

**NEW  
VERSION**

# MEERKAT™ HD

## FULLY DIGITAL TRIAX-TO-FIBRE VIDEO MEDIA CONVERTER



### **A compact solution for Sony® SD, Grass Valley™ (Thomson®) SD/HD camera based systems**

The LEMO MEERKAT™ Triax media converter system provides the solution the broadcast industry has been waiting for.

This compact “plug and play” transmission system provides a fibre link between Triax cameras and OB vans.

The LEMO Media Converter offers mobile facility providers, production centres and broadcast studios an appropriate and professional solution for long distance signal transmission.



## Get more from your cables

The camera is powered via a hybrid cable from the CCU with both the camera signals and the return monitor signals being digitally encoded and transmitted over fibre.

The SMPTE 311 hybrid cable uses the well proven technology of the LEMO 3K.93C series. If power from the CCU/OB van is not required, i. e. local power is available, a two fibre cable using 2 x FC-PC or 2 x SC may be used for signal transmission.

## Applications

- Golf, skiing, auto racing, olympic games
- Pre-fibred venues
- Stadiums, racing tracks

## Advantages

- Plug & play solution
- Lightweight and portable, compact
- No need for bulky / heavy triax cables
- High quality signal transmitted over fibre
- LED functionality display



## Features

- CE and FCC class B certified
- Immune to EMI
- NTSC & PAL
- Digital encoding and transmission
- Portable device
- No repeaters needed

## Accessories

- Tripod clamps (WST.MT.286.DZZ)
- MEERKAT™ carry belt (WST.MT.170.TZZ)
- 3K.93C assembled cable
- 3K.93C – SC or FC/PC adapter cable
- Option in-line power supply

Every triax-to-fibre Media Converter comes with power supply (110V/220V) adapter and its specific dongle (either Grassvalley or Sony).



**Each MEERKAT™ is delivered in a black watertight flightcase.**

## Specifications

| Input/outputs                                                         | Connectors                                            |
|-----------------------------------------------------------------------|-------------------------------------------------------|
| I/O ports                                                             | Triaxial connector 75 Ohms LEMO 3K.93C Series, (HDTV) |
| DC in                                                                 | LEMO 0K Series, 2pin in-line transformer              |
| General                                                               | Values                                                |
| Dimensions                                                            | 125W x 270L x 50H mm                                  |
| Mass (approx.)                                                        | 2 Kg                                                  |
| Power requirements In North America, Japan and areas of South America | 100 to 120 Vac, 50/60Hz                               |
| Power requirements in Europe, Africa, Australia, Scandinavia, China   | 220 to 240 Vac, 50/60 Hz                              |
| Power consumption                                                     | 16 W                                                  |
| Operating voltage                                                     | 12 Vdc / 1.5A max                                     |
| Operating temperature                                                 | -20°C to +55°C                                        |
| Humidity                                                              | up to +95%                                            |
| Index protection                                                      | IP66 (when mated)                                     |
| Signals                                                               | Values                                                |
| Optical RX sensitivity                                                | -3dB to -21dB                                         |
| Data rate                                                             | 2x2.5 GB/s                                            |
| Optical Tx output                                                     | 200µW (250µW max)                                     |
| Transm. wavelength                                                    | 1310nm /1550nm                                        |
| Supplied accessories                                                  | Quantity                                              |
| Fuse                                                                  | 4 X 4 Amp Wickmann TR5                                |
| AC/DC power supply                                                    | 2 with UK, USA, Europe adaptors                       |
| User's guide                                                          | 1                                                     |

## List of HD compatible cameras

| Manufacturer  | Camera       |      | Triax Camera Adaptor Part Nr | Base Station |      |
|---------------|--------------|------|------------------------------|--------------|------|
|               | Part Nr      | Type |                              | Part Nr      | Type |
| Grass Valley™ | LDK 3000     | HD   | LDK 5630                     | LDK 4580     | HD   |
| Grass Valley™ | LDK 4000     | HD   | LDK 5460                     | LDK 4502     | HD   |
|               |              |      | LDK 5860                     | LDK 4506     |      |
| Grass Valley™ | LDK 6000     | HD   | LDK 5460                     | LDK 4502     | HD   |
| Grass Valley™ | LDK 6200     | HD   | LDK 5462                     | LDK 4506     | HD   |
| Grass Valley™ | LDK 8000     | HD   | LDK 5860                     | LDK 4502     | HD   |
| Grass Valley™ | LDK 8000 (S) | HD   | LDK 5860                     | LDK 4506     | HD   |

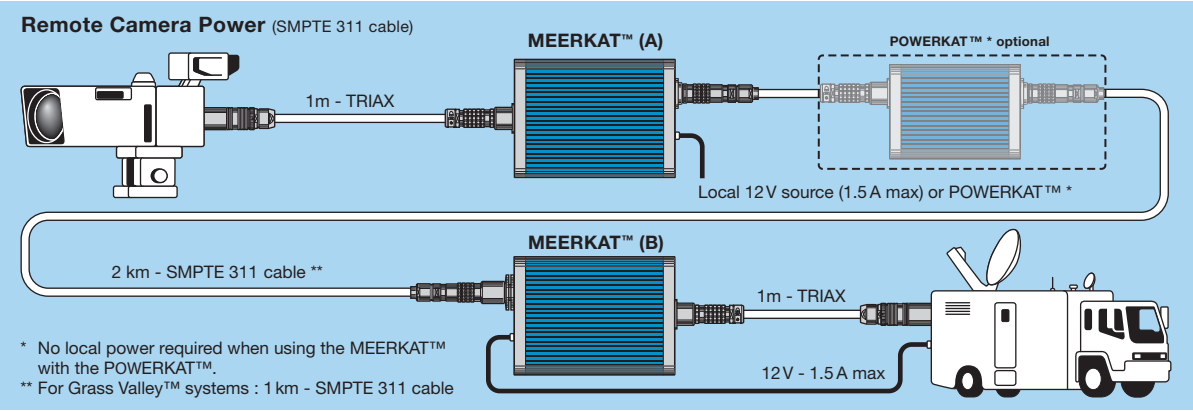
## List of SD compatible cameras

| Manufacturer  | Camera           |      | Triax Camera Adaptor Part Nr | Base Station |      |
|---------------|------------------|------|------------------------------|--------------|------|
|               | Part Nr          | Type |                              | Part Nr      | Type |
| SONY®         | BVP-E30          | SD   | CA590                        | CCU-790      | SD   |
| SONY®         | BVP550           | SD   | CA550                        | CU-550       | SD   |
| SONY®         | BVP950           | SD   | CA570                        | CCU-700      | SD   |
| SONY®         | BVP700           | SD   |                              | CCU-700      |      |
| SONY®         | BVP750           | SD   |                              | CCU-700      |      |
| SONY®         |                  |      |                              | CCU-750      |      |
| SONY®         |                  |      |                              | CCU-500      |      |
| Grass Valley™ | LDK20s           | SD   | LDK5400                      | LDK4053      | SD   |
|               |                  |      | LDK5430                      | LDK4501      |      |
| Grass Valley™ | LDK100<br>LDK200 | SD   | LDK5400                      | LDK4053      | SD   |
|               |                  |      | LDK5430                      | LDK5401      |      |
| Grass Valley™ | LDK300           | SD   | LDK5400                      |              | SD   |
|               |                  |      | LDK5430                      | LDK4501SL    |      |
| Grass Valley™ | LDK400           | SD   | LDK5400                      |              | SD   |
|               |                  |      | LDK5430                      | LDK4501SL    |      |
| Grass Valley™ | LDK500           | SD   | LDK5400                      |              | SD   |
|               |                  |      | LDK5430                      | LDK4501SL    |      |

**Notes:** Do not connect any camera other than those on the list above without contacting the LEMO Technical Support Group.

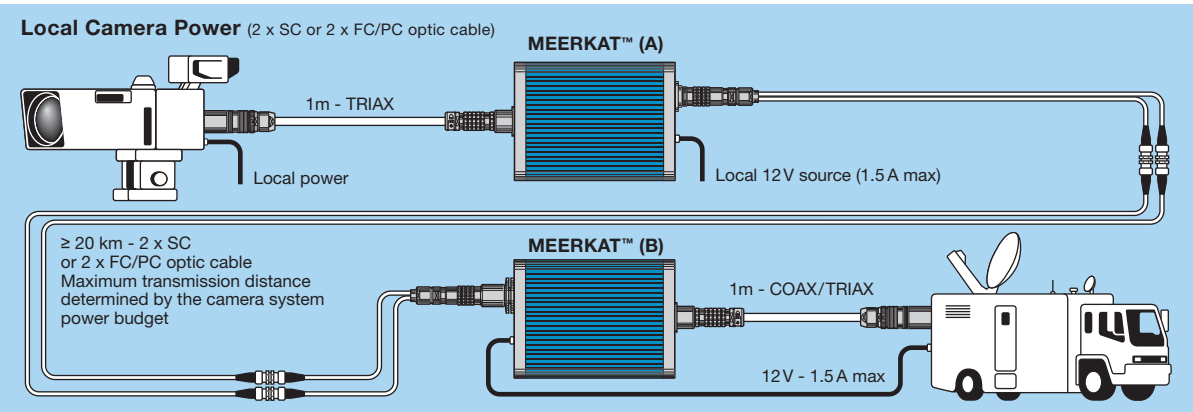
Option 1 - Remote Camera Power

With the Remote Camera Power setup, the camera is powered directly through the SMPTE 311 cable. The useable cable length of the SMPTE 311 cables is limited by the resistance of the copper power conductors and will vary between cables from different cable manufacturers. However distances of up to 2 km are achievable (for Sony® based systems only).



Option 2 - Local Camera Power

With the Local Camera Power setup, the camera is powered with its AC or DC voltage from a local source of power either - a generator or a power pack.



| LEMO triax connector on the camera | Part number of the MEERKAT™ (A) on the camera side | Electrical triax connector on cable |
|------------------------------------|----------------------------------------------------|-------------------------------------|
| Socket 4M.650                      | PHW.MT.3••.TFRP10                                  | FGG.4M.650.CTLC90                   |
| Plug 4M.650                        | PHW.MT.3••.TPRP10                                  | PHG.4M.650.CTAC90                   |
| Socket 4E.675                      | PHW.MT.3••.TFUP10                                  | FFA.4E.675.CTAC90                   |
| Plug 4E.675                        | PHW.MT.3••.TPUP10                                  | PCA.4E.675.CTLC90                   |
| Socket 4A.675                      | PHW.MT.3••.TFVP10                                  | FXB.4A.675.CTCC85                   |
| Plug 4A.675                        | PHW.MT.3••.TPVP10                                  | PXA.4A.675.CTRC85                   |
| Socket REDEL F                     | PHW.MT.3••.TFWP10                                  | FAZ.T7.675.CTA02C                   |
| Socket 3T.675                      | PHW.MT.3••.TFTP10                                  | FFA.3T.675.CTAY92S                  |

| LEMO triax connector on the CCU | Part number of the MEERKAT™ (B) on the CCU side | Electrical triax connector on cable |
|---------------------------------|-------------------------------------------------|-------------------------------------|
| Plug 4M.650                     | FGW.MT.3••.TPRP10                               | PHG.4M.650.CTAC90                   |
| Socket 4M.650                   | FGW.MT.3••.TFRP10                               | FGG.4M.650.CTLC90                   |
| Plug 4E.675                     | FGW.MT.3••.TPUP10                               | PCA.4E.675.CTLC90                   |
| Socket 4E.675                   | FGW.MT.3••.TFUP10                               | FFA.4E.675.CTAC90                   |
| Plug 4A.675                     | FGW.MT.3••.TPVP10                               | PXA.4A.675.CTRC85                   |
| Socket 4A.675                   | FGW.MT.3••.TFVP10                               | FXB.4A.675.CTCC85                   |
| Plug REDEL F                    | FGW.MT.3••.TPWP10                               | PCZ.T7.675.CTL02C                   |
| Plug 3T.675                     | FGW.MT.3••.TPTP10                               | PCA.3T.675.CTLY92S                  |

| •• | Camera system                                  |
|----|------------------------------------------------|
| KC | Sony® SD / Grass Valley™ SD                    |
| TH | Grass Valley™ HD / Grass Valley™ SD / Sony® SD |



Going the distance digitally

|                           |       |
|---------------------------|-------|
| TRIAX                     | 2 km  |
| Fibre (with remote power) | 2 km  |
| Fibre (with local power)  | 20 km |

| Cable Camera to MEERKAT™ (A) | Type      | Cable CCU to MEERKAT™ (B) |
|------------------------------|-----------|---------------------------|
| MAP.MC.TAA.MM012G            | 4A series | MAM.MC.TAA.CM012G         |
| MAF.MC.TRA.AM012G            | REDEL T7  | MAR.MC.TRA.AM012G         |
| MAC.MC.TMA.AM012G            | 4M series | MAG.MC.TMA.LM012G         |
| MAL.MC.TEA.LM012G            | 4E series | MAA.MC.TEA.AM012G         |
| MAA.MC.TTA.AM012G            | 3T series | MAC.MC.TTA.LM012G         |

Additional triax cables can be ordered for specific cameras.  
One set of cable comes with fully working MEERKAT™ System.



#### EDW POWERKAT™

##### EDW.MT.126.TE3K

It retrieves the power directly from the CCU and allows powering both the camera and HD MEERKAT™ directly from the SMPTE cable. Delivered with 1 meter cable to HD MEERKAT™ (PUW-FUW).



#### GSF Tripod clamp

##### GSF.MT.283.DZZ

The tripod clamp allows the camera operator to fix the HD MEERKAT™ to the camera tripod.



#### WST Hang up strap kit

##### WST.MT.170.TZZ

The hang up strap kit allows the camera operator to easily hang up the HD MEERKAT™ while shooting. (Strap length: 0.25 m).



#### WSK Belt carrier

**Belt: WSK.MT.285.PN**

**Buckles: WSK.MT.284.RT**

The belt carrier allows the cameraman to carry the MEERKAT™ or the POWERKAT™ on the hip. Simply slide the belt through two buckles.

**Note:** Two buckles are necessary to carry the MEERKAT™.



#### MGY Cable lead for battery

##### MGY.OK.302.YAM020N

Cable lead for professional battery belt, it allows powering the HD MEERKAT™. Cable (length 2 meters) with 2 pin LEMO connector (FGG.OK) to a 4-Pin XLR male Neutrik connector. To be used with commercially available battery belts (12V)



#### FGG Programming dongle

The HD MEERKAT™ is delivered with its original dongle. An additional dongle is available (Grass Valley® / Sony®). The second dongle allows switching from one system to another.

Grass Valley® SD: **FGG.OK.309.CB70TS**

Sony® SD: **FGG.OK.309.CD70SS**

Grass Valley® HD: **FGG.OK.309.CA00TH**

### LEMO HEADQUARTERS

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