

S P E C I F I C A T I O N

REMOTE CONTROLLER FOR ELECTRONIC APPLIANCES SUCH AS TELEVISION AND THE LIKE

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FIELD OF THE UTILITY MODEL

This utility model relates generally to remote control devices for operation of an electronic appliance such as television, video recorders/players and the like, but more particularly to a remote controller having rotary selector switch to change
10 channels or to increase and decrease the volume of the television or video recorder/player..

BACKGROUND OF THE UTILITY MODEL

Remote control units for televisions are used to control all operations of a television and video recorders/players or the like. The units are made so that they are
15 universal and can be programmed for the majority of televisions available on the market today. The operation is by sending an infrared signal from the control unit to an infrared receiver on the television, video recorders/players or the like. Remote control are used to change channels, volume control, on/off control and many features that different televisions are equipped with today. These remote control units
20 are usually equipped with push button selector switch for changing the channels or to adjust the volume of the television, video recorders/players or the like. In many occasions especially when in dark places, the user or viewer of the television would have difficulty changing the channels or decrease/increase the volume thereof, Due to the uniform sizes of the channel control switches, volume control switch and other

switches which are in the form of buttons, the user tends to push a wrong button, thus if the user wants to change channels, he would tend to push the volume control switch or other switches instead of the channel selector button.

The primary object of this utility model therefore is to provide a remote
5 controller for televisions, video recorders/players having a circular channel and volume selector switch which is different from the other control switches of the remote control.

Another object of this utility model is to provide a remote controller for
televisions, video recorders/players wherein the user can easily determine the correct
10 switch button when changing channels or adjust the volume of the televisions, video recorders/players.

Yet, an object of this utility model is to provide a remote controller for
televisions, video recorders/players that is very easy to manufacture using simple and
ordinary equipment.

15 These and other objects and advantages will come to view and be understood upon a reading of the detailed description when taken in conjunction with the accompanying drawing hereof.

Figure 1 is a perspective view of the remote controller for televisions, video
recorders/ players according to the present utility model; and

20 Figure 2 is a partial sectional view when taken along line 2-2 of Figure 1.

Referring now to the several views of the drawing, wherein like reference numeral designates same part throughout. Shown is a utility model for a remote

controller for televisions, video recorders/ players and the like generally designated as reference numeral 10.

Said remote controller 10 comprises an elongated generally flat housing 11 being defined by a pair of upper and lower shell 12 and 13. Said upper shell 12 is provided with a plurality of different kind of slots 14 adapted to receive different sizes of push buttons 15 intended for changing channels and for setting up different kinds of program activities, such as on/off button, mute button or for accessing the menu options.

Inside a typical remote control, a printed circuit board (not shown) is provided. Said circuit board is a thin piece of fiber glass having a thin copper wires etched onto its surface. Electronic parts such as chips, transistors, etc. are also assembled on said printed circuit boards and are connected to said copper wires.

The different push buttons 15 are made of thin rubbery material 16 and are each provided with black conductive disk 17 at the bottom thereof. Said black conductive disk 17 are spacedly disposed from the contact member 18 located on said printed circuit board, such that when the push button 15 is pressed downwardly, the black conductive disk 17 touches said contact member 18, thus is connected to the chip which senses the engagement of the particular button thereof. This step would produce a morse-code-line signal specific to that button. The transistors then amplify the signal and send them to a light emitting diode LED (not shown) which is usually located at one end of the housing 11, and translates said signal into infrared light that is received by the television/video recorder or player's sensor.

As best seen in the drawing, the novel feature of this utility model is in the provision of a pair of individual circular channel and volume adjustment controls 19 and 19a made of rubbery material, and each traversing a pair of spaced apart rectangular slots 20 and 20a on said housing 11, and respectively connected pivotally along at their centers with extending shafts 21 secured to said housing 11. Each of said channel and volume adjustment controls 19 and 19a are defined by a circular rubber member having a plurality of transverse ridges 22 along the periphery thereof and a pair of opposing forward lug 23 and rear lug 24 protruding outwardly from the periphery thereof. Said forward lug 23 and rear lug 24 are each provided with black conductive disks 15 that communicate with their respective contact members 18 and 18a of said printed circuit board. By means of pushing the circular channel and volume adjustment control 19 and 19a, the forward lug 23 would push the front contact member 18 to change an existing channel to higher channels or increase volume of the television or video recorder/player and the like. The retraction of said channel and volume adjustment control 19 and 19a, the rear lug 24 would push the rear contact member 18a to adjust the program of the television to lower channels or decrease the volume thereof.

While this invention has been particularly shown and described above, it will be understood by those skilled in the art that various changes in form and details may be made therein without departing from the scope and spirit of the invention encompassed by the appended claims. For example, said circular rubber member may also be adapted to be used in all buttons of the remote control.

CLAIM:

1. A remote controller (10) for televisions, video recorders/players comprising a housing (11) having an upper shell (12) and lower shell (13), said upper shell (12) being provided with a plurality of different slots (14) adapted to receive different sizes of push buttons (15), and a printed circuit board with electronic parts disposed inside said housing (11), characterized in that at least one circular channel adjustment control, and a volume adjustment control (19), (19a) traversing respective slots (20), (20a) on said upper shell (12), each of said circular channel and volume adjustment control (19), (19a) being connected pivotally along the center of said circle to said housing (11) with extending shafts (21) secured to said housing (11), and each being provided with opposing forward lug (23) and rear lug (24) protruding outwardly from the circular periphery thereof and in communication with said printed circuit board, wherein the forward lug (23) and the rear lug (24) are each provided with black conductive disks which are pushed to their respective front contact member (18) and rear contact member (18a) of said printed circuit board by means of pushing the circular channel and volume adjustment controls (19), (19a).
2. A remote controller (10) for televisions, video recorders/players according to claim 1 wherein each of said circular channel adjustment control and volume adjustment control (19), (19a) being provided with plurality of transverse ridges (22) disposed at the periphery thereof.
3. A remote controller (10) for televisions, video recorders/players according to claim 1 wherein said circular channel adjustment control and volume adjustment control (19), (19a) being made of rubbery material.