

808/847 Manual Driver and Auto/Manual Driver

Use of a Standard 808/847 as a Manual
Driver Unit

Use of a Standard 808/847 as an
Auto/Manual Driver Station

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Section I

INTRODUCTION

The discussions in this document are based on the introduction of Release 2, 808/847 software. The features described herein are not available in Release 1 but are restricted to Release 2 and subsequent sets of software. Any reference to "Release 2" software in this text will also pertain to applicable subsequent releases.

In many applications there is a need for a device capable of driving an SCR assembly at a preset level. In addition, it may be necessary to communicate with this device via a digital communications link. In other applications there is a need for a unit which can receive an input signal from another device and supply the appropriate output. This document outlines how these applications can be satisfied with standard software.

Section 2

MANUAL DRIVER STATION

The 809/847 controller can be configured as a Manual Driver Station with either Heat or Heat-Cool output configurations. A standard controller can be placed in the Manual mode by pressing the **A/M** pushbutton. This allows direct setting of the output duty cycle or D.C. level by way of the power setpoint on the bottom display. This setpoint has settability of 0.1% with an output resolution of 1:32,000. The outputs available are all standard selections with the exception of Time-Proportioned with Power Feedback. Flower Feedback cannot be accomplished with the 808/847 when it is in the Manual Mode.

Once the unit has been placed in Manual mode it can be locked into this mode by disabling the **A/M** pushbutton. This is done in the standard way by entering the scroll list and setting the **A H** parameter to the **Auto** selection. This will lock out the **A/M** pushbutton but will not disable the Up/Down pushbuttons.

When using the 808/847 controller as a Driver Station it may be desirable to jumper the input terminals, 19 and 20, to prevent the sensor break indication from appearing. It may also be desirable to set the **CJC** parameter to the **0C** selection. This will result in a fixed display of 0 in the upper display, as opposed to an indication of ambient temperature. Alternatively, the 808/847 can be used as an indicator or an alarm unit by connecting the input to a process variable in the system. Note, however, that the input will be isolated from a triac or relay output but will not be isolated from a triac or relay output but will not be isolated from a D.C. or Logic output.

Section 3

AUTO/MANUAL DRIVER STATION

An 9081847 controller can be configured as an Auto/Manual Driver Station with either heat-only or heat-cool outputs if the Linear Input option is installed. This is done by configuring the unit as a direct acting proportional-only controller with a 100.0 proportional band. The input should be set up for a 0.0 to 100.0% display range for heat-only applications or a -99.9 to 100.0% display range for heat-cool applications. Other key parameters should be configured as follows:

Parameter	Setting
Prop	100.0
Int.t	OFF
DEr.t	OFF
rEL.C	1.0 (if heat-cool)
SP H	0.0
SP L	0.0
CB O	Auto
Hi L	100.0
Lo L	0.0 (-99.9 if heat-cool)
FIL	0.1

In this configuration, the output power level will follow the input signal directly. The setpoint shown on the lower display will be fixed at 0.0 and must remain at this level to ensure correct operation. Altering this setpoint will serve to offset the output by the amount set but in the opposite direction. For example, if the setpoint is 20.0, output 1 will not become active until the input signal level exceeds 20.0%. Altering the proportional band will change the gain of the loop by causing the 808/847 to act as an amplifier or attenuator.

Pressing the A/M pushbutton will cause the unit to bumplessly transfer to Manual control. The lower display will indicate the output level being provided and may be altered. The upper display will indicate the input signal to the unit. Bumpless transfer to Automatic mode can be accomplished by setting the setpoint on the bottom display to equal the input level on the top display prior to transferring to Automatic control.

Parameter	Setting
Sn	. Lin
Pb d	Lin
Act	dir
HPL	100. 0 (typical)
Ctrl	Pid