

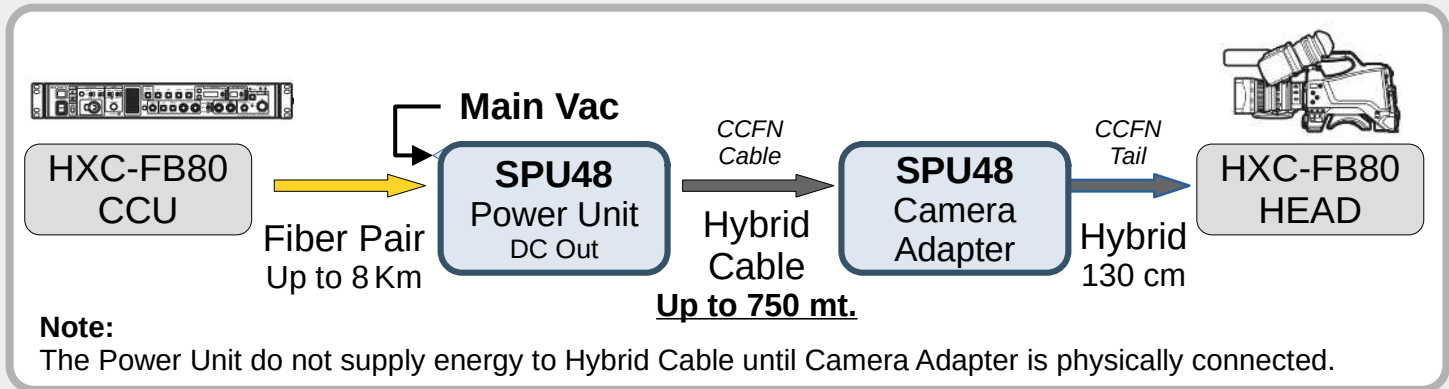
# Cambox SPU48

## Sony HXC-FB80 Advanced Power Unit

### SPU48 – Advanced Power Unit – ( 1/2 RU + CCA )



**Models:**  
**SPU48N** : Neutrik Opticalcon DUO  
**SPU48M** : Neutrik Tail to Lemo  
**SPU48L** : Lemo SMPTE 304M (HXC-FB80-L)  
**SPU12V** : Multi-Brand (power to camera 12V)



**SPU48 1/2 RU Power Unit**

**Main Switch:** Switch on the Power Unit → On LED  
**DC Out LED:** Lighted when Adapter connected and powered

**Main Input:** 90-240 Vac 60VA → Fuse: T1A  
**Fiber Input:** Connect Fibers LC/LC coming from HXC-FB80 CCU  
**Hybrid Output:** Powered Hybrid Out to Camera Adapter  
 • Neutrik Opticalcon DUO or Lemo - SMPTE304M

**SPU48M**  
 Special version developed to use SMPTE / LEMO cable connection between Power Unit and Camera Adapter keeping Neutrik connection to HXC-FB80

**SPU12V**

**Same features. Multi-Brand.**  
 The Camera Adapter is fixed on battery Plate, energy is supplied through battery pins or XLR4 and data via 10cm LC-LC. V-Lock or Gmount versions available.  
 Not compatible with HXC-FB80-L

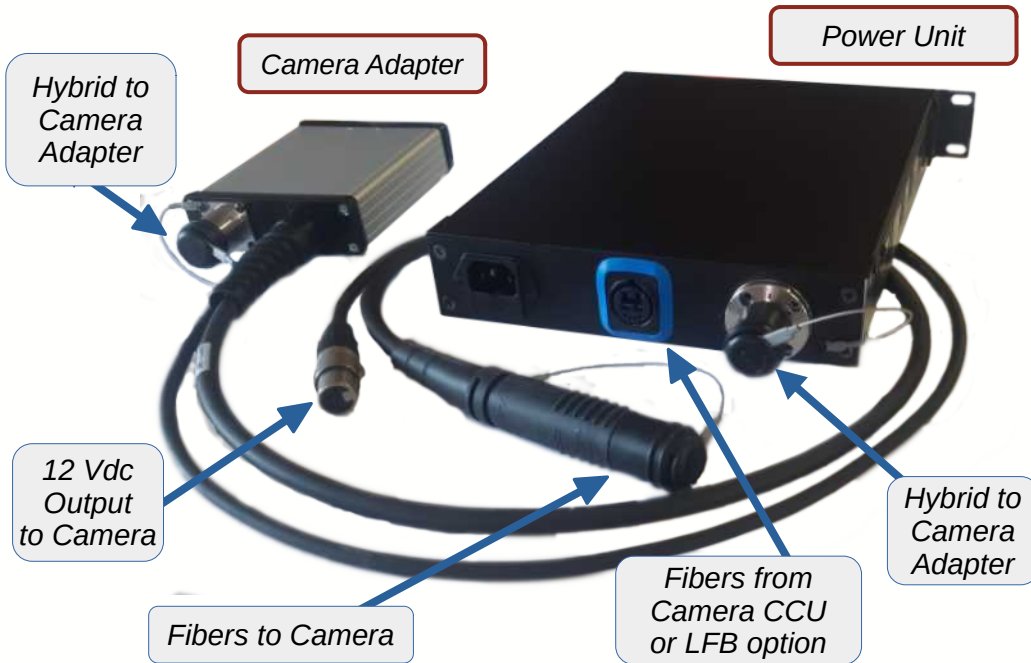
*Preliminary*

# Cambox SPU12

Multibrand Advanced Power Unit

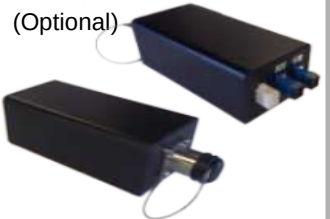
**SPU12 – Advanced Power Unit – ( ½ RU + CCA )**

*Sony – GrassValley – Panasonic – Hitachi - Ikegami*



General Purpose Power Re-Insertor in Hybrid Cable for Cameras with local Power Capability (Typically 12Vdc -XLR4)

**SPU-LFB**



Lemo to Fiber Adapter Box  
LC or SC



Camera CCU

LFB Opt.

Fiber Pair Up to 8Km

Main Vac

**SPU12**  
Power Unit  
DC Out

SMPTE

Hybrid Cable

Up to 750 mt.

**SPU12**  
Camera Adapter

SPU12 Tails

Hybrid +XLR  
130 cm

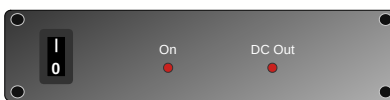


Camera HEAD

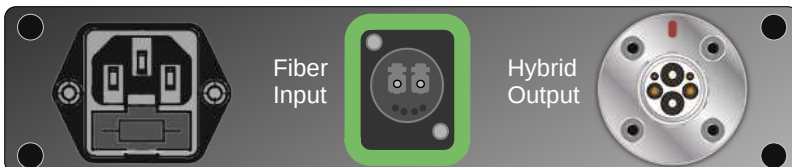
**Note:**

The Power Unit do not supply energy to Hybrid Cable until Camera Adapter is physically connected.

**SPU48** ½ RU Power Unit



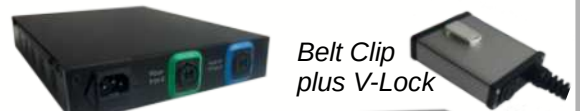
**Main Switch:**  
Switch on the Power Unit → On LED  
**DC Out LED:**  
Lighted when Adapter connected and powered



**Main Input:** 90-240 Vac 90VA max → Fuse: T1A

**Fiber Input:** ● Connect Fibers Pair coming from Camera CCU

**Hybrid Output:** ● Powered Hybrid Out to Camera Adapter  
● Neutrik Opticalcon DUO or Lemo - SMPTE304M



LC-LC  
OR  
SC-SC

Belt Clip  
plus V-Lock

CPU Side by Side mount

**SPU12Nx** : Neutrik Opticalcon DUO x=L → LC  
**SPU12Lx** : Lemo SMPTE 304M x=S → SC

**Check compatibility with Your Camera Models !!!**

Contact us: Email – SMS – WhatsApp

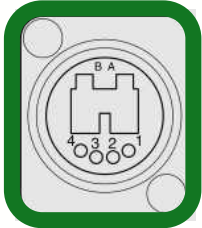
# Cambox SPU48

Sony HXC-FB80 Advanced Power Unit

## SPU48 – Quick Manual

### NEUTRIK Green

Connect here the Hybrid Cable to Camera Adapter



Pin	Signal
A	Optical Input
B	Optical Output
1	NC
2	NC
3	NC
4	NC

### Optical Fibers: Singlemode Pair

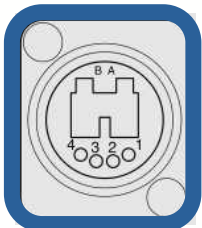


#### Note:

Neutrik Opticalcon DUO Lite was selected to allow usage of Hybrid cables on input (power unused) and for it's own internal fiber protection when **LC-LC** fiber pair are used  
Max distance from Camera CCU: 8 Km

### NEUTRIK Blue

Connect here the Hybrid Cable to Camera Adapter



Pin	Signal
A	Optical Input
B	Optical Output
1	DC Out (-)
2	Acknowledge
3	Acknowledge
4	DC Out (+)

### LEMO - SMPTE

Connect here the Hybrid Cable to Camera Adapter



### Hybrid Connector:

Neutrik-DUO or Lemo-SMPTE

#### Note:

Power Unit do not supply energy to Hybrid Cable until Camera Adapter is physically connected. One second after handshake the energy is enabled.  
All 4 wires of SMPTE are used.

### MAIN Connector



Power Input
90 – 280 Vac
Fuse: T1.5A
5W without Camera
50W max load

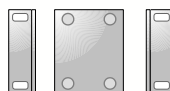
### Cautions:

To avoid undesirable spikes between cable/connector pins we suggest to switch off the Power Unit before unplugging Camera or Camera Adapter

**Warning:** Do not change Fuse Type ⚠

### Power Unit Rack Mounting:

Two ½ RU Power Units may be mounted side by side in 1RU with supplied adapters



#### Installation

Simply fix the Rack mount 'L' on sides with supplied screws  
Remove the 2 screws on joining side of front panel and set the '4 holes' plate to connect the two ½ rack than reinstall the removed screws

### Specifications:

Main Input: 90-280Vac  
Voltage to Camera: 48V (+/- 0,5v)  
Max Camera Power : 45W  
CPU Size: ½ RU deep 29cm Weight: 1,5 Kg  
CCA Belt Pack Size: 130 x 105 x 33 mm  
Weight; 675 g. Cable Tail included  
CCA Cable Tail length to Camera: 130 cm  
Operating temperature: -20 °C to 40 °C

CCA Locking Modes: V-Lock and/or Belt pack  
CCA normally slightly warm up  
Max cable length is load dependent  
HXC-FB80 with viewfinder >700m



Customised Version  
on Request



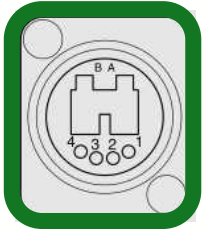
# Cambox SPU12

Multibrand Advanced Power Unit

## SPU12 – Quick Manual

### NEUTRIK Green

Connect here the Hybrid Cable to Camera Adapter



Pin	Signal
A	Optical Input
B	Optical Output
1	NC
2	NC
3	NC
4	NC

### Optical Fibers: Singlemode Pair LC-LC or SC-SC

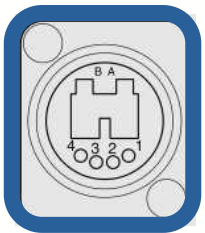


#### Note:

Neutrik Opticalcon DUO Lite was selected to allow usage of Hybrid cables on input (power unused) and for it's own internal fiber protection when **LC-LC** fiber pair are used. Max distance from Camera CCU: 8Km

### NEUTRIK Blue

Connect here the Hybrid Cable to Camera Adapter



Pin	Signal
A	Optical Input
B	Optical Output
1	DC Out (-)
2	Acknowledge
3	Acknowledge
4	DC Out (+)

### LEMO - SMPTE

Connect here the Hybrid Cable to Camera Adapter



### Hybrid Connector:

Neutrik-DUO or Lemo-SMPTE

#### Note:

Power Unit do not supply energy to Hybrid Cable until Camera Adapter is physically connected. One second after handshake the energy is enabled. All 4 wires of SMPTE are used.

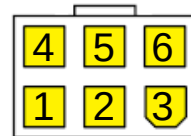
### MAIN Connector



Power Input
90 – 280 Vac
Fuse: T1.5A
5W without Camera
50W max load

### SPU-LFB Lemo Separator (Default Pin-Out)

1-4 Black - Power  
3-6 White - Power  
2 Red Sense  
5 Blu Sense



*Copper not used by SPU12 - Customized Pinout on request*

### Power Unit Rack Mounting:

Two ½ RU Power Units may be mounted side by side in 1RU with supplied adapters



#### Installation

Simply fix the Rack mount 'L' on sides with supplied screws  
Remove the 2 screws on joining side of front panel and set the '4 holes' plate to connect the two ½ rack than reinstall the removed screws

### Specifications:

Main Input: 90-280Vac  
Voltage to Camera: 13,5 V (+/- 0,5v)  
Max Camera Power : 75W  
CPU Size: ½ RU deep 29cm Weight: 1,5 Kg  
CCA Belt Pack Size: 130 x 105 x 33 mm  
Weight; 675 g. Cable Tail included  
CCA Cable Tail length to Camera: 130 cm  
Operating temperature: -20 °C to 40 °C

CCA Locking Modes: V-Lock and/or Belt pack  
CCA normally slightly warm up  
Max cable length is load dependent, up to 750m



*Customised Version on Request*



Preliminary

### Operating Instructions - (ENGLISH)

Before operating the unit, please read this manual thoroughly



#### WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.  
To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

THIS APPARATUS MUST BE EARTHED.

This product with the CE marking complies with the EMC Directive issued by the Commission of the European Community. Compliance with this directive implies conformity to the following European standards:

- EN55103-1: Electromagnetic Interference (Emission)
- EN55103-2: Electromagnetic Susceptibility (Immunity)

This product is intended for use in the following Electromagnetic Environment: E4 (controlled EMC environment, ex. TV studio).

#### Important Notes on Operation

##### *Use and storage locations*

Store in a level, ventilated place. Avoid using or storing the adaptor in the following places.

- In excessive heat or cold. Operating temperature range is 5°C to 40°C (41°F to 104°F).
- Locations where the adaptor may be exposed to rain or subject to violent vibration
- Near strong magnetic electromagnetic fields.
- In direct sunlight or close to heaters for extended periods

Do not subject to strong shocks. Do not drop the adaptor or subject it to strong shocks. The devices may be damaged.  
Do not wrap in a cloth or other covering during operation Internal temperatures may rise, causing malfunctions.

Note: Design and specifications are subject to change without notice

### Istruzioni per l'uso - (ITALIANO)

Leggere attentamente questo manuale prima di utilizzare l'unità



#### AVVERTENZE

Per ridurre il rischio di incendi o scosse elettriche, non esporre questi apparati alla pioggia o all'umidità.  
Per evitare scosse elettriche, non aprire l'involucro. Per l'assistenza rivolgersi unicamente a personale qualificato.

QUESTO APPARECCHIO DEVE ESSERE COLLEGATO A MASSA.

Questo prodotto recante il marchio CE è conforme sia alla direttiva sulla compatibilità elettromagnetica (EMC) emessa dalla Commissione della Comunità Europea.

La conformità a queste direttive implica la conformità alle seguenti normative europee:

- EN55103-1 : Interferenza elettromagnetica (Emissione)
- EN55103-2 : Sensibilità ai disturbi elettromagnetici (Immunità)

Questo prodotto è destinato all'uso nel seguente ambiente elettromagnetico:  
E4 (ambienti EMC controllati, ad esempio studi televisivi).

#### Note importanti sul funzionamento

##### *Luoghi d'uso e conservazione*

Conservare in un luogo piano e ventilato. Evitare di usare o conservare l'adattatore nei seguenti luoghi.

- In luoghi eccessivamente caldi o freddi. L'intervallo delle temperature di funzionamento è compreso tra 5°C e 40°C (41°F e 104°F)
- In luoghi in cui gli apparati potrebbe essere esposto a pioggia o soggetti a vibrazioni violente
- In prossimità di forti campi magnetici elettromagnetici.
- Sotto la luce diretta del sole o vicino a radiatori per un periodo di tempo prolungato

Non sottoporre a urti violenti. Non fare cadere gli apparati o sottoporli a urti violenti. In questi casi potrebbero venire danneggiati.

Non avvolgere in un panno o altracopertura durante il funzionamento

NOTA: Il progetto e le specifiche sono soggetti a modifiche senza necessità di notifica previa