

**The way to create**

*Dynamic Lighting*



*with control track & DALI control panel for accent lighting and window display solutions in particular*



## Why Dynamic Lighting

In the field of retail business the winners are those who can catch the attention of the customers. What counts today is not to "illuminate" retail facilities but to use lighting effects to enable the customers to experience the displayed products and to stimulate them to buy.

**Dynamic lighting** uses theatrical changing light scenes instead of static light settings. Constantly altering light scenes using changing brightness and intensity, also colours, guide the customers' attention from product to product. Dynamic lighting makes the customer to note the accentuated products, catches his attention and interest. The result is a high level of attention and a consumption promoting ambience.

**Nordic Aluminium's** solution is a lighting track system including control wires for transporting signals to individual light fixtures, combined with a DALI control panel with software for the creation of theatrical effects. With the DALI control panel preset scenes can be created and stored. Dynamic sequences are programmed easily using the preset scenes. The control track system offers the flexibility to position fixtures in the desired place and to change their place when needed. The Plug-and-Play solution offers intelligence in its compact control panel. Everybody has the opportunity to easily create and activate new light scenes time after time and to a low cost.

### The unique features of GLOBAL control plus system

- ideal for **shop window** lighting
- suitable also for **exhibitions, museums, restaurants** etc.
- **flexibility** with DALI compatible lighting tracks
- an **economical** way to create theatrical light scenes
- **easy** to plan, install and use, **plug and play** with the new DALI control panel
- combine up to **64** fixtures in the system and create up to **16** groups and up to **16** scenes

### What is DALI?

DALI (**D**igital **A**ddressable **L**ighting **I**nterface) is a protocol designed for control of lighting systems. It is especially meant for small installations offering many benefits for its users:

- individual control of fixtures
- economical way to control lighting
- easy to add additional fixtures
- supported by main lighting and component manufacturers

## GLOBAL control plus system consists of track system and DALI control panel

### Control track system GNC

- the new control track is DALI compatible (fulfils FELV requirements). No additional bus component for fixture is needed.
- it is also suitable for other control standards (e.g. DMX, EIB, LON, 1–10 V etc.)
- patented construction
- proven technics of GLOBAL track pro
- 3 integrated control wires (+, -, signal ground). DALI needs 2 wires (+, -), but e.g. DMX needs 3 wires (+, - and signal ground)
- length of the control track installation up to 100 m
- new control adapter GAC 100

### DALI control panel GNC DP

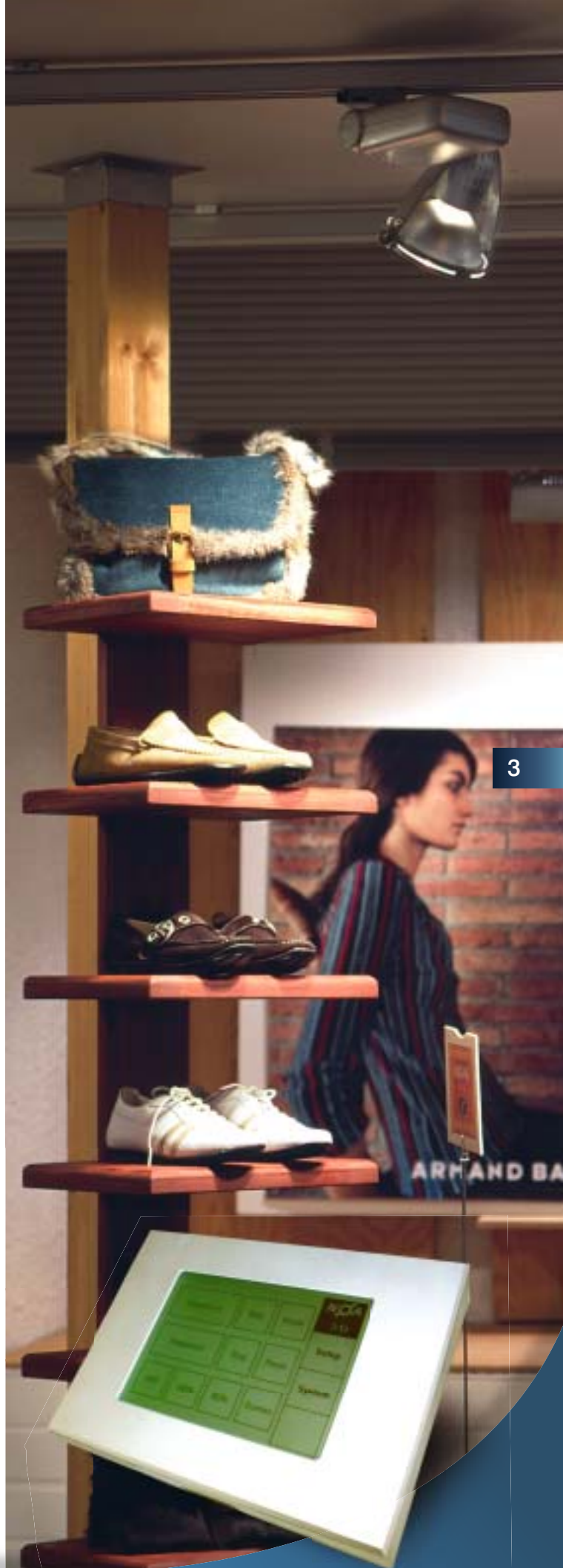
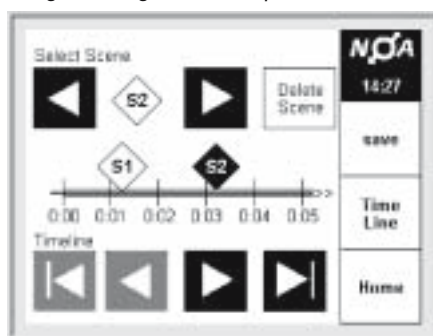
#### General

- designed for Nordic Aluminium's new GLOBAL control track system
- includes software to control lighting with DALI protocol
- touch screen user interface

#### Features

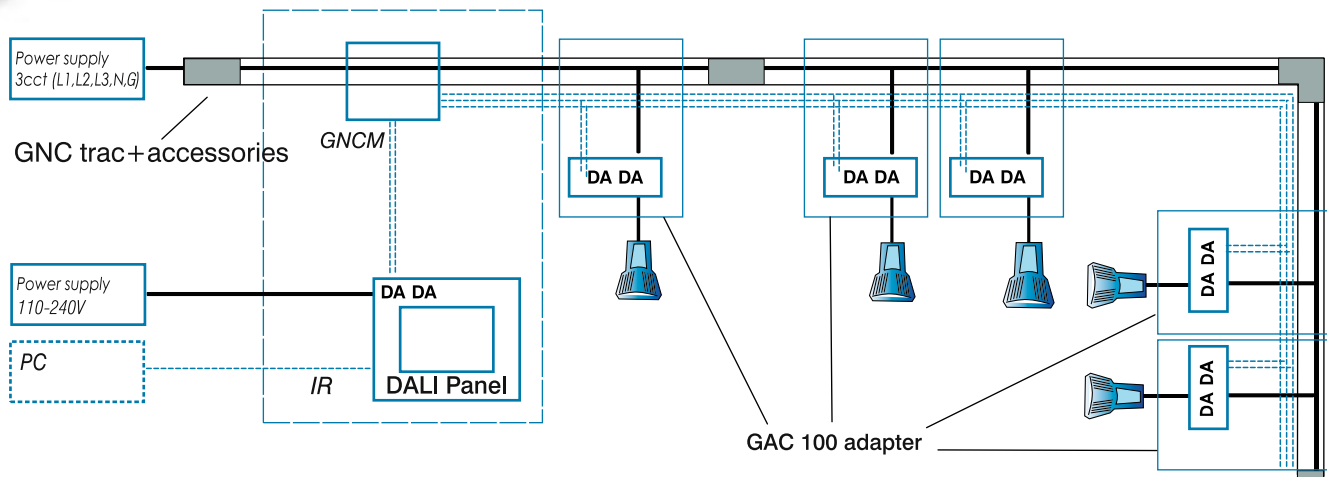
- easy to program and to run individual dynamic sequences, time related programs, loops (period 1 min–24 h) or clock related programs (24 h). 2 programs in memory of which 1 program runs at a time.
- allow to program and to call scenes, 16 pcs (includes each up to 16 groups)
- permanent scenes: all on/off, 10 %, 50 % and 100 %
- power supply for DALI bus
- panel languages: English, German, Swedish and Finnish

#### Programming of time-dependant scenes

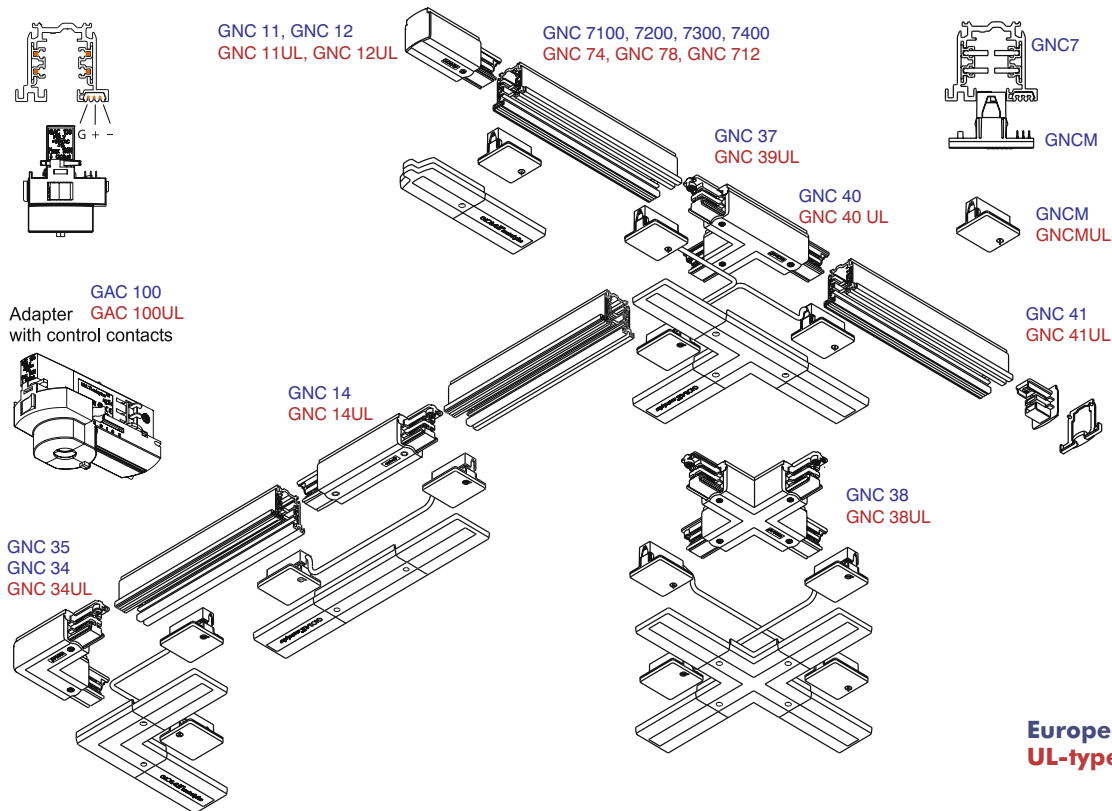




## SYSTEM DESIGN



## CONTROL TRACK SYSTEM



European type  
UL-type

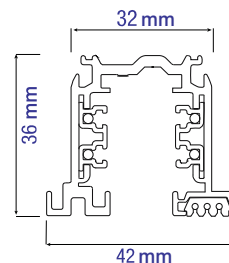
## CONTROL LIGHTING TRACKS

- L1 + L2 + L3 + neutral + ground + 3 x 1 A 50 V FELV AC
- 16 A 400 V, 20 A 120 V
- DALI-compatible (FELV), also for DMX, LON, EIB, I-10V etc.
- available colours: \*
  - 1 natural anodised aluminium, -2 black RAL 9005, -3 white RAL 9010



European type	Length/mm	kg	UL-type	Length	lbs
GNC 7100	1000	1	GNC 74	4'	2,7
GNC 7200	2000	2	GNC 78	8'	5,4
GNC 7300	3000	3	GNC 712	12'	8,1
GNC 7400	4000	4			

\*ordering example: GNC 7100-2=black, 1000 mm long track



Available colours for parts:

-1 grey RAL7040, -2 black RAL9005, -3 white RAL9010

European type

UL-type

Dimensions in mm

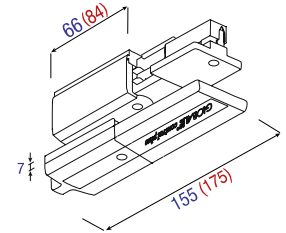


**End feeds**

- for power and control connections
- set: power feed, control module + connection cable + cover

**GNC 11**  
**GNC 12**

**GNC 11UL**  
**GNC 12UL**

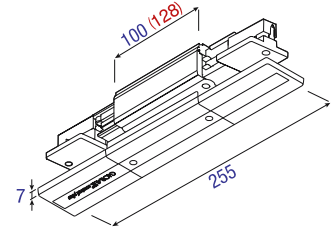


**Middle feed**

- for mechanical and electrical connection of two tracks
- for power feed
- set: power joint, two control modules with connection cable + cover

**GNC 14**

**GNC 14UL**

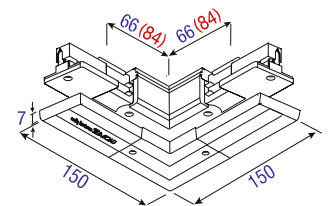


**L-feeds**

- for mechanical and electrical connection of two tracks
- for power feed
- set: power joint, two control modules with connection cable + cover

**GNC 34**  
**GNC 35**

**GNC 34UL**  
**(turnable)**

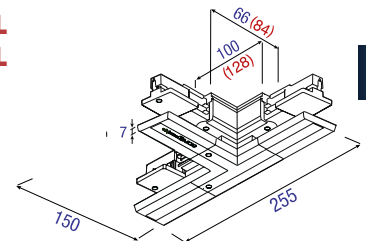


**T-feeds**

- for mechanical and electrical connection of three tracks
- for power feed
- set: power feed, three control modules with connection cables + cover

**GNC 37**  
**GNC 40**

**GNC 39UL**  
**GNC 40UL**

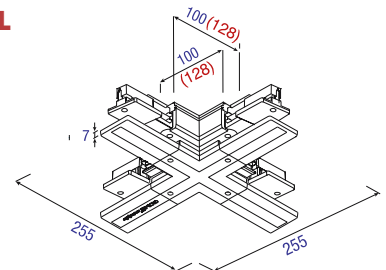


**X-feeds**

- for mechanical and electrical connection of four tracks
- for power feed
- set: power feed, four control modules with connection cables + cover

**GNC 38**

**GNC 38UL**

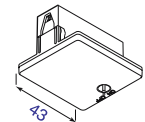


**Control module**

- for control feed
- max diameter of control cable is 3 mm
- suitable cable: e.g. Belden 1883A 2x24AWG

**GNCM**

**GNCMUL**

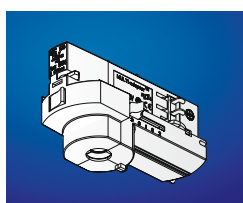
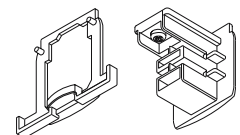


**End cap**

- for covering the end of the track

**GNC 41**

**GNC 41UL**

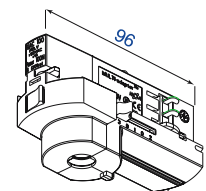


**Control adapter**

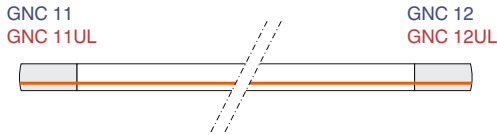
- control contacts +, -, signal ground, FELV
- pull strength 100 N (20 lbs.)
- standard NA nipples
- slot connection tool GB 66CT is needed for making power connection
- other suitable adapters: XTSA 68, GA 69 and GA 100 (only power connection)

**GAC 100**  
10 A, 250 V

**GAC 100UL**  
1200 W, 120 V

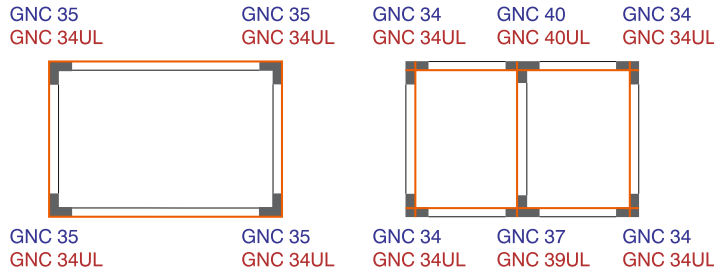


## USE OF CONNECTORS



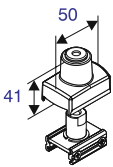
### Floor view

DALI protocol does not allow a closed loop control wiring



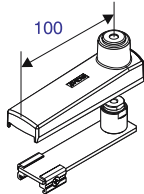
## SUSPENSION PARTS

Available colours: -2 black RAL 9005, -3 white RAL 9010



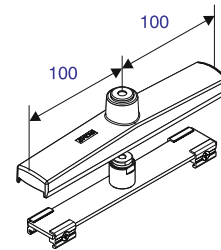
### SP 4R / SP 4PUL

Point clamp suspension  
F<sub>max</sub> 200 N (40 lbs)



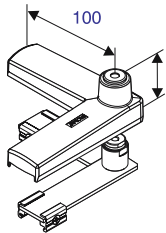
### SP 4E / SP 4EUL

End feed suspension  
F<sub>max</sub> 100 N (20 lbs)



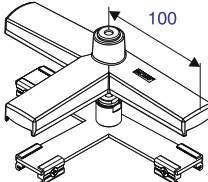
### SP 4I / SP 4IUL

Middle feed suspension  
F<sub>max</sub> 200 N (40 lbs)



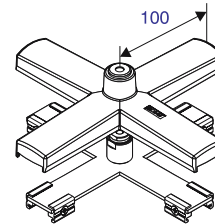
### SP 4L / SP 4LUL

L-feed suspension  
F<sub>max</sub> 100 N (20 lbs)



### SP 4T / SP 4TUL

T-feed suspension  
F<sub>max</sub> 200 N (40 lbs)



### SP 4X / SP 4XUL

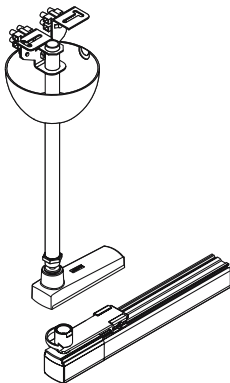
X-feed suspension  
F<sub>max</sub> 200 N (40 lbs)

6

## SUSPENSION DEVICES

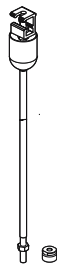
Available colours: -2 black RAL 9005, -3 white RAL 9010

Other UL-suspension components: contact USA sales office



### SP C16 / SP US 12...48

Conduit suspension set  
Ø 16 mm, length 1000 mm  
(Ø 3/8", in 12, 18, 24, 48, inch lengths)  
F<sub>max</sub> 200 N (40 lbs)



### SP R6

Rod suspension set  
M6, length 1000 mm  
F<sub>max</sub> 200 N (40 lbs)



### SP W1

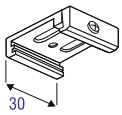
Wire suspension set  
Terminal M6,  
length 1500 mm  
F<sub>max</sub> 150 N (30 lbs)



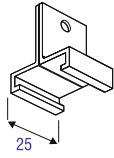
### SP R61

Rod extension set  
M6, length 1000 mm  
F<sub>max</sub> 200 N (40 lbs)

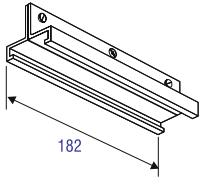
## MOUNTING ACCESSORIES



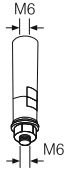
**SKB 12**  
Ceiling clamp (-1, -2, -3)



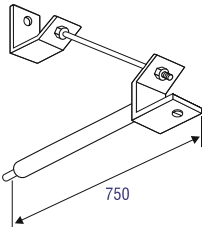
**SKB 16**  
Suspension clamp (-1,-3)



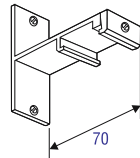
**SKB 18**  
Support (-1,-3)



**SKB 40**  
Height adjusting sleeve  
M6 (-1)  
adjustable to 20 mm



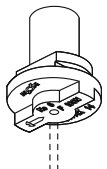
**SKB 23**  
Wall bracket (-1)



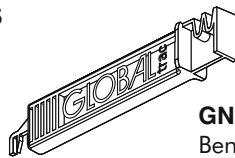
**SKB 21**  
Wall bracket (-1)

**SPW 50**  
Suspension wire (-1)  
( $\varnothing$  1,5 mm)  
L= 50 m

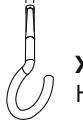
## OTHER COMPONENTS



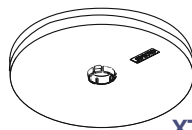
**GNCA 14**  
Hook base (-3)  
 $F_{max}$  100 N  
(20 LBS)



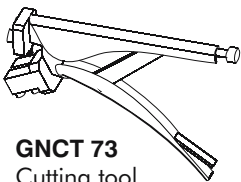
**GNCV 12**  
Bending tool  
for power wires



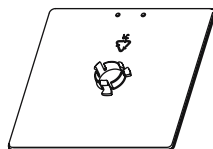
**XTAK 11**  
Hook (-1)



**XTSF 10**  
Outlet cover plate (-2,-3)



**GNCT 73**  
Cutting tool  
for control wires



**GES 15**  
J-box cover for UL-parts



**GB 66CT**  
Slot connection tool

## DALI control panel



### GNC DP

- includes panel and connection cable to the track
- frame made of aluminium, fixing holes for wall mounting
- panel languages: English, German, Swedish and Finnish
- dimensions 200 x 150 x 42 mm
- screen size: 5,7", colour screen
- Infra-Red interface to update software with computer
- power supply 110–240 V
- weight 1,5 kg (3,3 lbs.)

## DALI TRANSFORMERS OR BALLASTS (not available from Nordic Aluminium)

### Tridonic components

- electronic transformers for halogen lamps  
TE 0105 one4all, TE 0150 one4all
- electronic ballasts for compact fluorescent lamps  
PCA EXCEL one4all
- Relay model for HID lamps  
DALI RM
- LED-converters  
LED 0025 K210 24 V one4all

Suitable components from other suppliers.





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