SAVANT

Component Profile Tool
Quick Reference Guide

The Component Profile Tool (CPT-1212) is a general purpose tool for creating, testing, and modifying the .xml Profiles used in the RacePoint Blueprint® software. The CPT-1212 kit includes all the tools described in the Box Contents section below set in a durable carry case.

When connected, the CPT-1212 works with the Profiler and IR Translator applications to both create new or modify existing .xml Profiles. This Quick Reference Guide describes each of the tools in the kit along with general information on connecting the system. For information on using the Profiler and IR Translator software to test, modify, or create .xml Profiles, refer to the Profiler and Component Profile Tool Reference Guide 009-1037-xx on the Savant Portal.

Box Contents

- (1) SmartControl 12 (SSC-0012-xx)
- (1) Installation Kit SmartControl 12 (075-0180-xx)
  - (1) SmartControl Mounting Plate (074-0577-xx)
  - (1) 12V DC 1.5A Power Supply (025-0143-xx)
  - (4) 6-pin Screw Down Plug-in Connector (028-9352-xx)
  - (1) Cable Tie (014-0071-xx)
- (1) Installation Kit Serial/Cat 5 Adapters (075-0041-xx)
  - (4) RJ45 to DB-9F Adapters
  - (1) DB9 Gender Changer
- (1) IR Learner (064-0224-xx)
- (1) Keyspan High-Speed USB to Serial Adapter (064-0225-xx)
- (2) Ethernet Cable - 2 feet (064-0059-xx)
- (1) IR Repeater Cable (064-0020-xx)
- (1) IR Learner (064-0224-xx)
- (1) Smart Connect Lightning (SCA-CONFL-xx) ***
- (1) Technicians Screwdriver (015-0075-xx)
- (1) Carry Case
- (1) Quick Reference Guide (this Document)

*** The Smart Connect Lightning tool (SCA-CONFL) is a general purpose tool used to upgrade firmware on Savant® products. It is not used with the Profiler or IR Translator software. Refer to the *SmartConnect Reference Guide (009-1046-xx)* on the Savant Portal for information on this tool.

Specifications

Environmental

Temperature	32° to 104° F (0° to 40° C)
Humidity	10% to 80% RH (non-condensing)

Dimensions and Weight (Carry Case with all Components)

Height	12.25 in (31.12 cm)
Width	16.0 in (40.64 cm)
Depth	5.5 in (13.97 cm)
Weight	Net: 4.25 lb (1.93 kg) Shipping: 5.00 lb (2.27 kg)

Power (SSC-0012 Controller)

Input Power	12V DC 1.5A
Max Power	18 watts

Compliance

Safety and Emissions	FCC Part 15 | CE Mark | C-Tick
RoHS	Compliant

Minimum Supported Release

|	
Savant OS	da Vinci 7.0

SSC-0012 Controller

The main component in the CPT-1212 kit is the SSC-0012 controller. The Profiler software sends the command data to the controller. The controller then sends the commands to the Unit Under Test (UUT) using either IR, RS-232, or IP.

Front Panel
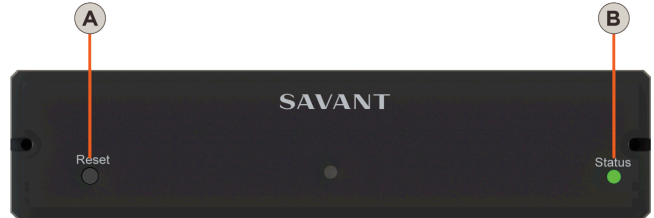
A	Reset Button	Press and hold for 5 seconds while powered On to clear network settings. The **Status** LED will blink rapidly when reset is complete.
B	Status LED	**Off:** No power **Blinks Once:** Access Point Provisioning Mode **Blinks Twice:** Waiting for a Host Connection **Blinks Three Times:** Connecting To Host **Solid:** Connected to Host

Rear Panel
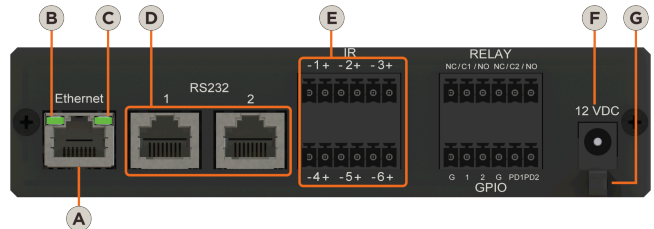
Note: Connections not identified in the diagram above are not used when utilizing the Component Profile Tool to create, test and modify .xml Profiles.

A	Ethernet	• 10/100 Base-T auto-negotiating port with Link and Activity LEDs. • 8-Pin RJ-45 female. • Connects to either a local unmanaged switch/hub or directly into the Ethernet port on the MacBook. Refer to the Diagram section.
B	Link LED	• **Off:** Ethernet link is not established. • **Green Solid:** Ethernet link is established. • **Green Blinking:** Ethernet activity is occurring
C	Data Rate LED	• **Off:** 10 Mbps data rate • **Green:** 100 Mbps data rate
D	RS-232	• When selected in software, the RS-232 port transmits and receives command codes between the SSC-0012 and Unit Under Test. Refer to Diagram section. • 8-pin RJ-45 female. • Ports 1 or 2 are selectable in the Profiler software.
E	IR	• When selected in software, the IR port transmits command codes to the Unit Under Test (UUT). • IR Repeater/Flasher connects to the required port on the 6-pin Screw Down Plug-in Connector. • IR Ports 1 - 6 are selectable in the Profiler software.
F	Input Power	• 12V DC 1.5A - Connect to included power supply.
G	Cable Lance	• Used with included cable tie to secure power supply connection.

RS-232 Connections

When the Profiler software is configured for RS-232, the command codes sent from the Profiler software are sent out the RS-232 ports on the SSC-0012 controller to the Unit Under Test (UUT). The table below displays the pinout of the two RJ-45 connections on the controller. The image in the table below follows the 568B format but either 568A or 568B is acceptable as long as the same standard is used on both ends (Straight-thru).

Pin 1 / Pin 8 / RJ-45 Connector (Gold Pins Facing Up)	Pin 1: (Not Used)	Pin 5: RXD (RS-232)
	Pin 2: (Not Used)	Pin 6: TXD (RS-232)
	Pin 3: (Not Used)	Pin 7: CTS (RS-232)
	Pin 4: GND (RS-232)	Pin 8: RTS (RS-232)
	Note: Pins 7 and 8 are only required for CTS/RTS handshaking	

⚠️ **IMPORTANT!** When wiring to this port, DO NOT connect any wires within the cable that are not required for communication.

RJ-45 to DB9 Adapters

When connecting between the RS-232 ports on the SSC-0012 controller and the RS-232 port on the UUT, an RJ-45 to DB9 adapter may be required. To make connection easy, Savant offers RJ-45 to DB9 adapters in a variety of configurations that can be used for RS-232/422/485 control. Refer to the manufacturers support for the devices configuration.

For information on Savant RJ-45 to DB9 adapters, see the RS-232 Conversion to DB9 and RS-422/485 Pinout application note located on the Savant Portal.

⚠️ **IMPORTANT!** If using RJ-45 to DB9 adapters not supplied by Savant:

- Ensure that any wires required for communication/control are terminated within the adapter and all wires NOT required for communication/control are NOT terminated in the connecter.
- Unused wires in the connector are cut to prevent them from shorting.

IR Connections

When the Profiler software is configured for IR, the command codes received from the Profiler software are transmitted out an IR port of the controller to the IR Flasher/Repeater. Connections are made using 6-pin Screw Down Plug-in Connectors supplied with the CPT-1212. Connect the IR Repeater/Flasher cable by sliding the stripped portion of each wire into the hole in the connector and locking the wire in place by turning the screw on the top of the connector clockwise.

IR Port Connector Pinout

White Stripe Positive (+)	1:	IR 1 -	7:	IR 4 -
	2:	IR 1 +	8:	IR 4 +
	3:	IR 2 -	9:	IR 5 -
	4:	IR 2 +	10:	IR 5 +
	5:	IR 3 -	11:	IR 6 -
	6:	IR 3 +	12:	IR 6 +

**Note:** IR connection pairs 4 to 6 are not shown in the diagram.

GC-IRL Learner

The Global Caché IR Learner (GC-IRL) is used to capture IR commands from 3rd Party equipment such as the remote control to the equipment being tested. To connect the GC-IRL Learner to the MacBook (SDE), plug the GC-IRL Learner into the Blue Adapter supplied in the CPT-1212 kit. Connect the assembly to the RS-232 port using one of the supplied Ethernet cables.

	GC-IRL IR Learner

Diagram

The Diagram below shows all the connections required when using the CPT-1212 to test, capture, modify, or create .xml Profiles for use with Savant RacePoint Blueprint®. Connect only what is required.
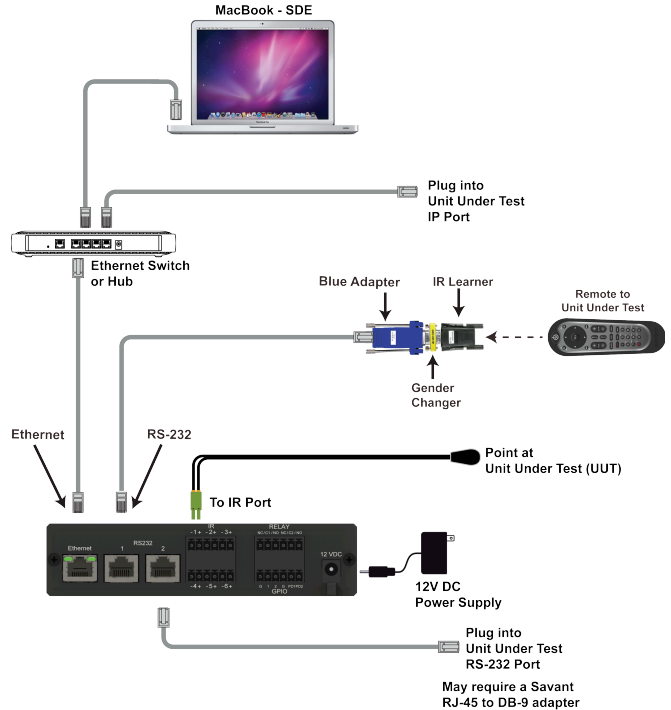
Additional Information

- The Ethernet switch/hub must be unmanaged. Features such as setting VLANs, Spanning Tree, and SNMP could cause issues.
- Wi-Fi® must be turned off when working with the Profiler Software.
- If the Unit Under Test (UUT) control port is either RS-232 or IR, the Ethernet switch/hub in the diagram does not need to be installed. A direct connection from the MacBook (SDE) to the SSC-0012 controller will suffice.

Mounting Plate Instructions

Supplied with the CPT-1212 kit is a mounting plate (074-0577-xx) for mounting to a wall or existing structure. This mounting plate is an option and not required when working with the CPT-1212. However, if mounting the SSC-0012 is required, the mounting instructions are described below.

1. Position the mounting plate onto the wall where the controller will be located. Position the bracket so the mounting holes are positioned vertically.
2. Mark on the wall the upper and lower mounting holes. Install wall anchors and screw mounting plate to the wall.
3. Snap the SSC-0012 controller into the bracket so the tabs on the mounting bracket seat into the slots on the side of the SSC-0012 controller.

Additional Documentation

Additional Information is available on the Savant Portal:

Knowledge Base > Savant Software > Savant Profiler

- Profiler and CPT-1212 Reference Guide - 009-1037-xx

Knowledge Base > Savant Hardware > SmartSystem Controllers > SmartControl (Control Only)

- SmartControl 12 (SSC-0012) Deployment Guide - 009-1268-xx