## EASYLINE

# master



## Tune in the easy KVM World

FULL HD - KVM EXTENDE

KVM Extender over IP in single DVI, DVI-D, KVM Extender VGA & KVM Extender USB in CATx

masterEASY single is a highly optimized KVM Extender over IP for distances up to 150m/492ft at a resolution of 1920x1200@60Hz and is available in copper. masterEASY KVM Extender convince with an ultra flat housing -4 single units in 1RU, have embedded sound and are compatible with standard Network components. Video sharing, USB sharing, multihead.

#### ... masterEASY single CATx

- DVI-D/ USB2.0 KVM Extender over IP
- single in copper/CATx
- max resolution
  1920 x 1200 @60 Hz
- max distance 150m/492ft
- 4 single masterEASY KVM Extender in 1RU
- Sound embedded
- Full HD Videos in real time

#### USB 2.0 in house development

The in-house developed USB 2.0 implementation supports typical USB devices like touch screens, sound modules, printers and alike components. On top the support for memory devices such as thumb-drives and USB HDDs can be enabled or disabled on demand providing another layer of security. And of course keyboards and mice are supported, too.

#### **Bandwidth reduction**

Mastereasy allows limiting the transmission bandwidth limitation in nine fix steps. This allows to managed network utilization by reducing operational performance. Depending on the use case, this might not even have a recognizable impact (e.g. static image monitoring).

- USB trnsmission rate max 480Mbit/s
- only one cable for USB & Video
- DVI extension without loss of quality
- Feature freeze last image
- Local/CPU -Remote/CON Monitor Output
- Single Units :redundant for point to point , in the Matrix Swiching System with Switch (Layer3)
- Upgrades: USB & Sound

#### Infrastructure

Mastereasy locals and remotes are small form factor devices. They fit easily underneath a desk and up to four units can be mounted on a 19"- shelf. Single-sided interface orientation provides easy access in setup and service. They provide two power inputs for redundant feeding. Easyline is designed fanless and with that noiseless for silent and ergonomic work spaces.

#### Audio

The Mastereasy KVM extender provides two ways of transmitting stereo audio signals. The video embedded (inluded) 2-channel – L-PCM standard and unbalanced analog (Upgrade opt) bi-directional audio using 3.5mm jacks for Line input and speakers.



Full HD



## www.kvm-tec.com

Misprints, errors and technical changes reserved

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### All in one go

Matrix Switching Systems up to 56 Endpoints without user system

### Bridging - Easy Switching without switch



With **Frontbridging** 2 Local EASYline Extenders can be bridged to 1 remote dual Extender (2 network sockets) & thus one or two screens can display the contents of the PCs simultaneously with different images and can be operated either right or left.

2 local single Unit + 1 remote dual Unit = Bridging on 1 or 2 screens



With **Backbridging** from one dual local extender can be shared to two single remote extenders. For all applications that require monitoring at different locations

1 dual local Unit + 2 remote Units = Bridging or Sharing on 1 or 2 screens



Easy Cross Move in Bridging Mode - Software feature both PCs can be operated with one mouse and one keyboard

2 local Units + 1 dual remote Unit = Easy Cross Move with 1 keyboard & 1 mouse In USB transparent the PC can be changed with a shortcut. In Emulation Mode uninterrupted switching between the PCs with the mouse.

Latency (encoding/decoding) <1.38 ms

For each meter of transmission additional 5ns of signal propagation need to be added. 200km result in 1ms accordingly. Latencies caused by network switch topologies vary by type and manufacturer and overall configuration and need to be counted on top!

#### 9-Step bandwidth fix reduction (1: no – 9: max reduction)

Image Change (Frame to Frame) (%)	average bandwidth [Mbit/s] with fix r eduction
5	50
10	100
25	250
50	470
75	950
100	950



With bandwidth reduction the frame rate is reduced.

Via level 5, the color accuracy is additionally the color accuracy is slightly reduced

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### **Technical specifications**

		ME1-Local/CPU	ME1-R Remote/CON	
Interfaces	Video	1x DVI in 1x DVI out	1x DVI-D out	
	USB 2.0	1 x USB-B to PC	4 x USB-A (devices )	
	Audio	1 x 3,5mm jack (Line ln) 1 x 3,5mm jack (Line out)	1 x 3,5mm jack Line In) 1Vpp 1 x 3,5mm lack (Speaker) 2x10mW@32Ohm	
Video	Signal type Resolution (digital) Signal type Resolution (analog) (opt.) Color mode	DVI-D max. 1920x1200 @ 60Hz DVI-I max. 1920x1200 @ 60Hz 24bit	DVI-D max. 1920x1200 @ 60Hz DVI-I max. 1920x1200 @ 60Hz 24bit	
Audio	Type Bandwidth	analogue / embedded 16bit, 44kHz, 2ch	analogue/embedded 16 bit, 44kHz, 2ch	
USB	Specification Type Rate	USB 2.0 transparent max. 480 Mbit/s mass storage devices & camera optional	USB 2.0 transparent max. 480 Mbit/s mass storage devices & camera optional	
Casing	Material Dimension (w x H x D) Weight Shipping weight SET 1895 g /4.17 lb	anodized aluminum 108 x 43 x 107,5 mm 4.25 x 1.69 x 4,23 inch 295 g / 0.65 lb shipment weight 1005g/2,21 lb	anodized aluminum 108 x 43x 107,5 mm 4.25 x 1.69 x 4.29 inch 295 g/ 0.65 lb shipment weight 890 g/ 1.96lb	
Power Supply	Туре	wall power supply unit 12 VDC 1A redundant max 35 V barrel connector 2.1mm	wall power supply unit 12 VDC 1A redundant max 35 V barrel connector 2.1mm	
Compreswssion factor		3.5 depending in image content	3.5 depending on image content	
Network Interface		RJ45	RJ45	
Power Input	Operation	12W	12W without USB devices	
Operation environment	Temperature Humidity	0 to +45 °C /32 to 113 °F) < 80%, non -condensing	0 to +45 °C /32 to 113 °F) < 80%, non- condensing	
Storage environment	Temperature Humidity	-25 to 80 °C /-13 to 176 F < 80%, non condensing	-25 to 80 °C /-13 to 176 F < 80%, non condensing	
Cooling		free air convection	free air convection	
MTBF		82.820 calculated hours approx. 10 years	82.820 calculated hours approx. 10 years	
Conformity		CE, FCC	CE, FCC	
Warranty		2 years (5 years optional)	2 years (5 years optional)	
Delivery content	Devices Power Supply	1 x ME1 local (CPU) 1 x wall power supply unit 12V 1A (EU- plug or INT plug)	1 x ME1 remote (CON) 1 x wall power supply unit 12V 1A (EU- plug or INT plug)	
	Cables	1 x DVI - DVI cable 1,8m (5.9ft) 1 x USB cable 1,8m (5.9ft) 1 x VGA-DVI cable 1,8m (5.9ft) opt 1 x Audio cable 1,8m (5.9ft) opt		
	Mounting	4 x rubber feet	4 x rubber feet	
	Manual	Quickinstallation manual download: www.kvm-tec		

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### Part Number & short description

Part.Nr	short name	short description
KT - 8112	ME1	masterEASY Extender Single – Set EAN0798190109947 UPC 51497113728
KT - 8112L	ME1L	masterEASY Extender Single –Local Unit /CPU EAN 0798190109954 UPC 51497113735
KT - 8112R	ME1R	masterEASY Extender Single –Remote Unit /CON EAN 0798190109961 UPC 51497113742KT -
KT - 8147	ME-MO	mastereasy USB Memory Upgrade EAN 0798190109244 UPC 051497113025
KT - 8141	ME-SO	masterEASY Sound Upgrade EAN 0798190109220 UPC 0798190109220
KT - 9003 KT - 9002	GV5JU GV5J	Warranty extension flexible per UNIT Warranty extension flexibleper SET
ADD-ONS KT - 6231	UMK-EASY	Rack Mounting Kit for under the table EAN 0798190109466 UPC 051497113247
KT - 6232	RMK-EASY-F	Rack Mounting Kit with front panel for EAN 0798190109473 UPC 051497113254
KT - 6233	RMK-EASY-FN	Rack Mounting Kit with front panel and Power supply EAN 0798190109480 UPC 051497113261
KT - 6234	RMK-EASY	Rack Mounting Kit with front panel and redundand Power supply EAN 0798190109503 UPC 051497113285
KT - 6235 KT - 6236 KT-7070 KT-7080	DINMK-EASY VH -EASY TNT40 TNT100	Din Rail Mounting EAN 0798190109510 UPC 051497113292 Vesa Mounting EAN 0798190109527 UPC 051497113308 Din Rail power supply DN40-12 Din Rail power supply DN-100-12



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