



WS-Remote IV & IV Light

WORKSTATION REMOTE WITH USB 1.1 SUPPORT

Save space and reduce heat radiation due to workstations at your desk

Remote control of your dedicated workstation over twisted pair cablings

Automatic compensation of cable losses

On Screen Display (OSD) for fine adjustment with keyboard



Description

With WS-Remote you can easily remote your workstations in a protected and air-conditioned area like a system room or cabinet, reducing air-conditioning costs on the trading floor.

Depending on cabling structure to the desks you may use your existing cabling system.

Floor space can be used more efficiently. Without computers on the desk, a smaller desk footprint is necessary.

Highlights

- Remote video, audio and data links over one twisted pair cable
- Reduce heat and noise radiation as well as required desk space
- Automatic adjustment of Gain, EQ and Skew in order to compensate cable losses (Attenuation/Skew)
- On Screen Menu for fine adjustment and settings operated with the keyboard at the desk
- Up to 300m distance, depending on cabling bandwidth and video signal
- Supports resolution of 1600x1200@60Hz or even higher

Features

WS-Remote IV is available as standard and as light version.

Transmission

Video, audio, USB and serial data signals of a workstation are transmitted in real time over one twisted pair cable (CAT5 UTP/STP).

Each additional transmission of a video signal requires an additional WS-Remote line.

Distance

WS-Remote IV : up to 300m
WS-Remote IV Light : up to 180m

Max. distance varies depending on:

- Bandwidth and skew of cable
- Resolution/Frequency of video
- Number of patch joints

Video Signal

The Video Signal on transmitter side (from workstation's graphic card), can be analogue (D-SUB HD15) or digital (DVI-D). Monitor data via I2C bus can be transmitted, if supported by the workstation

At receiver side the video signal is always analogue (D-SUB HD15).

WS-Remote IV supports VESA standard resolutions of up to 1600x1200@60Hz. WS-Remote IV Light supports some non VESA compatible formats up to 1600x1200@60Hz.

Product lines

WS-Remote IV is available in different product lines and module types.

Rack Module

EURO format card is mounted and powered by a Chassis available in different sizes and shapes (19" Desk Housing)

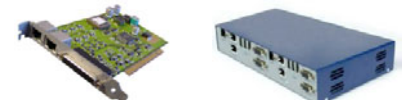
- Single Transmitter/Receiver card



- Single DVI Transmitter card
Input for Digital Video Interface (DVI-D). Output signal on receiver side analogue.
- Dual Video Transmitter card (Video only)
Card module for the transmission of 2 video signals only.

PCI Bus Module

- PCI Dual Transmitter card
Card module for the transmission of USB/RS232 and 2 video signals. PCI card modules are mounted directly in PC's PCI or PCI-X bus. Card uses only power from the bus.



Standalone

- Single/Dual/Quad Receiver
Standalone receiver boxes with external power supply.

Cabling system

The use of a CAT5 or higher shielded or unshielded twisted pair cable for the signal transmission between the transmitter and receiver ensures a high picture quality.

The data (USB1.1, Serial) and audio signals of the PC are transmitted together with the video signal over one twisted pair cable.

Additional video signals requires a separate cable connection to the desk.

Compensation of losses

During the transmission the quality of the signal decreases according to the length and characteristics of the cable.

The WS-Remote is able to compensate the most significant cable losses like attenuation and skew delay.

Attenuation losses are the result of the cable impedance (capacitive, inductive and resistance) of the cable.

They are visible on the monitor by a blurred and weak picture.

Depending of the production method the four-paired wirings of the twisted pair cable do not have equal lengths.

The three colours (RGB) of the video signal are separately transmitted using one pair of wiring per colour.

This results in skew delays between the 3 colour signals. These losses appear as misaligned colours on the screen.

Space saving modules

The WS-Remote product family comes with different mounting forms.

They are available as standalones (single, dual, quad) or as EURO format cards for the installation in a chassis.

Our highlight is the WS-Remote PCI card, which is a dual transmitter card for the installation directly in the PC using a PCI or PCIX slot. The card uses only the power from the PCI BUS so the PC's security will not be affected as no software or driver is required.

Example

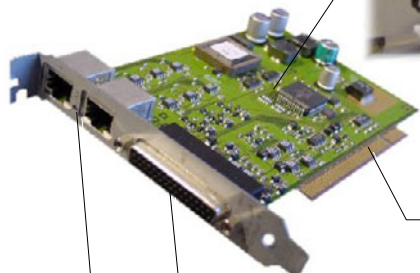
Example of a system room (back/front view) with remoted workstations stored in custom made cabinets.



PC with a WS-Remote PCI Dual card for the transmission USB1.1, RS232 and two video signals over two twisted pair cables.



WS-Remote PCI dual card with special connector for USB, Audio and 2 Video outputs.



Special connector for USB, serial data, audio and video

2 line outputs for the signal transmission

The PCI connector is only using the bus voltage from the PC for the power of the card.