### **RACK COMPONENTS**



#### ACCESSORY PATCH PANEL

accessory HUB

e-stop **PATCH PANEL** 

e-stop HUB

showstopper **BASE** 

## Example Facility Automation Components Layout

Emergency Stop buttons along with Control and Drive Connection points located in the grid, on stage level, and in the trap room provide a straightforward method to connect and control any stage effect. Racked components allow flexibility and expandability to accommodate growing automation inventories and needs.



**E** 

FACILITY WIRING REQUIRED Alpha wire 1181/15C



# Hard-Wired Solutions

#### Simpler. Cleaner. More Efficient.

#### BY GWENDA CONNER & MIKE WADE

't's here: a comprehensive set of automation control components to wire your facility for Spikemark control. Permanently installed **L** remote boxes distributed throughout the facility connect to a centrally located control rack and form the backbone of a nimble network capable of supporting your most complicated automation needs.

Mike Wade, Director of Technical Services, detected a sea change in recent years that indicated a growing interest in permanently wiring a theatre specifically for Spikemark. In response, we carefully considered the fluctuating needs of the folks on the ground, those daily swimming in a sea of shifting cables. We thought a lot about how best to support them, ultimately arriving at a design that marries the convenience of rigid conduit with the versatility of familiar modular components and gives you, the user, true "plug and play" flexibility when using any of the Creative Conners products.

The daily drivers of the system consist of three remote boxes, each of which performs a discrete and essential task. At outlet height is the Drive Connection box, housing Ethernet and Showstopper ports to connect any Stagehand controller to the Spikemark network and E-Stop system. Next down the line is the Control Connection box, with two Ethernet outlets

and a Showstopper 3 Accessory port for easily connecting your Stage Manager or Consolette with Spikemark PC or Pendant. Last, but not least, is the Remote E-Stop box. Mounted at light switch height, with system status indicator lights and

an illuminated E-Stop button, it's highly visible and easily accessible if the E-Stop needs to be engaged.

Built-in wiring pulled through conduit connects these boxes to a control rack located in a trap room, electrical closet, or similar available space. The rack includes standard Ethernet patch panels, a network switch, UPS power supply and, at the foundation of it all, literally and figuratively, is the Showstopper 3 Base—the hardworking muscle behind all emergency stop connections and accessories. On top of this unit is the Showstopper 3 E-Stop Hub, which increases the number of E-Stop outputs available, as well as the Showstopper 3 Accessory Hub, which supplies additional accessory outputs, to facilitate ever larger, more complex system designs.

Despite its name, hard-wired wiring is not, in fact, hard to terminate or commission. On the contrary, our system's low voltage, tool-less connections obviate any need for specialty tools or soldering in the field. And because all essential

#### Showstopper **3 Base**

Control Connection

The Showstopper 3 Base continues to shine as the foundation for Emergency Stop systems in both Facility infrastructure and demountable Production systems. The Showstopper 3 Base includes E-Stop outputs for multiple Stagehand controllers as well as Showstopper 3 Accessory outputs, allowing you to connect the Stage Manager, Spikemark Pendant, Consolette or any Showstopper 3 Hubs.

#### Showstopper **3 E-Stop Hub**

The Showstopper 3 E-Stop Hub makes adding additional E-Stop outputs a plug and play experience. There's nothing to configure, no settings to change just plug the Showstopper 3 E-Stop Hub into any available Showstopper 3 Accessory port and go.

#### Showstopper 3 Accessory Hub

The Showstopper 3 Accessory Hub creates six Showstopper 3 Accessory outputs from a single input. This supports complex system designs incorporating many remote E-Stop buttons and Showstopper 3 Accessory connections.

out there. "Most





cables are tidily bundled and built in, they don't have to be reconfigured and deployed with each show, dramatically reducing the amount of time

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**SIMPLICITY OF** 

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required for both the planning and execution of every load in. The end result, Mike says, is "simpler, cleaner, and more efficient."

But the elegant simplicity of our system belies its robust functionality and dexterous agility, which radically distinguish it from the other options

installations are just a mysterious black box on the wall," Mike explains. "They're built specifically for that installation and can't be customized down the line." But the Showstopper's inherent capacity for expansion means it comes equipped with maximum versatility. The system can accommodate your evolving automation needs, grow with them with the simple addition of extra pluggable components.

Additionally, since the building blocks of the Creative Conners hard-wired solution are serviceable and modular, any one of them can be easily swapped out, as necessary. This means if an

electrical component gets damaged, diagnosing the problem and restoring full functionality is a quick and painless operation, not a time-

consuming service call with a skilled technician. And in keeping with the company's commitment to backwards compatibility, the new hard-wired offerings work with every unit the company has sold since its inception in 2004.

Although the best time to invest in a hard-wired solution is when you're

building or renovating a venue so you bake in the infrastructure to grow as the theatre grows, there's no reason, says Mike, you couldn't retrofit a space, phasing in the fully compatible hardwired components as you continue to operate existing Showstopper equipment. But even those who can't currently take advantage of this next level solution will still benefit from it, as its creation has led to a redesign of the Showstopper products. The new and updated rack components not only support the permanent installation market, but also improve the experience of any user setting up a Creative Conners automation system one show at a time.

#### Drive Connection

The Drive Connection box incorporates an Ethernet and Showstopper connection in a standard 3 gang box. It is available as surface mount as well as flush mount box depending on the installation needs and includes standard nomenclature as well as customized ID numbers.

#### Control Connection

The Control Connection box includes one Showstopper 3 Accessory output and two Ethernet receptacles, which makes connecting the Spikemark Pendant or the Consolette and a PC running Spikemark a cinch. It even supports connecting a Showstopper 3 Hub to support additional production automation. It is available as surface mount as well as flush mount box depending on the installation needs and includes standard nomenclature as well as customized ID numbers.

#### Remote **E-Stop**

The Remote E-Stop is hard wired into the Showstopper system through a flush mount or surface mount box. It includes an illuminated E-Stop button, system status indicator, tool-less field terminations and customizable nomenclature.

#### Showstopper **Patch Panel**

The Showstopper Patch panel incorporates tool-less facility wiring terminations on the back along with tried and true panel mount 5 pin XLR Showstopper connections on the front. Integrating these brings harmony to the installer and end-user.

#### Showstopper Accessory **Patch Panel**

The Showstopper Accessory Patch panel incorporates tool-less facility wiring terminations on the back along with tried and true panel mount Harting 3A panel mount connections on the front. The toolless terminations make short work of wiring in the field, and the familiar connectors keep connections simple for the user.