



STC-2002 Quick Start Guide

Non-Sequencing Mode (Single Pocket Gun)

This guide is a supplement to the STC-2002 User's Manual (518-029).



WARNING:

Improper operation of this equipment could cause equipment damage or personal injury.

Read the safety precautions in the user's manual prior to operating this equipment.

Terms and definitions:

The STC-2002 provides both **manual** and **automatic** control of single- or multi-layer film deposition. Manual mode is often used to set up the system in order to run unattended in the fully automatic mode.

A **film** is a set of user-programmable deposition-related parameters (density, Z-ratio, map, etc.) Typically, one material deposition is accomplished per film. The STC-2002 can store up to 99 films. The **active film** is the film that will run when the start sequence is initiated. A **process** is a set of multiple films, or "layers". The **map** specifies the configuration of the physical plant (number of sensors, number of sources, which crystal to read, which gun to use, etc.) Up to 30 maps can be stored to allow multiple system configurations. Each film specifies which map to use.

The STC-2002 has two basic process control modes: **Sequencing mode** and **Non-sequencing mode**. Non-sequencing mode is used to run a single film (for systems with single-pocket e-beam guns.) Sequencing mode is used to run a process (a series of films) for systems with multi-pocket e-beam guns.

The **Runtime or Status Screen** is the screen normally displayed during operation. You may return to the Status Screen at any time by pressing the "Status" button.



Test Mode can be used to check the programming of the STC-2002. Test Mode simulates sensors and deposition rates to allow running films without operating the deposition system (in particular the high-voltage supply.)



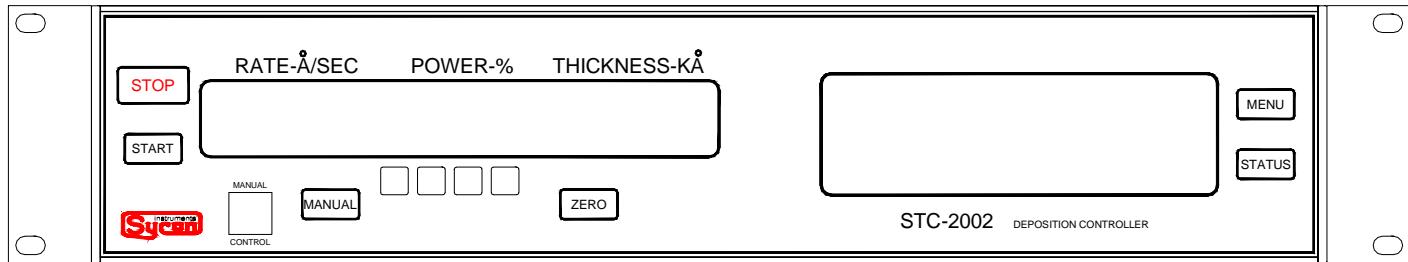
WARNING:

Gun output and all I/O are active in Test Mode.



Screen navigation (using fixed keys and touch screen):

- Arrow keys $\uparrow \downarrow$ on menu screens allow scrolling to unseen list parameters.
- **BYE** is a screen or function exit.
- **EDT** is edit.
- **GO2 any** selects another film, map or process.
- **STATUS** exits the menu system and returns the Run-time Screen.



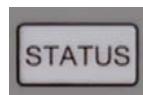
To Start:

From any Status screen, press the fixed “Start” button.

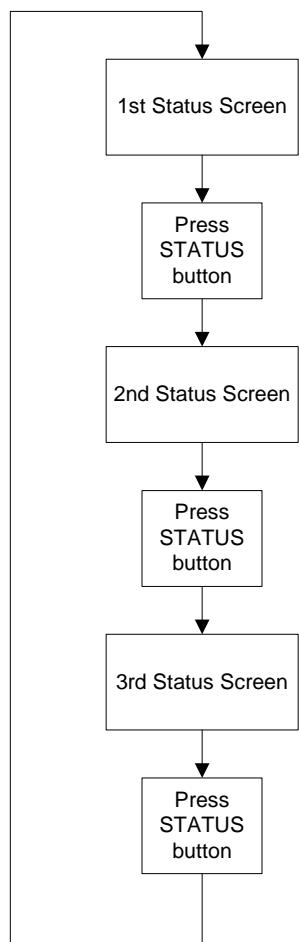


The word “Ready” should be displayed in the upper left corner of the screen. Press the start button again to start deposition.

Navigation of Status Screens:



The Status button



The 1st Status Screen displays information related to the current deposition.



The 2nd Status Screen displays gun information.

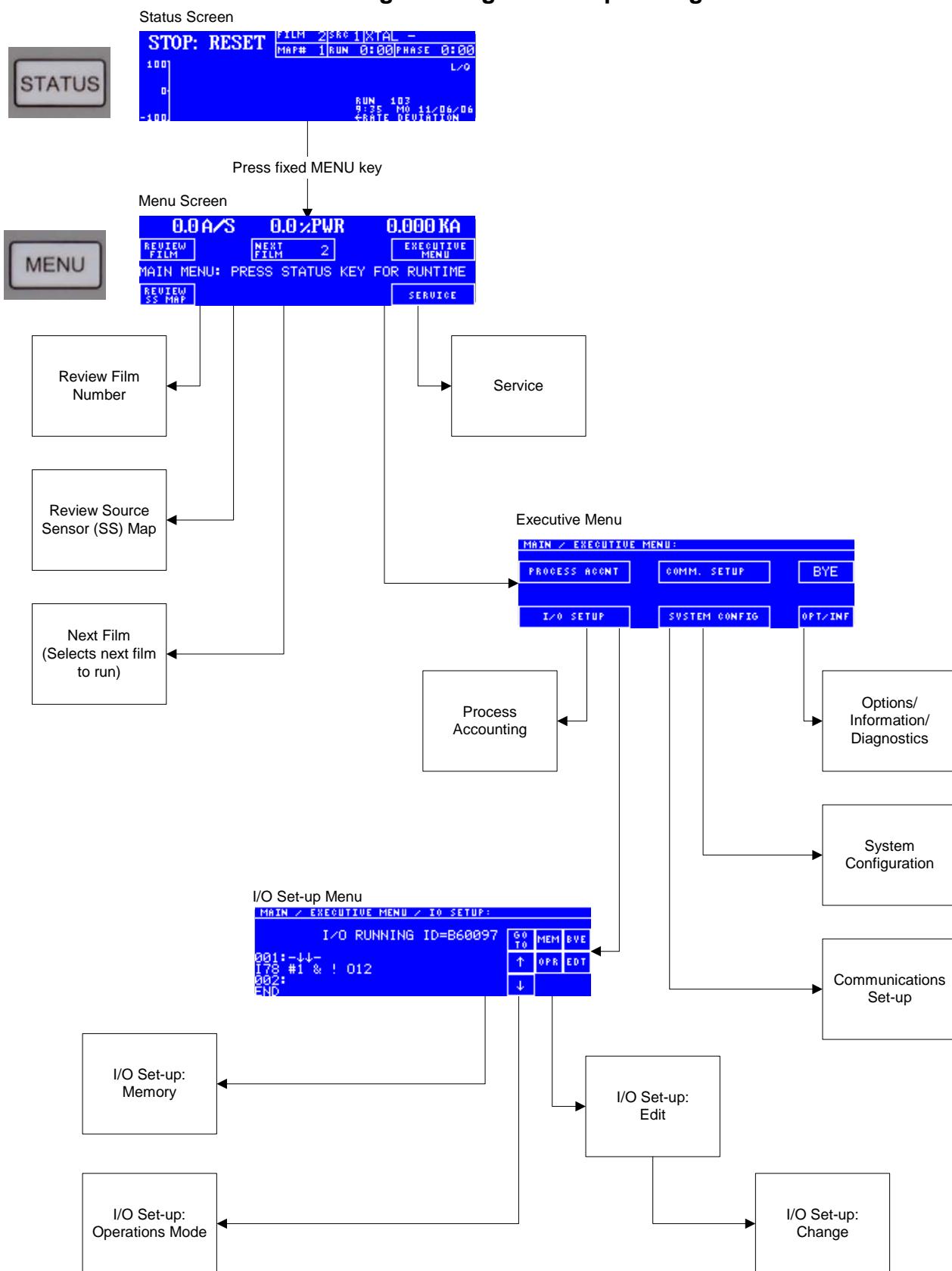


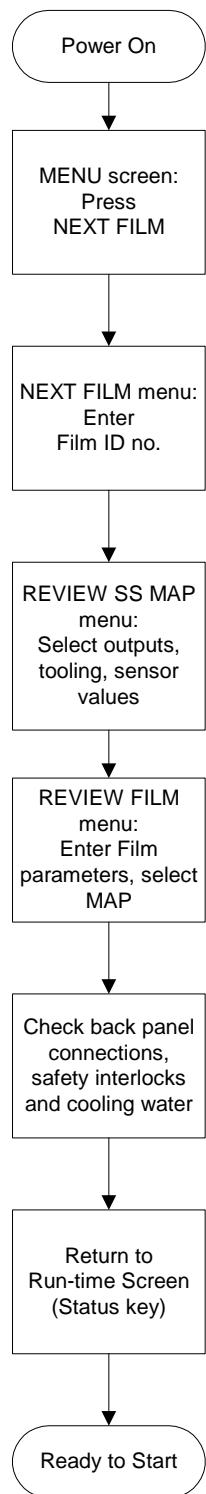
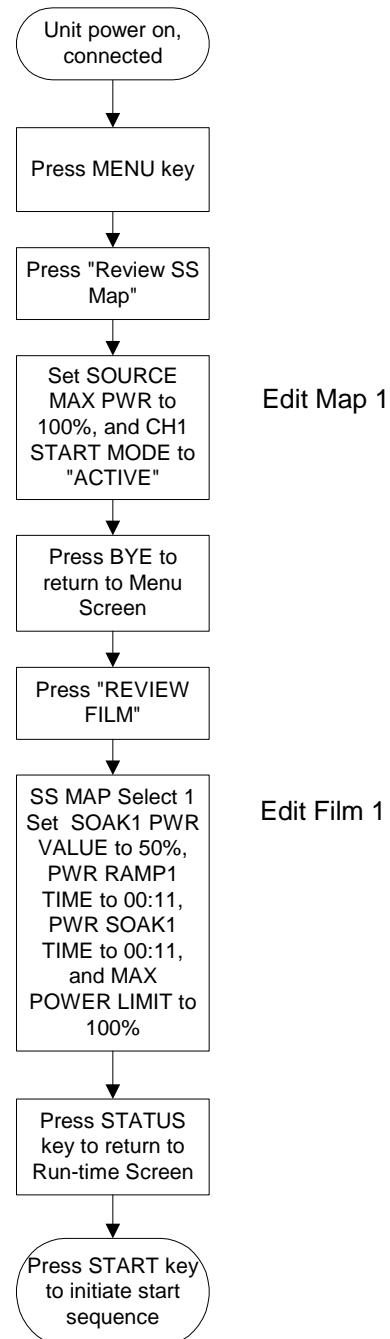
The 3rd Status Screen displays sensor information.



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Menu Programming: Non-Sequencing Mode



Basic Operation Flow Chart:

To perform a practice run of X thickness at X rate:




To switch from Sequencing to Non-sequencing or vice-versa:

Press the fixed “Menu” button to view the Menu screen.



Press “Service” on the touchscreen to view the Service menu.

Non-sequencing:



Sequencing:



Press to toggle

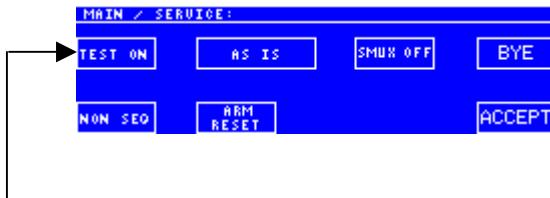
Press “Accept” on the touchscreen to accept the change. The STC-2002 will automatically restart after the change is accepted.

To switch to or from Test Mode:

Press the fixed “Menu” button to view the Menu screen.



Press “Service” on the touchscreen to view the Service menu.



Press to toggle

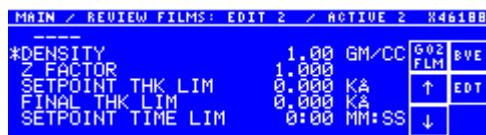
Press “Accept” on the touchscreen to accept the change. The STC-2002 will automatically restart after the change is accepted.

To edit film parameters:

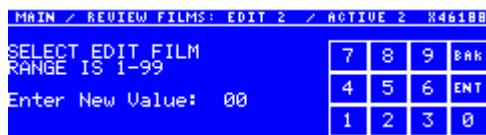
Press the fixed "Menu" button to view the Menu screen.



Press "Review Film" on the touchscreen to view the film parameter edit screen.



Select "GO2 Flm" on the touchscreen, and enter the number of the active film (select the number using the touchscreen keypad, then select "Enter".)



When the film numbers next to "Edit" and "Active" at the top of the screen match, you are editing the active film.





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The standard unit includes:

DESCRIPTION	SYCON P/N	QTY
Source sensor card (w/ 2 crystal sensor inputs & 1 analog output)	502-193	1
Input card (with 8 inputs)	502-197	1
Output card (with 8 outputs)	502-194	1
Power cord (120 VAC)	600-004	1
Fuses (2 x 2.00A 250VAC F-type)	356-014	2
Opto-coupled inputs 25-pin male connector	402-222	1
Relay outputs 25-pin female connector	404-020	1
EMI hood for 25-pin connectors	404-021	2
RS-232 9-pin male connector	404-011	1
EMI hood for 9-pin connector	404-009	1
Rack mount ears	016-012	2
Rack mount hardware	094-006	4
Manual	518-029	1
Serial communication cable	506-170	1
Hand controller	500-198	1
Communications software tools disk	500-046	1
Quick Start Guide	518-040	1

System Configuration:

The STC-2002 uses a crystal sensor and oscillator to monitor deposition. Connections are made as shown below. Consult the user's manual for detailed information.

