# REMOTE RACKING SYSTEM

SPECIFICALLY DESIGNED FOR:

SAFE-T-RACK by Remote Solutions LLC

Because Distance is the Best Arc Flash Protection

BREAKER: DH A-D

MANUFACTURER: Westinghouse

VOLTAGE: 5kV CURRENT: 1200A



021



- LIGHTWEIGHT AND PORTABLE
- EASY-TO-USE HANDHELD CONTROLLER
- STANDARD 50' CABLE (WITH OPTIONAL EXTENSIONS) ASSURES SAFE DISTANCE FROM BREAKER DURING RACKING SEQUENCE
- ERROR RECOVERY & EMERGENCY STOP CAPABILITY
- MOUNTING HARDWARE INSTALLED ON BREAKER

#### PARTS & ACCESSORIES

Smart Drive Bracket,
Tool Adapter Assembly, Motor Drive
Unit, Handheld Controller, and
50' Communications Cable

All of our products are designed, built to spec, and shipped from our state-of-the-art facility in Tucson, Arizona. Each product is created and tested by our knowledgeable team of designers and engineers to fit each individual breaker, cubicle door, switchgear, or variant. When you choose Safe-T-Rack, you're getting the safest, most reliable product on the market.

OUR TEAM GOES TO WORK EVERY DAY TO MAKE SURE YOUR TEAM COMES HOME SAFE.









# MAGENTA 021 **OPERATION MANUAL**

BREAKER: DH A-D

MANUFACTURER: Westinghouse

**VOLTAGE: 5kV CURRENT: 1200A** 

cubicle kit onto which the SDB is

mounted. For questions or installation

requests, contact Remote Solutions LLC.

# SAFETY FIRST

Always observe safety precautions and use personal protective equipment (PPE) as required by local site procedures. This equipment is designed to further minimize exposure risk to the operator.

State of California to cause

cancer and birth defects or other reproductive harm. For more

information go to

www.p65warnings.ca.gov.

# **PARTS LIST**



# SETUP SEQUENCE

#### SMART DRIVE BRACKET (SDB)

- 1. Assure that cubicle is fitted with Cubicle Kit and that Smart Drive Bracket (SDB) and Cubicle are both labeled with MAGENTA color code.
- 2. Hang SDB from breaker using installed Shoulder Nuts. SDB will suspend securely from keyhole slots.
- 3. Push body of SDB forward to engage with the racking port.
- 4. Pull handle on tension mechanism until tab secures behind SDB, locking it into place. Release handle.

#### MOTOR DRIVE UNIT (MDU) & TOOL ADAPTER (TA)

- 1. Using Quick Change Coupling, insert Tool Adapter (TA) into Motor Drive Unit (MDU) and release collar. Assure that TA is secured before proceeding.
- 2. Attach fully charged battery to MDU.
- 3. Set the locking pin on SDB to an open position and insert MDU & attached TA into the drive rings on SDB.
- 4. Align and engage the MDU with ring dogs on drive rings. Once aligned, release locking pin to hold MDU in place.
- 5. Connect SDB communication cable to port in MDU. *Note: red line indicates correct alignment.*

#### HANDHELD CONTROLLER (HHC)

- 1. Connect 50' Communication Cable to second port in MDU.
- 2. Connect other end of 50' Communication Cable to Handheld Controller (HHC)\*.
- 3. Move a safe distance away from the breaker.

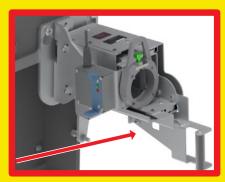


#### REMOTE SOLUTIONS, LLC

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SDB SUSPENDED FROM BREAKER BY CUBICLE KIT SHOULDER NUTS



INTERLOCKED TAB ON BRACKET, ENGAGED VIA TENSION MECHANISM.



MDU WITH ATTACHED TA



MDU WITH ATTACHED TA ENGAGED
WITH DRIVE RINGS AND LOCKING
PIN, READY FOR SDB AND HHC
COMMUNICATION CORDS

\*Note: Multiple cables can be used to increase safe distance from breaker. Additional cables sold separately. Contact Remote Solutions LLC for more information.

## **POWER ON**

- 1. Twist the E-Stop switch on HHC to activate the system.
- 2. Several screens will flash as unit powers up. Once HHC has powered up, **verify correct application screen is displayed.**

# SYSTEM OPERATION

1. Follow the on-screen prompts to complete racking procedure. Navigate selections using perimeter buttons on HHC (backlit in green). "Up" and "Down" will toggle through options on screen. "Right" and "Left" will confirm selections.

Note: System will ask to verify battery level. Check battery level is at 4 bars before attempting to rack. If racking multiple breakers, please verify

battery level between

each racking attempt.

BATTERY

REQUIREMENT

2. Navigating HHC in this manner, select current location and desired destination of breaker. When selection is highlighted, click center button (backlit in red) to confirm selection. **This will initiate the** 

racking process.

3. System will perform action as selected, displaying progress on screen.

4. Upon successful operation, HHC will display a completed racking screen.

# **POWER DOWN & STORAGE**

- 1. Power down the unit by pressing the E-Stop button. Remove battery from MDU.
- 2. Unplug power cord and HHC communication cord from SDB.
- 3. Remove MDU from SDB by releasing locking pin. Remove TA from MDU and return it to storage clip on SDB.
- 4. Stow 50' Communication Cable, HHC, MDU, and batteries in storage case.
- 5. Remove SDB from cubicle and store in provided polymer case.



CARE & MAINTENANCE

To ensure longevity of the Portable Kit and SDB, 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.

## **ERROR RECOVERY**

If a problem occurs, programmed recoveries will happen automatically and the system will attempt to recover the breaker to a known position.

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 on HHC with an asterisk (\*) in front of them. When the HHC has completed recovery

operations, HHC will display current expected location of the breaker. Note the expected location and approach the breaker with caution. Determine 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

**EMERGENCY STOP** 

positions.

The red E-Stop button on the HHC serves as both the power and Emergency Stop button. If an E-stop is initiated, the system will shut down. Operator must then manually recover the breaker to a known position. Follow all safety procedures and wear appropriate PPE when recovering a breaker manually.

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



HIGH OUT

