



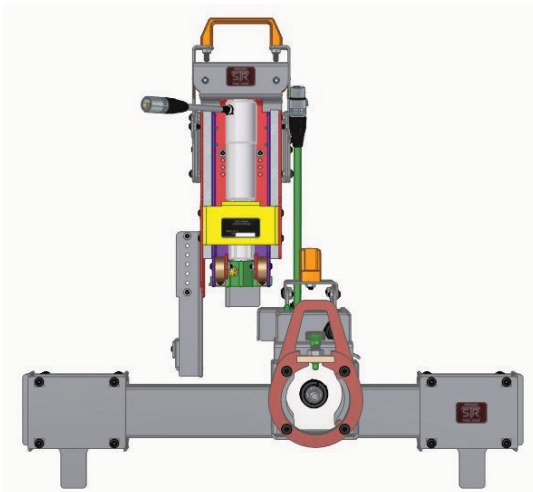
**SAFE-T-RACK**  
by remote solutions, llc

**Operation  
Manual**



**SR-U**

**SDB-50MAA-1223-NM**

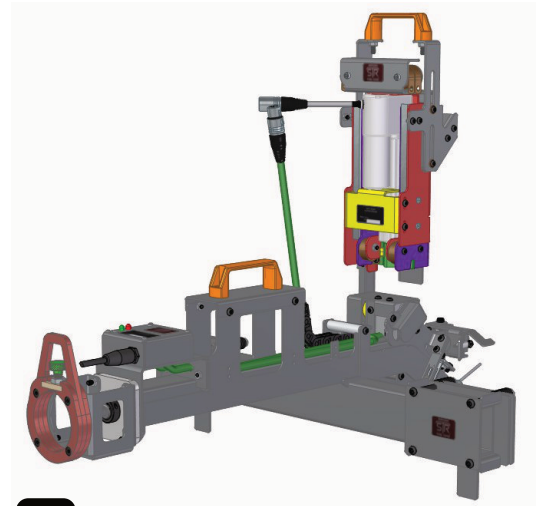


**Alice Chalmers  
/Siemens**

**MA**

**2400-4160V**

**1200-2000A**



**O**ur products are built to spec in our 23,000 sq ft., state-of-the-art facility by our team of designers and engineers in Tucson, Arizona. Each product is custom designed to individually fit each breaker, cubical door, switch gear, or variant so you know you're getting the safest, most reliable product on the market. We built the best so your team stays safe.

Because Distance is the Best Arc Flash Protection



**REMOTE SOLUTIONS, LLC**

2475 N. Jackrabbit Avenue ■ Tucson, AZ 85745 ■ (520) 628-4378 ■ FAX (520) 628-4568 ■ Safe-T-Rack.com

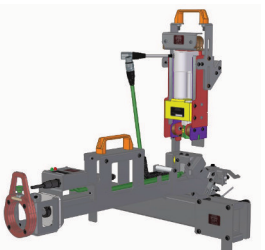



## Safety First

Always observe all safety precautions and use all personal protective equipment (PPE) as required by Local Site Procedures. This equipment is designed to minimize exposure risk to the operator. Please use the cables, explained below, to attain a safe distance from the breakers during racking. Always use appropriate PPE. Above all, adhere to site specific regulations and requirements.

Before beginning the racking process, be sure that the breaker is open, verify that a lockout/tag out is in place (LOTO) and allows racking of the breaker.

## Parts List

Part/Image	Quantity	Description
	1 each	The Smart Drive Bracket (SDB) and Spanner Bar engage with the breaker to perform the racking function.
	1 each	Portable Kit includes: One Motor Drive Unit (MDU), one 50' comm. cable, two 28V batteries, and one SR-U Handheld Controller (HHC)



## Operation Manual

## Overview

Depicted in figs. 1.1 and 1.2, the Smart Drive Bracket (SDB) and the Interlock Actuator mount on a Spanner Bar and breaker front, respectively. The Spanner Bar mounts between the front lip of the breaker walls while the Interlock Actuator hangs from a breaker handle. The Smart Drive Bracket aligns with the racking shaft and engages with the shaft without any prior modifications.

Once the MDU is in place, a Motor Drive unit mounts through the mounting rings (red) and engages with the SDB to perform the racking function. A 50-foot cable is connected from the MDU to a Handheld Controller (HHC) to operate the racking process from a safe distance.

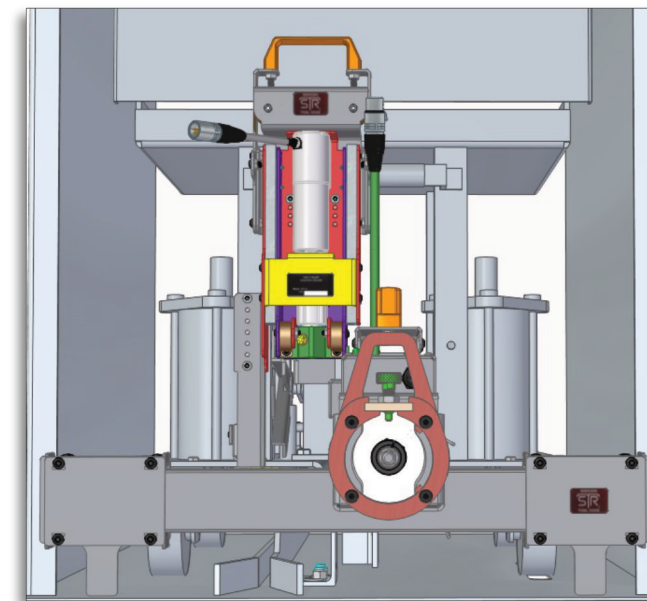


Fig. 1.1

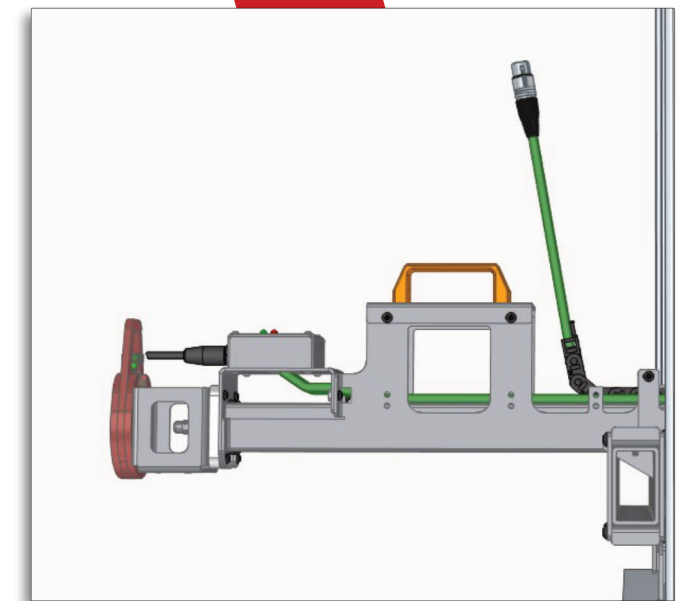


Fig. 1.2



## Tool Adapter Mount

As noted in the Overview, the Motor Drive Unit (MDU) engages directly with the SDB. The SDB is equipped with an assembly that fits into a quick-connect tool coupling on the MDU. The collar on the MDU pulls back and the MDU fits with the tool assembly. All this takes place once the SDB and the Spanner Bar are mounted on the breaker.

### Sequence Process

1. Pull back the collar on the MDU.
2. Insert the MDU through the mounting rings on the SDB.
3. Release the collar and secure the MDU in place with a locking pin.

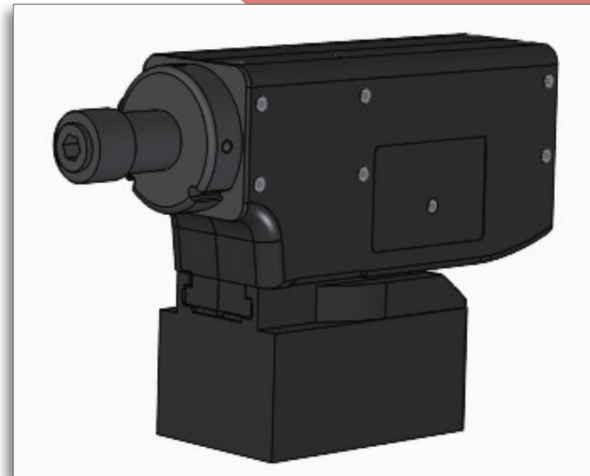


Fig. 1.3

## Motor Drive Unit Mount

The Portable Kit includes two 28V batteries. Before connecting the battery to the system, make sure the battery is fully charged and is attached to the MDU. If preferred, an AC Power Supply is available, negating the need of a battery.

The MDU intuitively fits into the SDB mounting rings (depicted in red), on top of which is a locking pin (depicted in green, fig. 1.5). Set the locking pin to the open position. Insert the MDU and align the quick-connect tool adapter with the tool assembly. Lock the MDU into place by releasing the locking pin. When the pin fully engages, the MDU is secure.

Once the MDU is secured to the SDB is engaged with the racking shaft, connect the 50-foot SDB Automation Cable to the Motor Drive Unit.

### Sequence Process

1. Attach a fully charged battery to the MDU.
2. Set the locking pin to the open position.
3. Insert the MDU through the mounting rings.
4. Release the locking pin, securing the MDU in place.
5. Connect the SDB Automation Cable to the MDU.

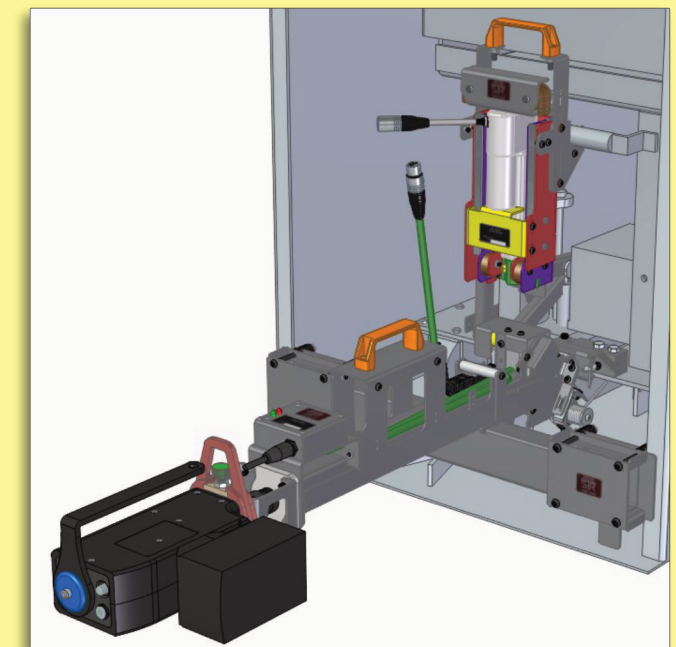


Fig. 1.5

## Smart Drive Bracket Mount

The Spanner Bar has an adjustable length and first between the breaker wall. Once it is secured in place, the SDB mounts over the top of it, aligning with the racking port. Above, the Interlock Actuator hangs from a breaker handle and engages with the interlock. The Actuator and the SDB connect via a comm. cable and the interlock engagement and the racking function are all performed by with the Handheld Controller.

### Sequence Process

1. Fir the Spanner Bar between the breaker walls.
2. Mount the SDB over the Spanner Bar.
3. Hand the Interlock Actuator on the breaker handle and connect it to the SDB.

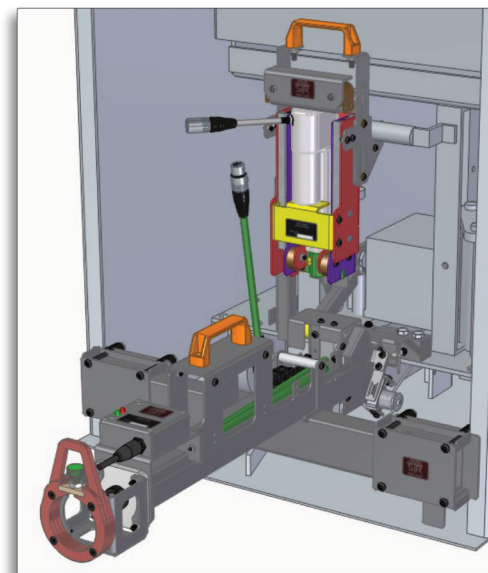


Fig. 1.4



## Handheld Controller

The Handheld Controller connects to the MDU via a 50' Automation Cable. If necessary three cables may be tethered to achieve a safe distance of 150'. Once plugged in and turned on, the Handheld Controller guides the user through the racking in/out procedure.

### Sequence Process

1. Connect the Handheld Controller with the 50' Comm. Cable.
2. Move a safe distance from the breaker.
3. Twist the E-Stop switch, depicted here, to activate the HCC.
4. Turn on the Handheld Controller and follow the on-screen prompts.

### Error Recovery

When racking in/out, if an obstruction or mechanism failure occurs, the system will attempt to recover the breaker to a safe position. Actions will be displayed with an asterisk (\*) in front of them. When done, the position of the breaker will be displayed as determined by the recovery. Note the location and approach with caution. Determine the cause of the failure and remedy the situation prior to attempting additional remote racking.

**NOTE:** Attempting to stop or shutting down the system mid-process once it has started is not recommended, as this will leave the breaker in an unknown position. The Remote Racking System will only operate from "known" positions: connect or disconnect. The Remote Racking System will not engage when the breaker is at a mid-point.



## Care/Maintenance

To ensure longevity from the Portable Kit and the Smart Drive Bracket, store the tools in the provided polymer case in a dry, temperate environment. The tools are weather resistant but should be used with care in rain and snow.

### WARNING

This product can expose you to chemicals including Di(2-ethylhexyl)phthalate (DEHP), which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

For any questions, concerns, information, or missing/replacement parts, contact Remote Solutions below or follow the QR link to our website.



Because Distance is the Best Arc Flash Protection

Remote Solutions, LLC

2475 N. Jackrabbit Avenue  
Tucson, AZ 85745  
(520) 628-4378  
[sales@safe-t-rack.com](mailto:sales@safe-t-rack.com)  
[www.safe-t-rack.com](http://www.safe-t-rack.com)



**SAFE-T-RACK**  
by remote solutions, llc

Because Distance is the Best Arc Flash Protection



**REMOTE SOLUTIONS, LLC**

2475 N. Jackrabbit Avenue ▪ Tucson, AZ 85745 ▪ (520) 628-4378 ▪ FAX (520) 628-4568 ▪ Safe-T-Rack.com