Quick Setup Guide

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Specifications subject to change

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Duet HyperX Quick Setup Guide

Thanks for choosing Chyron's Duet HyperX. Follow these steps to get your system up and running.

1 : Unpack and Check Contents

Check the packing slip against your order. Make sure you've got EVERYTHING listed. If anything is missing, contact your shipper or Chyron immediately at 1-888-4-CHYRON (888-424-9766).

2 : Important Safety Instructions

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- Read all instructions before connecting, powering and using the HyperX unit. Operate the HyperX unit only as directed by the HyperX documentation. Inappropriate use, faulty installation or incorrect operation can result in the risk of injury to the user or damage to the HyperX unit.
- Do not attempt to modify the HyperX unit as this may present a safety hazard.
- Do not attempt to destroy the HyperX unit as this may present a safety hazard. If the apparatus is to be disposed of, use a facility that accommodates the disposal of circuit boards.

3 : Take Note of Specifications and Get Prepared!

HyperX Physical Specifications	
Depth Width Height	• 25 inches / 63.5 cm • 19 inches / 48.3 cm • 7 inches / 17.8 cm
Weight (varies with system configuration)	• 60 lbs / 27.3 kg approx., typical
Operating Humidity	• 5% to 95% non-condensing
HyperX Electrical Specifications	
Power Supply	• 100 - 240 VAC @ 10 Amperes RMS
	• 50 / 60 Hz
	• 600W Triple-redundant, Hot-swappable, with Power Factor Correction (PFC)

3.1: Think ahead:

- HyperX pulls cool air into the front of the unit and vents through openings in the rear panel. **DO NOT** operate the system without the top cover in place, or air flow necessary to cooling will be compromised.
- Is there enough room for the front door to open?
- Before hookup, place the cables where they'll be convenient.

3.2: Take these steps:

1. Locate rack position where system will be installed. Make sure there is adequate space for ventilation.
2. Unpack slides and associated hardware, and check contents.
3. Install slides to rack and to the HyperX chassis in accordance with instructions provided with the slides.
4. Carefully position HyperX in place and engage the intermediate slide section with the rack and chassis slide sections.
5. Attach HyperX front panel flange to rack using hardware supplied.

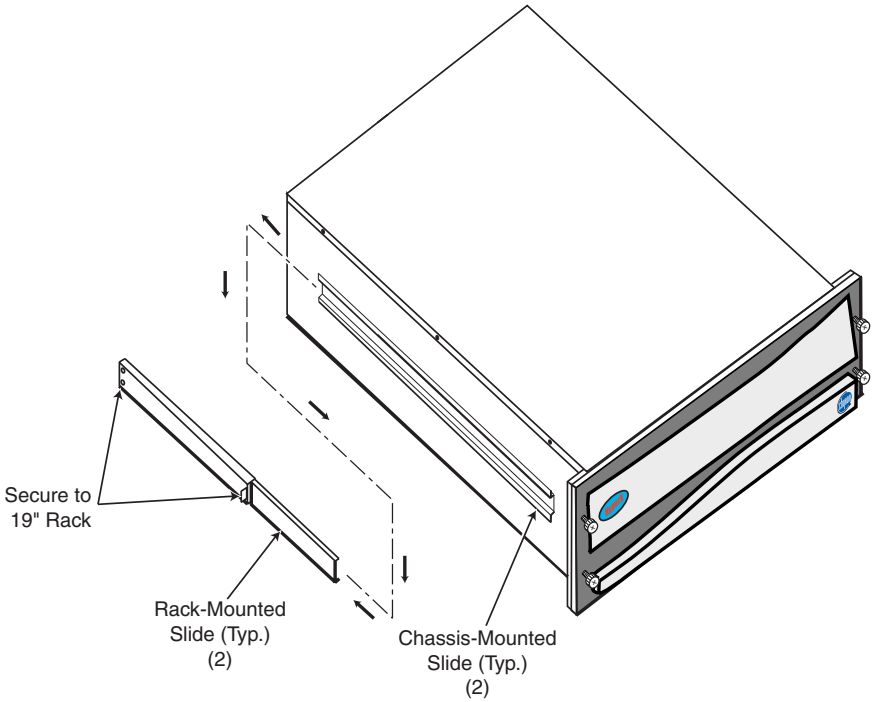

Figure 1: HyperX and its rack-mounting accessories

6. Because of HyperX's weight, Chyron STRONGLY RECOMMENDS that you use the rear brackets pictured below to secure the rack slides to the rear horizontal segments of your equipment rack. These brackets are included in the rack slide kit.

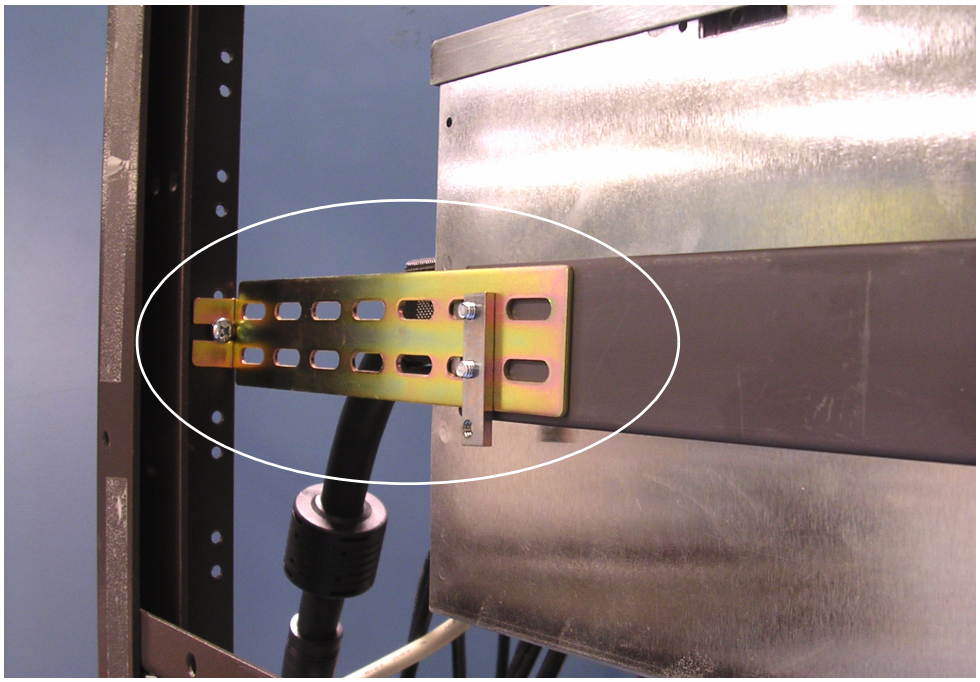

Figure 2: Extra brackets at rear of chassis

4 : Basic Configuration

System with two eFX boards shown. Remember, the AC line cords should not yet be connected!

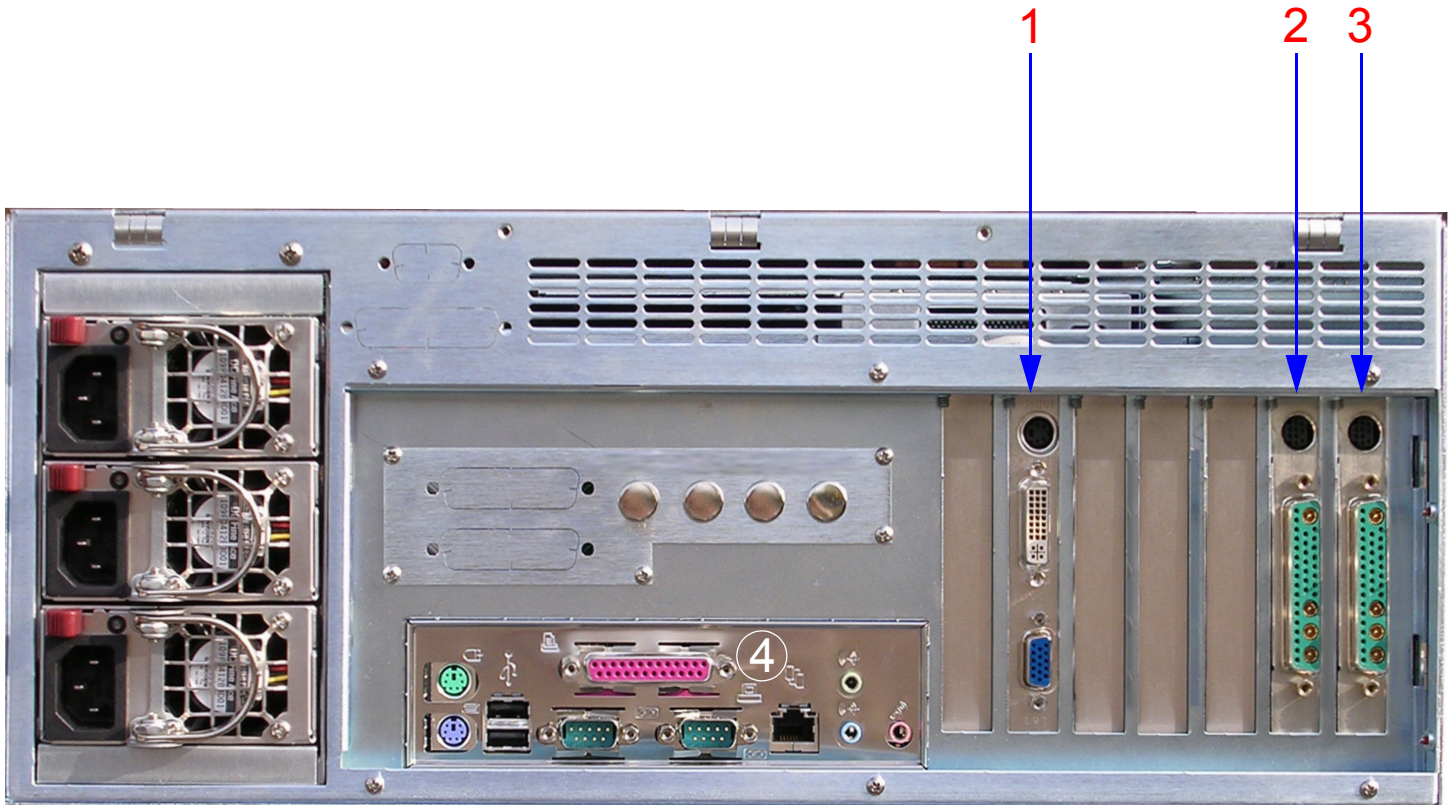

Figure 3: HyperX with two eFX Boards.

1. **AGP Video Card**. Top: S-video output. Center: DVI out for digital PC monitors. Bottom: 15-pin connector for conventional VGA monitors. Your AGP card may differ in appearance.
2. **HyperX eFX Board**. *Note that the* HyperX eFX Board *can function as both a Frame Buffer (with optional DVE-type effects) and an Internal Clip Player, depending on your enabled software options. Each* HyperX eFX Board *can also create its own layered mix of the frame buffer effects and clip-playouts it produces.*

   Two cables are provided with each eFX Board.

   One connects the 9-pin DIN jack at the top of the panel to compatible VGA monitors. This signal is an analog monitor output of **one** of the channels on that particular eFX Board; the channel displayed on this output is determined by settings in made in Lyric or your CAL application.

   The larger connector includes all the video and audio Air/Production signals for routing to your facility. As shown in Figure 4, this is a breakout cable with BNC and RCA connectors. Additional analog video monitoring is provided by the red Composite Output cable.

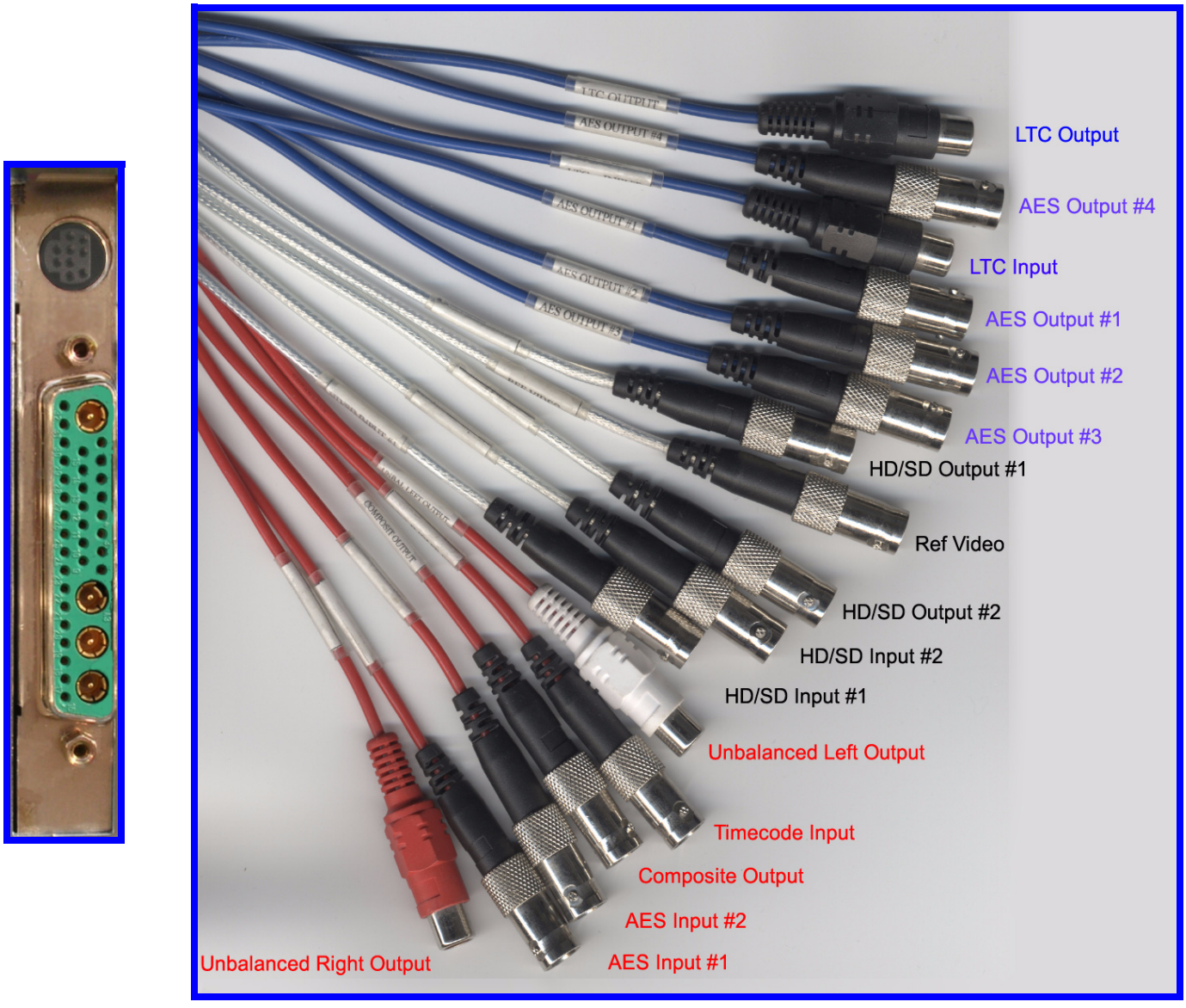

Figure 4: eFX Board breakout cable. Left: panel connector. Right: connectors to other hardware.

- **Ref Video**: Used to connect an analog GENLOCK source input. The preferred input is Tri-level (600mV nominal) or composite "House" sync signal. *If Reference In is used, the Genlock signal must be connected here. With multiple boards of this type in a single system, each board must receive its own Reference input to this connector. There is no provision for "sharing" a Reference signal internally, as there is with the SD processors*
- **HD/SD Input #1**: Program video input. HyperX-produced video will be inserted over this video from an external source. This connection is also used for recording directly to this board's optional Internal Clip Player function.
- **HD/SD Output #1**: Output of board's internal mixer.
- HD/SD Input #2: *Not currently used*.
- **HD/SD Output #2**: Provides a key signal to external device.
- LTC Input and Output: *The Linear Timecode facility on this board is not currently supported for use with Chyron products.*
- **AUDIO**; *connections will vary with your facility's routing arrangements*:
    - Unbalanced Inputs (2, BNC; red cables) 75 ohm
    - Unbalanced AES Outputs (4, BNC; blue cables) 75 ohm
    - Unbalanced Right & Left Analog Outputs (2, RCA; red cables)

3. Additional **HyperX eFX Board**, *optional.* See connectors described above.
4. **CPU connectors** *(may vary with board updates).*

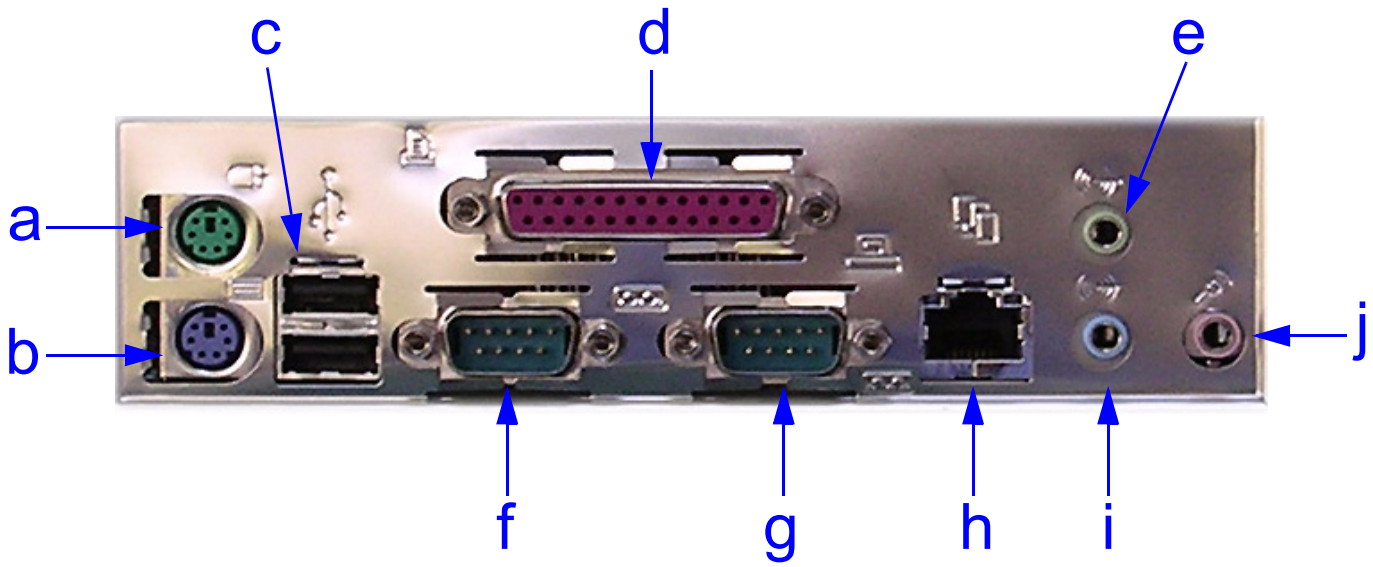

Figure 5: Connections to HyperX's motherboard

- a: Mouse (top; green).
- b: Keyboard (bottom; blue).
- c: USB ports (2).
- d: Parallel port (purple).
- e: Audio Line Output (green).
- f: Serial port, 9-pin (COM 1).
- g: Serial port, 9-pin (COM 2)
- h: RJ-45 LAN connector.
- i: Audio Line Input (blue).
- j: Microphone Input (red).

The **CPU**'s audio connections should not be confused with audio connections on the eFX board(s).

5 : HyperX Connected to Chyron CMix (*SD operation only*)

Chyron's CMix creates additional options for mixing between output channels of a HyperX system **configured for standard-definition output**. This device combines four video/key input pairs plus one program video input layer into two individual video/key pair outputs, controlled by independent sets of mixing logic. The mixers share the same inputs, but the inputs can be assigned to different layers in each mixer. Figure 6 and Figure 7 show CMix used with a HyperX. This type of configuration allows HyperX-originated graphics from multiple boards to be combined into a single video output with effects between channels. HyperX's three sets of outputs and key outputs are mixed and layered as desired, *upstream* of the production switcher, allowing the greatest possible flexibility in allocating your switcher's inputs and outputs.

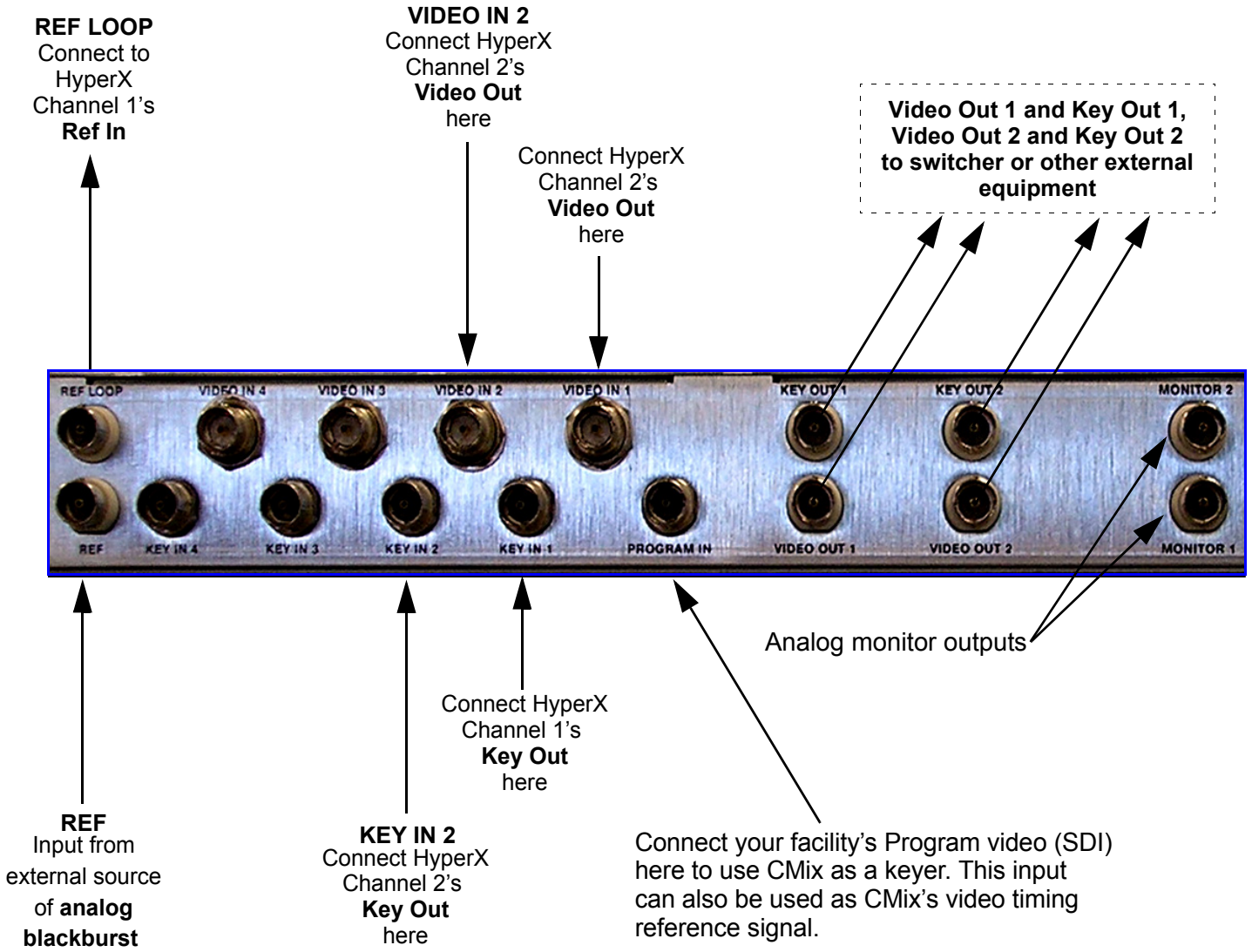

Figure 6: Chyron CMix rear panel with typical connections to a two-channel standard-definition HyperX system

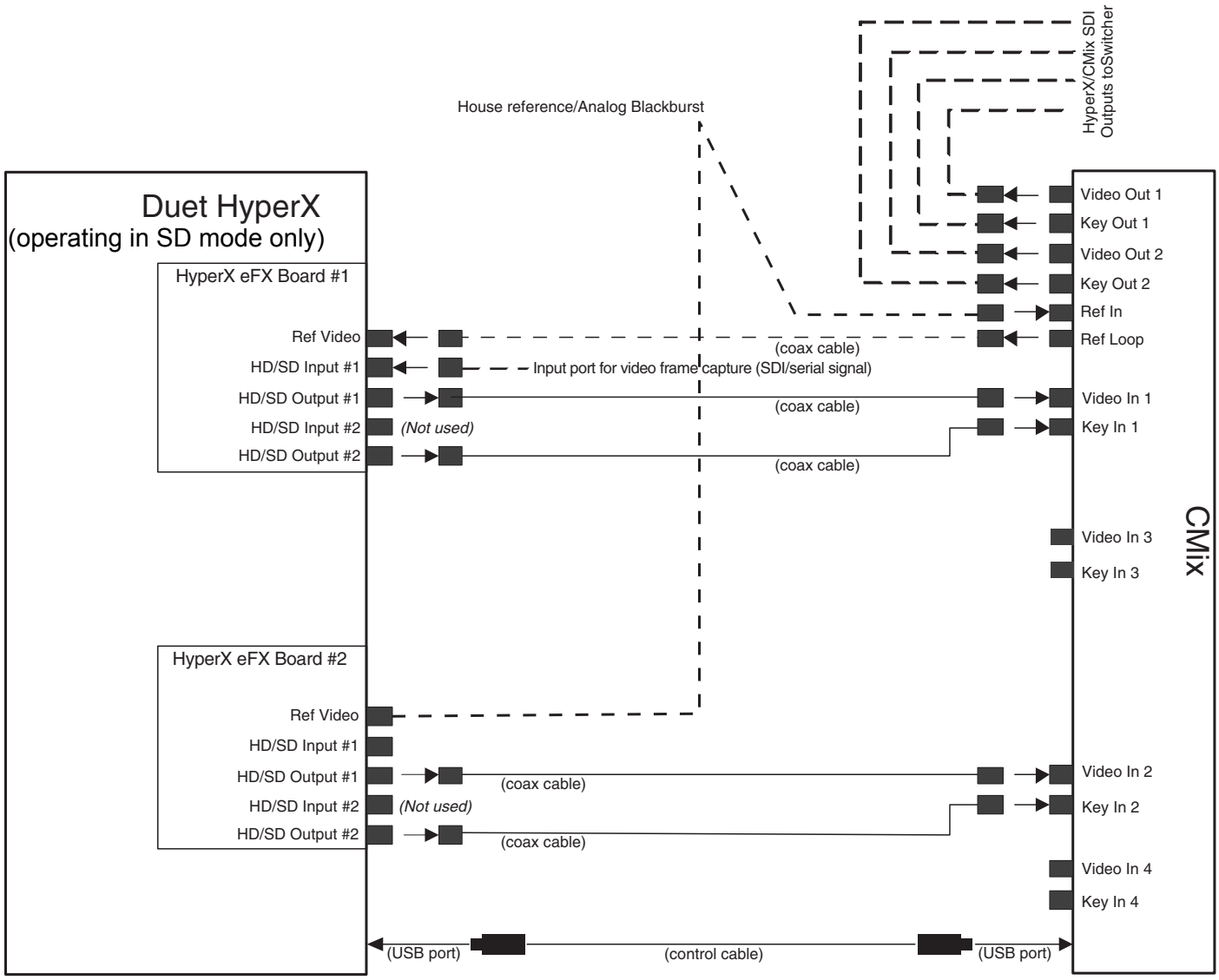

Figure 7: Typical connections between a two-channel standard-definition HyperX and Chyron's CMix

6 : Switch On and Initial Test

If your system includes the Lyric application:

1. Locate the Lyric installation directory on your system (its filepath should be C:\Program Files\Chyron\Lyric)
2. Search for files with the **.lyr** extension. These are sample Lyric messages from Chyron, included for the purpose of testing your system. Take note of the filepath where these files are found.
3. Locate the Lyric icon on the desktop; double-click it to launch Lyric.
4. Use the File > Open command or click the button, and navigate to the directory identified in Step 2. Open one of the messages.
5. Test the system's Video (and Key) Output 1 by pressing the **Xfer** key.
6. To test the system's second channel (Video and Key Output 2), press the Swap key, then press Xfer again. To get started with Lyric, refer to the On-Line Help.

7 : IMPORTANT - PCI SLOT ASSIGNMENTS

The slot location of the system's PCI cards has been determined by factory testing and is critical to proper system operation. DO NOT CHANGE THE LOCATION OF BOARDS IN THE HYPERX SYSTEM WITHOUT CONSULTING CHYRON CUSTOMER SERVICE.