

Sealed SF₆ Interrupters

Circuit-making and circuit-breaking are accomplished internally with no exposed moving parts or arcing contacts. See Figure 1.

Internal Operation

Full live-switching performance is ensured under any ice conditions because circuit-making and circuit-breaking are accomplished internally; there are no external moving parts.

Integral Stored-Energy Operating Mechanism

Charges with battery power, and it operates by solenoid control to open or close the SF₆ interrupting mechanism.

Manual Operation Pull Ring

Switches in the upright, tiered-outboard, and pole-top mounting configurations feature an operating mechanism with a manual-operation pull-ring, which permits non-electrical mechanical closing and opening of the interrupters in the event of a power loss. Switches in the vertical mounting configuration, on the other hand, feature an operating mechanism that permits only nonelectrical mechanical opening of the interrupters. See Figure 1.

Visible Air-Gap Isolation of Switched-Open Circuits

This is required only when work on the feeder is needed. It is provided by an integral, hookstick-operated three-pole disconnect. This eliminates the need for separate single-phase disconnects and is more convenient to use. An auxiliary switch is provided for local and remote indication of the disconnect position. See Figure 2.

Disconnect Operating Lever

A hookstick is used to open or close the integral disconnect. The disconnect may be locked or tagged in the **Open** position. See Figure 1.

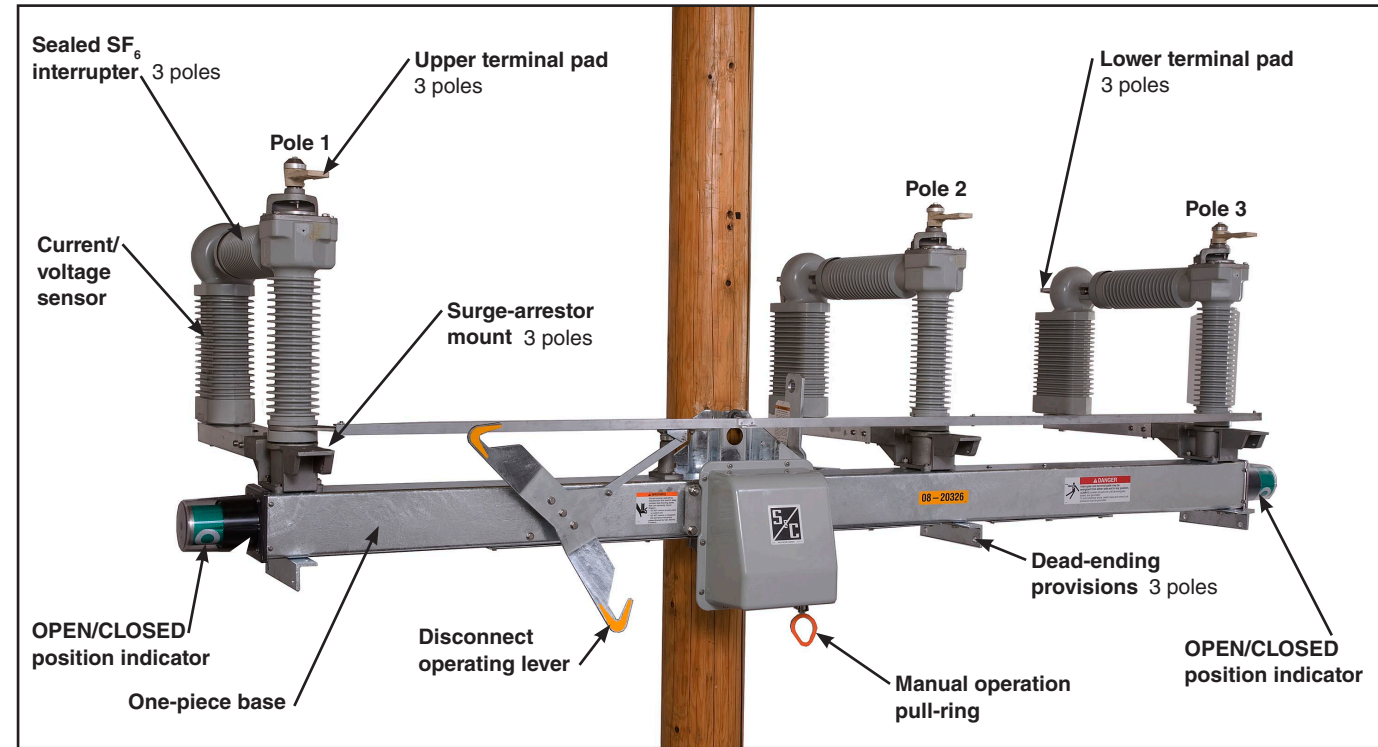


Figure 1. The Scada-Mate Switching System Upright Mounting Configuration.

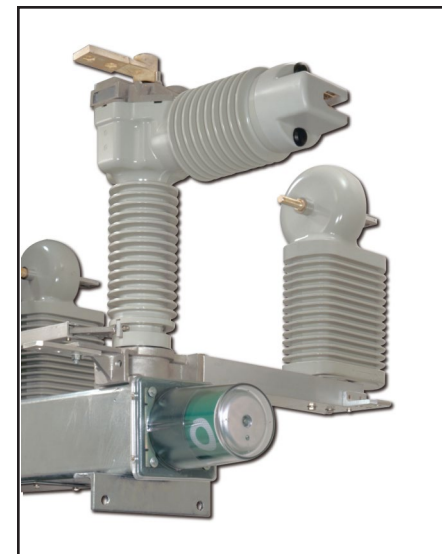


Figure 2. The visible disconnect in the Open position.

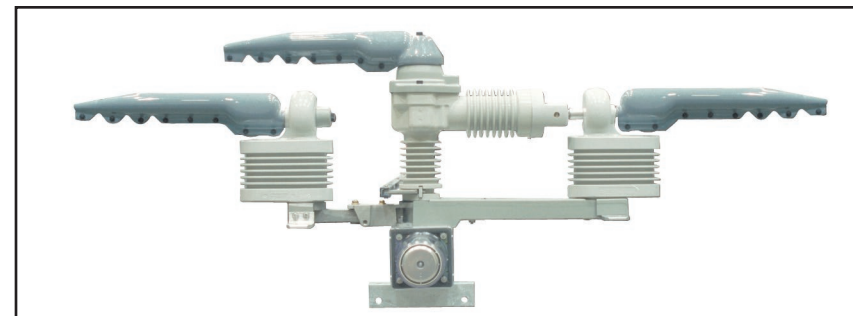


Figure 3. The wildlife protection helps reduce wildlife-related nuisance outages.

Voltage and Current Sensors

Two S&C Current Sensors and one S&C Current/Voltage Sensor are included on each Scada-Mate Switch to provide three-phase monitoring of line current and single-phase monitoring of system voltage. Sensors for three-phase voltage sensing are optionally available. Voltage sensors can also be provided on both sides of the switch for the designated normally open points on the system. See Figure 1.

Control Power

The voltage sensor provides continuous battery-charging power for operating the complete automated-distribution switch installation.

OPEN/CLOSED Indicator

Green: Interrupter open—"O"

Red: Interrupter closed—"I"

Colors are reversed for option "-F2"

One indicator on the left is standard. Optionally, right side only indicators or indicators on both sides. See Figure 1.

One-Piece Base

The base encloses high-speed drive linkages for the interrupters.

Surge Arrestors

Surge arrestors are available. All configurations mount 6 surge arrestors as standard. See Figure 1.

Dead Ending

Provisions for dead-ending are available and allow convenient attachment of conductors. See Figure 1.

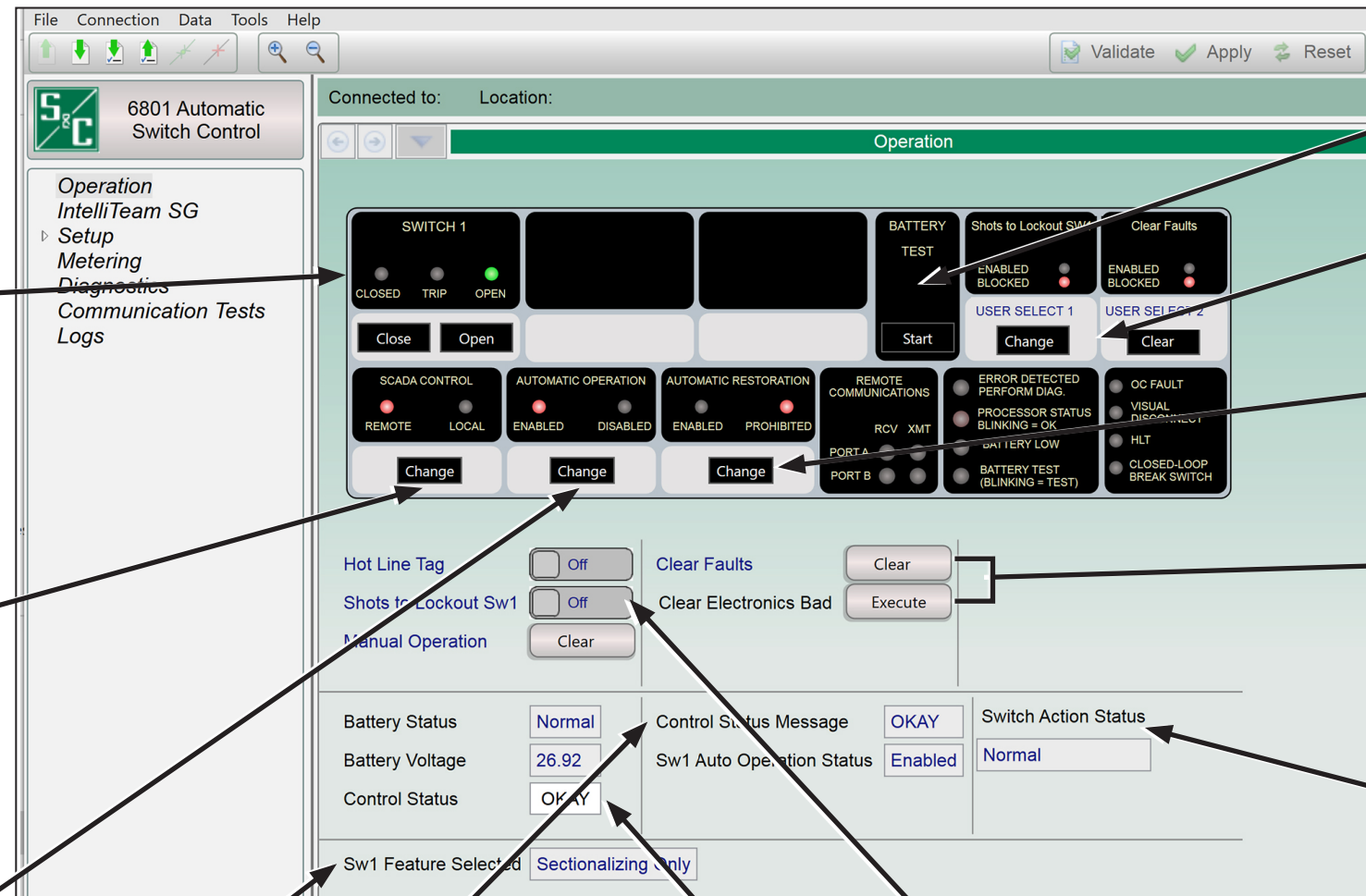
WARNING

Scada-Mate Switching Systems must be installed, operated, and maintained by qualified persons knowledgeable in overhead electric power distribution equipment and the associated hazards. This guide is not a replacement for adequate training and experience in safety procedures for this type of equipment. Read S&C Instruction Sheet 768-500 thoroughly and carefully before installing and operating the Scada-Mate Switching System.

Enabling IntelliLink Setup Software Commands

The 6801 control can be operated from the IntelliLink Setup Software *Operations* screen either locally or remotely. The connection is local when connected to the faceplate serial port and remote when connected by Ethernet or radio. To enable IntelliLink software remote commands, the **Remote Commands** setting must be enabled on the IntelliLink software *Setup>Security* screen.

Figure 4. The IntelliLink® Setup Software Operation Screen.



SWITCH POSITION Indicator

Switches can be manually operated from this screen. Click on the OPEN button to open the switch, and click on the CLOSE button to close the switch.

The switch position is indicated by switch contact information:

Closed—The switch contacts indicate a **Closed** switch position.

Trip—This indicates the switch was opened automatically, and it will turn off when the switch is in the **Closed** position.

Open—The switch contacts indicate an **Open** switch position. See Figure 2 on page 1.

SCADA Control

The CHANGE button sets the SCADA CONTROL indicator to the **Remote** or **Local** mode, as indicated by the LEDs:

Remote—This indicates SCADA commands are permitted.

Local—This indicates SCADA commands are blocked.

Note: The LOCAL button is only accessible when connected locally to the control.

Automatic Operation

The CHANGE button enables or disables **Automatic** operation, as indicated by the LEDs.

The **Automatic** operations are:

- Sectionalizing
- Phase-imbalance protection
- Phase-imbalance protection with automatic reclose
- One- or two-shot lockout of a faulted circuit

Sw1 Feature Selected

The **Automatic Operation** setting is configured on the *Setup>General>Automatic Op.* screen, and the configured setting is indicated here.

Control Status Message

“OKAY” indicates the control is operating correctly.

“Settings Mismatch” indicates the **Validate/Apply** command failed.

“Problem Present” indicates an error is detected that is not a **Warning** or **Alarm** condition.

Sw1 6801 Control Auto Operation Status

“Disabled” if the **Automatic Operation** function was disabled on the *Operation* screen or the faceplate.

“Enabled” if the **Automatic Operation** function was configured by SCADA.

Battery Test

The START button manually starts the battery test.

User Select Commands

The CHANGE button changes the status of the two **User Select** commands configured on the *Setup>General> User Commands* screen.

Automatic Restoration

The CHANGE button enables or disables the **Automatic Restoration** feature, as indicated by the LEDs, which should blink during testing.

Clear Faults

The CLEAR button clears all fault indicators.

Clear Electronics Bad

The EXECUTE button clears all bad electronics indicators.

Switch Action Status

This field indicates the status of SW1 if an active user-defined input has resulted in the switch action being blocked. The following statuses will be displayed in this field:

- “Sw1 Close Op Blocked”
- “Sw1 Open Op Blocked”
- “Normal”

Statuses only go active when the **User-Defined Input** feature is also set to block operation (block close or block both open and close) and they go active. The statuses clear when the **User-Defined Input** status points go inactive.

Shots to Lockout Sw1/Sw2

This button enables the **Shots to Lockout** mode. This feature is the configured number of three-phase voltage losses that must be detected during the configured **Shots to Lockout Time Threshold** setting before the control can trip open the switch.

Manual Operation

The CLEAR button clears a manual operation to return the IntelliTeam® Automatic Restoration System to a **Ready** state.

Battery Status

This is the overall status of the battery system. A battery system can be in a **Normal, Low, or Bad** state.

Battery Voltage

This shows the battery voltage under normal operating load.

Control Status

This can show the **OKAY, Warning, Alarm, or Maintenance Mode** status.