TSR-310

Handheld Touch Screen Remote

> Customizable handheld wireless remote

> Elegant, ergonomic, and rugged design

> 3 in. (76 mm) HVGA capacitive color touch screen with Smart Graphics® technology

> Backlit buttons for AV/DVR control and OSM navigation

> 5-way navigation pad changes colors when accessing the four-color buttons mode

> Preprogrammed graphical interface for controlling a Crestron Pyng® OS 2 system

> Voice recognition executes functions using spoken commands [2]

> Fully programmable functionality via a Crestron® control system [1]

> Advanced, high-performance Wi-Fi® wireless communications [3]

> Movement sensor wakes the remote when picked up

> Instant-Waking® technology executes button presses without picking up the remote

> Auto-brightness control maintains optimal visibility

> Setup and diagnostics via touch screen or web browser

> Li-Polymer rechargeable battery

> Space-saving table dock charger [4]

The Crestron® TSR-310 Handheld Touch Screen Remote is an elegant, customizable wireless controller designed for use in home theaters, bedrooms, hotel rooms, boardrooms, and many other applications. Ruggedized for durability, the TSR-310 offers exceptional comfort and ergonomics for hours of one-handed use. Its backlit buttons provide positive tactile response and clear visibility under all lighting conditions. Its high-resolution 3 in. (76 mm) capacitive touch screen affords completely customizable control over audio, video, lighting, shades, climate, security, and other amenities. Built-in Voice Recognition allows many functions to be executed using spoken commands. Dependable wireless performance is ensured using enhanced Wi-Fi® technology. A space-saving tabletop dock is included for charging the remote. [1]

Backlit Tactile Buttons

A full complement of buttons provides immediate access to everything you need to watch TV, listen to music, navigate onscreen menus, and browse through media titles on your TV display. Each button is clearly labeled using familiar text and icons for intuitive operation. Button backlighting affords excellent legibility in darkened rooms. The 5-way thumbpad affords easy directional navigation in normal use and changes colors when placed in four-color mode to provide access to the green, blue, red, and yellow option buttons.

Each button on the TSR-310 is fully programmable to deliver precise and predictable behavior, whether simply adjusting audio volume and flipping through channels, browsing a media library or program guide, controlling a DVR or DVD player, or operating a pan/tilt camera.

Touch Screen with Smart Graphics® Technology

The TSR-310 features a high-resolution, high-contrast capacitive touch screen to enable fully customizable control over anything in your home or workplace. Crestron Smart Graphics technology delivers an engaging and intuitive touch screen experience with fluid gesture-driven controls, kinetic effects, animated feedback, rich metadata, embedded apps and widgets, and personalized themes – all custom tailored to your needs.

Performance UI for Crestron Pyng® OS 2 Control

Performance UI is a built-in software program for the TSR-310 that provides a preprogrammed graphical interface for controlling a Crestron Pyng® OS 2 system. Once the TSR-310 is paired with the Crestron Pyng system and added to a media room via the free Crestron Pyng configuration app, media sources may be controlled using the TSR-310 hard buttons and touch screen controls. Scrolling menus of channel presets and media titles appear on the touch screen with full color icons and cover art for all your favorite TV channels, radio stations, movies, and music. User profiles are also provided to give users custom control over the media system, including the ability to save favorites, such as television channels and radio stations, for easy access.

CRESTRON®

Touch Screen
3" (76 mm) capacitive color touch screen, HVGA (320 x 480) resolution, 700:1 contrast ratio, auto-brightness control

Power, Voice, & Home Buttons

Function Buttons
For volume control, channel up/down, guide, menu, and info

Navigation Pad
Directional control plus center select button (shown in 4-color mode)

4-Color Mode Button
Puts Nav Pad into 4-color mode

Transport Buttons
DVR and DVD controls, plus exit, and last buttons

All buttons are backlit for visibility in a darkened room; Nav Pad changes from white to colors when in 4-color mode

Performance UI also provides controls for adjusting the lighting, shades, and climate in the room, as well as controls to activate quick actions for the whole house. Actual lighting levels, shade positions, and thermostat modes are graphically displayed and adjustable with a simple finger stroke. Performance UI also supports voice control commands if the Crestron Pyng system is paired with a voice provider service.[1,2]

Voice Command Recognition

Some things are easier *said* than *done*, so why not just *say* what you want and let Crestron *do* it for you? With built-in voice recognition, the TSR-310 provides the ability to use spoken commands to control a variety of devices and functions. Voice recognition can be used to quickly turn devices on or off, change the channel, choose a lighting scene, lower the windows shades, lock the doors, or arm the security system. Simply press the Voice button and say a command and Crestron does the rest.[1,2]

Movement Sensor

Its built-in accelerometer wakes the TSR-310 instantly whenever it's picked up or moved, so it's always ready for use.

Instant-Waking® Technology

Even without picking it up, the TSR-310 wakes instantly at the press of a button and transmits the button press within milliseconds. So spontaneous actions like muting the audio, pausing the video, or changing the channel can be executed on the fly, even with the remote left lying on an armrest or placed in its charging dock.

Auto-Brightness Control

To ensure optimal visibility under varying lighting conditions, the TSR-310 includes a built-in light sensor, which regulates the brightness of the touch screen display and button backlighting according to the ambient light level in the room.

Advanced Wi-Fi® Wireless Performance

Crestron enhanced Wi-Fi performance is optimized to deliver fast, dependable wireless communications with a remarkable 50 feet (15 meters) omnidirectional range (conditions permitting). The choice of 802.11 a, b, g, and n protocols affords reliable, high-speed wireless connectivity in virtually any RF environment. For Wi-Fi networks with multiple access points, the TSR-310 supports the ability to hand off communication from one access point to another if the active connection is lost.[3]

Shown with TSR-310-DS Table Dock (included)

Note: The TSR-310 has been tested and verified to work with wireless access points from a variety of leading manufacturers. Please visit https://www.crestron.com/Products/Featured-Solutions/TSR-310-with-Wi-Fi for a list of recommended WAP manufacturers.

Extended Battery Life

To conserve power, the TSR-310 goes into a sleep state when not in use. In sleep mode, the TSR-310 maintains a very low level connection to the wireless access point, ensuring instantaneous response upon waking. Maximum battery life and performance are ensured only when using a Crestron certified wireless access point (see above). Under typical use, the TSR-310 can operate continuously for 5.5 hours between charges.

Table Dock Charger

Its included table dock provides for charging the TSR-310 while occupying minimal space on the tabletop or shelf. When placed on the table dock, the remote remains upright and fully operational while charging.[4]

SPECIFICATIONS

Note: See also TSR-310-DS for additional specifications.

Touch Screen Display

Display Type: TFT active matrix color LCD
Size: 3 inch (76 mm) diagonal
Aspect Ratio: 3:2 HVGA (portrait orientation)
Resolution: 320 x 480 pixels
Brightness: 410 nits (cd/m^2) typical
Contrast: 700:1 typical
Color Depth: 18-bit, 262,144 colors
Viewing Angle: ±80° horizontal, ±80° vertical
Illumination: LED Backlit w/auto-brightness control (adjustable high, medium, and low settings)
Touch Screen: Projected capacitive, 3-point multi-touch capable

Note: Pressing any button or moving the remote wakes the remote from sleep mode; a second button press or touching the touch screen wakes the touch screen display (configurable for any button or just Power, Voice, and Home); the touch screen display may also be configured to wake on movement.

Buttons

Power: (1) Programmable pushbutton with red power icon
Voice: (1) Pushbutton with microphone icon, initiates voice command capture [2]
Home: (1) Programmable pushbutton with list icon
Functions: (8) Programmable pushbuttons with text or icons for volume up, volume down, mute, guide, menu, up, down, and info
Navigation Pad: (1) Programmable 5-way directional navigation pad for up, down, left, right, and select; alternately functions as four context-dependent option buttons when the 'four color mode' button is pressed (nav pad icons illuminate green, blue, red, and yellow in this mode)
Transport: (11) Programmable pushbuttons with text or icons for exit, last, rewind, play, forward, previous, pause, next, stop, DVR, and record
Illumination: White LED backlighting behind all button labels w/auto-brightness control (adjustable high, medium, and low settings)

Note: Pressing any button or moving the remote wakes the remote from sleep mode and turns on the button backlight if the room is dark

Light Sensor

Photosensor detects the ambient light level to enable the button backlight if the room is dark and automatically adjust the touch screen display and button backlight brightness

Movement Sensor

Accelerometer detects if the remote is picked up or moved, wakes the remote from sleep mode, and turns on the button backlight if the room is dark; may also wake the touch screen display if desired

Graphics

Graphics Engine: Crestron Smart Graphics, on-screen numeric keypad and multi-language keyboard, screensaver, Performance UI for Crestron Pyng OS 2 control
Maximum Project Size: 512 MB

Languages

Smart Graphics: Arabic, Chinese (Simplified), Chinese (Traditional), Czech, Danish, Dutch, English (UK), English (US), Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Portuguese (Brazilian), Romanian, Russian, Slovak, Spanish, Swedish, Thai
On-Screen Keyboard: Arabic, Chinese (Simplified), Croatian, Czech, Danish, Dutch, English (UK), English (US), Finnish, French (Canada), French (Switzerland), German, Hebrew, Hungarian, Italian, Japanese, Norwegian Bokmal, Polish, Portuguese, Russian, Serbian, Spanish, Swedish, Turkish
Voice Recognition: Afrikaans (South Africa); Chinese, Mandarin (China, Simplified); Chinese, Mandarin (Hong Kong, Simplified); Chinese, Mandarin (Taiwan, Traditional); Chinese, Yue (Hong Kong, Traditional); Czech (Czech Republic); Dutch (Netherlands); English (Australia); English (Canada); English (Generic); English (India); English (New Zealand); English (South Africa); English (UK); English (US); French (France); German (Germany); isiZulu (South Africa); Italian (Italy); Japanese (Japan); Korean (South Korea); Polish (Poland); Portuguese (Brazil); Russian (Russia); Spanish (Spain); Turkish (Turkey)
Performance UI: Arabic, Chinese (Simplified), Chinese (Traditional), Czech, Danish, Dutch, English (UK), English (US), Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Portuguese (Brazilian), Romanian, Russian, Slovak, Spanish, Swedish, Thai

Wireless Communication

Transceiver: IEEE 802.11a/b/g/n Wi-Fi (2.4 or 5 GHz 2-way RF), static IP or dynamic IP via DHCP [3]
Security: 64 & 128-bit WEP, WPA & WPA2-PSK with TKIP & AES
Range: Up to 50 feet (15 m), subject to site-specific conditions
Handoff: Supports handoff between a maximum of four Wi-Fi wireless access points [3]
Gateway: Requires an 802.11a/b/g/n wireless access point and Ethernet-enabled Crestron control system

Note: The TSR-310 has been tested and verified to work with wireless access points from a variety of leading manufacturers. Please visit https://www.crestron.com/Products/Featured-Solutions/TSR-310-with-Wi-Fi for a list of recommended WAP manufacturers.

Wired Communication

USB: USB client for console only (installer setup)

Audio

Features: Built-in microphone for multi-language voice recognition [2]

Connectors

USB: (1) Micro-USB Type B console port behind battery compartment cover, for installer use only
Charging Contacts: (2) Contacts which mate with the charging terminals on the table dock

Battery

Rechargeable Battery: Li-Polymer, 3.7 Volt, 2000 mAh, model TSR-310-BTP
Usage per Charge: 5.5 hours continuous
Charging Time: 3 hours

Power

Power Pack (included): Input: 100-240 Volts AC, 50/60 Hz;
Output: 2 Amps @ 5 Volts DC

Note: Power connection made via the charging dock [4]

Environmental

Temperature: 32° to 104° F (0° to 40° C);
50° to 104° F (10° to 40° C) while charging
Humidity: 10% to 90% RH (non-condensing)

Construction

Ruggedized ABS plastic, black housing, black buttons with backlit laser etched labeling

Dimensions

Height: 0.95 in. (24 mm)
Width: 2.28 in. (58 mm)
Depth: 8.68 in. (221 mm)

Weight

6.35 oz (180 g)

Compliance

CE, IC, FCC Part 15 Class B digital device

MODELS & ACCESSORIES

Available Models

TSR-310: Handheld Touch Screen Remote

Included Accessories

TSR-310-DS: Table Dock for TSR-310 (Qty. 1 included)
TSR-310-BTP: Battery Pack for TSR-310 (Qty. 1 included)

Notes:

1. A complete Crestron control system, plus additional equipment and services, are required to deliver all the capabilities and functionality described. Please contact your Crestron representative to learn more.
2. Voice recognition, weather information, and certain other functions require an Internet connection.
3. Refer to https://www.crestron.com/Products/Featured-Solutions/TSR-310-with-Wi-Fi for a list of recommended wireless access points. Wi-Fi "handoff" capability enables automatic handoff amongst up to four pre-designated Wi-Fi wireless access points, wherein the last successful Wi-Fi connection is maintained indefinitely until that connection is lost, at which point communication is handed off to the next nearest access point. A very brief interruption to wireless Ethernet communication may occur during the handoff.
4. The TSR-310 ships with (1) TSR-310-DS Table Dock included. Additional docks may be ordered separately. Refer to the TSR-310-DS spec sheet for additional information.

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221 mm

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