

user manual

# Trigger module/ lightningFX

for the LFXHub®



LightingFX Tools  
for professional filmmakers

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edition 2007-V2.4e

This user manual is valid for the trigger module for the LFXHub

download the latest user manual:

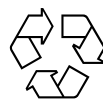
<http://www.movie-inter.com/en/support/downloads/index.html>


This user manual is also available in German language

<http://www.movie-inter.com/de/support/downloads/index.html>

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## 1. Safety instructions

**PLEASE READ ME FIRST!**

Please read this user manual before the first operation !

This user manual is also available as a downloadable PDF document from the homepage of movie-intercom >  
<http://www.movie-inter.com/en/support/downloads/index.html>

**Before you use the trigger module please be sure people are informed that a flash will occur.**

**Do not use this application if people with epileptic disease might be exposed to a lighting effect!**

**Prevent a shock of persons who might look into the dimmer-shutter in the moment of a flash. Keep the area clear of persons in front of the dimmer-shutter.**

**The intensity of the flash depends on the power of the HMIs used with the dimmer-shutter.**

**movie-intercom is not responsible for injuries or shocks of persons caused by the use of this application.**



Please do not keep the trigger module under water.

The trigger module is protected against short drops into water (IP 67).

**This "trigger module" is exclusively engineered to be operated with the LFXHub.**



The safety instructions for the LFXHub and the operation with DMX based equipment- especially with a dimmer-shutter - must be observed.

### use of dimmer-shutter

Lighting effects generated by the LFXHub take advantage of the dimmer-shutter made by different third party manufacturers.

Dimmer-shutters are available for HMIs from 1200 W up to 18 kW.



If you need assistance which sort of dimmer-shutter should be used please contact movie-intercom.

Please be aware dimmer-shutters are products of a third party manufacturer. Movie-intercom does not guarantee the functionality of third party products combined with our products.

### main fuse



**ATTENTION! Voltage at power output might be present when main fuse is switched off!**

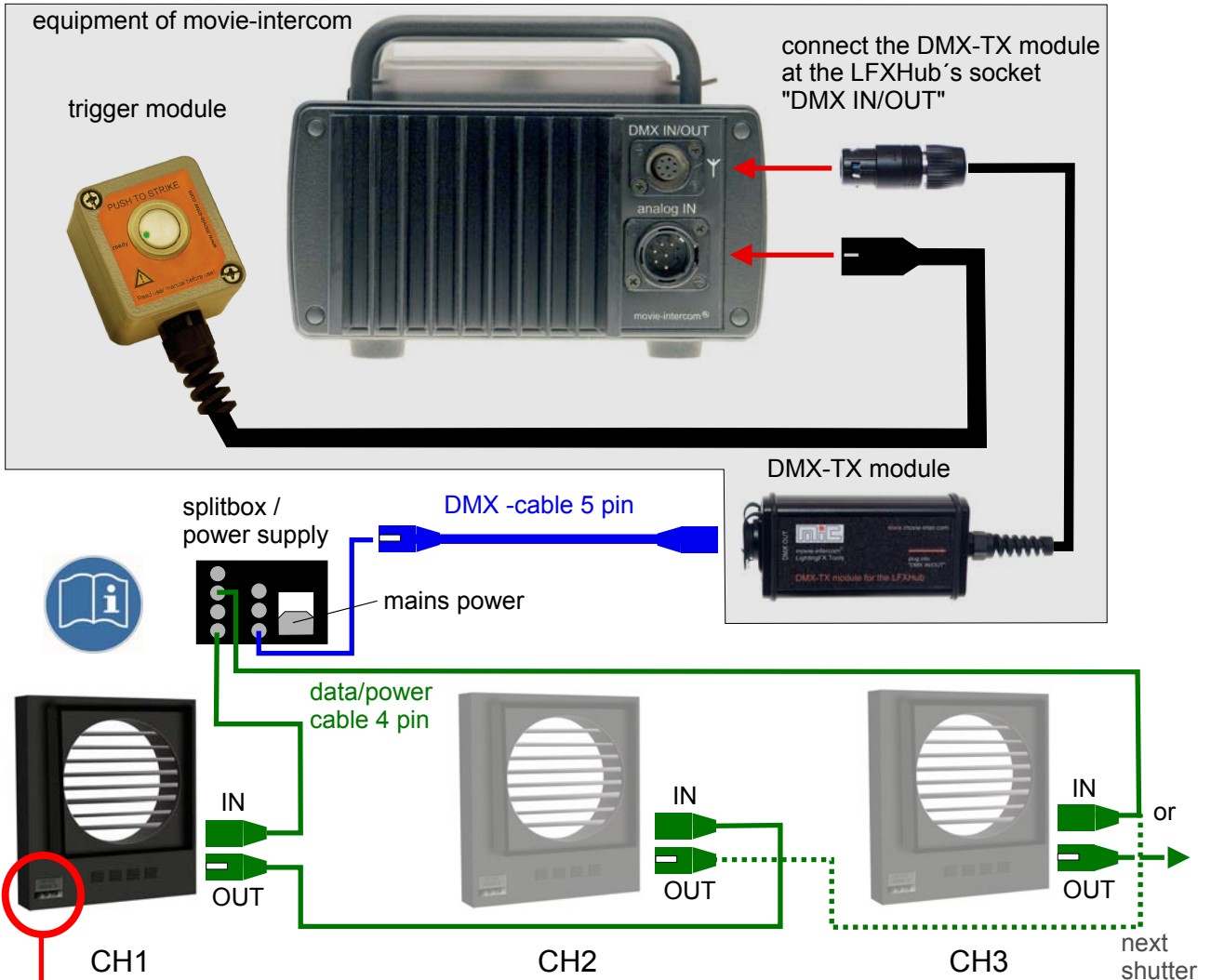
main fuse



## 2. quick start

The example shown below illustrates the operation of dimmer-shutter(s) type "Dark Vader"

**1** connect the trigger module at the LFXHub's input "analog IN"



set dimmer mode P15 to "3" (single mode) using the menu of the dimmer-shutter ("Dark Vader")

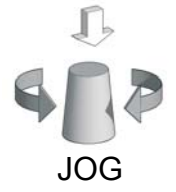
## 2 display of the LFXHub

➔ turn rotary switch "EFFECT" to position "analog IN"  
the trigger module is automatically identified by the LFXHub



➔ choose preset from preset list

```
DIM max=100% min=off
speed= 70% »help
»preset: lightningX
»CH delay/measure
```



**DMX addresses of the LFXHub must match to the dimmer-shutter addresses**

```
my recent setting
• lightningX
single-flash
multi-flash ←
```

### 3. function overview

The lightningFX module is an optional available plug & play extension for the LFXHub.

With the lightningFX application you can...

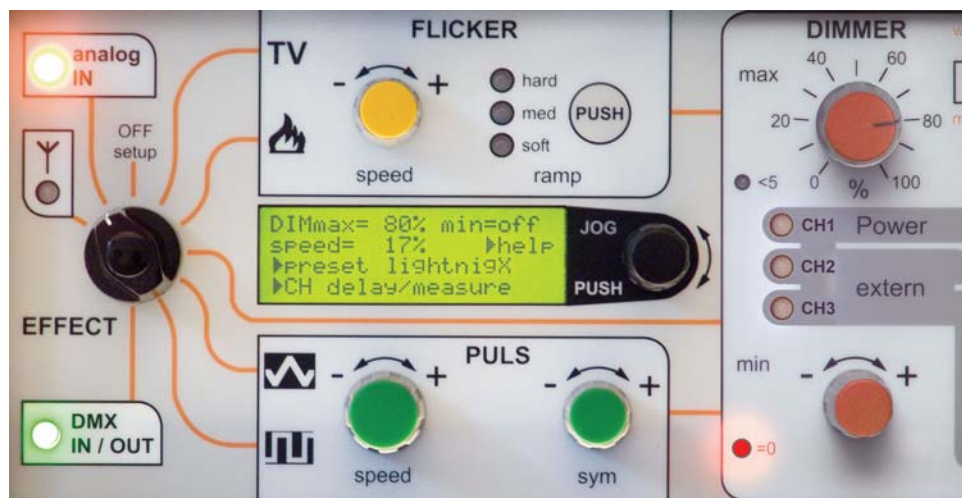
- ... generate realistic looking lighting effects of ...
  - a "lightningFX" effect of a thunderstorm ...
  - a moving "lightningFX" effect of a thunderstorm using three different channels ....
  - a single flash of a photo camera ...
  - many irregular flashes of photo cameras made by some journalists from different directions ...

...using conventional HMI(s) up to 18 kW with attached DMX controlled dimmer-shutter(s), mounted instead of the barndoor of the lamp.



- ... cascade a virtually unlimited number of dimmer-shutters linked via DMX.
- ... easily generate lighting effects using the three stored precision presets. Lighting effects can be individually changed. The stored "flicker curves" provide a resolution of 24/25 samples per second.
- ... measure and calibrate the upper brightness limit by a "freezed" LFX.
- The delay of the output channels is adjustable from 0 to 300 ms (for preset "lightningFX")
- The lightningFX trigger module is automatically identified by the LFXHub's analog input when plugged in. Settings are made via the display of the LFXHub with the jog shuttle, "Dimmer max." and "speed".

*user interface of the LFXHub when trigger module and DMX module are connected*



The additional lightningFX software does not have any influence to the functionality of other functions of the LFXHub.  
"lightningFX" is a software and hardware (the trigger module) upgrade for the LFXHub.

#### included in delivery

- trigger module incl. 3.5 m control cable
- user manual
- software upgrade on a CD for the LFXHub unless a new LFXHub is ordered incl. the "lightningFX" upgrade

## 4. system requirements

### Minimum requirements for operation of the trigger module/ lightningFX app with the LFXHub

1. the latest lightningFX software is installed in the LFXHub
2. trigger module
3. DMX-TX module for the LFXHub
4. DMX controllable dimmer-shutter incl. power supply and 5 pin DMX cable
5. HMI(s) or tungsten lighting equipment suitable for the dimmer-shutter(s)

### How to find out whether my LFXHub is equipped with lightningFX software:

- turn "EFFECT" to position "off/set-up"
- with JOG navigate to:  
basic settings > identity > software versions

LCD of the LFXHub

```
software-versions:  
CIO: 1.0  CHP: 2.2  
FT:  2.3  MT:  2.14  
XTM: -      ←
```

**The version for CHP must be at least version 2.2**

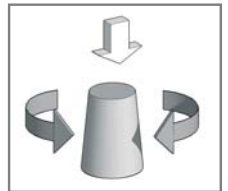
**The version for FT must be at least version 2.3**

**The version for MT must be at least version 2.14**

If the mentioned software versions are not displayed please read  
📖 upgrading the software of the LFXHub, chapter 9, page 15

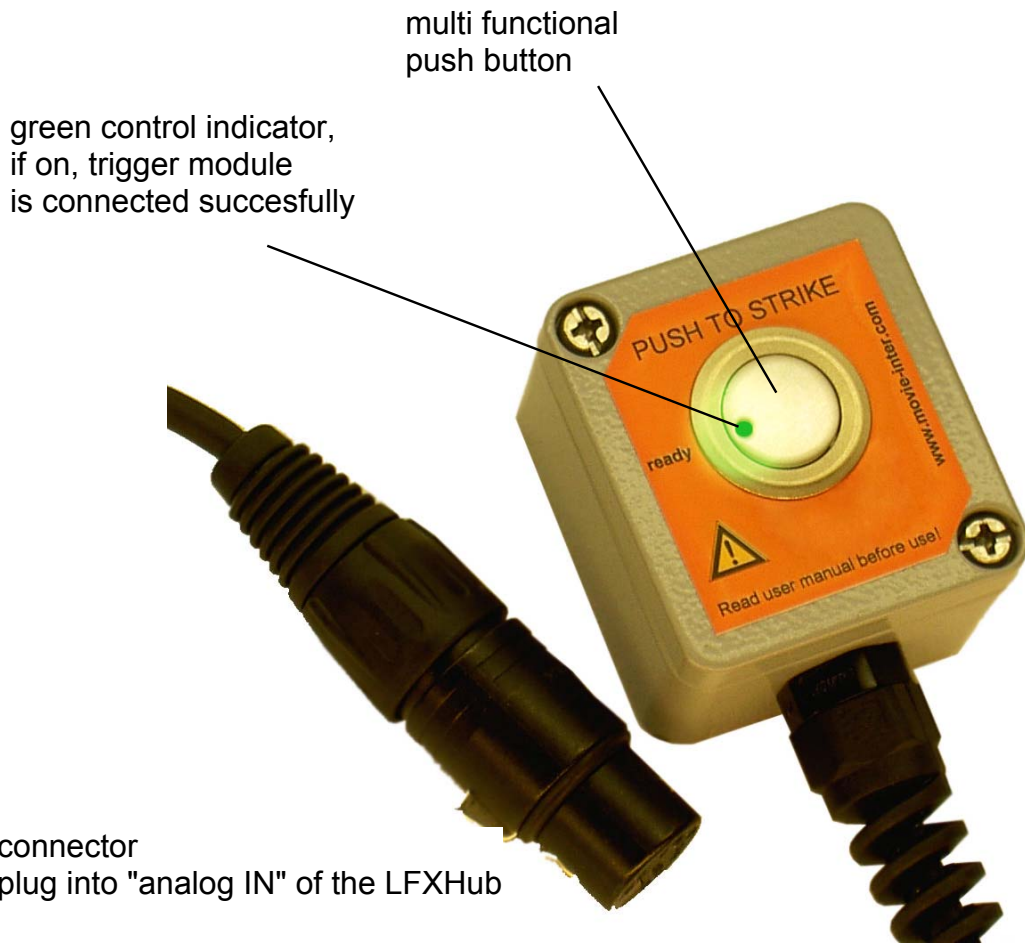
**Please read the safety instructions / this user manual before the DMX module and the dimmer shutter will be used for the first time.  
As well please read the safety instructions of the LFXHub!**

**Dimmer-shutters are third party products and not included to delivery.**





## 5. trigger module



### extend the control cable length

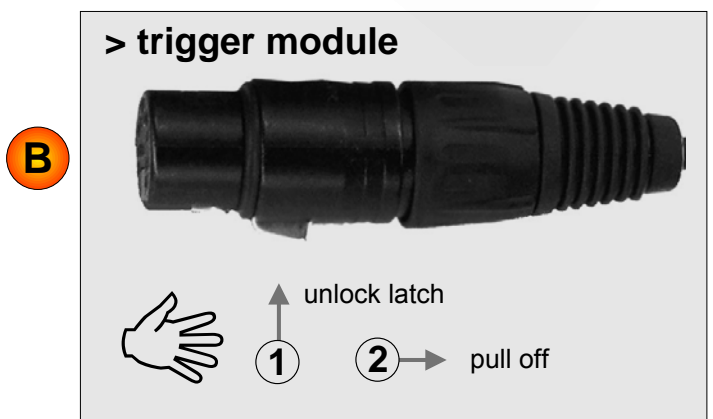
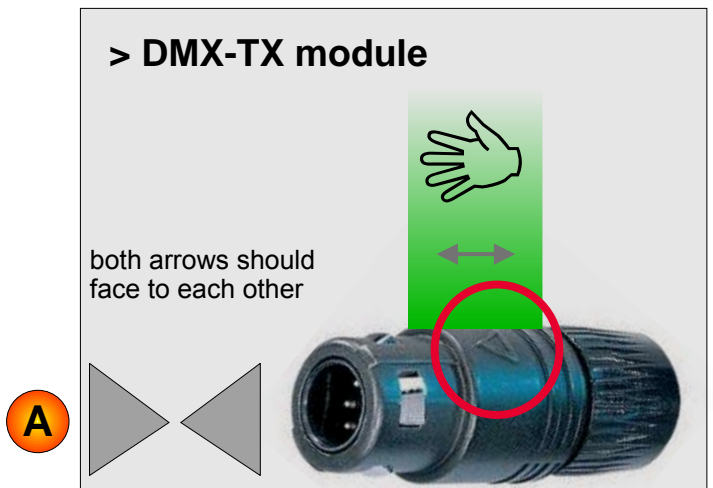
The control cable of the trigger module can be extended using the universal cable. Use a maximum of two universal cables in order to ensure safe operation.





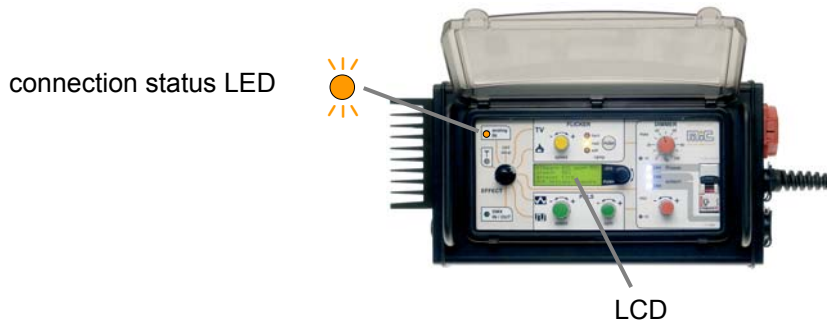
## 6. connection of trigger module/DMX module at the LFXHub

- A** The plug of the DMX module is self-locking.  
To lock or unlock the plug please exclusively move **the centre part of the plug** (as marked below.)  
The external DMX module is powered by the LFXHub.
- B** The plug of the trigger module is self-locking when plugged in.  
To unlock the plug please push the latch and pull the plug off.  
The external trigger module is powered by the LFXHub.



## 7. menu structure

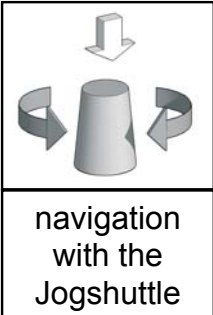
This menu is visible when the trigger module is connected at the socket "analog IN" and the rotary switch "EFFECT" is in position "analog IN".



LCD menu level 1      LCD menu level 2      LCD menu level 3

**analog IN**  
Please connect LFX Tool to "analog IN" on your left hand side!

no external LFX Tool is connected at "analog IN":  
amber LED at LFXHub is flashing



**analog IN**

DIM min=*100%* min=off  
speed= *70%* »help  
»preset: *lightningX*  
»measure/*CH delay*

display alternates every 5 sec

trigger module is connected  
•push/turn JOG to set up

help: please connect one or more dimmer-shutter @ DMX module of the LFXHub.

external trigger module is connected:  
amber LED at LFXHub is steadily on

my recent setting  
•lightningX  
single-flash  
multi-flash

of *lightningX*  
measure DIM max=*100%*  
push JOG or ext. trigger = back

of *lightningX*  
»measure DIM max  
»help for *CH delay*  
•*CH delay*= *25 ms*

help delay:  
select= push JOG  
change= turn JOG  
ready = push JOG

Red/*italic* text is a variable and might show different values, depending on your settings.

### Menu language

If the menu language of the LFXHub is set to a certain language, this language will be displayed in the "lightningFX" menu either. Please refer to the user manual of the LFXHub how to set up the menu language. The latest user manual of the LFXHub is available at <http://www.movie-inter.com/en/support/downloads/index.html>.

#### Hint

A reset to factory settings of the LFXHub does not have an influence to the selected language.



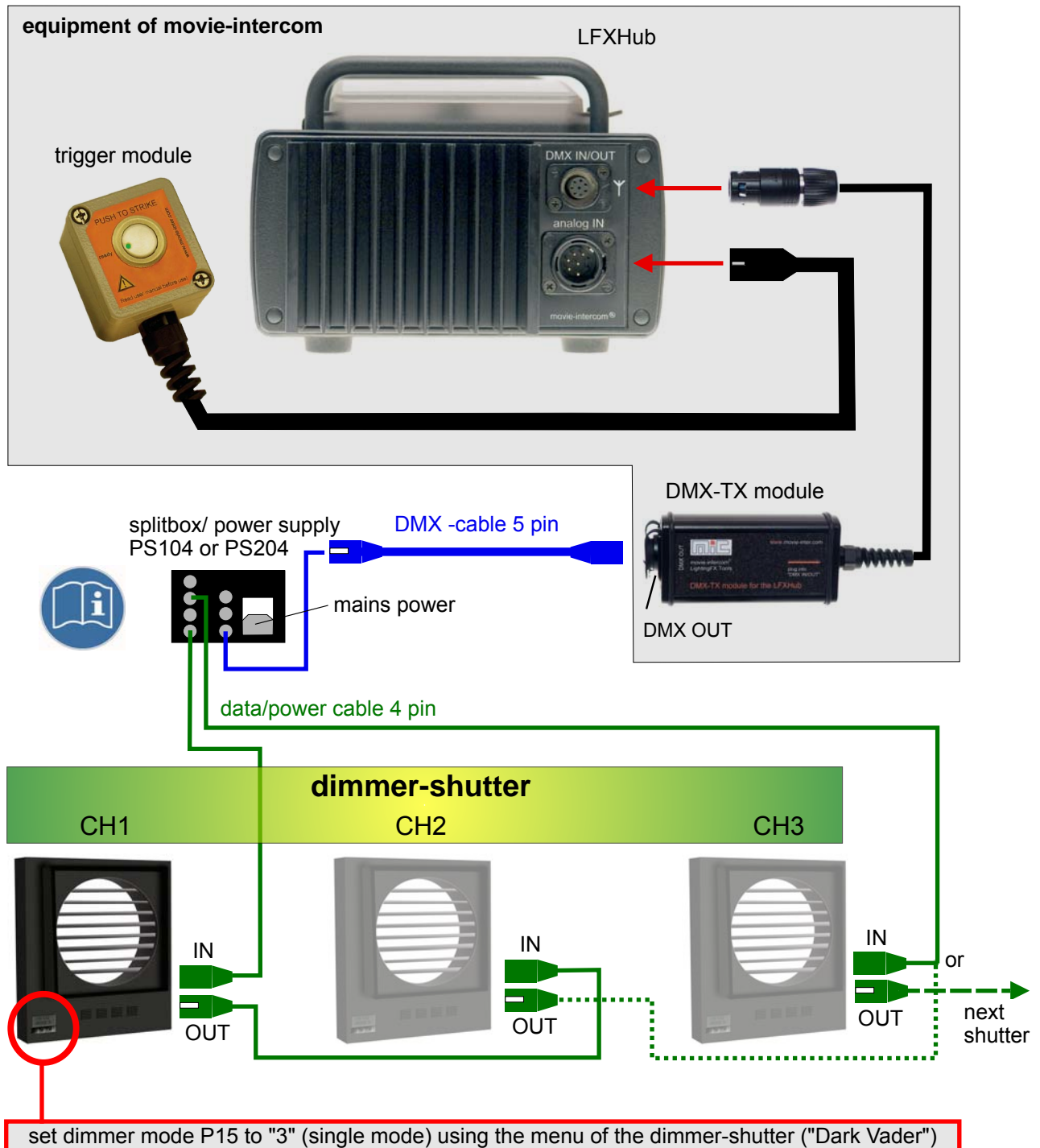
## 8. setting up flash effects (A)

### A: connecting hardware

Please connect the required equipment as shown below.

1. plug in trigger module at socket "analog IN" of the LFXHub
2. plug in DMX module at socket "DMX IN/OUT" of the LFXHub
3. connect dimmer-shutter hardware at "DMX OUT" of the DMX module  
Dimmer-shutters are available for HMIs from 1200 W to 18 kW.

The example shown below refers to the set-up procedure using "Dark Cader" dimmer-shutters.



## 8. setting up fash effects (B....D)

### B: setting up dimmer-shutter (here: type "Dark Vader")

#### IMPORTANT!

Set dimmer mode P15 to "3" (single mode) using the menu of the dimmer-shutter.  
**Read and note the DMX channels of each connected dimmer-shutter.**



Please take advantage of using more than three dimmer-shutters within the DMX line by allocation of the DMX channels twice to the dimmer-shutters.

A user manual for dimmer-shutter type "Dark Vader" is available as a PDF document here <http://www.licht-technik.com/eng/html/darkvader.html>

### C: setting up DMX at the LFXHub

Plug in the DMX-TX module into socket "DMX IN/OUT".

- turn "EFFECT" to "DMX IN/OUT"
- allocate the read DMX channels of the dimmer-shutter to the DMX channels of the LFXHub within the DMX menu using the JOG, DMX-IDs must match

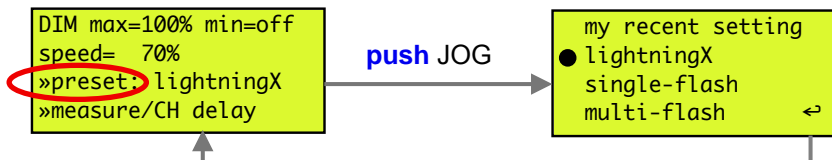
CH1= 001 and 004  
 CH2= 002 and 005  
 CH3= 003 and 006  
 »change DMX-TX-ID



The user manual of the DMX-TX module for the LFXHub is available as a PDF document at <http://www.movie-inter.com/en/support/downloads/index.html>

### D: how to select a preset

- turn "EFFECT" to "analog IN" (trigger module should be connected)
- turn Dimmer max. to 100% (Dimmer min. is automatically set to 0%/off)
- select a preset using the JOG (as shown below)



result: dimmer-shutter(s) are inactive, white monitor LEDs are off

If the preset "single-flash" or "multi-flash" is selected menu item "CH delay" (channel delay) is not visible within the menu.

- push and hold the button of the trigger module

result: dimmer-shutter(s) are working as long as the button of the trigger module is pressed

- release of the button stops the lighting effect



## 8. setting up flash effects (E)

### E: list of preset

preset name	if modified: preset name	lighting effect properties	default delay
lightningX	mod(LiX)	"lightningFX" of a thunderstorm, "moving" lightningFX if used with three channels and "CH delay" ≠ "sync"	sync
single-flash	mod(sfl)	a single flash of a photo camera	off
multi-flash	mod(mfl)	some journalistst take pictures	off
my recent setting		recently used settings of a modified preset are stored here	-

A selected preset will change its name to "mod(LiX) when e.g. the speed of preset "lightningX" has been modified manually. It can be recalled using "my recent setting".

### range of application

#### preset lightningX

- A: single channel "lightningFX" effect using one dimmer-shutter, all connected dimmer-shutters are synchronized with "CH delay" (set to=sync) by default
- B: A "moving" lightningFX is achieved by changing the value of "CH delay" (is NOT set to=sync) using the delay menu item via the LCD, in this case there are at least three dimmer-shutter recommended.



sync.

#### preset single-flash

- A: a single flash of a photo camera
- B: short-circuit flash
- C: flash of a bomb explosion



There is at least one frame exposed (referred to 25 fps).  
This preset automatically sets all output channels to sync.  
Normally there is only one dimmer-shutter required.  
Every push on the button of the trigger module will release one flash.

#### preset multi-flash

- A: Looks as some journalists would take pictures from different directions.  
At least three dimmer-shutters should be used.
- B. lighting effects of explosions, blasts from different directions



### individual settings

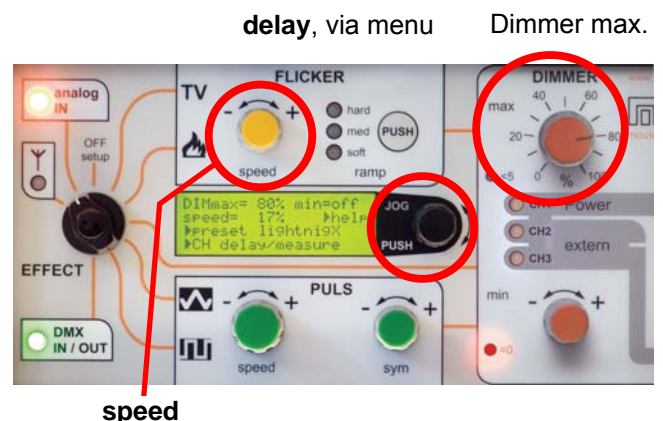
Additionally the presets "lightningX" and "multi-flash" can be individually adapted.

"speed" adapts the speed of the LFX.  
(not available when used with "single flash")

Please be aware in case of a change of a preset the name of the preset will be displayed as "mod(xyz).

Controls for "ramp" and dimmer "min." are deactivated for all presets when used with the trigger module.

Please refer to the next chapter to find out how to adjust the settings of "delay" .





## 8. setting up flash effects (F...H)

### F: setting up "delay" for multi-channel LFX ("moving" strikes)

The function "delay" means the output channels are alternating irregular. For that reason the preset "lightningX" provides a moving light effect when three channels (= three dimmer-shutters) are used and "CH delay" is NOT set to "sync.". Please use the menu item "CH delay" to set up the delay time. (The default value of CH delay" is "sync.".)  
Change the value of "delay" to get a fast or slowly moving "lightningFX".

```
DIM max=100% min=off
speed= 70% »help
»preset: lightningX
»measure/CH delay
```

```
of mod(liX)
»measure DIM max
»help for CH delay
•CH delay= 25 ms ↔
```

delay range: 0 ... 300 ms

use the JOG to change the value of "CH delay"

1. push JOG selects "• CH delay= xyz ms"
2. change value= turn JOG
3. ready = push JOG



The menu item "CH delay" is not available when used with presets "single flash" or "mutli-flash".

In order to increase the output power cascade many dimmer-shutters within the DMX line and allocate the same DMX-ID to the dimmer-shutter. E.g., use 10 x 18 ks!

### G: measuring upper brightness level / steady light

If this function is activated all connected dimmer-shutter stop moving, the maximum brightness level is steadily activated. The lighting effect is frozen with its maximum level.

measurement feature for the maximum brightness level:

- calibrate the maximum brightness level according to the desired exposure
- set-up the spread of SFX rain-effect/wet down perfectly fine
- see easily where the cast shadow is

```
DIM max= 80% min=off
speed= 70% »help
»preset: lightningX
»measure/CH delay
```

```
of lightningX
»measure DIM max
»help for CH delay
•CH delay= 25 ms ↔
```

```
measure DIM max=100%
push JOG or
ext. trigger button
= back
```



If the measure mode is activated, return to the preset mode by pushing the button of the trigger module.



measure mode: =



PUSH

or



### H: Resetting to factory settings

The lightningFX software stores the preset "my recent setting" without any time limit.

We do recommend resetting to factory settings if the LFXHub is returned to the rental house. So every lighting crew starts under the same conditions.

```
resetting LFXHub
to factory settings?
yes •No
```

1. turn "EFFECT" to position "OFF / set-up"
2. choose menu item "basic settings" > "factory reset"
3. confirm with "yes"

## 9. Upgrading the software of the LFXHub

The functionality of the LFXHub is based upon software.

Additional software can be installed to the LFXHub to extend the functionality with new features (e.g. DMX or lightningFX). Shipping the unit is not required.

The required software will be send via e-mail or will be shipped on a CD.  
LFXHubs delivered after May 2006 are already equipped with the DMX software.  
The lightningFX feature is an upgrade and can be purchased at movie-intercom.

### system requirements

- data cable for the LFXHub (optional available)
- PC with Windows 95 / 98 / 2000 / XP and serial interface (COM-port)

### installation procedure

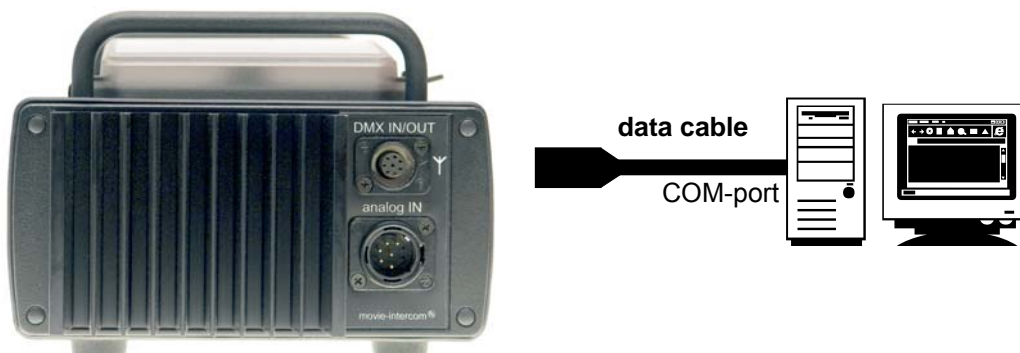
1. remove all external components from the LFXHub and disconnect loads from "POWER OUT".
2. Plug in the data cable in socket "DMX IN/OUT" and connect the SUB-D plug of the data cable to a COM-port of the PC.
3. Connect the LFXHub with the power plug to a **stable** 220-240 V / 50 Hz power network.
4. turn the rotary switch "EFFECT" to position "radio"
5. launch your PC and double click the installer received from movie-intercom and follow the instructions.

### Please be aware:

**The power of your PC and the power of the LFXHub must not be interrupted during the installation process.**



### connection of data cable at "DMX IN/OUT"



For detailed installation instructions please refer to the user manual delivered with the software installer on CD or e-mail.



## 10. Trouble shooting

**Possible problems using the LFXHub might be solved here.**

### Basic conditions for operation

1. The trigger module has no damages and is properly connected at "analog IN"
2. The DMX-TX module has no damages and is properly connected at "DMX IN/OUT".
3. The latest lightningFX software is installed.
4. The built-in main fuse of the LFXHub is turned on.
5. The operation voltage of the LFXHub is 220 - 240 VAC /50 Hz.

In case of a malfunction of the LFXHub the internal fuse of the power supply could have been triggered. This internal fuse is self resetting. Please unplug the LFXHub, wait at least 10 minutes and try again. Do not open the LFXHub. RISK OF ELECTRIC SHOCK!

symptom	possible fault	solution
trigger module is not recognized by the LFXHub	the software of the LFXHub is not upgraded, check if the LFXHubs' software is up to date > page 7	load latest software for the LFXHub > page 15
dimmer-shutter does not work	dimmer-shutter are not connected properly	check cabling of the dimmer-shutter > page 11
	power supply of dimmer-shutter is not turned on	switch it on
	connected dimmer-shutter is broken	exchange dimmer-shutter
dimmer-shutter react very slowly	value of "Dimmer max." is too low	increase "Dimmer max."
	DMX-ID of the transmitter (LFXHub) is different to DMX address of the dimmer-shutter. DMX-IDs should match.	set up DMX-ID - at the LFXHub or - at the dimmer-shutter
	operation mode of dimmer-shutter is set incorrectly > must be set to P13 = mode 3 (single mode)	set up P13 to mode 3 of the dimmer-shutter > page 12
lightningFX is not "moving" using three channels	value if "CH delay" is set to "sync" (default value)	set "CH delay" to at least 25 ms > page 14
the unit does not work although all settings are correct	Did you use the device in wet environment? Humidity might be too strong inside the dimmer-shutter	Leave the device dehumidify at a warm and dry place for at least one hour.

**If you have a problem which can not be solved with this manual, please disconnect all cables from the LFXHub and contact movie-intercom.**

### cleaning the unit

ONLY clean the unit when disconnected from LFXHub!  
Use a clean slightly wet cloth.

### disposal

In order to avoid any possible effects resulting from the disposal of electrical and electronic equipment containing substances damaging the environment and human health, the European Parliament and Council directives

2002/96/EC on waste electrical and electronic equipment (WEEE) and 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) have been transferred into national law in all EU member states. The product you have purchased was developed in line with the current state of the art in an environmentally friendly manner and with the view of recycling.

The product is labelled with the symbol illustrated to the right. If you wish to dispose this product, this symbol obliges you to do so separately from industrial sorted waste.

Waste equipment should be shipped to movie-intercom.

**Electrical equipment does not belong in regular waste.** We will dispose the waste for you.



## 11. specifications

trigger module + lightningFX software	
operation voltage	10VDC (powered by the LFXHub)
operating temperature range	-20°C ...60°C
dimensions (l x b x d)	50 x 45 x 50 mm (without cable)
weight	470 g
output plug	6-pin XLR
protection level	IP 67
presets	single-flash, multi-flash, lightningX
memory space for individual setting	1 (my recent setting)
duration storage of individual settings without power	unlimited
resolution of flicker presets	24/25 fps
delay between channels	0...300 ms
protection class	III

lightningFX upgrade kit consists of software updater and the trigger module. Software installation requires an optional available PC- data cable for the LFXHub. Operation requires the trigger module, one or more dimmer-shutter(s) (third party manufacturer) and the optional DMX-TX module for the LFXHub.

## 12. address / support

Do not hesitate to contact movie-intercom.  
We are looking forward to answer your questions.

postal address	movie-intercom Urbanstr. 171B 10961 Berlin Germany	
phone 24h / 7 days	+49 (0)30 22 32 05 75	
fax	+49 (0)30 22 32 05 71	
e-mail	support@movie-inter.com	
web	<a href="http://www.movie-inter.com">http://www.movie-inter.com</a>	

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