Rail Configuration Reference

Anonymised configuration patterns for interactive sliding rail screens, drawn from comparable builds. Track lengths, screen diagonals and venue types are real; client names, locations and photographs are omitted. Every new wall is surveyed before a track length is fixed.

Short history wall

Configuration	3 m straight rail with a 55 inch IR touch display
Notes	Position markers trigger one chapter per stop; a home position is restored after a power loss.

Vocational college timeline

Configuration	5 m rail with a 43 or 55 inch display
Notes	Self-guided operation; chapters are self-contained so a visitor can join midway.

Retail store upgrade

Configuration	6 m motorised rail with a 55 inch display
Notes	Automatic sensing mode; the screen moves and plays without staff involvement.

Corporate showroom

Configuration	6.7 to 8.25 m rail with a 55 or 65 inch IR touch display
Notes	Presenter-led tours with skip and replay from the touch layer.

Curved feature wall

Configuration	6.8 m arc rail with a 55 inch display and decorative edging
Notes	Curved track geometry and carriage clearance are engineered against the wall survey.

Large exhibition hall

Configuration	14 to 16 m rail with a 65 inch display, a background wall and additional players
Notes	Long walls use linked carriages or extra players so a guided group and a casual visitor do not wait for one screen.

Opening screen wall

Configuration	4.7 m assembly of four 55 inch opening and closing panels
Notes	Panels part to reveal the exhibit behind them; a separate mechanical sequence with its own limit switches.

How a rail system is controlled

A precision linear or curved track carries a display on a motorised or hand-pushed carriage. Infrared, photoelectric or magnetic sensors report the carriage position to a PLC, microcontroller or industrial PC; when a preset point is reached, the controller switches the local player to the matching image, text, video or 3D scene. Limit switches, a home position after power loss and a cable carrier are part of the mechanical specification.

- Straight, arc, circular, opening and closing, and multi-screen linked tracks are engineered

against the wall survey.

- Track lengths on comparable builds run from about 3 m to 16 m with 43, 49, 55 or 65 inch displays.
- Playback and trigger logic run locally; a content management system and remote monitoring are optional.

Commissioning checks

- [ ] Wall survey and laser level before track fixing.
- [ ] Carriage travel, track level and cable carrier routing.
- [ ] Every trigger point against its playlist entry.
- [ ] Limit switches, emergency stop and home position after a power loss.
- [ ] Touch calibration and playback from a cold start.

See https://www.hnzeyang.cn/how-it-works/ for the full principle and https://www.hnzeyang.cn/support/ for the maintenance schedule. Indicative reference data, not a named customer case study.