VGA Keyboard Mouse CAT5 Extender

ITEM NO.: VKM02

The VGA, Keyboard Mouse CAT5 Extender allows VGA video signals and keyboard mouse to be transmitted up to 100 meters via one 4-paris CAT5 UTP or STP cable.   Used in pairs, the Extender is used in home or commercial applications as a smart, fast and cost-effective, eliminates costly and bulky VGA, keyboard mouse cable.   Applications for classroom projector systems, boardroom systems, collaborative PC systems C-training systems, and tradeshows PC demo systems and medical information systems.

Features:
VKM02   Keyboard Mouse CAT5 Extender – USB Interface at Local Unit
- Extend VGA and Keyboard mouse over 2 CAT5 UTP cable to instead of VGA cable and keyboard mouse cable.
- Including local and remote units.
- Up to 100 meters via standard 4 pairs CAT5 UTP or STP cable instead of VGA cable.
- **Built in Dip switch for compatible with all monitors when using CAT5 UTP cable.**
- Supports up to 1280x1024 pixels.
- Passive device, not support VGA DDC protocol.
- Perfect for classrooms, lecture halls, tradeshows, video information displays…etc.
- but the keyboard mouse is USB Interface at local unit.

Installation:

CAUTION: Make sure to follow this instruction for DIP switch setting when using CAT5 UTP cable.   Please disconnect the wiring from receiver to monitor once the picture not normal, otherwise it may cause your monitor damaged.
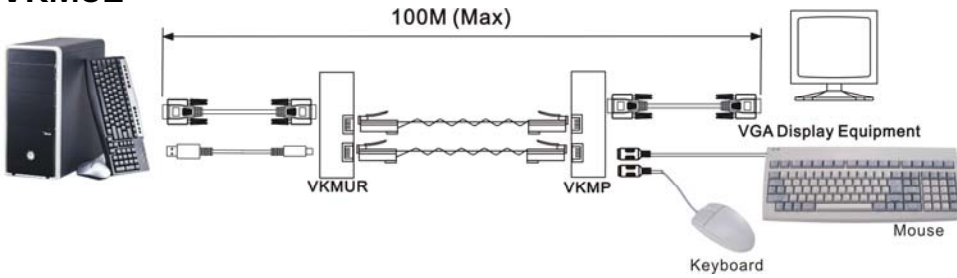**If the keyboard mouse work abnormal, please reverse the cable of keyboard mouse.**
* There is no need to adjust Dip switch when using STP (shielding twisted pair) cable.
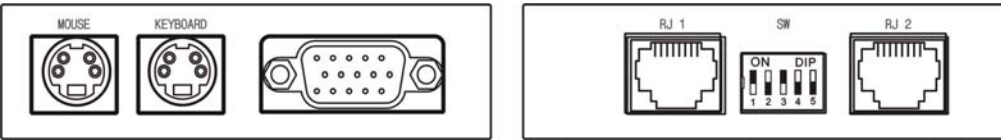
* Dip Switch setting when using with UTP cable.

1. Set up the Dip switch setting from stage 2 or 3 for both transmitter and receiver and check all wiring and setting, then connect with monitor.

2. Please disconnect the receiver with monitor once the picture not normal or no picture display.   Then increase the stage of Dip switch at the receiver and re-connect again.

3. If still no picture display, then try to increase the stage of Dip switch at the transmitter and re-connect again.

4. The picture may distorted at the upper side when use CRT monitor, you could increase the stage of Dip switch at the transmitter to improve picture quality.

5. Dip switch by accumulate setting. For Example:
    3 + 2 + 1 = 6
    3 + 2 = 5
    3 + 1 = 4
    3 = 3

6. Improper setting may cause no picture display.
7. After properly setting, you could adjust the monitor for the best picture quality.

Installation View :
VKM02

Panel View:
VKMP

VKMUR

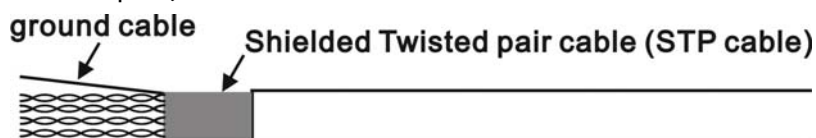| Max. Distance via CAT 5 Cable	
800x600 pixels (30MHz)	105M
1024x768 pixels (60MHz)	75M
1280x1024 pixels (100MHz)	60M

Specification:

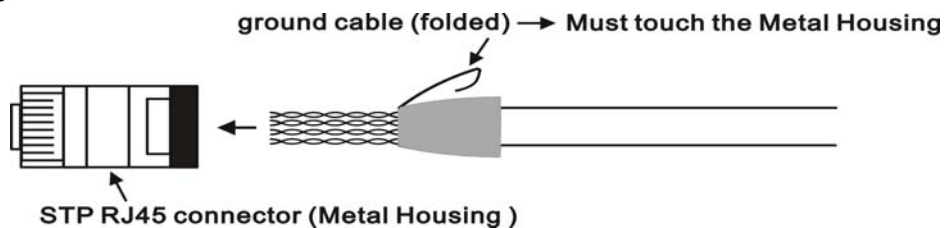| ITEM NO.	VKM02
Environment	VGA. VESA VP&D 1.0, VIP ver 2.0
Devices	VGA monitors, LCD projection screen, Laptops, PCs.
Input Signals	Video : 1.1V P-P
	Horiz & Vert Sync : TTL standard. 300kHz max. bandwidth
Insertion Loss	Less than 3dB per pair over the frequency range
Video Signal Return Loss	-15dB max from DC to 60Mhz
RJ45 Pin Configuration	R video (Red): Pin 1 (+), Pin 2 (-) Balanced Gvideo (Green): Pin 4 (+), Pin 5 (-) Balanced B video (Blue): Pin 7 (+), Pin 8 (-) Balanced Horizontal Sync: Pin 3, Vertical Sync: Pin 6
Impedance	Input : RGB 75 ohms (DB15 HD) Unbalanced
	Output : RGB 100 ohms (RJ45 shielded) Balanced
	Horizontal and vertical sync : TTL standard
Dip Switch	5 stage, up to 32 combinations
Transmission Distance	Up to 100 meters depend on image resolution
CABLE FOR RJ-45	CAT5 UTP or STP Cable
Temperature	Operation: 0 to 55 C, Storage: -20 TO 85 c, Humidity: up to 95%
DIMENSIONS W x H x D mm	108x74x27

Application Tips:

Following is the correct cable connection when use STP cable:

1. STP (shielding twisted pair) Cable.

ground cable   Shielded Twisted pair cable (STP cable)

2. STP (shielding) RJ45 connector with STP cable connection.

ground cable (folded) → Must touch the Metal Housing

STP RJ45 connector (Metal Housing)

Roubleshooting:

1. Check all the connections and verify the pin of configuration.
2. The maximum distances supported by the VGA Extender are dependent on the type of twisted pair cable and image resolution of the PC's VGA interface.   Make sure that the maximum recommended operational distances have not been exceeded.
3. All wiring is "straight-through" twisted pair cable, not being used for other LAN or telephone equipment.
4. Do not connect the VGA Extender to a telecommunication outlet wired to unrelated equipment.
5. Replace the VGA Extender with another one that is knows to be working.