TV Remote control is a device used to control television set remotely. It’s made of plastics and rubber on the outside and all necessary electronic components inside. It also contains batteries (most commonly AAA), which can be replaced when exhausted. It’s lightweight, around 100-150 grams, and it is designed to be held and used in one hand. It should not emanate any smell. Most commonly, it has the following buttons:

* Power button
* Numeric keyboard
* Volume-up and volume-down buttons
* Mute button
* Channel-up and channel-down buttons
* Menu button
* Navigation buttons (up/down/left/right)
* Enter button
* Exit button

In order to test remote control, we must first ensure that the TV itself is working. This is important, because, if we come across a bug during remote control testing, remote control might not be the culprit, but it is the TV to blame. In order to avoid this, we will test the TV in one of the 2 ways:

1. We will use another TV remote for which we are certain it is 100% functional.
2. We will test using control panel integrated onto the TV.
   1. Condition A: All functions available on the TV are also available on the remote control.
   2. Condition B: Infrared receiver on the TV is functional.

Remote control test starting conditions:

* The TV unit is tested and working properly;
* TV is connected to working power outlet;
* Multi-channel video input source is connected and this is currently selected source;
* TV channels are stored in memory;
* TV is in standby mode;
* The remote control is placed in front of the television;
* The remote control‘s distance from TV is not further than 8 meters;
* The remote control‘s angle from the center of a TV is not greater than 45° (horizontally and vertically);
* No other devices are in the vicinity that could interfere with IR signal;

Test 01:

When I press the power button, then the TV starts producing some image.

Test 02:

Given that the TV is on and is on the channel 0, when I press one of the numeric button (other than 0), then the TV changes the channel to selected number.

Test 03:

Given that the TV is on and is on the channel 1, when I press zero, then the TV changes the channel to zero.

Test 04:

Given that the TV is on, volume is on the middle of the scale, and some sound can be heard from the TV, when I press volume up, then the volume from the TV speakers increases.

Test 05:

Given that the TV is on, volume is on the middle of the scale, and some sound can be heard from the TV, when I press volume down, then the volume from the TV speakers decreases.

Test 06:

Given that the TV is on and some sound can be heard from the TV, when I press mute, then no sound can be heard from the TV.

Test 07:

Given that the TV is on, and is on the 5th channel, when I press channel up button, then the channel switches to 6th channel.

Test 08:

Given that the TV is on, and is on the 5th channel, when I press channel down button, then the channel switches to 4th channel.

Test 09:

Given that the TV is on, and no OSD is displayed, when I press the menu button, then the menu opens.

Test 10:

Given that the TV is on, the menu is opened, and the first option is marked, when I press the menu-down button, then the selection moves from first to second option.

Test 11:

Given that the TV is on, the menu is opened, and the second option is marked, when I press the menu-up button, then the selection moves from second to first option.

Test 12:

Given that the TV is on, the menu is opened, and the left option is marked, when I press the menu-right button, then the selection moves from left to right option.

Test 13:

Given that the TV is on, the menu is opened, and the right option is marked, when I press the menu-left button, then the selection moves from right to left option.

Test 14:

Given that the TV is on, the menu is opened, and the first option is marked, when I press enter button, then it goes to submenu of that option.

Test 15:

Given that the TV is on, the menu is opened, and the top menu screen is displayed, when I press the exit button, then the menu closes.