



Switchware2 Software

Version 2.00b

For use with Monroe models
R-165, R-174A

Instruction Manual

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Table of Contents

Product Overview	3
Software Installation	3
From a floppy disk or CD_ROM.....	3
Uninstallation	3
Software Operation	4
Opening the Switchware2 Program.....	4
Initial Conditions	4
Add a Location and Connection Type.....	4
Edit a Location	5
Delete a Location.....	6
Setting Up a Unit List for Each Location	6
Adding Units to a Location.....	7
Edit Unit List	7
Delete Unit from List.....	7
General Operation.....	8
Viewing Switch Status	8
Operating the Switches.....	9
Operating Individual Switches.....	9
Gang Switching.....	10
Synchronized Switching.....	10

Product Overview

Switchware2 is a *Windows*®-based program to control Monroe Electronics Models R-165, and R-174A Switch Panels. This software works with the *Windows*® operating system, version 95 or newer. Communication between the computer and the switch panels is made via RS-485 serial link (comport, 9600 bps) or by a Local Area Network (LAN) connection.

NOTE: Older switch panels may not be compatible with the Switchware2 software. Compatible switch panels have serial numbers in the format 01-00-00. Noncompatible switch panels have serial numbers in the format 100000. Noncompatible switch panels can be modified to operate with the Switchware2 software. Contact Monroe Electronics for information about these modifications.

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Software Installation

From a floppy disk or CD-ROM:

- 1) Double click on the Setup.exe icon to start the installation, and follow the instructions.
- 2) After displaying the license agreement, it will ask for a path and folder name where the program will be installed, or it will use the default path:
C:\Program Files\Monroe Electronics\Switchware2
- 3) Upon completion of the installation, the program will appear in a window. A Switchware2 program icon is automatically placed on the desktop.
- 4) Close the window or begin using the program.

Uninstallation

Should you choose to uninstall the Switchware2 software:

1. Click on: Start → Settings → Control Panel → Add/Remove Programs
2. Select: Switchware
3. Click on the Add/Remove Button

Software Operation

Opening the Switchware2 Program

- 1) Click Start → Programs → Switchware
or
- 2) Click the Switchware2 icon on the desktop, if there is one.

Initial Conditions

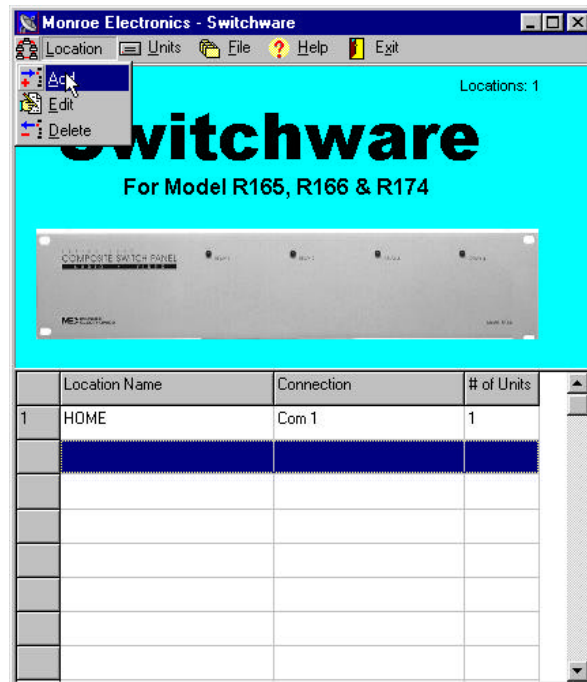
When first installed, the program contains no information for the locations or configurations of the switch panels that are connected to the computer.

Add a Location and Connection Type

Use locations to group switch panels in a meaningful way.

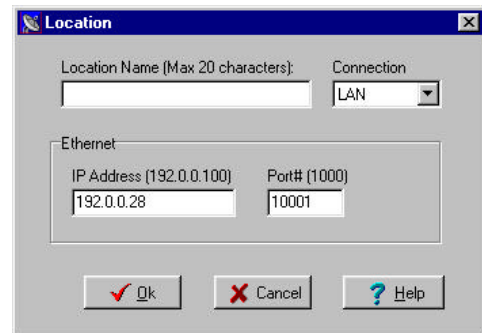
Select “Location” from the menu bar by clicking on “Location”.

Select “Add” from the pull down menu by clicking on “Add”.



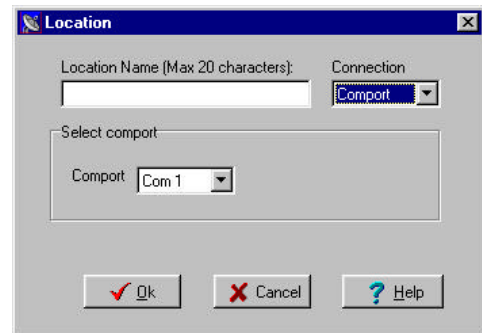
A dialog box appears for a new location. Enter a name or description for the location, and select the connection type, comport or LAN.

If using a LAN, an IP address and port number are required. Consult your LAN-Serial connector manual about how to set up the IP address and port number. The serial setup should be 9600bps, 8N1.



The 'Location' dialog box shows the 'Connection' dropdown set to 'LAN'. The 'Ethernet' section contains two input fields: 'IP Address (192.0.0.100)' with the value '192.0.0.28' and 'Port# (1000)' with the value '10001'. At the bottom are 'Ok', 'Cancel', and 'Help' buttons.

If using a comport, identify the comport where the switch panels will be connected.



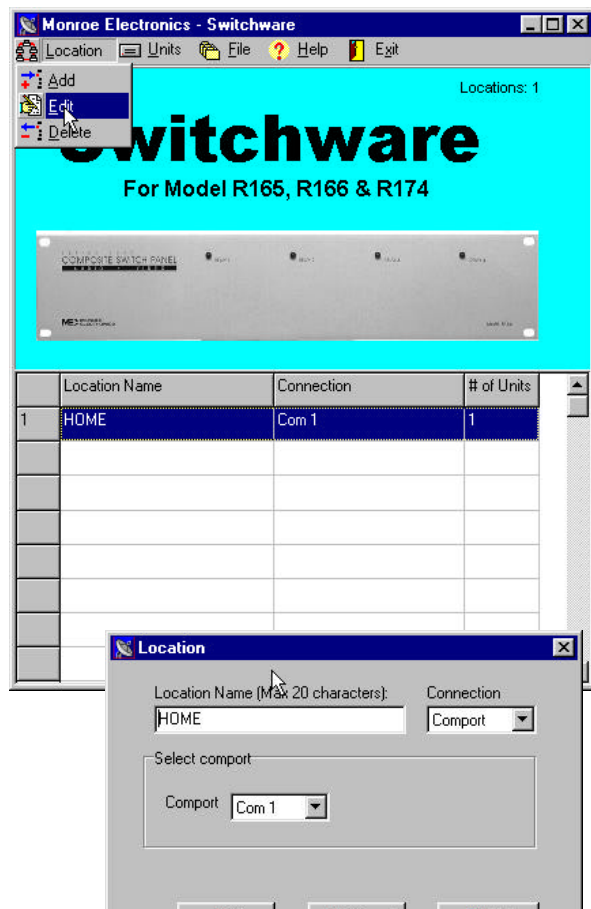
The 'Location' dialog box shows the 'Connection' dropdown set to 'Comport'. The 'Select comport' section contains a 'Comport' dropdown menu with 'Com 1' selected. At the bottom are 'Ok', 'Cancel', and 'Help' buttons.

Edit a Location

Highlight the location that you want to edit by clicking on the location name.

Select "Location" from the menu bar by clicking on "Location".

Select "Edit" from the pull down menu by clicking on "Edit".



The main window shows the 'Monroe Electronics - Switchware' application. The menu bar includes 'Location', 'Units', 'File', 'Help', and 'Exit'. A pull-down menu is open under 'Location', showing 'Add', 'Edit', and 'Delete'. The main area displays a 'COMPOSITE SWITCH PANEL' for Model R165, R166 & R174. Below this is a table with the following data:

	Location Name	Connection	# of Units
1	HOME	Com 1	1

A 'Location' dialog box is open in the foreground, showing the 'Location Name' as 'HOME' and the 'Connection' as 'Comport'. The 'Comport' dropdown is set to 'Com 1'. At the bottom are 'Ok', 'Cancel', and 'Help' buttons.

A dialog box appears. Modify the information in the dialog box as needed.

Click on the Ok button when satisfied with the changes, or click on Cancel to abort.

Delete a Location

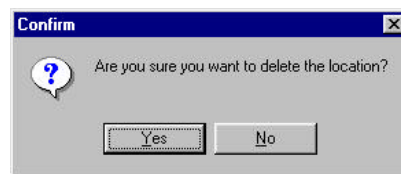
Highlight the location that you want to delete by clicking on the location name.

Select "Location" from the menu bar by clicking on "Location".

Select "Delete" from the pull down menu by clicking on "Delete".

The following dialog box appears.

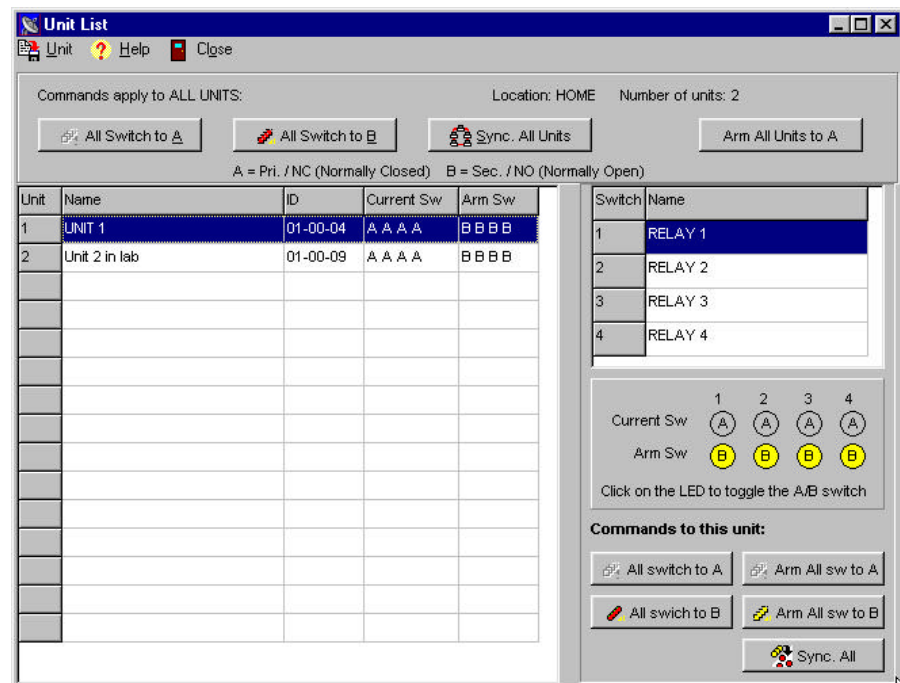
Click "Yes" to delete the selected location, or click "No" to abort.



Setting Up a Unit List for Each Location

Once a location is set up, units (switch panels) can be added to that location. Up to 32 units can be added per location. A repeater is needed if more than 32 units are to be connected to a single RS485 network.

Double click on the location line in the active window to see the list of units for that location. The unit list appears in a new pop up window.



Adding Units to a Location

In the menu bar of the Unit List window, click on "Unit" to access the Unit pull down menu.

Select "Add" to add equipment to the location.

A dialog box appears for the new unit being added. Enter a unit name and a switch name for each of the output devices for the unit. Enter the unit ID. The Unit ID is the serial number for the switch panel. The form of the Unit ID is 00-00-00.

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Edit Unit List

Highlight the unit that you want to edit by clicking on the unit name in the unit list.

In the menu bar of the Unit List Window, click on "Unit" to access the Unit pull down menu.

Select "Edit".

A dialog box appears for the selected unit. Edit the information in the dialog box as desired.

Once the changes are complete, click on "Ok" to save the changes, or click on "Cancel" to abort.

Delete Unit from List

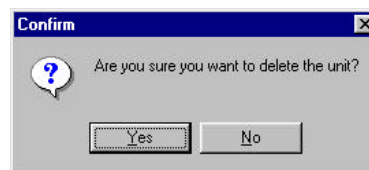
Highlight the unit that you want to delete by clicking on the unit name in the unit list.

In the menu bar of the Unit List Window, click on "Unit" to access the Unit pull down menu.

Select "Delete".

The following dialog box appears.

Click "Yes" to delete the selected unit from the location, or click "No" to abort.



General Operation

Viewing Switch Status

The status of any switch in the network can be viewed using the Unit List window.

The status of all switches at a location can be viewed in the “Current Sw” column of the Unit List for the location of interest. “A” is displayed when a switch is switched to the primary source and “B” is displayed when a switch is switched to the secondary source.

More detailed information can be viewed by selecting a unit of interest and viewing the descriptions and indicators for the individual switches.

The screenshot shows the 'Unit List' window with a menu bar (Unit, Help, Close) and a toolbar. The main area contains a table with columns: Unit, Name, ID, Current Sw, and Arm Sw. Two units are listed: 'UNIT 1' and 'Unit 2 in lab'. The 'Current Sw' column shows 'A A A A' for both units. To the right of the table is a detailed view for 'UNIT 1', showing a list of switches (RELAY 1 to RELAY 4) and a section for 'Current Sw' and 'Arm Sw' indicators. The 'Current Sw' indicators are labeled 1, 2, 3, 4 and show 'A' for all. The 'Arm Sw' indicators are labeled 1, 2, 3, 4 and show 'B' for all. Below the indicators is a section for 'Commands to this unit' with buttons for 'All switch to A', 'All switch to B', 'Arm All sw to A', 'Arm All sw to B', and 'Sync. All'.

Switch Status

Switch Descriptions

Individual output indicators

Unit	Name	ID	Current Sw	Arm Sw
1	UNIT 1	01-00-01	A A A A	B B B B
2	Unit 2 in lab	01-00-09	A A A A	B B B B

Switch	Name
1	RELAY 1
2	RELAY 2
3	RELAY 3
4	RELAY 4

Current Sw

1 (A) 2 (A) 3 (A) 4 (A)

Arm Sw

1 (B) 2 (B) 3 (B) 4 (B)

Click on the LED to toggle the A/B switch

Commands to this unit:

All switch to A All switch to B Arm All sw to A Arm All sw to B Sync. All

Operating the Switches

Command buttons permit switching on three levels

- Commands to “gang” switch all switches at a location (all switches on the unit list)
- Commands to “gang” switch all switches within a unit
- Commands applying to only an individual switch

The buttons to execute commands for each of these levels are grouped together in the unit list window.

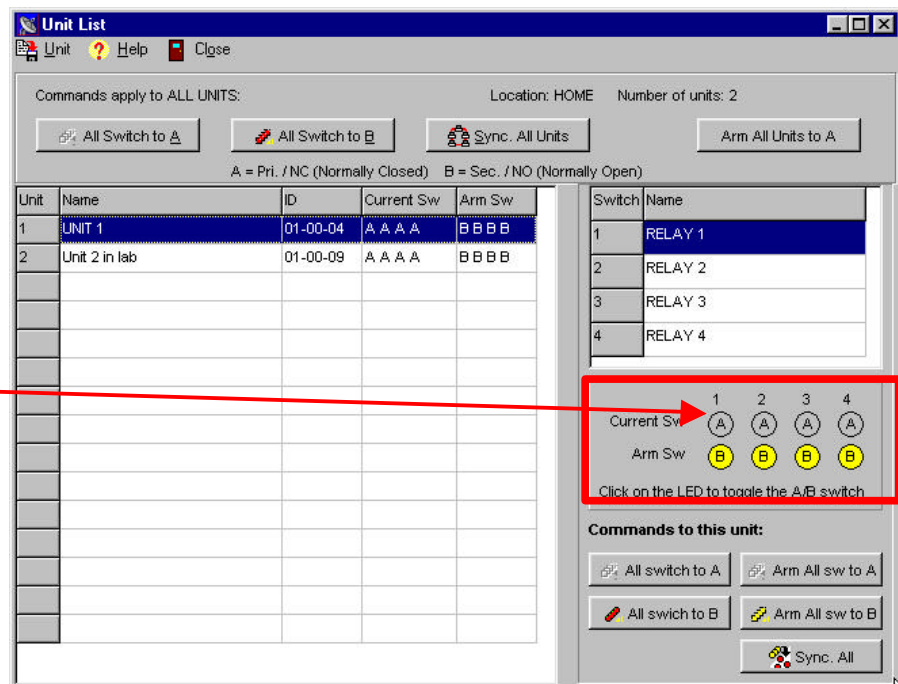
Operating Individual Switches

From the opening window, double click on the desired location. A unit list appears for that location.

Highlight the unit you wish to operate by clicking on the unit name. The details about that unit are displayed on the right side of the unit list.

Individual output devices can be operated (toggled) by clicking on the current status indicator for each output device.

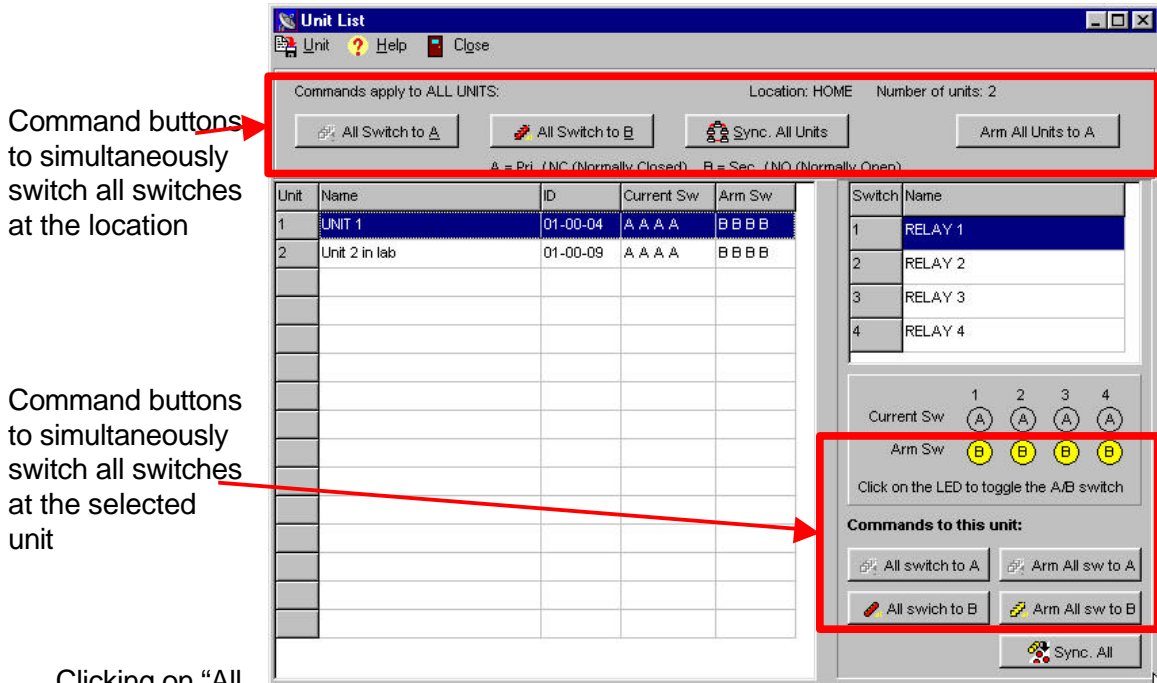
Click on indicators
to toggle individual
switches



Gang Switching

Buttons permit all switches within a unit or all switches on the unit list to be switched simultaneously to either the A or B state.

Buttons to switch all outputs of a unit to A (Primary) or B (Secondary) at the same time.



Clicking on "All switch to A" and "All switch to B" cause all of the affected switches to switch immediately when the button is clicked.

Synchronized Switching

Individual switches within a unit or throughout the location can be armed to switch when a sync command is sent.

To arm a switch, click on the "Arm Sw" indicator for the switch of interest. The "Arm Sw" indicator will change state from A to B or B to A to indicate the condition that will transfer to the switches when the sync signal is sent.

Once the desired switches are armed, click on "Sync All" when you want the armed switches to transfer. This command affects only those switches within the selected unit.

To transfer all armed switches for all units at the selected location, click on the "Sync ALL UNITS" button near the top of the window.

Press the "Arm All sw to A" button to arm all switches within the selected unit to the A state.

Press the "Arm All sw to B" button to arm all switches within the selected unit to the B state.

Press the “Arm All Units to A” button at the top of the window to arm all switches within the selected location to the A state.