


6802/3 Front Panel Retrofit for 5800 Series Automatic Switch Controls

Table of Contents

Section	Page	Section	Page
Introduction		Safety Precautions	5
Qualified Persons	2	Front Panel Retrofit Kit	
Read this Instruction Sheet	2	Field Retrofit Kits	6
Retain this Instruction Sheet.	2	Tool List.	6
Proper Application	2	Installation	7
Special Warranty Provisions.	3		
Warranty Qualifications	3		
Safety Information			
Understanding Safety-Alert Messages.	4		
Following Safety Instructions	4		
Replacement Instructions and Labels	4		



Qualified Persons

 **WARNING**

Only qualified persons who are knowledgeable in the installation, operation, and maintenance of overhead and underground electric distribution equipment, along with all associated hazards, may install, operate, and maintain the equipment covered by this publication. A qualified person is someone who is trained and competent in:

- The skills and techniques necessary to distinguish exposed live parts from nonlive parts of electrical equipment
- The skills and techniques necessary to determine the proper approach distances corresponding to the voltages to which the qualified person will be exposed
- The proper use of special precautionary techniques, personal protective equipment, insulated and shielding materials, and insulated tools for working on or near exposed energized parts of electrical equipment

These instructions are intended ONLY for such qualified persons. They are not intended to be a substitute for adequate training and experience in safety procedures for this type of equipment.

Read this
Instruction Sheet

NOTICE

Thoroughly and carefully read this instruction sheet and all materials included in the product’s instruction handbook before installing or operating your 6800 Series Automatic Switch Control. Familiarize yourself with the Safety Information and Safety Precautions on pages 4 and 5. The latest version of this publication is available online in PDF format at sandc.com/en/support/product-literature/.

Retain this
Instruction Sheet

This instruction sheet is a permanent part of your 6800 Series Automatic Switch Control. Designate a location where you can easily retrieve and refer to this publication.

Proper Application

 **WARNING**

The equipment in this publication is only intended for a specific application. The application must be within the ratings furnished for the equipment. Ratings for the 6800 Series Automatic Switch Controls are listed in Specification Bulletin 1045-31. The ratings are also on the nameplate affixed to the product.

Special Warranty Provisions

The standard warranty contained in the seller's standard conditions of sale, as set forth in Price Sheet 150, applies to S&C 6801 Automatic Switch Controls, except that the first paragraph of said warranty is replaced by the following:

(1) General: The seller warrants to the immediate purchaser or end user for a period of 10 years from the date of shipment that the equipment delivered will be of the kind and quality specified in the contract description and will be free of defects of workmanship and material. Should any failure to conform to this warranty appear under proper and normal use within 10 years after the date of shipment the seller agrees, upon prompt notification thereof and confirmation that the equipment has been stored, installed, operated, inspected, and maintained in accordance with recommendations of the seller and standard industry practice, to correct the nonconformity either by repairing any damaged or defective parts of the equipment or (at seller's option) by shipment of necessary replacement parts. The seller's warranty does not apply to any equipment that has been disassembled, repaired, or altered by anyone other than the seller. This limited warranty is granted only to the immediate purchaser or, if the equipment is purchased by a third party for installation in third-party equipment, the end user of the equipment. The seller's duty to perform under any warranty may be delayed, at the seller's sole option, until the seller has been paid in full for all goods purchased by the immediate purchaser. No such delay shall extend the warranty period.

Replacement parts provided by seller or repairs performed by seller under the warranty for the original equipment will be covered by the above special warranty provision for its duration. Replacement parts purchased separately will be covered by the above special warranty provision.




Warranty Qualifications

Warranty of 6801 Automatic Switch Controls is contingent upon the installation, configuration, and use of the control or software in accordance with S&C's applicable instruction sheets. This warranty does not apply to major components not of S&C manufacture, such as batteries, communication devices, and remote terminal units. However, S&C will assign to the immediate purchaser or end user all manufacturers' warranties that apply to such major components.

Safety Information


Understanding Safety-Alert Messages

Several types of safety-alert messages may appear throughout this instruction sheet and on labels and tags attached to your 6800 Series Automatic Switch Control. Familiarize yourself with these types of messages and the importance of these various signal words:

<div><div> DANGER</div><div>"DANGER" identifies the most serious and immediate hazards that will likely result in serious personal injury or death if instructions, including recommended precautions, are not followed.</div></div>
<div><div> WARNING</div><div>"WARNING" identifies hazards or unsafe practices that can result in serious personal injury or death if instructions, including recommended precautions, are not followed.</div></div>
<div><div> CAUTION</div><div>"CAUTION" identifies hazards or unsafe practices that can result in minor personal injury if instructions, including recommended precautions, are not followed.</div></div>
<div><div>NOTICE</div><div>"NOTICE" identifies important procedures or requirements that can result in product or property damage if instructions are not followed.</div></div>

Following Safety Instructions


If you do not understand any portion of this instruction sheet and need assistance, contact your nearest S&C Sales Office or S&C Authorized Distributor. Their telephone numbers are listed on S&C's website sandc.com, or call the S&C Global Support and Monitoring Center at 1-888-762-1100.

<div><div>NOTICE</div><div>Read this instruction sheet thoroughly and carefully before installing your 6800 Series Automatic Switch Control.</div></div>	
	

Replacement Instructions and Labels

If additional copies of this instruction sheet are needed, contact your nearest S&C Sales Office, S&C Authorized Distributor, S&C Headquarters, or S&C Electric Canada Ltd.

It is important that any missing, damaged, or faded labels on the equipment be replaced immediately. Replacement labels are available by contacting your nearest S&C Sales Office, S&C Authorized Distributor, S&C Headquarters, or S&C Electric Canada Ltd.

⚠ DANGER	
 <p>© 1982 NEMA</p>	<p>The 6800 Series Automatic Switch Control line voltage input range is 93 to 276 Vac. Failure to observe the precautions below will result in serious personal injury or death.</p> <p>Some of these precautions may differ from your company's operating procedures and rules. Where a discrepancy exists, follow your company's operating procedures and rules.</p>
<ol style="list-style-type: none"> 1. QUALIFIED PERSONS. Access to the 6800 Series Automatic Switch Control must be restricted only to qualified persons. See the "Qualified Persons" section on page 2. 2. SAFETY PROCEDURES. Always follow safe operating procedures and rules. 3. PERSONAL PROTECTIVE EQUIPMENT. Always use suitable protective equipment, such as rubber gloves, rubber mats, hard hats, safety glasses, and flash clothing, in accordance with safe operating procedures and rules. 	<ol style="list-style-type: none"> 4. SAFETY LABELS. Do not remove or obscure any of the "DANGER," "WARNING," "CAUTION," or "NOTICE" labels. 5. MAINTAINING PROPER CLEARANCE. Always maintain proper clearance from energized components.

Front Panel Retrofit Kit

Field Retrofit Kits

By installing a 6802/3 Front Panel Retrofit Kit, the 5802/3 Automatic Switch Control can be converted to a 6802/3 control. This also adds Ethernet communication capability through an Ethernet port on the back of the panel. The converted 6802/3 control will be able to operate IntelliTeam® SG Automatic Restoration System software.

Item	Catalog Number
6802 Front Panel Retrofit Kit	903-002350-03
6802 Front Panel with GPS Retrofit Kit	903-002350-04
6803 Front Panel Retrofit Kit	903-002350-05
6803 Front Panel with GPS Retrofit Kit	903-002350-06

Tool List

Tools required for installation include:

- $\frac{11}{32}$ -inch nut driver
- $\frac{3}{4}$ -inch drill bit for metal—to install GPS Antenna
- Electric drill—to install GPS Antenna

CAUTION

Electric shock hazard. Disconnect ac control power, sensor power, and battery before proceeding.

Complete the following steps to install the retrofit kit:

- STEP 1.** Disconnect ac control power, and disconnect the battery connector. If the 5802/3 control has the “-W2” sensor power option, disconnect the sensor cable. All power must be disconnected before moving to Step 2.
- STEP 2.** Disconnect all cables attached to the processor on the rear of the front panel, including the power connection, X-bus data cable, and door switch. See Figure 1.

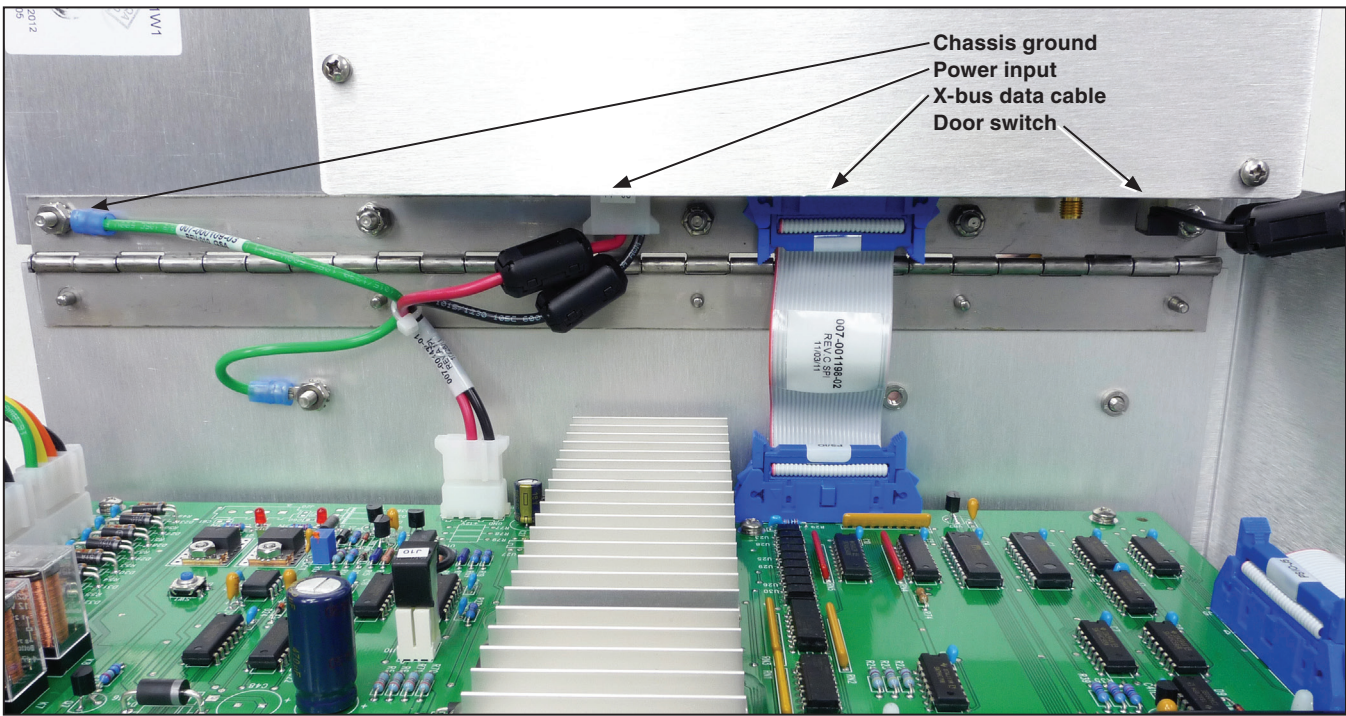


Figure 1. Connections to existing 5802 control faceplate processor board.

Installation

- STEP 3.** If the 5802/3 control has a communication option, disconnect the radio harness(es) from the processor.
- STEP 4.** Remove the nuts that hold the front panel studs to the chassis hinge. Remove the chassis ground wire. See Figure 2.
- STEP 5.** Open the front panel so it is perpendicular to the chassis. The hinge will clear the circuit board when removed from the front panel studs. Remove the 5802/3 control's front panel.

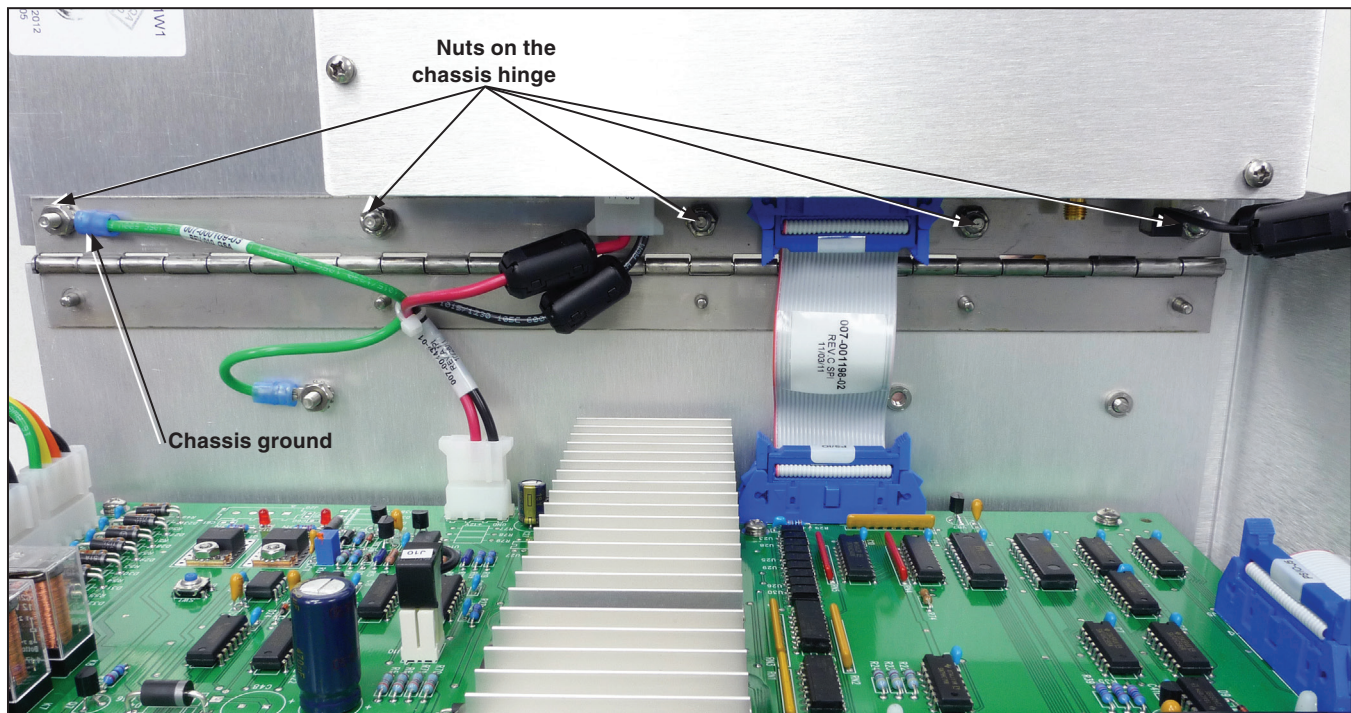


Figure 2. Five nuts that hold the front panel to the chassis hinge.

- STEP 6.** Insert the 6802/3 control's front panel studs into the hinge holes, and secure the panel with the new nuts on the second through fifth studs from the bottom. Install the chassis ground wire and nut on the bottom stud, and tighten all nuts. See Figure 2. Discard the original mounting nuts.

- STEP 7.** Reconnect the radio harness(es) to the processor.
- STEP 8.** Reconnect all cables that had been attached to the processor on the rear of the front panel, including the power connection, X-bus data cable, and door switch. See Figure 1 on page 7.
- STEP 9.** Reconnect the battery, and then ac control power. Reconnect the sensor cable, if removed in Step 1 on page 7.
- STEP 10.** If installing a replacement front panel with the **GPS** option, install the GPS antenna in the top of the low-voltage enclosure. Drill a $\frac{3}{4}$ -inch (19-mm) hole in the enclosure top panel. See Figure 3 and Figure 4 on page 10. The hole location may be different from what is indicated in the drawing.

NOTICE

Stray metal chips from drilling can cause intermittent misoperation and damage to electronic components. Take precautions to protect the electronic circuits from chips you create while drilling the antenna hole.

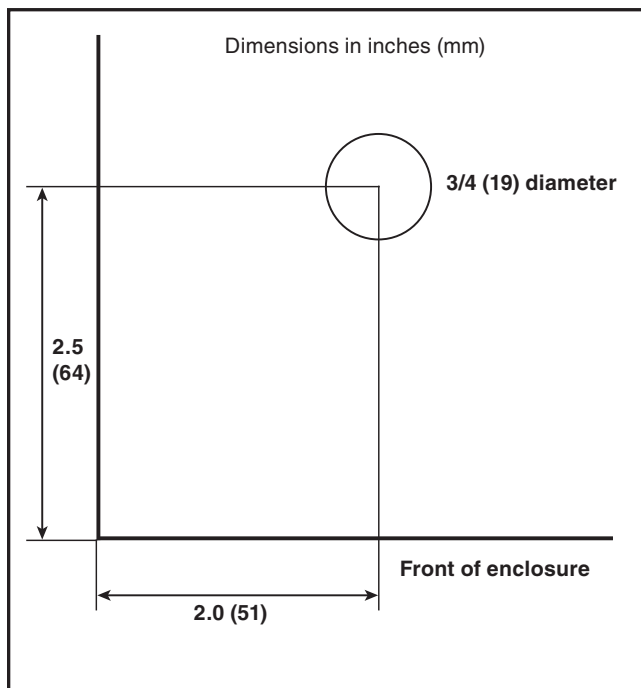


Figure 3. Antenna hole location on the enclosure top.



Figure 4. Exterior view of the installed GPS antenna.

STEP 11. Connect the GPS antenna cable to the GPS connector on the back of the front panel. See Figure 5 on page 11.

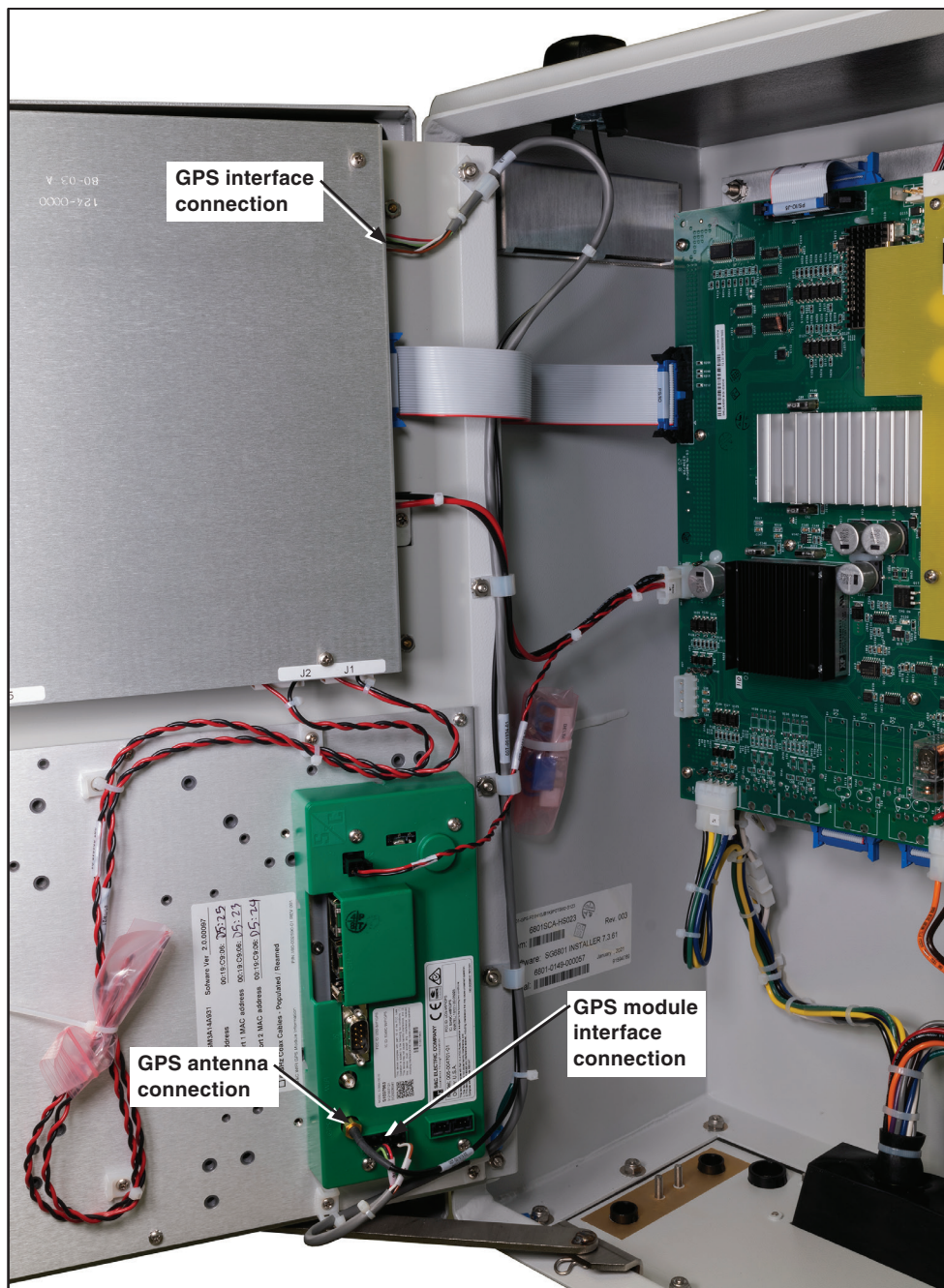


Figure 5. GPS interface connections (6801 control shown).

This completes the 6802/3 control front panel installation.