ENTERTAINMENT TECHNOLOGY

rosco

Intelligent Power System®

User Guide

HORIZON

512 Channel DMX Interface

Table of Contents

Notational Conventions

References to other sections of the manual will appear in italics. Example: See *Installing Horizon Software*, page 3.

Text in a box accompanied by this symbol indicates a note of special interest.

Getting Started

We provide the following:

- Horizon 512 Channel Interface
- Power adapter
- Horizon CDROM

> **NOTE:** You should always check to be sure you have the latest software version. If your Interface has been in a dealer s stock for some time, the disk packaged with it might be out of date. Check at www.rosco-et.com or call 1-800-223-9477 to find out which version you should be running.

- Interface Manual (this document)
- IEEE-1284 compliant IBM-PC parallel printer interface cable.
- Machine Cut Keyboard Labels
- Horizon Registration Form

You will need to supply:

- IBM-compatible PC running Windows 95, 98, or ME and the following minimum requirements:

    Pentium 100

    VGA video [SVGA recommended]

    32MB RAM [64MB recommended]

    10MB available disk space

- DMX cable and DMX-compatible lighting control system.

> **NOTE:** The DMX-512 Interface can **not** be used with Windows NT or Windows 2000.

You may install the program in any of the following ways:

From the Horizon CD-Rom

1. Insert the Horizon CD-Rom into the CD-Rom drive of the PC.

2. Double Click My Computer.

3. Double Click your CD-Rom drive icon.

4. Follow the installation directions on your screen.

From the Internet

Horizon may be downloaded from the Rosco /Entertainment Technology website: http://www.rosco-et.com.

From Floppy Disk

If you don't have a CD ROM drive, use the following steps to install the program.

1. On any PC with a CD ROM drive, insert the Horizon CD in the CD ROM Drive.

2. Copy the entire contents of Directory Disk-1 to a floppy disk. Label this floppy as Disk-1.

3. Follow the same procedure for Directory Disks 2 - 5 on the Horizon CD-ROM.

4. Insert Disk-1 in the floppy drive of your Windows Computer.

5. Double click on MY COMPUTER.

6. Double click on the floppy drive A: icon.

7. Double click on the Horizon.exe file.

8. Follow the installation directions on your screen, changing disks when prompted to do so.

Starting the Program

From the Windows Start menu, select **Programs|Horizon| Horizon.**
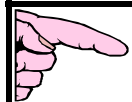
> **NOTE:** The Horizon Help files are the User Manual for the program. Once you have Horizon running, consult the Help files for more detailed programming instructions. If you prefer printed documentation, a .pdf file of the Help files is available for download at http://www.rosco-et.com.

Connecting the 512 Channel DMX Interface

1. Install Horizon on the PC (see previous page).

2. Connect the IEEE 1284 Bi-directional printer cable to the LPT printer port on the PC. Tighten the hold-down screws.

3. Connect the other end of the printer cable to the DMX Interface. Snap the latches in place.

4. Connect the DMX cable from the lighting system to the DMX port on the interface.

5. Plug the power adapter into a suitable power source, and connect the power adapter output into the DC input connector on the interface.

6. Start Horizon.

7. Select **Set-up | Interfaces** from the Menu Bar.

8. Click **Add** and choose the port where you have connected the interface (LPT1 or LPT2) from the **Choose Interface** pull down menu.
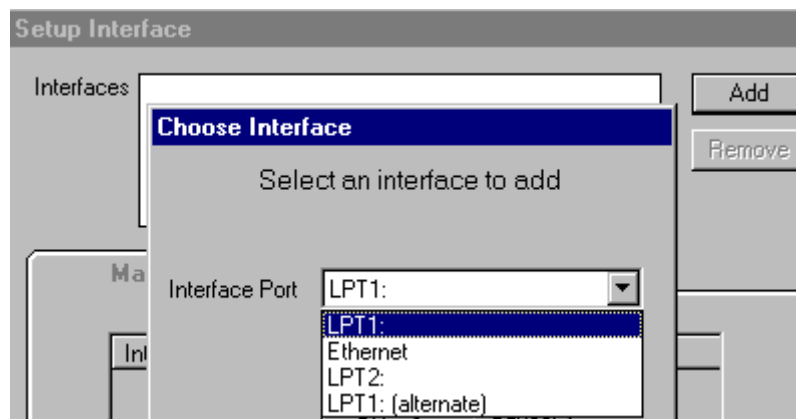
9. Click **OK**.

10. Click **Done**.

NOTE:

- The Cable for the DMX Interface must be marked **IEEE-1284**

- When the interface is connected properly, the Interface Icon is displayed without an X on the Status Bar.

- If this is the first time the Interface has been used, a dialog box will appear telling you to authorize your software. See *Authorizing Horizon Software, page 6,* to authorize your interface.

- The DMX-512 Interface can **not** be used with Windows NT or Windows 2000.

- On some PCs you may have better results if you choose LPT1: [alternate]

Authorizing the 512 Channel DMX Interface

> **NOTE:** No matter what level of software you have purchased, the unit must be authorized for Basic first before you may upgrade to Silver or Gold.

> **NOTE:** When you request your Authorization code, please have all of the information on the Registration Form ready. You may request your code by fax, email, or phone.

1. Obtain the Authorization Code(s) from Rosco/Entertainment Technology.

2. Once your interface is connected (see *Connecting The 512 Interface*, page 4), double click on the DMX icon (shown below) in the Status Bar (lower right hand corner of the Horizon screen). A dialog box showing details about your interface will appear. Click **Upgrade**. The "Upgrade Horizon Interface" dialog box will appear:

DMX Icon

3. Select **Basic** from the pull down menu.

4. Fill in the Name, Company, and Authorization Code text boxes as appropriate, then click **Upgrade**.

5. If you have not purchased Silver or Gold software, click **Done**.

Silver or Gold

> **NOTE:** The unit must be authorized for Basic first before you may upgrade to Silver or Gold. Once you have authorized Basic, you may upgrade to Silver or Gold at any time. (It is not necessary to upgrade to Silver before upgrading to Gold.)

1. Obtain the Silver or Gold Authorization Code from Rosco/Entertainment Technology.

2. Once you have finished the Basic authorization, click **Upgrade** again.

3. Select **Silver** or **Gold** from the pull down menu.

4. Fill in the text boxes as appropriate, then click **Upgrade**.

5. Click **Done**.

FCC (USA)

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with this instruction manual may cause interference to radio communications. It has been tested and found to comply with the limits for a Class B computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a residential environment.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause interference to radio and television reception, which you can determine by monitoring reception with the interface connected and powered on, or disconnected and powered off, the user is encouraged to try and correct the interference by one of the following measures:

- Reorient the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Re-orient power and data cables.

- Consult a radio or TV technician for help.

You may also find the following booklet helpful: *How to Identify and Resolve Radio-TV Interference Problems.* This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, stock no. 004-000-00345-4.

NOTE: Any changes or modifications not expressly approved by Rosco/Entertainment Technology could void the user s authority to operate this equipment. Use of a shielded interface cable is required to comply within the Class B limits of FCC Part 15.

U. S. A./CANADA

This information technology equipment is UL and C-UL listed for the uses described in this manual.

European Union

⊂ DECLARATION OF CONFORMITY

according to ISO/IEC Guide 22 and EN 45014:

Manufacturer s Name: ROSCO/Entertainment Technology

Manufacturer s Address: 2181 NW Front Avenue

Portland, Oregon 97209, USA

declares that the product:

Product Name: Horizon 512 Interface

Model Number: HZI-512

Product Options:

conforms to the following product specifications:

Safety: EN 60950:1992+A1+A2:1993+A3:95

EMC: CISPR-22:1985/ EN 50022:1988 class B[1]

EN 50082-1:1992

IEC 801-2:1991 ESD - 3kV CD, 8kV AD

IEC 801-3:1984 - 4.8 V/m

IEC 801-4 - 0.5kV signal lines, 1kV power lines

Supplementary Information:

This product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC.

Director of Engineering Services

Portland, Oregon USA

February 5, 1997

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[1] This product was tested in a typical configuration with a personal computer, video monitor, serial printer, and Rosco/Entertainment Technology DMX test system.

Parallel input port	IEEE-1284, 36-pin Centronics.
DMX Output port	DMX512-1990, 5-pin XLR female, DMX512-1990 and RET IRCP on pins 2 & 3, IDS 2.0 Return Data on pins 4 & 5
Line Termination	120 Ohm with 0.250 V fail-safe on Return Data pair
Protocols	DMX512-1990, RET IRCP for remote configuration of IPS systems, IDS 2.0 Return Data
Indicators	Green multifunction status LED
Dimensions	(W) 8.5"" (215.9mm) (D) 4.875"" (123.8mm) (H) 1.75"" (44.4mm) Weight 1.125 lb (.511kg)
Power Adapter	12VDC 500mA, Class II, IEC 950, 2.1mm Plug, Center +, Sleeve -
AC Power	47 to 63 Hz, 5.5W
Output Protocol	USITT DMX512-1990, RET IRCP for remote dimmer configuration
Number of Dimmers	512
Update Rate	24 Hz
BREAK Time	160 µS
MARK AFTER BREAK Time	80 µS
Total Byte Time	80 µS
Interbyte Gap	36 µS

Rosco/Entertainment Technology

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