

## Overview

The Remote Control Protocol enables Skyport WiFi Key equipped ColorTouch thermostats to be controlled via the local network. ColorTouch thermostats available on the local network are discoverable via Simple Service Discovery Protocol (SSDP). The Remote Control Protocol is served by a simple RESTful web service and can be accessed by a wide range of clients written in different programming languages.

ColorTouch thermostats do not allow remote control commands by default. You must go into "Menu" - "Accessories" screen and turn ON "Local API" after connecting to the wireless network.

## Simple Service Discovery Protocol (SSDP)



## **VENSTAR** Developers

The Simple Service Discovery Protocol (SSDP) is a network protocol based on the Internet Protocol Suite for advertisement and discovery of network services and presence information. It accomplishes this without assistance of server-based configuration mechanisms, such as the Dynamic Host Configuration Protocol (DHCP) or the Domain Name System (DNS), and without special static configuration of a network host. SSDP is the basis of the discovery protocol of Universal Plug and Play and is intended for use in residential or small office environments.

SSDP is a text-based protocol based on HTTPU. It uses the User Datagram Protocol (UDP) as the underlying transport protocol. Services are announced by the hosting system with multicast addressing to a specifically designated IP multicast address 239.255.255.250 at UDP port number 1900.

In order to discover the ColorTouch thermostats on your local network, your program can send the following M-SEARCH message using the HTTP protocol to the SSDP multicast address and port.

M-SEARCH \* HTTP/1.1

Host: 239.255.255.250:1900

Man: ssdp:discover ST: colortouch:ecp

ColorTouch thermostats will respond with the following message when they receive a valid M-SEARCH message.

HTTP/1.1 200 OK

Cache-Control: max-age=300

ST: colortouch:ecp

Location: http://192.168.1.100:8080/

USN: ecp:00:23:a7:3a:b2:72:name:Living%20Room

Location header is the URL for the ColorTouch Remote Control Service. The thermostat name is contained in the USN header. If you have multiple ColorTouch thermostats on your network, your program will receive multiple packets with different locations and names.

At a regular interval ColorTouch thermostats broadcast their services by sending a NOTIFY message similar to the response message above to the multicast address and port. NOTIFY messages replace the ST header with NT. If your program has not received a new NOTIFY message before the Cache-Control expires, ColorTouch thermostat is no longer available on the network.

