DVMD & Stream Explorer™ DVMD-B1

Remote Usage of STREAM EXPLORER™ via Ethernet Network

In frequent cases, it appears that the MPEG2 decoder is not located in the control/monitoring room. The present application note describes how to operate a remote control of up to four DVMDs over an ethernet link.

ROHDE & SCHWARZ

Contents

1   Overview

This application note aims at providing the necessary understanding to configure and to control remotely the DVMD over an Ethernet link. The system includes a special device (COM-Server) to interface the network world upon which is connected a PC and the serial communication ports of the DVMD(s).

2   Principle of Operation

This all turns around the configuration of communication ports. After having configured the COM-Server driver (see below) and entered the corresponding serial port in the Stream Explorer, just use the duo DVMD-Stream Explorer as usual. The COM-Server makes it all transparent.

3   Hardware and Software Requirements

Hardware Requirements

This application involves the following devices and cables

- PC + Ethernet card
with Stream Explorer™ software already installed

- COM-Server Display-Version 1/4 ports   #58004

or

- COM-Server Kompakt 1 ports   #58201 :

(1 Port)   (4 Ports)

- **Driver for COM-Server** to be downloaded from Internet (see below)

- **2 Ethernet cables** for
PC to Network
Network to COM-Server : twisted pair or coaxial both possible on COM-Server

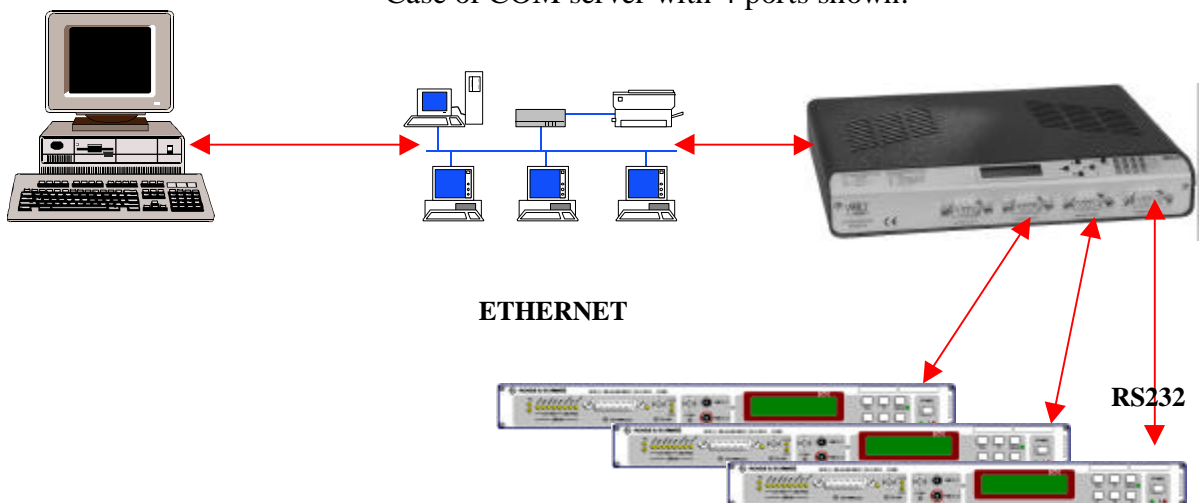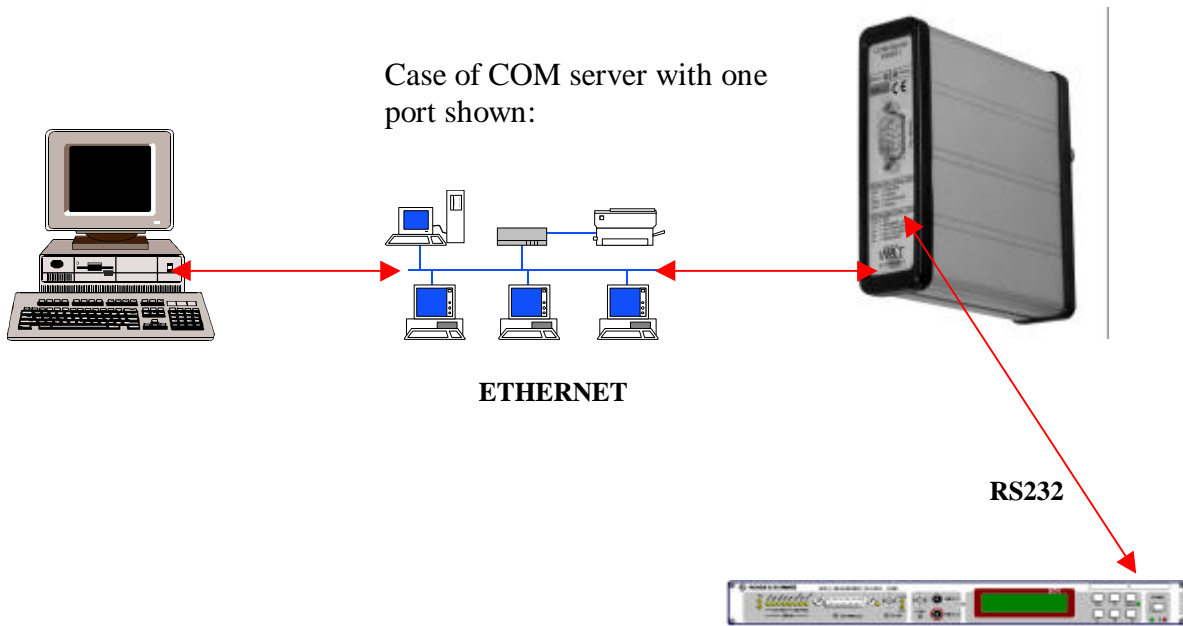- **RS232 Cable** for
COM-Server to DVMD

Software Requirements
- Stream Explorer™ DVMD-B1
- Driver for COM-Server

4 Connections

PC to network: twisted pair
COM-Server to network: coax or twisted pair
DVMD to COM-Server: serial

Case of COM server with 4 ports shown:

ETHERNET

RS232

Case of COM server with one
port shown:

ETHERNET

RS232

5   Installing the Driver / Setting the Parameter

Now, the COM-Server must be informed about communication protocols of its both sides, i.e. serial protocols and Ethernet parameters.

Installation of the COM-Server driver (RS232/Ethernet converter):

The following procedures and parameters suit well to the application :

Download the driver from the WuT internet site, corresponding to the OS of the computer Windows 3.11, Windows 95 or Windows NT.

Download sites from W&T homepage: www.wut.de
Dienste → Download Service for Win95 or Win98 driver
Neuigkeiten → Umlenkung lokaler COMs ins Netzwerk... for Windows NT driver

De-compact the received .EXE file in the directory of your choice.

Launch then the SETUP.EXE program.

Configure the COM-Server driver.

The settings of the converter must be fixed in the *System* window (icon *COM-Umlenkung*). Specify the IP address (refer to your network administrator) of the converter as well as the correspondence between the port number of the converter (A to D) and the communication port seen by the DVMD (COM1 to COM9).

When launching the Stream Explorer, the available serial ports are recognised and the communication can take place automatically if the parameters match :

Parameters settings

COM-Server: menus
SET TCP/IP

Box IP Number : 89.10.24.86 (factory default setting)

COM
Port A: 115,2 kBaud, 8 bits data, 1 bit stop, parity none, handshake hardware. (to match with the DVMD side)

DVMD
These are the settings appearing on the monitor screen. Menu MAIN-SETUP-RS232

BAUD	115200
PARITY	NONE
PACE	RTS/CTS

6 Starting the Software

The system, after the installation of the COM-Server driver, is seen as a direct serial link between the PC and the DVMD. That is to say that the driver provided along with the COM-Server makes the Ethernet link (and its protocol) totally transparent to the PC.

RS232

7 Troubleshooting

Problems that might occur and solutions

First of all check all settings correspondences (IP address, Port numbers, Cables, Parameters)

DIAGNOSIS	SOLUTION
Error on COM-Server at beginning (red LED)	Press OK button on front to cancel
Stream Explorer does not communicate with the DVMD straight away at the beginning	Press *Retry* in Stream Explorer
DVMD Status displays *No Decoder*	De-connect and reconnect (use of "offline" icon (mains plug) within the toolbar of Stream Explorer)

8 Ordering information

MPEG2 MEASUREMENT DECODER
DVMD   Rohde & Schwarz   2068.8597.02

STREAM EXPLORER™
DVMD-B1   Rohde & Schwarz   2068.9406.02

COM-SERVER DISPLAY VERSION
COM-server   Wiesemann & Theis GmbH   58004
4 ports

COM-SERVER KOMPAKT
COM-Server   Wiesemann & Theis GmbH   58201
1 port

Technical details on :
http://www.wiesemann.de/58001.html
Ordering :
Telephone: +49 202/2680-110
Fax: +49 202/2680-265
Wiesemann & Theis GmbH, Wittener Straße 312, D-42279 Wuppertal, Germany