Creating and Managing Display Grids in Sytewise

Overview

If you are installing or documenting a multi-panel LED display, Sytewise has a purpose-built toolset to capture everything from grid layout and network groups to per-panel firmware data and cable routing diagrams. The workflow starts with Cabinet Presets, moves through a visual grid builder inside the fixture record, and finishes with wiring diagram documentation. For Samsung installations, there is a direct import path using Samsung SBox CSV exports that gets you to a fully documented fixture record in a fraction of the time.

This guide walks you through the whole process.

Cabinet Presets

Before you build your first grid, spend a few minutes setting up Cabinet Presets. Think of presets as reusable panel profiles -- you store the technical specs for a cabinet model once, and then apply them with a single click every time you build a grid using that panel. Every cabinet in the grid inherits those values automatically, though you can always edit individual panels afterward.

Tip: If your team regularly works with a handful of panel models, getting those presets built before installation day will save you real time on the job site.

Getting to Cabinet Presets

In the left-side navigation menu, click Cabinets. The page opens with two columns -- the left side manages your presets with an Add a New Cabinet Preset button at the top, and the right side displays your existing presets in an alphabetically sorted list. Each preset shows its name and pixel resolution at a glance. Use the pencil icon to edit a preset and the trash icon to delete one.

Creating a New Preset

Click Add a New Cabinet Preset. A form appears on the left side of the page. Fill in the following fields:

Cabinet Preset Name (required): Give this something you will immediately recognize in the grid builder dropdown. Including the manufacturer and model works well -- for example, "Absen A2715

2.5mm" or "Leyard LVA146 1.46mm."

Cabinet Resolution (required): The native pixel dimensions of one cabinet, entered as width x height. A cabinet with 384 columns and 216 rows would be entered as 384x216. The grid builder uses this value to calculate proportional sizing and total pixel output for the display.

Part No / Serial No: The manufacturer part number for this cabinet model. When the preset is applied, this populates the part number field on every cabinet record in the grid.

Description: A short plain-language note about the panel. Useful for anyone looking at the fixture record later who needs a quick reminder of what they are looking at.

Manufacturer Name: The panel manufacturer.

Model Number: The manufacturer model number for this cabinet.

The next four fields are the firmware and hardware configuration values. They are optional on the preset, but if your team maintains consistent firmware versions across a panel family, storing them here means they carry through to every grid you build with that preset automatically:

CFPGA: The FPGA firmware version for the cabinet receiving card or module. This identifies the programmable logic firmware layer and is used to verify consistency across panels.

FW: The main cabinet firmware version running on the receiving card, distinct from the FPGA layer.

Valens: The Valens chipset firmware version, relevant for panels using Valens-based signal distribution. Not applicable to every manufacturer.

OSD: The on-screen display firmware version or configuration string.

Click Create Preset when you are done. The preset appears immediately in the list on the right.

Tip: You can create as many presets as you need. One per panel model your team regularly deploys is a practical starting point. Deleting a preset later does not affect any grids that were already built from it -- those cabinet records already have the values baked in.

Editing and Deleting Presets

Click the pencil icon on any preset to open its edit form. All fields are editable. Click Update Preset to save your changes. Click the trash icon to delete a preset, and confirm when prompted.

Getting to the Grid Builder

Display grids live inside fixture records, which live inside properties. To reach the grid builder:

1. Open the property that contains the display you are working on.
2. Select the fixture for that display.

Once you are on the fixture page, look for these three action buttons:

Import Samsung Panels -- Starts the Samsung SBox CSV import workflow, which builds a complete grid from files exported directly by the Samsung SBox controller. See the Samsung section at the end of this guide for details.

Create Grid (appears when no grid exists yet) or **Edit Grid** (appears after a grid has been saved) -- Opens the interactive grid builder where you configure, visualize, and save the full cabinet array.

Add Wiring Diagrams -- Opens the diagram canvas for documenting signal, control, and power cable routing. This button is available after a grid has been created.

Creating a New Grid

Click Create Grid. A full-width editor panel opens at the top of the fixture page and walks you through three steps.

Tip: Grids up to 10 cabinets wide display fully within the standard view. For displays wider than 10 cabinets, the grid area adds horizontal scroll bars so you can navigate the full layout on any device -- including a handheld wireless device on the job site. No need to lug a laptop if you are working on a large installation.

Step 1: Build the Grid

This step defines the physical structure of the display.

Controller Name: Enter a name for the controller driving this display. This becomes the label on the controller record in the parts list -- something like "Main SBox" or "LED Controller A" works well.

Cabinet Preset: If you have presets defined, a dropdown appears here. Select the preset for the panel model you are installing. This applies the resolution, manufacturer, model, and firmware values to every cabinet in the grid. The default option is Standard Cabinet 650x480, which is a useful starting point if you plan to set resolution manually in the next step.

Cab/Panel Prefix: A short alphabetic prefix used to label each cabinet. The system combines the prefix with row and column coordinates to generate part numbers -- for example, prefix "C" produces C-0-0, C-0-1, C-1-0, and so on. Only alpha characters are accepted. The default is "C" and that works for most installations.

Columns x Rows: The physical layout of the display entered as columns first, then rows. A display four cabinets wide and three tall would be entered as 4x3. Think of it as the landscape footprint of the display as viewed from the front.

Click Build Grid. The cabinet array appears as a proportionally sized visual grid. Each box represents one physical cabinet, labeled with its auto-generated part number and current pixel dimensions. The grid scales to fit no matter how large the display is, and scroll bars appear automatically on wide displays.

Step 2: Set Cabinet Resolution

After building the grid, the editor moves you to the resolution step. For a standard display where every cabinet is the same model, your preset has likely already handled this. For mixed-resolution displays or any non-standard configuration, this is where you make individual assignments.

To select cabinets, click individual boxes on the grid. A number appears on each selected cabinet showing the selection order. Along the top edge of the grid you will see small column selector icons, and along the left edge you will see row selector icons. Clicking a column selector selects every cabinet in that column in one click. Same for rows. On a 12-wide display, that single click saves you a lot of individual tapping.

Once you have selected the cabinets you want to adjust, enter the new resolution in the width x height field and click the checkmark button. The selected cabinets update and the grid redraws to show the new proportions. Use the clear selection button to deselect everything and start a new selection group.

Click Next when your resolution assignments are correct.

Step 3: Assign Groups and Omit Panels

This step maps cabinets to their network groups and handles any gaps in the physical layout.

Assigning groups: Select a set of cabinets using the same click or column/row selector approach from Step 2. Enter the IP address or group name for those cabinets in the field and click Set Group. The selected cabinets immediately color-code to that group and a brief confirmation message appears. Repeat for each group in the installation. Most displays have one group per SBox output port or per network subnet, but there is no limit on the number of groups you can define.

Omitting panels: Some displays have an irregular shape -- an L-configuration, a cutout for a camera housing, or a deliberate gap in the panel arrangement. Select the cabinets that represent those empty positions and click the omit button (the ban icon). Omitted cabinets are marked distinctly in the grid view and excluded from the grid layout while still holding their position. This lets you accurately document any non-rectangular configuration without faking the grid dimensions.

Tip: The color-coding by group makes it easy to do a visual sanity check before saving. If a cabinet shows the wrong color, select it and reassign the group before you move on.

Step 4: Save

Click Save Grid. Sytewise creates a controller part record and individual cabinet part records for

every non-omitted position in the grid. The editor closes and the fixture page refreshes, now showing the Edit Grid and Add Wiring Diagrams buttons along with a visual representation of the completed grid.

Editing an Existing Grid

Click Edit Grid on the fixture page to reopen the grid editor. The saved grid loads and you have two targeted editing options.

Editing Resolution

Click Edit Resolution. The grid loads in an editable state with the column and row selectors active. Select the cabinets you need to change, enter the new dimensions, and click the checkmark. When you are done, click Save Resolution. The parts database updates immediately and the grid redraws.

Editing Groups

Click Edit Groups. The saved grid loads with all existing group color-coding visible so you can see what is currently assigned. Select the cabinets you want to reassign, enter the new IP or group name, and click Set Group. When all assignments look right, click Save Groups.

Exporting and Importing Cabinet Data

After a grid is saved, Sytewise provides a CSV-based workflow for loading site-specific data into the cabinet records in bulk. Serial numbers, firmware versions, warranty dates, model numbers, IP assignments -- anything that is easier to fill in on a spreadsheet than clicking through individual cabinet records gets handled here. This is the manufacturer-agnostic path. Samsung users have an additional option covered in the next section.

Exporting the Cabinet CSV

From the fixture page with an existing grid, open the Edit Grid panel and click Download. Sytewise generates cabinets_data.csv and your browser downloads it automatically. Open it in Excel or any spreadsheet application.

The file contains one row per cabinet. Three columns are locked and must not be modified:

ID_No_Change: The internal Sytewise part ID used to match each row back to the right database record on import. Do not touch this one.

res_No_Change: The resolution on record for this cabinet.

loc_No_Change: The stored position coordinates.

Every other column is editable: partno_serialno, description, ip_group, cabid, warr_desc, warrantytime, mfg, modelno, cfw, cfpga, valens, osd, coord, and batchcode.

Fill in the site-specific data across all rows and save the file as CSV when finished.

Tip: This is a natural handoff point between the installation team and the project documentation team. A technician captures serial numbers and firmware versions during installation, fills in the spreadsheet, and hands it back. One import and the fixture record is fully populated as-built.

Importing the Updated CSV

Use the CSV upload control in the Edit Grid panel. Select your completed file and click Upload. Sytewise processes each row, matches records by the ID_No_Change value, and updates the cabinet fields in the database. A success message confirms how many records were updated, and the parts list and grid view refresh automatically.

Wiring Diagrams

After a grid is saved, click Add Wiring Diagrams on the fixture page. A drawing canvas opens as a modal overlay with the display grid as a visual reference layer underneath. You can create multiple named diagrams per fixture, each on its own canvas.

The drawing tools let you add lines, shapes, and annotations over the cabinet grid to document how cables are physically routed. The most common uses are:

Video Signal: The path from the media player or video processor through the SBox controller to each cabinet, including daisy-chain or star topology routing.

Control Signal: Network or control data paths, switch connections, IP addressing, and any serial control runs.

Power: Power distribution layout, panel circuit assignments, PDU connections, and cable entry points.

Keeping signal, control, and power on separate named canvases rather than combining everything into one diagram makes the documentation much easier to read during a service call at two in the morning.

Tip: Wiring diagrams are accessible to anyone with access to the fixture record, including field technicians doing maintenance or repair. A well-documented diagram can save hours of troubleshooting when the original installer is not available.

Samsung Panel Import

For Samsung LED installations, Sytewise supports a direct import path using the CSV exports from

the Samsung SBox controller. An AV technician typically runs this import during installation. Once in the system, the fixture record is available to everyone doing ongoing repair and maintenance -- no need to rebuild it later.

Click Import Samsung Panels on the fixture page. A two-panel import interface appears.

Upload Samsung SBox CSV: The left panel accepts a drag-and-drop or file-select upload of the SBox CSV file exported from the Samsung controller. Drop your SBox file here or click Select A File. The system reads the controller data and establishes the grid structure and controller record.

Upload Cabinet CSV: The right panel accepts the accompanying cabinet CSV containing individual panel specifications -- serial numbers, cfw, cfpga, Valens, OSD settings, batch codes, warranty information, model numbers, IP group assignments, and coordinates. Drop the cabinet file or click Select A File.

Sytewise processes both files together and creates the complete fixture record: the controller part, all cabinet parts, and the visual grid.

Tip: The Samsung import does in two file uploads what would otherwise take a manual grid build plus a full cabinet CSV import. Once it is done, the fixture behaves exactly like any other saved grid -- you can edit resolution and groups, re-import an updated CSV, and add wiring diagrams the same way.

Note: Samsung panels are the one case where the SBox CSV drives the initial grid creation. For every other manufacturer, build the grid manually using the Create Grid workflow, then use the CSV export/import workflow to populate the site-specific cabinet data.

Getting Help

If something is not behaving the way you expect, or you run into an error not covered here, reach out to your Sytewise account administrator. When you contact them, mention which step you were on and what you were trying to do when the issue occurred. A screenshot is worth a thousand words if you can grab one.

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