

Using Switch Closures

You can configure CompuSat to control switches that provide a contact closure. You can use various digital input/output boards that provide a range of input/output types.

When controlling these switches, CompuSat displays each as a small, rectangular button on the bottom or right side of the screen. When the switch is open, CompuSat displays it in one color with one label, and when the switch is closed, CompuSat displays it with a different color and label. You can specify the labels and colors to use for each switch in your system.

Switch Descriptions

The following table describes each switch type.

Switch type	Description
HI/LOW Band Horizontal	Intended for use with European 11 Ghz satellites. This switch activates when a receiver selects a horizontal transponder on the HI band side of a European satellite.
HI/LOW Band Vertical	Intended for use with European 11 Ghz satellites. This switch activates when a receiver selects a vertical transponder on the HI band side of a European satellite.
No Activity	Used to perform an action after a period of no mouse or keyboard activity. You can use it to turn off equipment that is not being used.
Receiver C/Ku	Used to control an external C/Ku switch: the closure switches when the operator selects a transponder on the associated receiver.
Right Audio 6.20	This closure is set when the associated receiver's right audio is tuned to 6.20 MHz.

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Switch type	Description
Receiver H/V	Used to control an external H/V switch: the H/V closure switches when the operator selects a transponder on the associated receiver.
Standalone	Used to manually switch a device. This is the only switch that is always displayed on the front panel.
Uplink Active	This switch is closed when the associated uplink is radiating. You can associate an ON-AIR warning light with this closure.
Uplink Fault Alarm	This switch is closed when a fault is present on the associated uplink. You can attach a sound device to this closure to provide an audible alarm.
Use A/B Record	This switch is closed when the event's A record number is active, and is closed when the event's B record number is active.

Configuring Switch Closures

You can define switches as site data or machine data:

- Site switches can be controlled by remote control
- Machine switches are local to the machine on which they are defined.

In general, you should use site-configured switches unless you have a specific reason for locally configuring the switch.

To configure a site switch, follow these steps:

1. Select *Site Configuration* from the Configuration menu.
2. Click the *Auxiliary Device Setup* button. CompuSat displays the Auxiliary Device Setup screen, which is shown in [Figure 1](#).
3. Select the *New* menu, and then enter a name for the switch that you are adding.
4. Click on the Model drop-down list and select *Closure On/Off Switch*.

Figure 1 The Auxiliary Device Setup screen

Auxiliary Device Setup

New Copy Rename Delete

Name: MySwitch

Model: Closure On/Off Switch

Used as: No Activity Switch

Which: All

Closure Switch Names & I/O Pin

IO Position: Switch Digital I/O Line 1

Open Label: MySwitchOpen Green

Closed Label: MySwitchClosed Red

Port: CD800h Driver: PCI-20098C Multifunction Board

Advanced

CLOSE About Device

5. Click the *Used as* drop-down list and select the type of switch that you are defining.

Note that some switch types must be associated with a device. For example, an H/V switch requires the receiver to which the external H/V switch is attached. If your switch requires a device, CompuSat displays a field and you must select the device from the drop-down list.

6. Click the *I/O Position* field and select the input/output line of the board that you want to use for this switch.

Each switch must have use its own, unique input/output line.

7. Enter a label and select a color in the *Open Label* and *Closed Label* fields. CompuSat uses these labels and colors to display the switch.

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8. Use the *Port* and *Driver* fields to define the type of digital input/output device to use for the switch. Refer to the installation notes for the board you are using to make sure that you enter the correct values.
9. Close the Auxiliary Device Setup screen.
10. Click the *OK* button in the Site Configuration screen.
11. Click on the *YES* button to save the changes to your configuration.

Modifying Switch Preferences

You can use the following preferences to customize your switches:

- Your switches can be displayed horizontally at the bottom of the CompuSat front panel, or vertical on the right side of the front panel. The default is to display them horizontally.

To display the switches vertically, follow these steps:

- a. Select *Preferences* from the Configuration menu.
 - b. Click the *Drawing Preferences* button. CompuSat displays the Drawing Preferences screen.
 - c. Click the *Vertical Switches* checkbox.
 - d. Modify the *Vertical Switch Space* value as required to change the spacing between switches on the display.
 - e. Click the *OK* button in the Drawing Preferences screen.
 - f. Click the *OK* button in the Preferences screen.
- All switch activity can be logged in the COMPUSAT.LOG file. To enable this, follow these steps:
 - a. Select *Preferences* from the Configuration menu.
 - b. Click the *Logging Preferences* button. CompuSat displays the Logging Preferences screen.
 - c. Click the *Log Switch & Sensor Activity* checkbox.
 - d. Click the *OK* button in the Logging Preferences screen.
 - e. Click the *OK* button in the Preferences screen.