DX-700

Quick Start Guide

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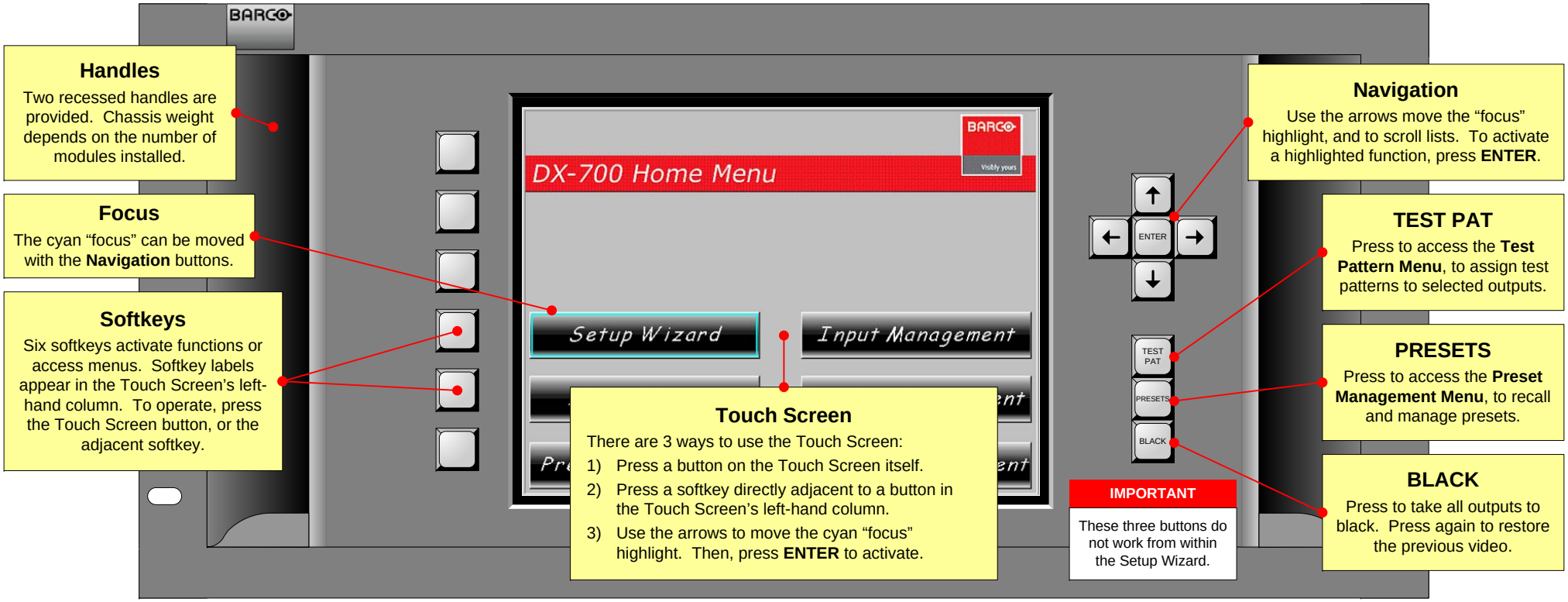

Handles

Two recessed handles are provided. Chassis weight depends on the number of modules installed.

Focus

The cyan "focus" can be moved with the **Navigation** buttons.

Softkeys

Six softkeys activate functions or access menus. Softkey labels appear in the Touch Screen's left-hand column. To operate, press the Touch Screen button, or the adjacent softkey.

Touch Screen

There are 3 ways to use the Touch Screen:

1) Press a button on the Touch Screen itself.
2) Press a softkey directly adjacent to a button in the Touch Screen's left-hand column.
3) Use the arrows to move the cyan "focus" highlight. Then, press **ENTER** to activate.

Navigation

Use the arrows move the "focus" highlight, and to scroll lists. To activate a highlighted function, press **ENTER**.

TEST PAT

Press to access the **Test Pattern Menu**, to assign test patterns to selected outputs.

PRESETS

Press to access the **Preset Management Menu**, to recall and manage presets.

BLACK

Press to take all outputs to black. Press again to restore the previous video.

IMPORTANT

These three buttons do not work from within the Setup Wizard.

Quick System Setup

The following list summarizes the overall DX-700 setup procedure. For error-free installation, always refer to the listed section in the User's Guide.

1. **Install and Cable LED Walls** — Ensure that your LED wall(s) are properly installed and cabled.
2. **Rackmount DX-700** — Ensure that the DX-700 is properly installed in your equipment rack. (Chapter 3, "Rack-Mount Installation")
3. **Configure DX-700 Modules** — Ensure that all modules are installed in the proper configuration. (Chapter 2, "Module Installation and Configuration")
4. **Connect Sources and Signals** — Ensure that all sources and signals are properly connected. (Chapter 3, "Signal Installation")
5. **Power On LEDs, Fiberlink** — Turn on power to your LED walls and Fiberlink connections.
6. **Power On DX-700** — Turn on power to the DX-700 chassis. (Chapter 4, "Power-Up Initialization")
7. **Factory Reset** — The first time you use a DX-700, or after a DX-700 returns from a show, perform a Factory Reset. (Chapter 4, "Performing a Factory Reset")
8. **Calibrate Touch Screen** — Adjust display brightness and calibrate the Touch Screen. (Chapter 4, "Using the Front Panel Display Adjust Menu")
9. **Run the Setup Wizard** — Use the **Setup Wizard** to configure LED wall outputs and "groups." (Chapter 4, "Using the Setup Wizard")

IMPORTANT Ensure that you set up all outputs and configure all output groups.

10. **Run the Input Wizard** — Use the **Input Wizard** to configure inputs, and assign them to LED outputs. (Chapter 4, "Using the Input Wizard")

IMPORTANT Ensure that you save a preset after you configure each input.

11. **Fine Tune Inputs** — Use the **Input Management Menu** to adjust brightness, contrast, color and more. (Chapter 4, "Using the Input Management Menu")
12. **Fine Tune Displays** — Use the **Display Management Menu** to adjust contrast, gamma, Fiberlink and more. (Chapter 4, "Using the Display Management Menu")
13. **Recall Presets** — Recall the desired preset, and you're ready to begin production. (Chapter 4, "Using the Preset Management Menu")

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Input Module

DX-700 Input Modules provide the system's input, scaling, and mixing functions. Within each module, the input source is selected from among the various input connectors and scaled to the required size and position in the final display.

- Use the **Input Wizard** to configure inputs.
- Use the **Input Management Menu** to fine tune inputs.

Latches
Used for precise insertion and removal. See the "Module Insertion and Removal" section.

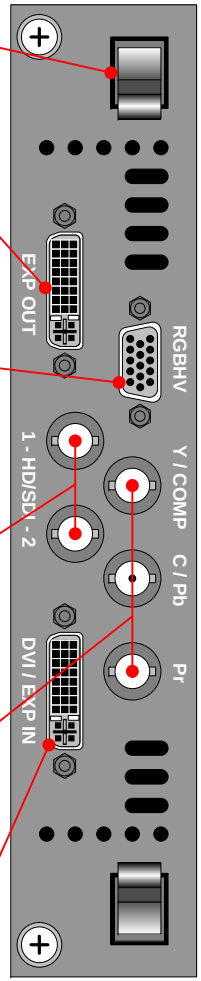
Expansion Out
Connects input modules for external and cross-bank stacking configurations only.

RGBHV Input
Accepts RGBHV inputs up to QXGA (2048 x 1536), with a max. 240 MHz pixel clock.

HD / SDI Input
Accepts:
- 2 x SDI
- 2 x HD-SDI
- 1 x SDI and 1 x HD-SDI
- 1 x Dual HD-SDI

Component Input
Accepts Composite, S-Video and Component. See the "Format Connection Table."

DVI / Expansion Input
Accepts single or dual DVI inputs, with resolutions up to QXGA (2048 x 1536) with a max. 240 MHz pixel clock.



Output Modules

Each module provides three outputs, which can drive one (or more) attached displays from any portion of a selected source image.

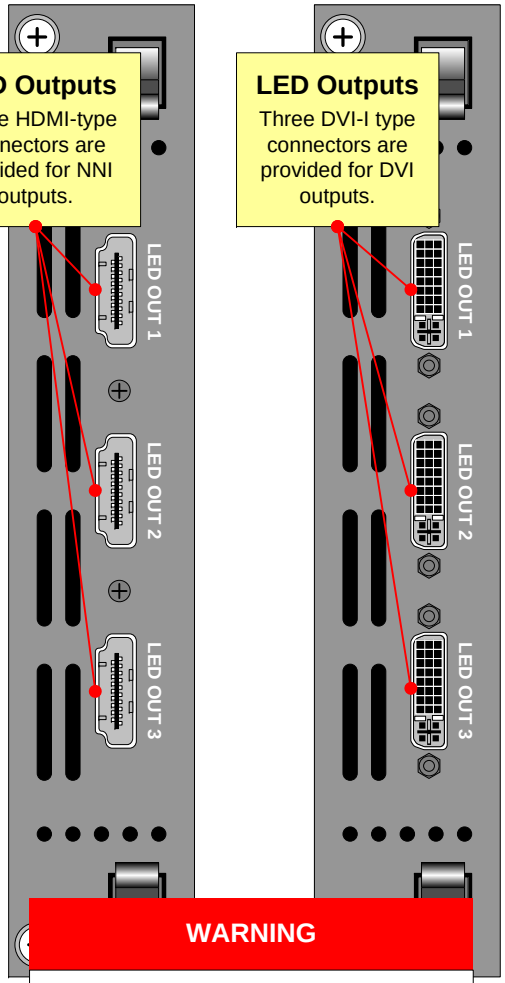
- Use the **Setup Wizard** to configure outputs and groups.

NNI Output Module
Runs next generation LEDs. Each output is limited to 1024 x 768 pixels.

DVI Output Module
Runs legacy LEDs. Each output is limited to 800 x 600 pixels.

LED Outputs
Three HDMI-type connectors are provided for NNI outputs.

LED Outputs
Three DVI-I type connectors are provided for DVI outputs.



WARNING

Output Module connectors use proprietary signals and pinouts. Do not connect the outputs to anything other than the inputs of Barco LED tiles.

System Module

The System module provides connections for Ethernet, synchronization (genlock), monitoring, DMX and diagnostics.

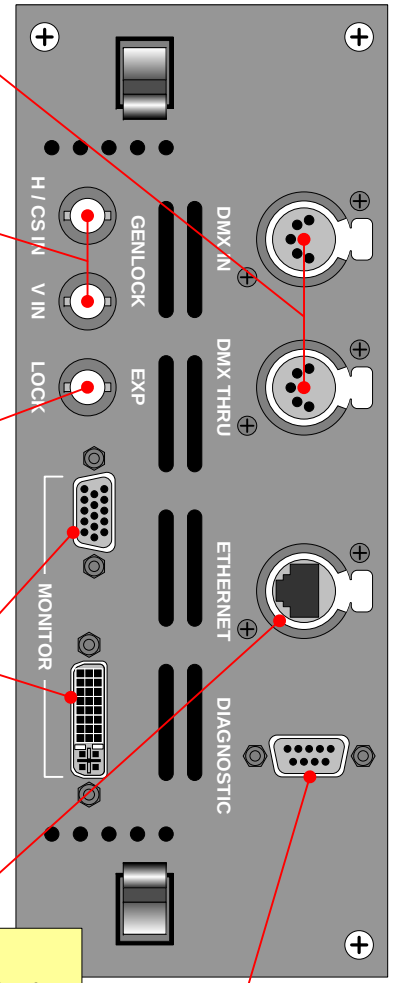
Under the **DX-700 Management Menu**:
- Use the **Ethernet Menu** to configure Ethernet parameters.
- Use the **Monitor Setup Menu** to set monitor output parameters, test patterns, and the monitor's video source.
- Use the **Genlock Menu** to set the master sync source, and individual bank genlock sources.

DMX Control
Currently not implemented.

Genlock Inputs
- Single: connect composite sync or black burst to **H/CS IN**.
- Separate: connect H and V sync to **H/CS IN** and **V IN**.

Expansion Lock Out
For external stacking configurations, provides sync and communications to additional DX-700s.

RGBHV Monitor Out DVI Monitor Out
Use the **Monitor Output Menu** to set resolution and video source. Both outputs show the same video.



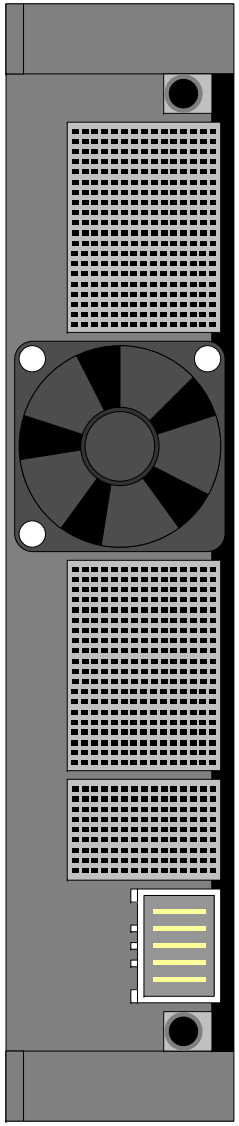
Ethernet
100BaseT connection for Director Toolset communications. Use the **Ethernet Menu** to set parameters.

Diagnostic Port
For factory and technical support use only.

DX-700 Module Insertion

1. Ensure that DX-700 power is off.

2. Orient the module so that the power connector is at the bottom.



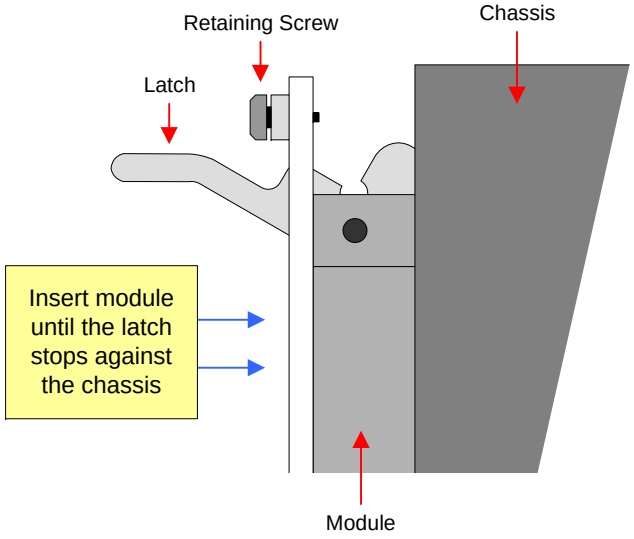
Rear View:

- System Module
- Input Module
- Output Modules

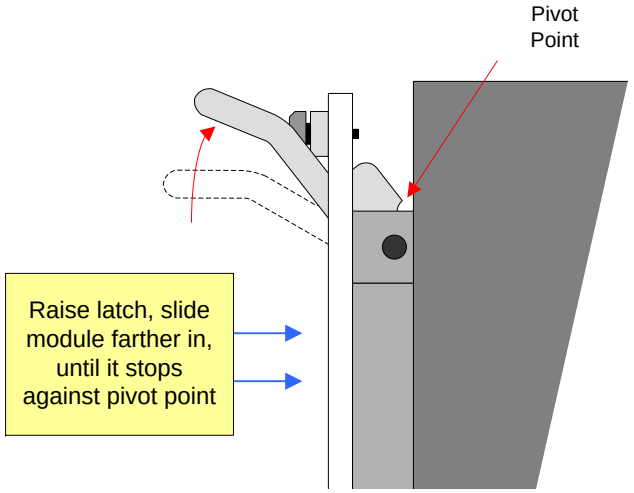
Note

The rear panels of all three DX-700 modules are identical.

3. Carefully insert the module, and push it into the chassis until the module's top latch stops against the chassis.

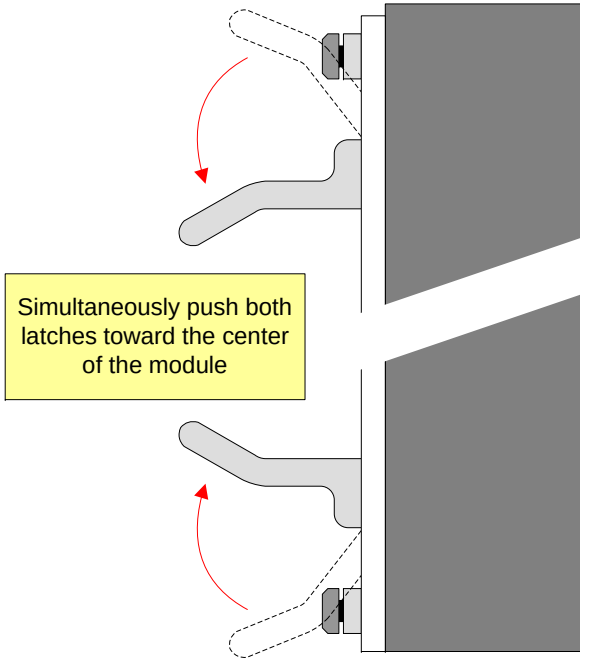


4. Raise the top latch until you can slide the module farther into the chassis — up to the latch's pivot point.



5. Simultaneously push both latches towards the center of the module, until the module is fully seated against the chassis.

CAUTION Always push both latches simultaneously.



6. Tighten both retaining screws to secure the module.

DX-700 Module Removal

1. Ensure that DX-700 power is off.

2. Loosen both retaining screws on the module.

3. Simultaneously push both latches away from the center of the module.

CAUTION Always push both latches simultaneously.

4. When both latches are clear of the chassis, remove the module.

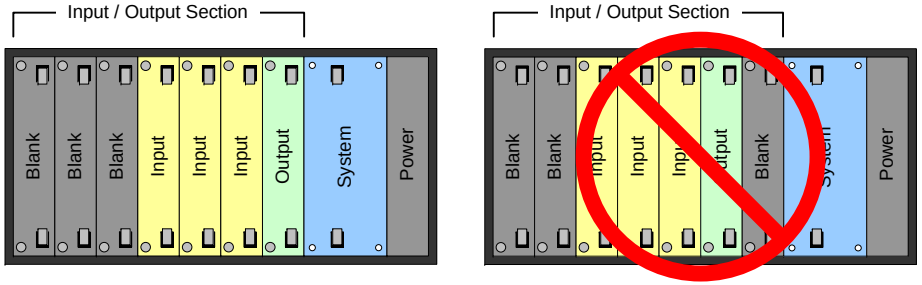
DX-700 Module Configuration Rules

DX-700 supports a wide number of system configurations. Input and output modules are installed in "banks," consisting of one (or more) input modules, and either one or two output modules (with two being the maximum allowed in a bank). By definition, a "bank" is a way of combining inputs and outputs into independent video processors that are capable of driving one (or more) LED walls.

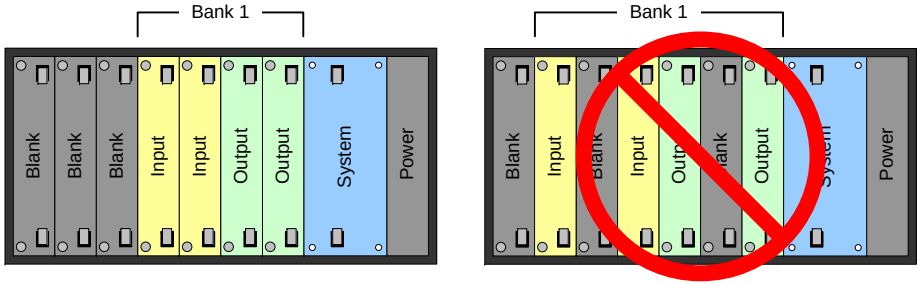
Please remember the following important "module" configuration rules.

1. In the most basic of DX-700 "single bank" configurations, you must have at least one input module and one output module — to route video to an LED wall.

2. As you face the rear of the chassis, the right-most module in the Input/Output Section must always be an Output Module. It must always be right-justified against the System Module.



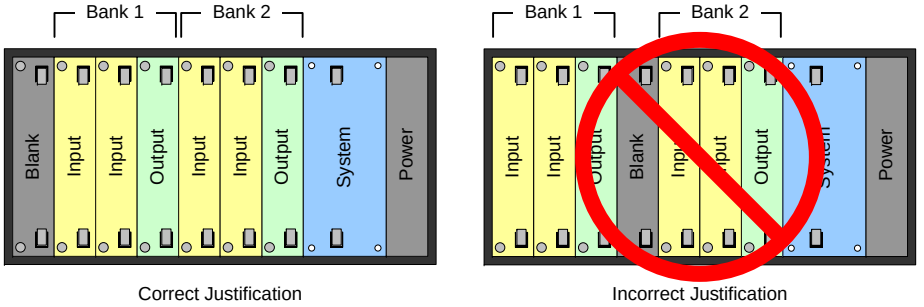
3. Within any bank, all modules must be adjacent to each other, with no blank panels in-between, and all Output Module(s) are always right-justified.



DX-700 User's Guide

For complete details on all installation, setup, configuration and operations procedures, please refer to the DX-700 User's Guide.

4. In multi-bank configurations, all banks must be directly adjacent to one another, with no blank panels in between.



IMPORTANT

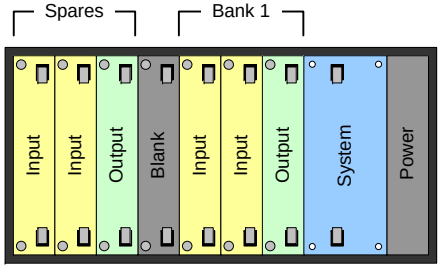
- With the exception of "spare" modules, if the DX-700 determines that any modules are incorrectly installed (or missing), a **Startup Diagnostic Menu** appears which prompts you to power down and re-configure your modules.
- If the above prompt occurs, and provided that a System Module is properly installed, on the **Startup Diagnostic Menu** you can press the **DX-700 Management** button, and access a subset of management functions.
- The DX-700 will not recognize modules that are installed to the left of a blank panel. They will be treated as spares.
- Slots that do not contain modules must always have blank panels installed.

Storing Spare Modules

1. Configure a bank according to the rules outlined in the "DX-700 Module Configuration Rules" section.

2. Install a blank panel immediately to the left of the bank's left-most input module.

3. In the remaining slots, insert spare modules. These are ignored and treated as spares.



Format Connection Table

Use the following table to connect various source formats to the DX-700, using the system's Component input (3 x BNC) on the Input Module.

Input Connector	Composite Video	S-Video (Y/C)	YUV (YP_bP_r)	RGB Sync on Green
Y / COMP	✓	✓ (Luma)	✓ (Luma)	✓ (G)
C / P_b		✓ (Chroma)	✓ (P_b)	✓ (B)
P_r			✓ (P_r)	✓ (R)