



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.

The CPT-1212 works with both the Profiler and IR Translator applications to 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 Customer Community**.

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 (025-0166-xx)
 - (4) 6-pin Screw Down Plug-in Connector (028-9352-xx)
 - (1) Cable Tie (014-0071-xx)
- (4) RJ45 to DB-9F Serial Control 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 - 2.0 ft (60.96 cm) (064-0059-xx)
- (1) IR Repeater Cable (064-0020-xx)
- (1) IR Learner (064-0224-xx)
- (1) Technicians Screwdriver (015-0075-xx)
- (1) Carry Case
- (1) Quick Reference Guide (this Document)

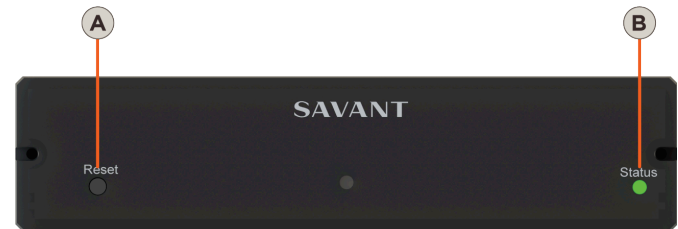
Specifications

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 first transmits the command data to the controller. The controller then converts the data and transmits this data to the Unit Under Test (UUT). Dependent on the UUT, the data sent to the UUT can be IR, RS-232, or IP.

Front Panel



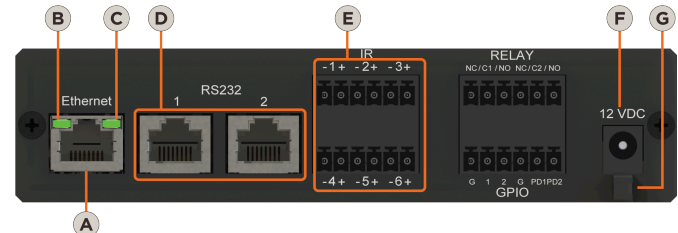
A Reset Button

Press and hold for 5 seconds while powered on to clear network settings. The **Status LED** will blink rapidly when controller starts its boot sequence.

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 using 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 SDE/ 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 Profiler software.

F Input Power

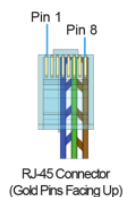
- 12V DC 1.5A - Connect to included power supply.

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: (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 Customer Community.

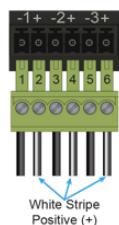
IMPORTANT! If using RJ-45 to DB9 adapters not supplied by Savant:

- Any wires required for communication/control should be terminated within the adapter.
- Any wires NOT required for communication/control should be cut to prevent them from shorting. DO NOT connect unused wires.

IR Connections

When the Profiler software is configured for IR, the command codes received from the Profiler software are converted and then transmitted out an IR port of the controller to an IR Flasher/Repeater. Connections are made using the 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



Pin 1: IR 1 -	Pin 7: IR 4 -
Pin 2: IR 1 +	Pin 8: IR 4 +
Pin 3: IR 2 -	Pin 9: IR 5 -
Pin 4: IR 2 +	Pin 10: IR 5 +
Pin 5: IR 3 -	Pin 11: IR 6 -
Pin 6: IR 3 +	Pin 12: IR 6 +

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

GC-IRL Learner

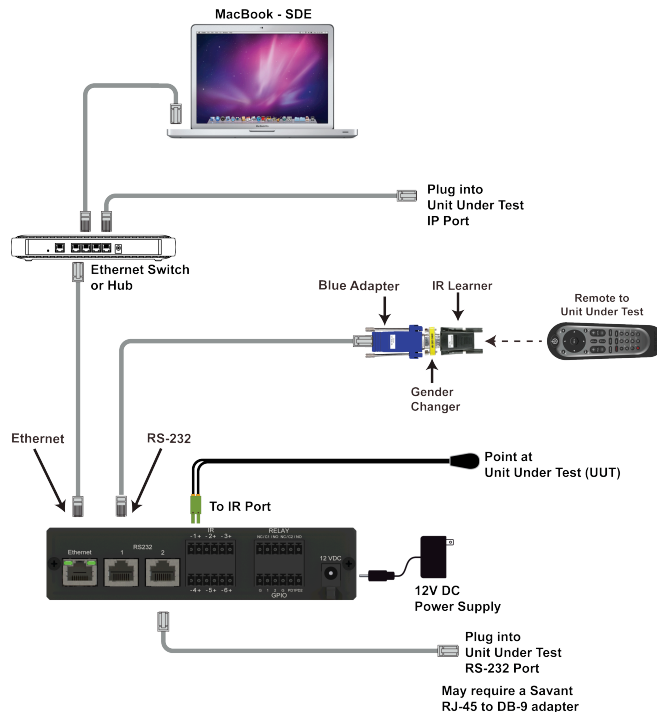
The Global Caché IR Learner (GC-IRL) is used to capture IR commands from 3rd Party equipment such as a remote control from the equipment being tested. To connect the GC-IRL Learner to the MacBook (SDE), plug the GC-IRL Learner into the Blue Adapter supplied in the CPT-1212 kit. Connect the assembly to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

- Position the mounting plate onto the wall where the controller will be located. Orient the bracket so the mounting holes are positioned vertically.
- Mark on the wall the upper and lower mounting holes. Install wall anchors and screw mounting plate to the wall.
- 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 Customer Community**

- Profiler and CPT-1212 Reference Guide - 009-1292-xx
- SmartControl 12 (SSC-0012) Deployment Guide - 009-1268-xx