



HV-FD Plug & Play
Revolutionary
HV technology

EASY INSTALLATION PLUG & PLAY

- Max. 16 Amp
- No Inrush currents
- Max. 100 spots per string possible
- Dimmable to 0,1% with Casambi dimmer (CBU-TED, max 10 pcs per group)



BROADLY USABLE

The spotlights equipped with the unique Illuxtron HV-FD technology can be directly connected to the electricity network without a power supply. Illuxtron introduced this technology in 2011 and has continuously improved it.

Because the electricity network has direct access to the light module, it is very important that the circuit is resistant to all kinds of pollution that occur in practice on the mains. In early 2022, another major

improvement was made to the circuit, so we can say that we have reached a point now where we can carry all contamination up to 2kV.

The advantage of this own technique is that a perfect dimming to less than 1% is possible when using the right dimmers from our dimmer list. Even in the lowest dimming positions the light is then very stable.

BROADLY USABLE





FIDO RANGE HV-FD

The Fido range is a top range from Illuxtron which was developed by the renowned Belgian designer Serge Cornelissen.

By using the HV-FD technology it was possible to provide the wall light (WL) and surface ceiling light (CL) with a minimalist design.

The products are available in various interesting color combinations. Since the products are completely assembled in the Netherlands, specific color combinations can also be made on request through our MIYO department.



Fido 98



Fido 108



Fido CL 105



Fido WL 105

PRODUCT OVERVIEW HV-FD



**FLICKERFREE;
NO STROBOSCOPIC
(FLICKER) EFFECTS**

Surveys have linked light flicker to health problems. Even though flicker at these frequencies may not be visible to the naked eye, there is evidence to suggest that the human brain can detect light flicker at frequencies of up to 200Hz. Potential problems can include headaches, eye strain, impaired visual performance, or in extreme cases, epileptic seizures. While the best quality power supplies for low voltage luminaires have a flicker percentage of 1-3%, our High Voltage technology has a flicker percentage of only 0.4%.

**LOW INRUSH
CURRENTS**

While most power supplies have a high inrush current (e.g. >5 Amps), our high voltage solution has a maximum of 100 mA (incl. soft-start). With this low (almost negligible) inrush current, the number of luminaires per group, or per dimmer, is no longer determined by the inrush current but rather by the VA rating of that group or dimmer. E.g. a group protected by a B16 circuit breaker has an acceptable VA value of 3600VA. So this group can handle $3600/10 = 360$ luminaires.



**4KV SURGE
PROTECTION**

It is often necessary to protect the electronic components against high voltage spikes (surges) from the mains. These can be caused by switching inductive loads near the luminaires or by atmospheric discharges such as lightning strikes.

The HV-FD technology is perfectly suited to replace Dali cabling with wireless controls, as well as being coupled to a building management system.

FLICKERFREE PATENTED DIMMING TO 0,1%

The minimum and maximum dimming levels are dependent on the quality of the dimmer. With a good quality dimmer, it is possible to achieve/attain a dimming range of 0.1 - 100%. Even at the lowest levels of dimming, our technology is still lower than 2.4% flicker with a negligible flicker index.

Dimming power	100%	75%	50%	25%	10%
Flicker percent	0.4%	2.4%	1.2%	1.4%	1.4%
Flicker index	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

**FLICKERFREE
RCS PROOF**

Our past experience has shown us that ripple control signals (RCS) sent over the electricity grid (e.g. for load switching or tariff switching), can cause an annoying flickering of the HV downlights. Our new patented Flicker-free dimmable (FD) technology is not affected by this kind of signal.



**FLICKERFREE
PERFECT FOR VIDEO SHOOTS**

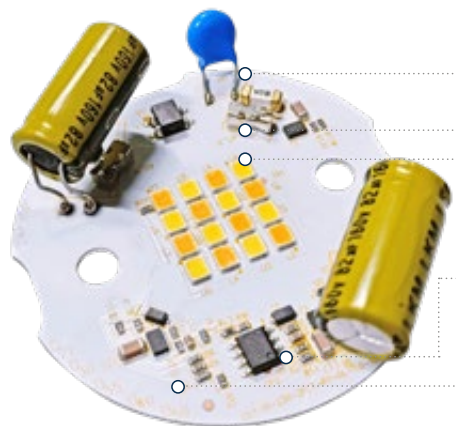
It's important to have little to no flicker effects when recording video, where the images are cut with several black lines and it is not possible to shoot the video properly.

**WARM DIM VERSION
AVAILABLE**

100% brightness	3000K
50% brightness	2900K
25% brightness	2700K
10% brightness	2200K

When dimming the light down, the light becomes warmer just like an incandescent lamp.

**HV-FD 600 LM
(2200-3000K)**



- Protection circuit against voltage peaks (4000V)
- 220-240V input
- Multi junction LEDs
- Highly reliable because there are mainly active electronic parts in the circuit
- Flicker control circuit
- IC to reduce flicker

TECHNOLOGY



3-POLE CONNECTION BOX

Each downlight is supplied with a 3-Pole connection box for screw-less looping of H03 or H05 cabling. See the example to the right: looping of "low smoke" cable for public buildings

220-240V

LOOPING



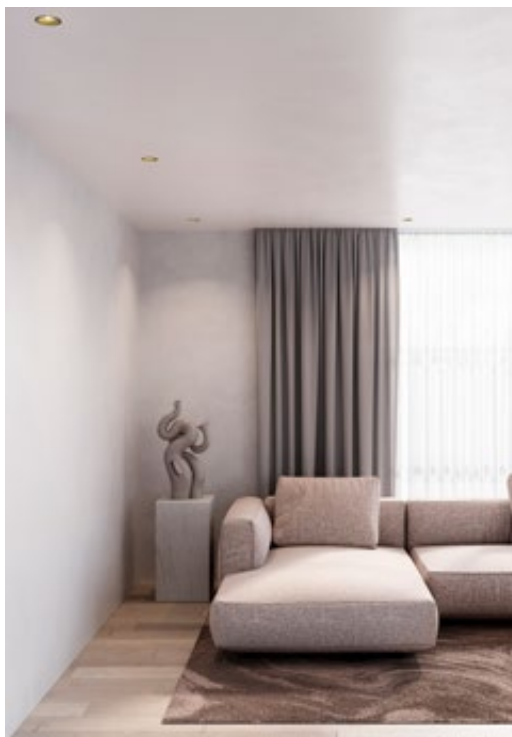
CONNECTION

HOME AUTOMATION

For home automation, KNX is currently the standard where by means of Dali power supplies the spotlights can be dimmed. The recessed spotlights can also be supplied with a Dali power supply in order to be easily connected to such a KNX system.

What is a much more affordable solution now are the new wireless systems. If you opt for such a system, the HV-FD technology is the best choice because it can be controlled perfectly.

With 1 wireless dimmer for a group of HV-FD fixtures you save maximum on expensive home automation components.



All products are developed by our own people and then assembled in various workshops by people with a disadvantage on the labor market. The range is aimed at the higher market segment and guarantees the use of high quality materials, resulting in a warranty of 7 years. 7 years warranty can be guaranteed.



Check out our website for
more information and inspiration.
Scan the QR code or go to
illuxtron.com!



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 **ILLUXTRON®**
LIGHTING