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If you are related with electronics trade because of any reason, getting updates about the new developments in trade is must to stand in front raw of leaders. Many online portals help the technology smart professionals in great way by providing latest information about the new electronics circuits and projects. â€˜Electronics for youâ€™ like online portals have become the need of hour because such portals keep us ahead of others. The provided information can be sued to improve our performance at work places. The circuit lab type sections are dedicated towards the new circuits designed for making new utility gadgets by self. Do it yourself like sections also contains the information about the DIY projects but the circuit lab is more optimized for the electronics circuits.

Recently, I came across very valuable gadget named â€˜Clap-Based Digital Volume Controlâ€™ in an online electronics magazineâ€™s circuit lab section. This amazing control offers volume control facility at four levels. Each clap increases the volume of audio device. After last and fourth clap, volume level returns to first level that is the minimum level. The article is published with well detailed circuits and each part is well defined with numeric nomenclature. The circuit of Digital Volume Control consists of level detector, 4-stage counter, four analogue switches, resistive ladder network and microphone besides minotr components, many of which would be already available in your stock.

Four outputs of CD4040 come at pins numbers 9, 7, 6 and 2. The outputs are led to level detector made by LED1 to LED4. Level detector has input control pins 13, 5, 12 and 6 at IC CD4066 bilateral quad switch. Ladder network is designed with R9 - R12 resistors. The circuit consumes few MAmps current that is supplied by a regulated 5V supply. Audio input signal is sent to pin number 8 of CD4066. The output from pin number 1 of CD4066 can be used to control any audio amplifier. Here is the circuit that will make the understandings of â€˜Clap-Based Digital Volume Controlâ€™ easier to understand:

The clapping signal is captured by MIC1 (electret microphone) and is amplified by T1 transistor. MIC1 gets bias voltage from resistor R1. IC CD4040 (IC1) Counter gets clock pulse at 10th pin when a specific noise level comes through T1. The intensity of this counter output determines the configuration of 4 electronic switches inside the IC2. When output at 9th pin of IC1 becomes high, control 13th pin of IC2 shorts its 1st and 2nd pins to bypass the R9 in audio output circuit. The audio signal level can be viewed on LEDs 1 - 4. Try hands on experience to make â€˜Clap-Based Digital Volume Controlâ€™; it is useful for everyone.

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Kavita is an eminent and amateur writer primarily focusing on do it yourself projects, a target_new Electronic Circuits, Analogue Wattmeter, Electronics Design, a target_new Clap-Based Digital Volume Control, Circuit Diagrams, Relay Circuit, DIY projects related topics and working with one of the reputable Electronic and electrical company since 4 years.

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