

# KVM TRIVIA Vol.1



Newsletter from the S Laboratory Vol.1

## The Inside Story of the Extender

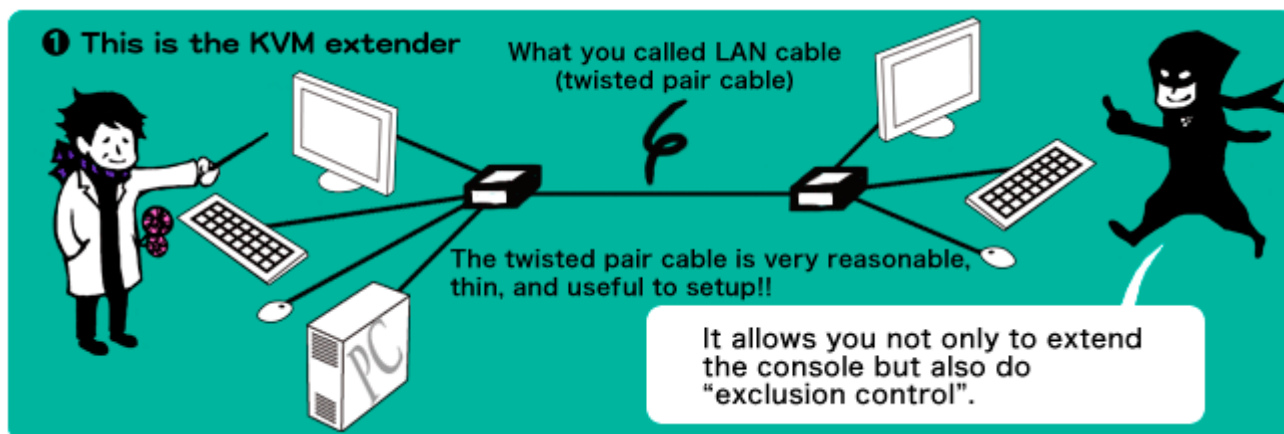
### [ The Inside Story of the Extender ]

This column named “Newsletter from the S Laboratory” is written by me whose nickname is “Unlicensed Doctor S”, a technical expert of ATEN Japan. In this column, I would like to discuss unknown mechanisms and structures of KVM switches, extenders and Over-IP products and let readers know them secretly.

I would like to explain a device called console extender in my first column.

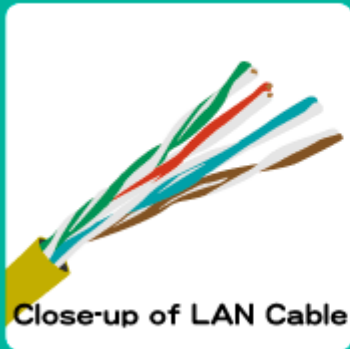
Many of you may have thought of operating your PC from a separate place. Recently it has become possible and relatively easy to operate a PC through the network, but it is a fact that you may have to face a lot of troubles with complicated setups and synchronizing methods when installing two PCs.

In such situations, a console extender is very useful. This device allows you to put your PC anywhere and operate it even if the console is located tens of meters away. The structure of this device allows connecting 2 sets of consoles (keyboard, mouse, and monitor) to your PC, and one of the consoles can extend the signal by using the Cat 5e LAN cable. That's why you can set your console away from your PC.



Although this console extender uses a LAN cable, it is not a network product. In other words, you don't need any knowledge about the network. You just need to connect the LAN cables for setup. However, you have to note that it is a different feature from transmitting digital signals through a LAN cable because analog signal is transmitting from an extender.

## ② The Story of Cable



Because it is not digital packet data, deterioration of the video quality cannot be avoided due to decay the signal.

Actually a Cat 5 LAN cable usually has eight lines. Two lines for each color of RGB are used to transmit the signal as color information from the extender (6 lines are used in total because RGB is composed of three colors) and the remaining two lines are used to transmit the signals of your keyboard and mouse. When analog signal is used, the longer distance of the extension will cause more deterioration in the transmission. So, please note that the quality of the display will improve if you use good quality LAN cable or one which has picture compensation.

