



Harlequin Liberty Switch®

Professional multi-use floor system



ABTT Engineering Product of the year 2023



LDI Best Debuting Product Staging and Rigging Award 2022 DTHG Technology Product Award 2023

SHOWTECH



JTSE Innovation Award 2023

Overview

CHARLEQU

Harlequin Liberty Switch is a modular multi-use floor that transforms from a rigid stage floor into a high-quality sprung floor designed for dance, so protecting dancers by reducing the risk of injury.

The base units house a series of moving carriages connected by straps running on high-strength carrier rails powered by actuators. Each actuator and associated controller are linked to a master control unit located off-stage. The upper panels are standard Harlequin Liberty with the addition of low-friction blocks on the underside.

Harlequin Liberty Switch can be custom designed to incorporate features such as traps, lifts and revolves as required. Areas of the floor can be quickly isolated to create rigid zones for the placement of pianos, scenery or retractable seating while the rest of the floor is used as a sprung dance floor.



Operation

Harlequin Liberty Switch is very simple to operate. The system is controlled remotely via a hard-wired master control unit which can be integrated with most existing stage control or building management systems.

This has many benefits over the old approach of swapping floors between shows. It transforms from a sprung floor to a rigid floor in less than a minute using the intuitive touch display screen and is more cost-effective than an equivalent ballet wagon. There are no labour costs in laying and removing a temporary floor and no storage costs.

LIBERTY SWITCH

This innovative and versatile floor has been designed for venues who regularly put on both dance and theatrical performances and so require both a sprung and a rigid floor in the same performance or rehearsal space.

Harlequin Liberty Switch is more sustainable than the traditional alternative of using a portable sprung floor or ballet wagon. Having one multi-purpose floor instead of two separate floors uses less resources. The floor does not need to be stored, moved, installed or uninstalled for each performance, reducing the manpower required and energy consumed.

Harlequin Liberty Switch uses no power to stay in the selected mode, minimising energy consumption.

All timber used in the manufacture of Harlequin Liberty Switch is responsibly sourced from sustainable well-managed forests that are FSC certified. All Harlequin vinyl flooring is 100% recyclable.

• • We are extremely excited to be the first venue to have Harlequin Liberty Switch! It is easy to use and it is great being able to switch between a sprung and rigid floor so quickly.? ?

Martin Schläpfer Ballet Director and Chief Choreographer of the Vienna State Ballet

Specifications

CHARLEQU

- Much cheaper than an equivalent ballet wagon
- No labour costs to swap floors during and between shows
- Space saving with no storage costs
- Simple one-touch operation via a hard-wired master control unit.
- Transforms from a sprung floor to a rigid floor in less than a minute
- Can incorporate features such as traps and create sprung and rigid 'zones' in the floor as required
- Complies with test standards BS EN 1991-1-1:2002.
- Requires no power to stay in selected mode, power requirement single phase 16 Amp
- UK Patent GB2592382 US Patent US 11,649,646 B2 International Patent W02021/170970



Case Study: Vienna State Opera

The Vienna State Opera and Vienna State Ballet needed a rehearsal space with both a sprung and rigid floor that they could use on a daily basis. Following over two years of development in 2022, Harlequin's technical teams from the UK, Luxembourg and Germany worked together to install Harlequin Liberty Switch at The Vienna State Opera House.

Before the installation of the Liberty Switch system could begin, a sub-floor was constructed using timber battens to provide a completely level surface onto which the pre-manufactured Liberty Switch base panels, complete with the drives and control mechanism were installed.

The Harlequin Liberty top panels were then laid and locked into place, finally being topped with a Harlequin Studio vinyl floor.

The whole system is operated via a master control unit using a simple touch screen placed on the wall of the room which enables rapid transformation.

I heard amazing things but trying it was next level, a new world. It really makes sense. Your body, your bones they love it and by the end of the day you are not exhausted. It feels really healthy. ??

Rebecca Horner Soloist

About us

Harlequin is the world leader in advanced technology floors and stage systems for the performing arts. Established in the UK over 40 years ago, Harlequin remains the performance floor of choice for the world's most prestigious dance companies, theatres, venues and schools, production companies and events.

Harlequin design, build and refurbish performance floors and stages, working with stage engineers and theatre consultants in leading venues across the world.

Harlequin's experience and reputation are founded on the design, manufacture and supply of a range of high quality portable and permanent sprung and vinyl floors.

Harlequin is the global leader in its field with offices in Europe, The Americas and Asia Pacific.



Scan here to find more information about Harlequin



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ROYAL OPERA HOUSE



ABT MERICAN BALLET THE ATRE

THEATRES

The Australian Ballet