

HyperX² HD/SD Graphics System

QUICK START GUIDE

June 2007

Publication No. 2A02278, Rev 0

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Title	Publication No.	Rev
HyperX ² HD/SD Graphics System Hardware Reference Guide	2A02279	0
Lyric Handbook	2A02111	--
Lyric Handbook Supplement for Version 3.12	2A02163	--

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INSTALLATION and SETUP

INTRODUCTION

This section provides information and procedures to receive, unpack, check, and install the Unit in a suitable, user selected rack.



CAUTION

The chassis weighs 35 - 40 pounds, depending on options purchased. To avoid personal injury, care should be exercised when lifting the Unit.

RECEIPT and UNPACKING

The System is shipped in a single carton that contains all the equipment, hardware, documentation and software that is required to install, set up, and operate the equipment.



It is recommended that the shipping carton and packing material be saved for possible future use.

To unpack the equipment, proceed as follows:

1. Carefully open the carton and remove all packing material.
2. Remove the contents of the carton; set the carton aside.
3. Check every item against the list in Table 1, and examine each item to make sure nothing was damaged in shipment.
4. If anything is missing, or if any item was damaged in shipment, contact Chyron customer service as soon as possible at 1-888-4-CHYRON.



If directed to do so, repack the equipment in the original carton with the original packing material. Ship the carton to Chyron as directed.

INITIAL SETUP

Equipment Supplied

Table 1 lists the equipment supplied with the Unit.

Table 1: Equipment Supplied

Rack-mountable, 4 RU
Slides for rack mounting
Power line cords
Hard drive image DVD
DVI-SVGA adapters
Keyboard and mouse NOTE: If a Chyron keyboard was ordered, it will be shipped separately.
OEM software and documentation for various components installed in your System. NOTE: Store these items in a safe place—Chyron Corporation is not responsible for replacing these items.

Also included are cables and a converter used to convert the SVHS output to composite video.

Preparation Before Installation

Depending on the method of installation, the System chassis may require some preparation before installation. This includes, but is not limited to:

- Attaching the slides to the chassis for slide mounting the Unit
- Installation of any optional components that were not installed before shipment

INSTALLATION

Standard installation of the System equipment consists of placing the Unit in the selected location. The location selected must provide adequate space to the front, rear, and sides of the Unit for proper air circulation. In addition, adequate space must be available at the rear of the Unit to allow for proper connection of peripheral equipment. If the System is to be slide mounted in a rack, see *Rack (Slide) Installation*, below.

Rack (Slide) Installation



Adequate space must be provided in the rack at the front and rear of the chassis to allow for adequate air circulation.

To install the Unit in a 19-inch relay rack using the optional slides, proceed as follows:

1. Locate package containing slide mechanisms and attaching hardware.

2. Locate position on rack where Unit is to be installed. Make sure that adequate space is available for air circulation and ventilation.
3. Unpack slides and attaching hardware and check contents.
4. Install slides to rack and to the Unit chassis in accordance with instructions provided with the slides.
5. Carefully position the Unit in place and engage the intermediate slide section with the rack and chassis slide sections.
6. Attach Unit front panel flange to rack using hardware supplied.

Software Installation

All necessary software is already loaded on the System before shipment.

INITIAL CONNECTIONS

POWER SUPPLY

1. Connect an AC power cord (supplied) to each of the power supply modules. The AC power cords connect to the AC line cord connectors on the power supply modules located at the back of the Unit.



WARNING

The Unit Must Be Connected To A Suitable, Grounded AC Power Source Using The Power Cord Provided With The Unit. Failure To Comply With This Requirement Can Result In Damage To The Equipment And May Present A Safety Hazard To The Operator.

2. Connect the other ends of the power cords to a grounded electrical power source.

VIDEO CARD CONNECTIONS

The PCI Express (PCI-e) video card supplied with the Unit has the following connectors:

- **DVI-I OUT CONNECTORS** - Two identical DVI-I connectors for digital/analog PC monitors
- **S-VIDEO OUT CONNECTOR** - Connector for analog monitors



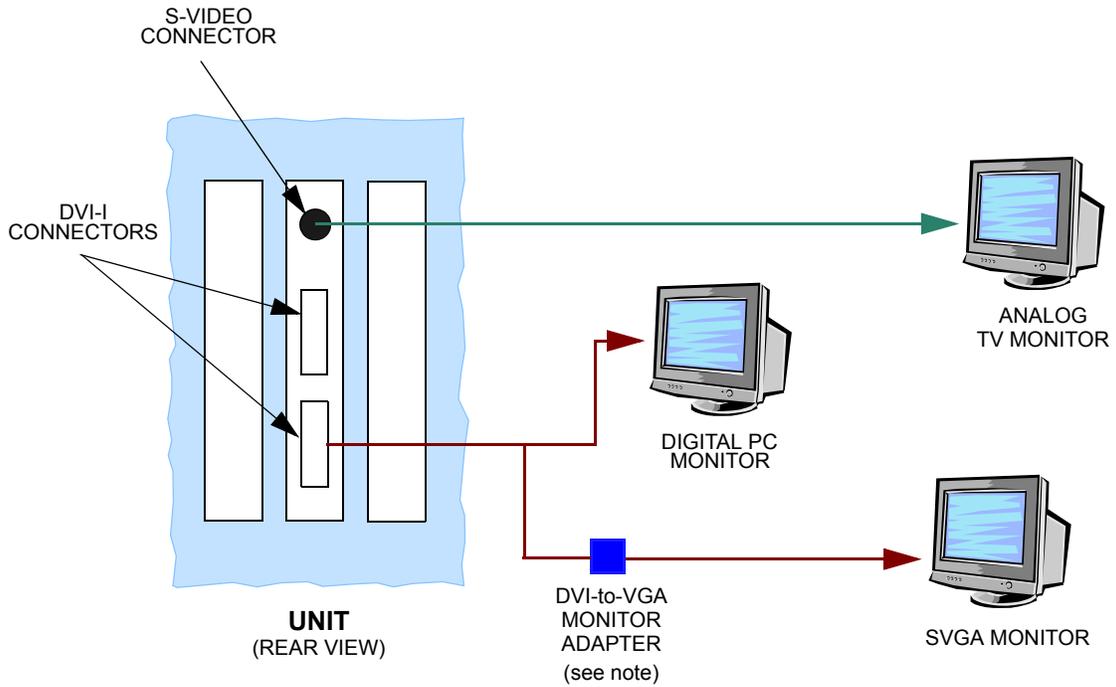
Important

All cables must be connected before the Unit is powered on.

The video card may be connected as shown in Figure 1. Actual connections will depend on your application.



The video card provides two identical DVI-I connectors. Therefore, only connections to one DVI-I connector are shown as typical in Figure 1.



NOTE: Two DVI-to-VGA monitor adapters are provided—one for each DVI-I connector.

Figure 1 Video Card Connections

PS/2 KEYBOARD and USB MOUSE

Chyron provides a standard PC keyboard and optical mouse with each System. The computer monitor is a customer supplied item. The Chyron Dedicated custom keyboard is available as an option. See “APPENDIX: Chyron Dedicated Keyboard” on page 14.



The following assumes that the keyboard, mouse, and monitor are all located within ten feet of the System. For installations where the keyboard, mouse, and monitor are all located over ten feet from the System, a KVM Station Extender must be used. Contact Chyron Customer Service for additional information.

To install the peripheral equipment that is required for operation of the System, proceed as follows:

1. Install the keyboard connector to the appropriate mating connector at the rear of the chassis. If the optional Chyron keyboard is being installed, refer to “KEYBOARD INSTALLATION” on page 15 of this manual.
2. Connect the mouse to the appropriate connector at the rear of the chassis.
3. Connect monitor(s) to the video card. See “VIDEO CARD CONNECTIONS” on page 4.

GPI/O (if so equipped)

Refer to the *PCI-D1024H Board User Manual* for detailed information.

INSTALLING/CONNECTING the BREAKOUT PANEL(S)— Figure 2

To install/connect the breakout panel(s):

1. Install the breakout panel(s) in the rack.

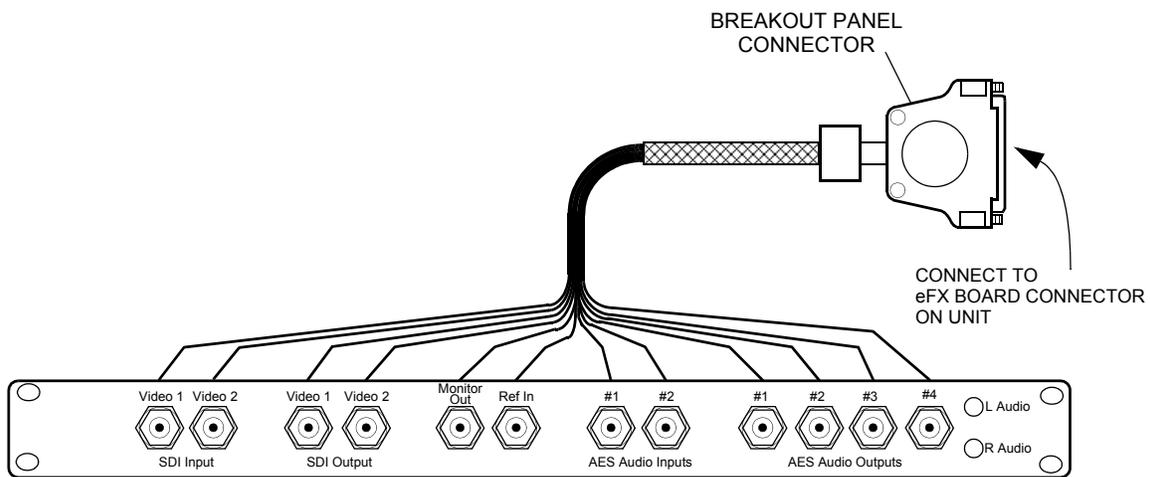


Figure 2 Breakout Panel



CAUTION

Shut off power to the Unit.

2. Be sure to shut off power to the Unit, and remove the power cords from the power supply.



When installing two breakout panel connectors in dual channel systems, do not tighten connector screws until both connectors are installed.



Important

Do not apply excessive force when tightening connector screws.

3. Insert the breakout panel connector(s) into the mating eFX board connector(s) located on the rear panel of the Unit.
4. Gently tighten screws on breakout cable connector(s).



When using the breakout panel(s), note that connector VIDEO 2 (SDI OUTPUT) is the KEY signal.

TURNING ON the UNIT

To turn on System power:

1. Ensure that each power supply module is plugged in.
2. Ensure that the System's monitor is connected to the Unit and that the monitor is receiving power.
3. Open the control door (Figure 3). Press the **System Power** switch. The **PWR** LED should light, and the Power On Self-Test (POST) should begin.

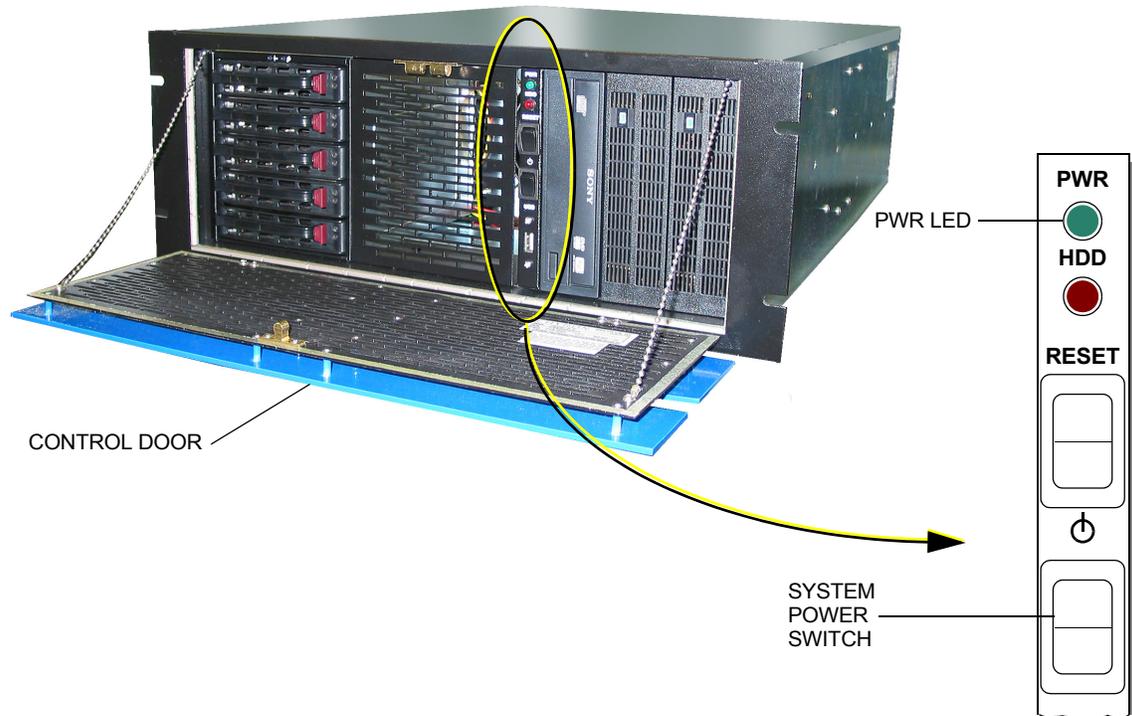


Figure 3 Turning on the Unit

Important

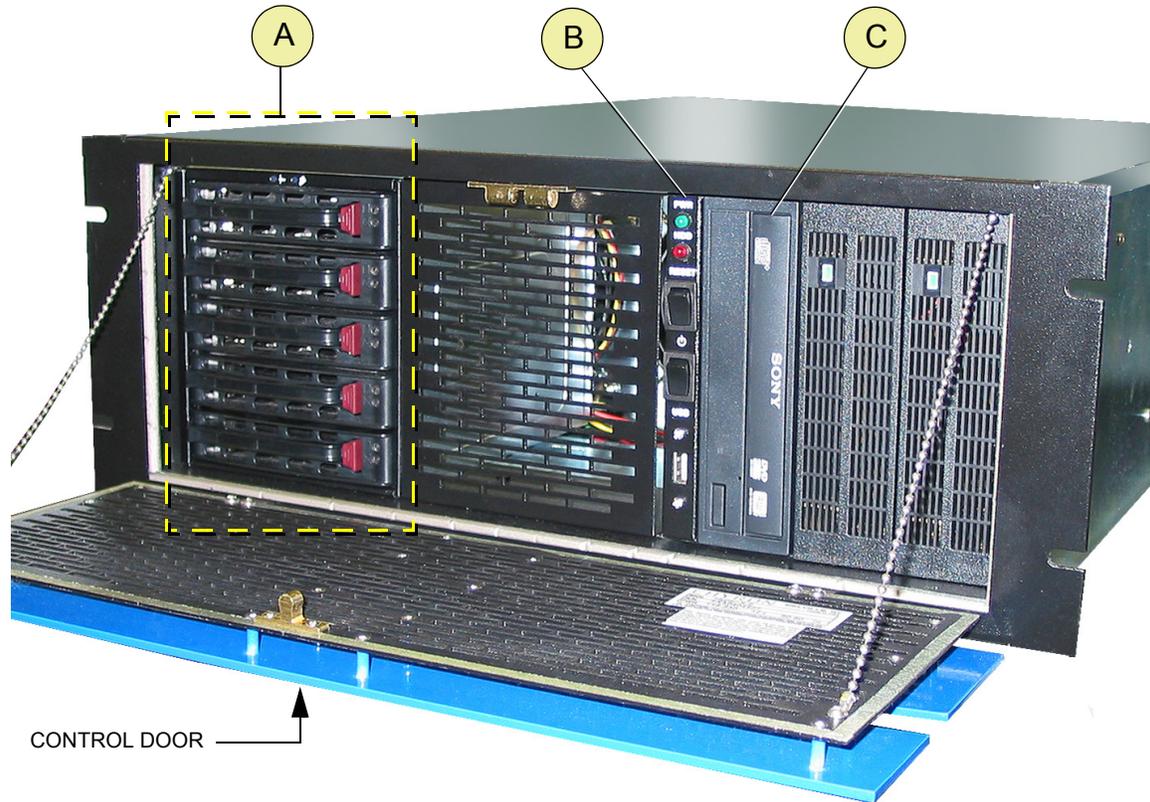
If the System fails to start, or If the startup script indicates that no disk was found, or that there is no operating system, contact Chyron Customer Service immediately.

4. After POST, the Windows desktop appears.

HARDWARE DESCRIPTION

FRONT PANEL

The front panel's controls, indicators, and removable-media drives are identified in Figure 4.

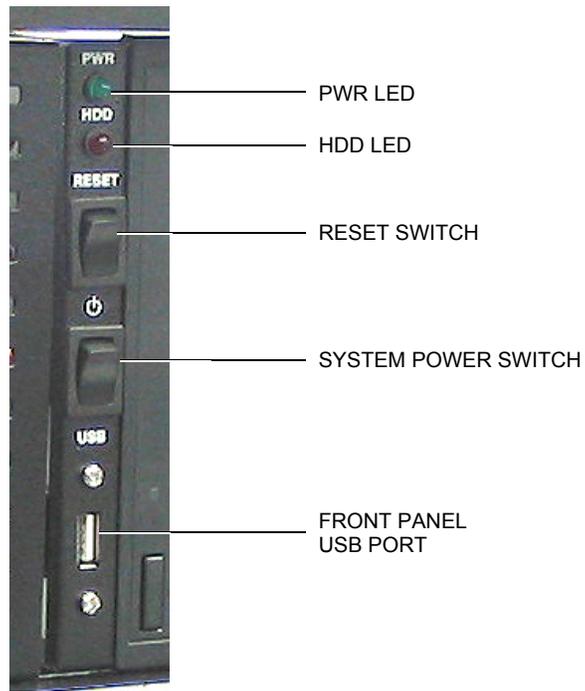


- A 5-position media drive bay — contains system drive
- B Controls and indicators. See “Controls and Indicators” on page 10.
- C DVD±RW drive

Figure 4 Front Panel Features

Controls and Indicators

The front panel controls and indicators are identified in Figure 5.

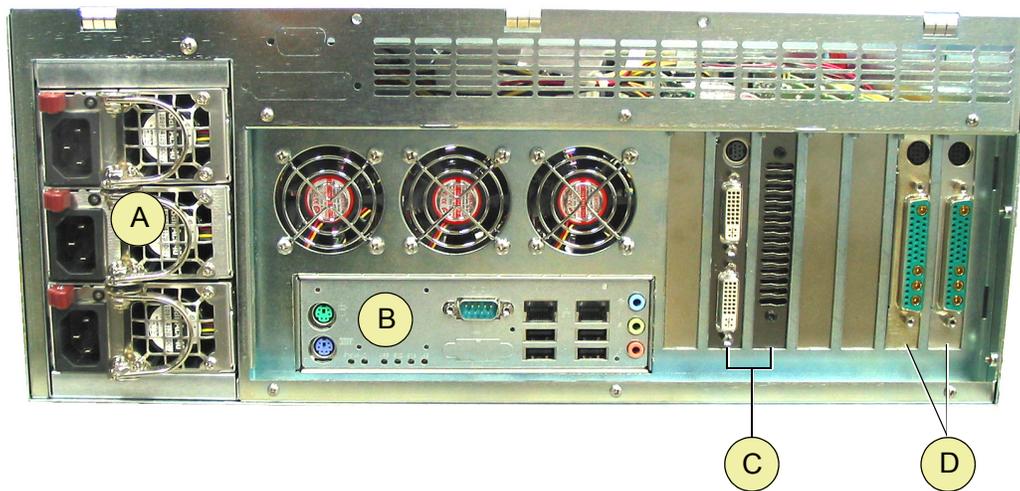


ITEM	DESCRIPTION
PWR LED	Indicates that power is on. Routine power-down should be performed through Windows.
HDD LED	Lights to indicate that the System hard drive is active.
Front Panel USB Port	Front panel Universal Serial Bus 2.0 port (4-pin female)
Reset Switch	Press this spring-loaded rocker switch to give the System a hard re-boot. This switch should only be used in case of system lock-up.
System Power Switch	Spring-loaded momentary switch. Applies power to the Unit when pressed. This switch will turn the Unit OFF if it is held for 4-5 seconds.

Figure 5 Controls and Indicators

REAR PANEL

Rear panel components are identified in Figure 6.



- | | | | |
|---|----------------------|---|---|
| A | Power supply modules | C | PCI-e video graphics card
(requires two slots) |
| B | PC I/O connectors | D | eFX boards |

Figure 6 Rear Panel

eFX BOARDS

The System comes equipped with either one or two identical eFX boards. Figure 7 identifies the board's connectors.

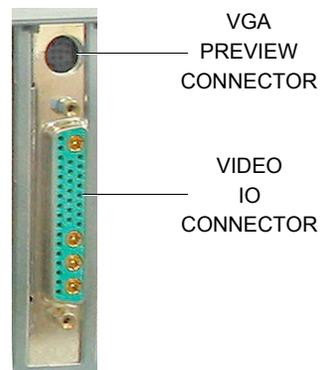


Figure 7 eFX Board Connectors

PC I/O CONNECTORS

Refer to the motherboard documentation supplied with this unit.

GPI/O BOARD (if so equipped)

Refer to the *PCI-D1024H Board User Manual* for detailed information.

POWER SUPPLY

The Unit is equipped with a triple-redundant module power supply. The power supply consists of three identical 200 Watt modules, each with its own fan and AC line cord connector (power cords are supplied).

NOTES:

APPENDIX: Chyron Dedicated Keyboard

INTRODUCTION

The Chyron Dedicated Keyboard is a custom keyboard device for use with the HyperX² in conjunction with the Lyric software. Use this keyboard to simplify common operations, compose functions, and reduce the need to use a mouse pointing device. The Chyron Dedicated Keyboard option includes an adapter cable kit to allow the keyboard to be installed in a standard PC PS/2 keyboard port and a *Keyboard Reference Card* (Publication No. 2A02122).

KEYBOARD LAYOUT

The layout of the Chyron Dedicated Keyboard (Figure 8) is very similar to the established locations and functions of an iNFiT! keyboard.

Some of the “hotkey” positions replace commonly used Windows keys, and create the availability of standard functions. These keys have their standard function printed on the front of the key and are color coded. For example, keys that generate the same scan code have their standard function printed in BLUE on the front of the key. Keys that generate different scan codes have their standard function printed in RED on the front of the key.

To use the standard PC function of these keys, hold down the red **Fn** key, and then press the desired key.

For a detailed description of the key functions of each key, refer to the *Keyboard Reference Card* (Publication No. 2A02122).

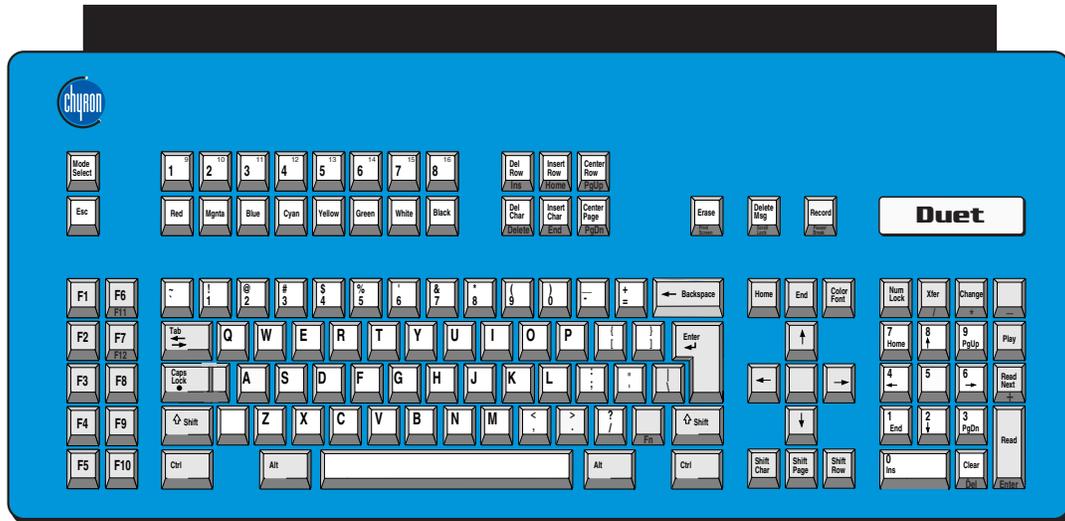


Figure 8 Chyron Dedicated Keyboard.

KEYBOARD INSTALLATION

Installation of the Chyron dedicated keyboard requires the use of the adapter cable kit supplied with the keyboard.

To install the keyboard, refer to Figure 9 and proceed as follows:

1. Connect the 5-pin adapter cable connector to the connector on the rear of the Chyron dedicated keyboard.
2. Connect the 6-pin adapter cable connector to the PS/2 keyboard port (purple) on the rear panel of the chassis.

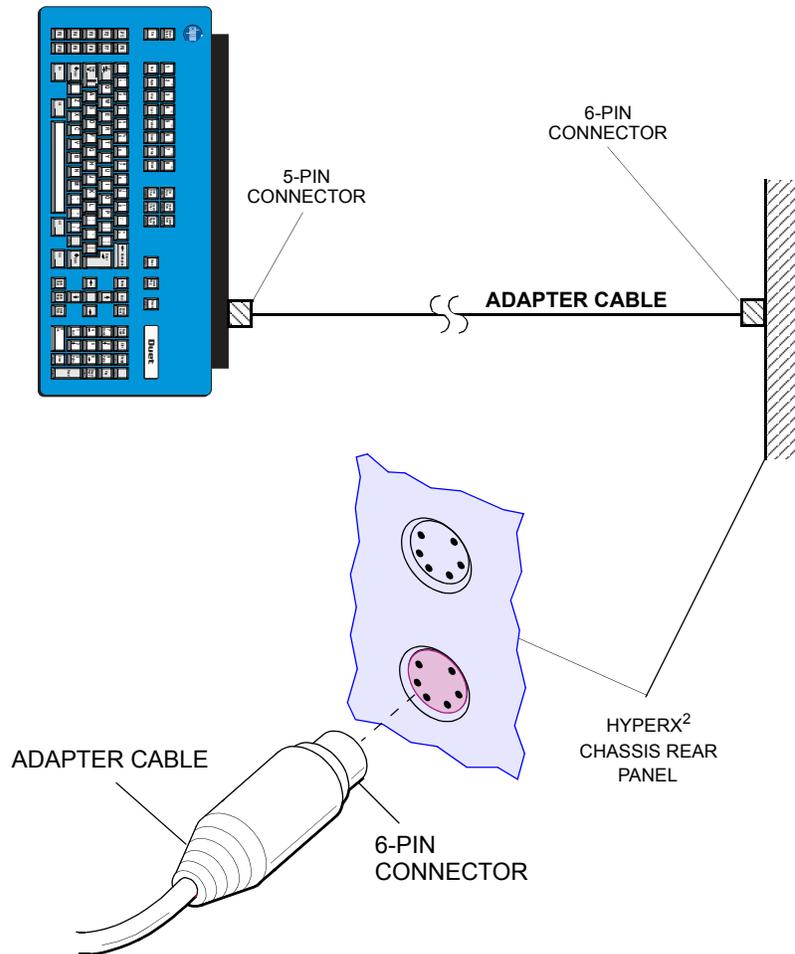


Figure 9 Chyron Dedicated Keyboard Installation