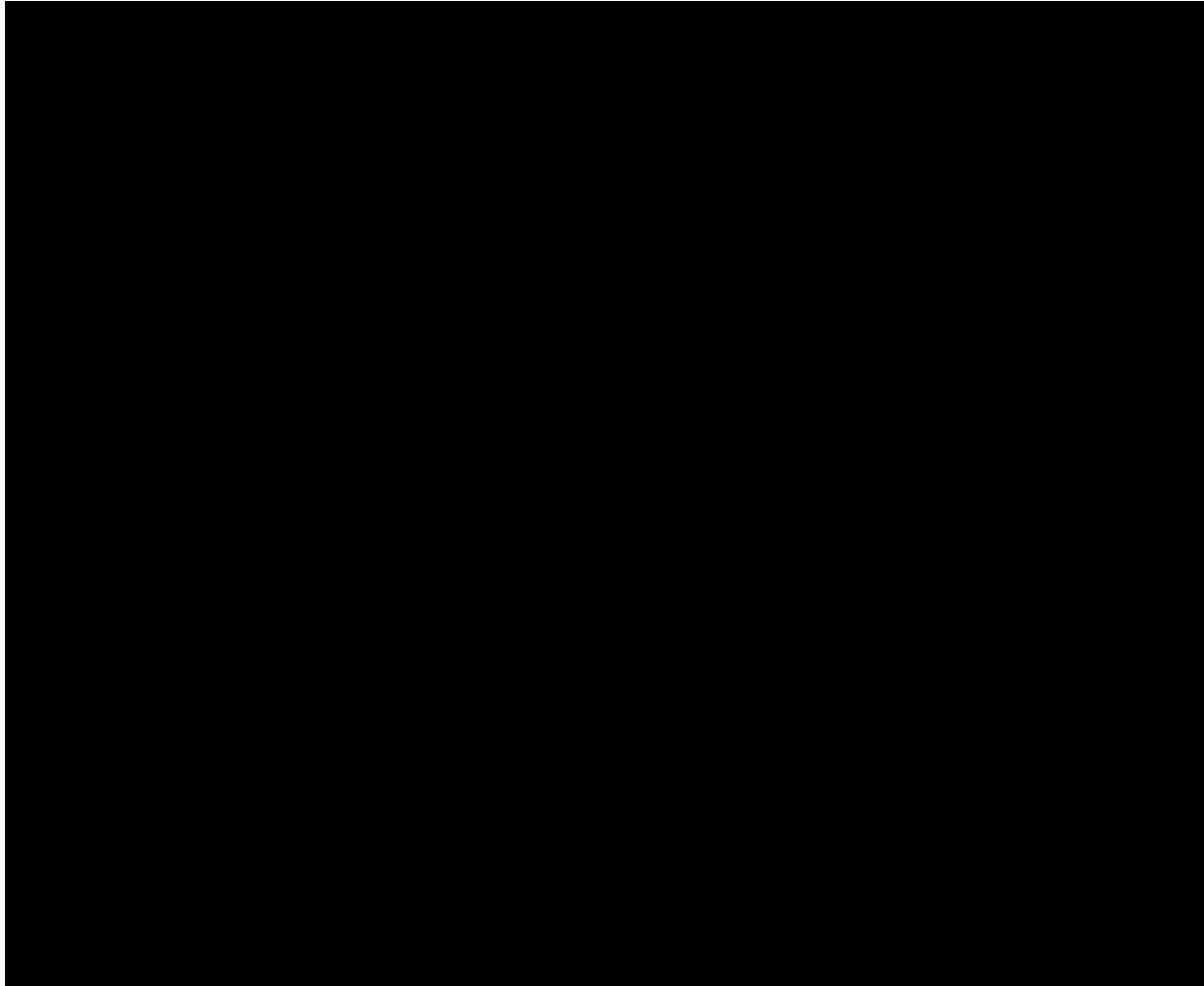
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Home Automation – Audio System



Home Automation – Audio System



Thank you for your time!



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