# **SPAJ 142 C**



# **Contents for How to Use the Simulator Program**

This manual describes the various items you see in the simulation program. To choose a Help Topic, click on the underlined topic to view the text.

## **Toolbar**

#### **Menu Commands**

<u>File</u>

**Options** 

Preferences

Help

#### Other functions

#### **Toolbar**



Exit button Exit simulator program





Power Switch button Simulates the switching on/off of the power supply

to the SPAJ 142 C relay



Factory Settings button Change all settings to the defaults set when the

relay is shipped from the factory.

WARNING: Selecting this option results in the

lost of all current settings.



Factory settings button

Disabled when power supply is OFF



Simulate current or voltage

injection

or voltage injection into the relay.

Select the required module for which the current

This window allows the simulation of current

or voltage is to be injected.

Inject preset current command button

Simulates the one time (static) injection of the input current into selected input of the relay.



Simulate Current Injection

Disabled when power supply is off or when

display is not in main menu



Forced Activation

Enable the force activation mode. This will place

the user at Register 0.



Forced Activation

Disabled when power supply is off or during

initial test routine.



Change Simulator Colour

This option allows the user to change the colour

of the various relay items like the LED,

Dipswitches, etc..



Change Simulator Speed

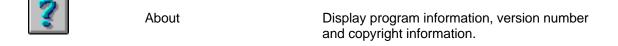
The scrolling speed of the LEDs can be

controlled using this option

	Copy button	Copy selected area to the clipboard. Upon selecting this option, the cursor is restricted to the SPAJ 142 C relay area.  To select the required area  Press and hold left mouse button at top left hand corner of required area.  Move mouse to bottom right hand corner of required area. (a rectangle box is display to show the selected area)  Release the mouse button.  Note: Click once anywhere to cancel the copy command
	View Clipboard	This button will launch the clipboard viewer. It allows the user to view the items copied to the clipboard.
4	Print Simulator Window	This function sends the current screen image to the printer attached.
	SPAJ 142 C manual button	Show SPAJ 142 C manual



**Getting Started Tutorial** A step by step guide on how to use the program



#### Menu Commands - File

View Clipboard - Display the contents of the clipboard

Copy to Clipboard - Copy selected area to the clipboard.
Upon selecting this option, the cursor is restricted to the SPAJ 142 C relay area.

To select the required area

• Press and hold left mouse button at top left hand corner of required area.

 Move mouse to bottom right hand corner of required area. (a rectangle box is display to show the selected area)

• Release the mouse button.

Note: Click once anywhere to cancel the

copy command

**Print Simulator Window -** Print the contents of the SPAJ 142 C

window

**Print Setup -** Change the printer configuration

**Exit -** Stop running the simulator program

## **Menu Commands - Options**

Clear All Registers - Resets all readings in registers (1 to 9) to zero

Simulate current or voltage injection -

This window allows the simulation of current or voltage

injection into the relay.

Select the required module for which the current or voltage is to be

injected.

Inject preset current command button -

Simulates the one time (static) injection of the input current into

selected input of the relay.

**Forced Output Activation** - Places the simulator in the *Forced Output Activation* position

(i.e. "forced" trip mode).

Note: In the relay, this position is reached by running through the relay positions to position zero (with the reset button) and then pressing the program button down for more than 5 seconds

Turn on/off power switch - Simulates the switching on/off of the power supply to the SPAJ

142 C Relay

#### Menu Commands - Preferences

Show Toolbar/Show Status Bar -Displays/removes the toolbar on the screen depending

on whether it is currently removed/shown respectively.

Change LED colours -Change the colours of the background and LED's to suit

individual screens and preferences

Click on the appropriate box to change the

corresponding colour

Click on the "Apply changes to Simulator" button to

confirm the changes made

Click on the "Apply default colours" button to set all

colours to permanently set defaults

Click on the "Cancel all color changes" button to cancel

all changes made

Change simulator speed -Change the speed at which the simulator works. This

allows for adaptations to individual hardware configurations. When this option is selected, the

following window is shown

Use the left mouse button to click on the left (or right) arrow to increase (or decrease) the simulation speed. Alternatively, click (and hold) the flashing box on the

slide and drag it to the required position.

Click OK to confirm the changes made or click

CANCEL to ignore any changes

Changes the background colour of the window. Change background -

Change to default settings -Change all settings to the defaults set when the relay is

shipped from the factory.

WARNING: Selecting this option results in the lost of all

current settings.

Change to Customized Settings -All settings are automatically saves to file when:

> 1. Power is turned off

Program exits

These (current) settings are also automatically loaded

when the program is restarted.

Another (separate) set of settings can be saved by using the SAVE AS CUSTOMISED SETTINGS option. This allows the user to keep a set of preferred initialization settings, which can be, reload at any time using the CHANGE TO CUSTOMISED SETTINGS option. Selecting this option results in the lost of all current settings.

#### Save as Customized Settings -

All settings are automatically saves to file when:

- Power is turned off
- 2. Program exits

These (current) settings are also automatically loaded when the program is restarted.

Another (separate) set of settings can be saved by using the SAVE AS CUSTOMISED SETTINGS option. This allows the user to keep a set of preferred initialization settings, which can be, reload at any time using the CHANGE TO CUSTOMISED SETTINGS option. Selecting this option results in the lost of all current settings.

# Menu Commands - Help

**Help on simulator -** See this help window

Show SPAJ 142 C manual - Show the online manual

**How to use help -** Learn how to use this help window

**Getting started tutorial -** Runs the tutorial on some basic functions

**About SPAJ 142 C -** Information about the simulator and system resources