



### Box Contents

- (1) SmartMediaPro 6 (SSP-0600-00)
  - (1) Installation Kit (075-0098-xx)
  - (2) 9-pin Screw Down Plug-In Connector (028-9353-xx)
  - (2) 6-pin Screw Down Plug-in Connector (028-9352-xx)
  - (1) 6 ft Power Cord (064-0079-xx)
  - (2) Module Removal Tool (071-0268-xx)
  - (2) Rack Mounting Bracket (071-0638-xx)
  - (4) M5 x 8 mm Flat Phillips Screw (039-0180-xx)
- (1) Quick Reference Guide (this document)

### Specifications

Environmental	
Temperature	32° to 104° F (0° to 40°C)
Humidity	10% to 80% (non-condensing)
Cooling	25 cubic feet per minute (CFM) recommended. Note that each chassis has fans pushing 36 CFM.
Max BTU	512 BTU/hr
Noise	Normal Operation condition: 52 dB Average
Dimensions and Weight (Product)	
Height	5.25 in (13.33 cm)
Width	17.25 in (43.82 cm)
Depth	14.00 in (35.56 cm)
Weight	Net: 19.8 lb (8.98 kg) Shipping: 26 lb (11.79 kg)
Rack Space	3U
Power	
Input Power	100 - 240V AC 3A 50/60Hz
Maximum Power	200 Watts
Regulatory	
Safety and Emissions	FCC Part 15   CE Mark   C-Tick   S-Mark
ROHs	Compliant
Minimum Supported Release	
Savant OS	da Vinci 4.3.2

### Network Requirements

Savant requires the use of business class/commercial grade network equipment throughout the network to ensure the reliability of communication between devices. These higher quality components also allow for more accurate troubleshooting when needed. Connect all Savant devices to the same local area network (LAN) or subnet as the Host. Savant recommends not implementing any type of traffic or packet shaping in your network topology for the Savant devices as this may interfere with performance.

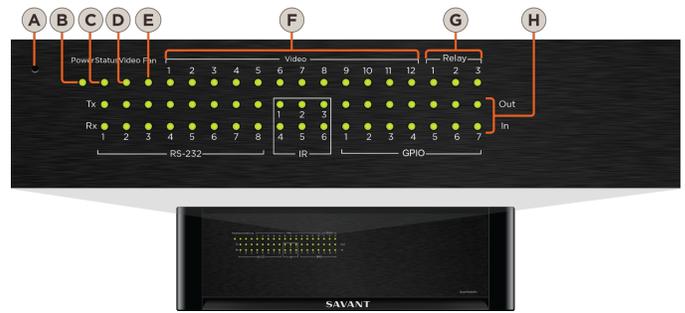
### Network Configuration

To ensure that the IP Address will not change due to a power outage, a static IP Address or DHCP reservation should be configured. Savant recommends using DHCP reservation within the router. By using this method, IP Addresses for all devices can be managed from a single UI avoiding the need to access devices individually. Setting DHCP reservation varies from router to router. Refer to the documentation for the router to configure DHCP reservation.

### Network Changes

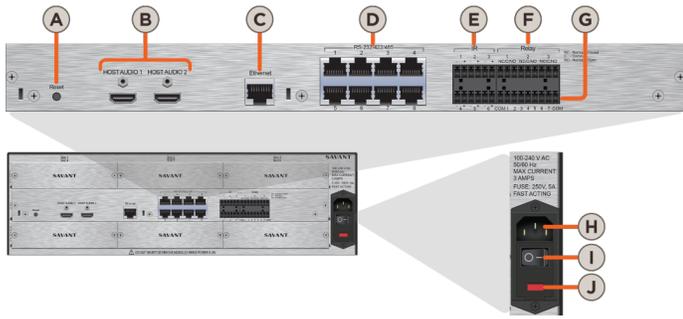
If there are any changes made to the network, the IP Address needs to be refreshed. See the [Network Changes](#) section below for information on this.

### Front Panel



<b>A</b> Standby Power (hole)	Insert pin into hole and hold for 5 seconds while powered-on to place the controller in or out of <b>Standby mode</b> .
<b>B</b> Power LED	<b>Green:</b> Has adequate power and operating normally. <b>Red:</b> In Standby mode. <b>Off:</b> Not receiving power.
<b>C</b> Status LED	<b>Green:</b> Operating normally. <b>Green Flashing:</b> Was assigned an IP Address and is connecting to the Host. <b>Off:</b> System is rebooting. <b>Red:</b> Firmware update has failed and the system will be rebooted. <b>Red Flashing:</b> No IP Address assigned. Trying to connect to the local network. <b>Amber:</b> Firmware update in process. <b>Amber Flashing:</b> Has a link-local IP Address and is connecting to the Host. This applies to controllers that are not connected to an active router and may be connected directly to a Host. <b>Hardware Failure</b> Status LED indication will be interrupted every three seconds with a solid <b>Red</b> indication. For example, if the LED is flashing <b>Green</b> when a hardware failure occurs, the LED will flash <b>Green</b> , solid <b>Red</b> , etc., in three second intervals.
<b>D</b> Video LED	<b>Off:</b> HDCP keys received are valid. Encrypted video content remains protected. <b>Red Flashing:</b> HDCP keys are invalid. Encrypted video content is unprotected. Video may still be present as this state only indicates that the HDCP sync has been lost.
<b>E</b> Fan LED	<b>Green:</b> Fans are running. <b>Off:</b> Fans are Off.
<b>F</b> Video Port LEDs	<b>Off:</b> Video output port is functional. <b>Green:</b> Video output port not functioning due to error.
<b>G</b> Relay	<b>Green:</b> Indicates relay activity on the associated port. Relay ports are located on the back panel.
<b>H</b> Control Status LEDs	<b>Green:</b> Indicates activity on the associated control type port. Control ports are located on the back panel.  Control Ports - RS-232/422/485, IR, and GPIO

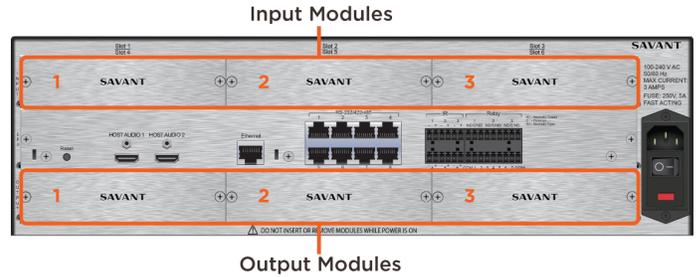
## Rear Panel



<b>A</b> Reset	Press and hold for five seconds while powered-on to reboot the SSP-0600 processor. Performs the same operation as a power cycle. No network settings will be lost.
<b>B</b> Host Audio	19-pin type A HDMI female digital video/audio input (requires adapter - not included): <ul style="list-style-type: none"> <li>- Supports HDMI.</li> <li>- Used for receiving up to 4 PCM streams (iTunes®) from a Pro Host (Not available on the Smart Host).</li> </ul> <p><b>Note:</b> iTunes is not supported in da Vinci releases 8.1 and higher.</p>
<b>C</b> Ethernet	8-pin RJ-45 connection. 10/100 Base-T auto negotiating port.
<b>D</b> RS-232	8-pin RJ-45 connection. Used to transmit and receive serial binary data to and from serial controllable devices. <ul style="list-style-type: none"> <li>- Ports 1-4: RS-232 - CTS/RTS handshaking.</li> <li>- Ports 5-6: RS-232/RS-422/RS-485 - CTS/RTS handshaking.</li> </ul> <p>CTS/RTS handshaking availability is based on component profile.</p> <p>See <a href="#">RS-232 Wiring</a> or <a href="#">RS-422/485 Wiring</a> sections for pinouts.</p>
<b>E</b> IR	6-pin Screw Down Plug-in Connector. Used to send IR signals to control devices with an IR input or IR receiver via an IR flasher (5V tolerant only). Before making connections, see the <a href="#">IR Wiring</a> section for important precautions regarding IR functionality.
<b>F</b> Relay	9-pin Screw Down Plug-in Connector. Normally Open (NO) and Normally Closed (NC) ports to control devices requiring basic on/off operation. DC Voltage Max: 30V DC 1A. See <a href="#">Relay Wiring</a> section for pinouts.
<b>G</b> GPIO	9-pin Screw Down Plug-in Connector. <p><b>GPIO Input:</b> When configured as an input, the processor will look for a low (&lt;0.8V DC) or a high (&gt;2.4V DC) state.</p> <p><b>GPIO Output:</b> When configured as an output, the port provides a binary output of 0-12V DC 150mA max. (Min 0V DC / Max 12V DC)</p> <p>See <a href="#">GPIO Wiring</a> section for pinouts.</p>
<b>H</b> Power Input	100 - 240V AC 3A 50/60 Hz
<b>I</b> I/O (power switch)	I (On): Powers On the controller. O (Off): Powers Off the controller.
<b>J</b> Fuse	250V 5A Fast acting (field replaceable)

## Audio/Video Slots

The module slots accept input and output modules in certain locations on the back panel. The upper three slots accept input modules. The lower three slots accept output modules.



**ELECTRIC DISCONNECT!** Before replacing modules, power-off the controller by toggling the power switch on the rear of the chassis to Off (O) and then remove the power cord. Failure to do so may cause damage to the equipment.

**ELECTROSTATIC DISCHARGE (ESD) WARNING!** When handling modules, observe the following precautions to avoid damage from electrostatic discharge (ESD).

- Use an approved ESD wrist or ankle-grounding strap. Ensure the grounding strap makes good skin contact.
- Connect the clip end of the ground strap to a threaded grounding stud on the chassis.



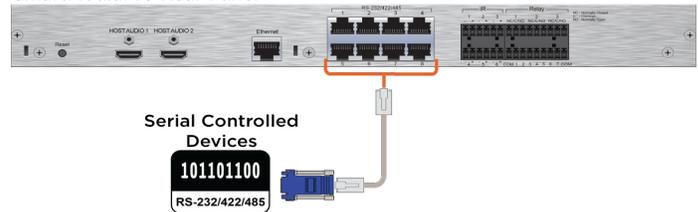
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## Wiring and Connections

Wiring and Pinout information on each of the Control ports are described in the next few sections.

### RS-232/422/485 Connections

#### SmartMediaPro Rear Panel



### RS-232 Pinout

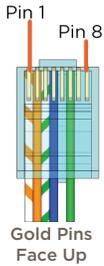
Pin 1: -----	Pin 5: RXD (RS-232)
Pin 2: -----	Pin 6: TXD (RS-232)
Pin 3: -----	Pin 7: CTS (RS-232)
Pin 4: GND (RS-232)	Pin 8: RTS (RS-232)

- Pin 7 & 8 are only required for CTS/RTS handshaking.  
- Wire colors are included to identify pins. Colors shown do not represent any wiring standard.

### IMPORTANT!

- When wiring to this port, DO NOT connect any wires within the cable that are not required for communications.
- CTS/RTS handshaking is supported for flow control based on the profile used in the configuration.

## RS-422/RS-485 Pinout



Pin 1: RS+ (RS-422/485)	Pin 5: -----
Pin 2: RS- (RS-422/485)	Pin 6: TX- (RS-422/485)
Pin 3: TX+ (RS-422/485)	Pin 7: -----
Pin 4: Gnd (RS-422/485)	Pin 8: -----

- Wire colors are included to identify pins. Colors shown do not represent any wiring standard.

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

## RJ-45 to DB9 Adapters

Savant offers RJ-45 to DB9 adapters in a variety of configurations that can be used for RS-232/422/485 control.

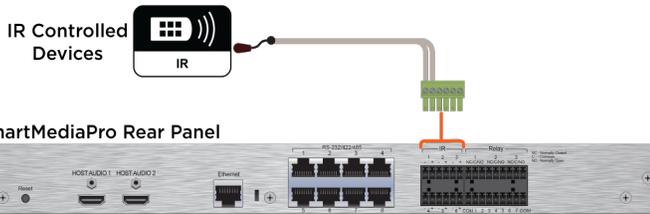
Refer to the RS-232 Conversion to DB9 and RS-422/485 Pinout-Application Note located on the [Savant Customer Community](#) for more information on RJ-45 to DB9 adapters.

**⚠ 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.
- Ensure that all wires NOT required for communication/control are NOT terminated in the connector.
- Ensure that the unused wires in the connector are cut to prevent them from shorting out, as they are still terminated in the RJ-45 connector on the controller side.

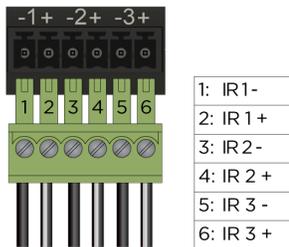
## IR Wiring

IR connections are made using 6-pin screw down plug-in connectors supplied. The wire slips into the hole and locks with a screw located at the top of the connector.



**⚠ IMPORTANT!** IR Wiring Precautions

- Ensure that all IR emitters are within 15 feet (4.6 meters) from the controller's location.
- Use of 3rd party flashing IR emitters with Talk Back is not recommended. These types of emitters can draw voltage away from the IR signal that can degrade IR performance.



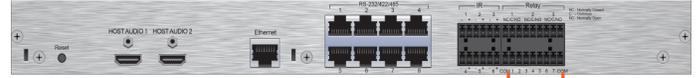
Use White Stripe for Positive (+)

**Note:** While not shown in the diagram, IR connections 4 to 6 follow the same wiring as 1 to 3.

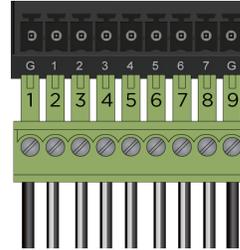
## GPIO Wiring

General Purpose Input/Outputs (GPIO) are binary I/O ports used on Savant controllers to trigger an action within the system. Events can control a device, such as turning on an amplifier (output) or detecting a state change for a device (input) to perform a workflow. Pins 1-4 are used for input or output depending on the configuration.

### SmartMediaPro Rear Panel



Voltage Trigger Controlled

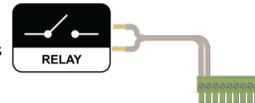


1: GND	6: GPIO 5
2: GPIO 1	7: GPIO 6
3: GPIO 2	8: GPIO 7
4: GPIO 3	9: GND
5: GPIO 4	

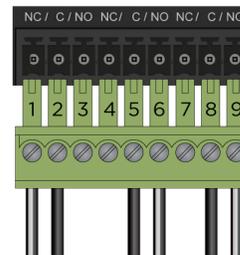
## Relay Wiring

Relay ports are used when a device is controlled via a normally open (NO) or normally closed (NC) relay.

Contact Closure Controlled Devices



### SmartMediaPro Rear Panel



1: NC1	6: NO 2
2: C 1	7: NC 3
3: NO1	8: C 3
4: NC 2	9: NO 3
5: C 2	

NC = Normally Closed  
C = Common  
NO = Normally open

Use a white stripe for NC or NO

## Network Changes

After connecting to a new network, changing routers, or if the IP Address range is changed in the current router, Savant recommends the following steps to refresh any IP connection and ensure that the controller is communicating with the network correctly.

To refresh the IP connection, perform one of the following steps:

- **Cycle Power**
  1. Disconnect the controller from the AC power source.
  2. Wait 15 seconds and then reconnect.
- **Hot Plug the Ethernet (LAN) Connection**
  1. Disconnect the Ethernet (LAN) connection from the controller.
  2. Wait 15 seconds and then reconnect.
- **Restore System Defaults**

See [Restoring System Defaults](#) section below

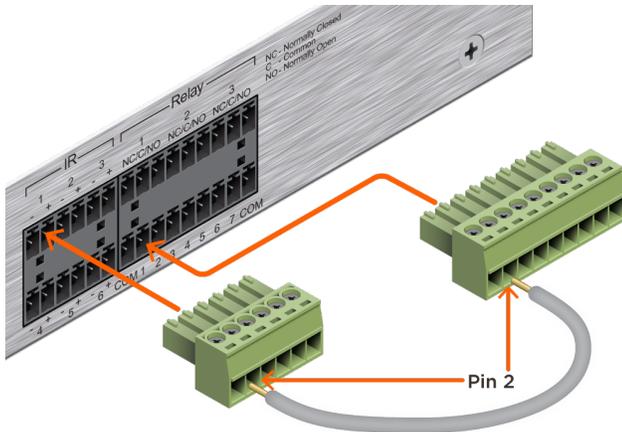
## Restoring System Defaults

The following procedure will set the SSP-0600 network settings to the factory default of DHCP. Any static IP Address that has been set will be lost and will need to be reset.

- 1 Power Off the SSP-0600 using the rear power switch.
- 2 Using a jumper wire (for example, a strand from a Cat 5 cable), connect IR 1+ to GPIO 1 (pin 2 on their respective connectors).

**Note:** Remove any wire that is currently in pin 2, connect only the jumper wire during the restore process.

- 3 Insert the connectors into their respective jacks on the rear of the SSP-0600.



- 4 Power **On** the SSP-0600 using the rear power switch.
- 5 The **Status** LED will blink green briefly while the firmware clears the network settings.
- 6 Remove the jumper wire from the connectors.
- 7 The system will reboot and come back up.
  - If an IP address was received from the DHCP server, the status LED will blink **Green**.
  - If a self-assigned IP Address is set, the status LED will blink **Amber**.
- 8 Use **rpmEmbScanner** to confirm that an IP Address has been received or to set a static IP Address.

## Replacing Fuse

- 1 Power **Off** the SSP-0600 using the rear power switch.
- 2 Disconnect the unit from AC power by removing the power cord.

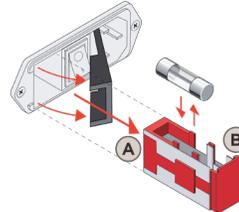
**ELECTRIC SHOCK HAZARD!** To avoid possible electrical shock, physically remove the power cord from the AC outlet.

- 3 Open the fuse cover on the AC power input using a flat head screwdriver or similar thin flat head tool. This will allow access to the fuse cartridge.
- 4 Using the flat head screwdriver or similar thin flat head tool, gently loosen the cartridge and pull the cartridge out of the unit slowly. As the cartridge is removed, make note of the orientation as it is important to proper operation.

**TIP!** To make the reinstallation process easier, it is good practice to mark both the chassis and fuse holder before completely removing from the chassis.

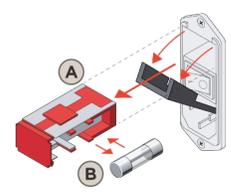
- 5 Remove the old fuse from the cartridge and discard.
- 6 Gently place the new fuse in the cartridge and place the cartridge part way into the receptacle aligning it as defined in the diagram.

Horizontal Installation



A Connection Pins Towards Unit

Vertical Installation



B Open Side of Cartridge Towards Power Switch

- 7 Gently press on the cartridge the rest of the way until it seats into the terminals at the rear of the slot.

**Note:** If any resistance is encountered during seating the cartridge, DO NOT apply more pressure. Stop pressing on the cartridge, remove it, verify the orientation, and repeat step.

## Additional Documentation

Additional Documentation is available on the [Savant Customer Community](#).

- SmartMediaPro (SSP-1200, 1200R, SSP-0600) Deployment Guide