Date	Description	Amount	Payer
03/04/2025	Components from Asia Electronics	290.00	Thiviru
	" " Digital Electronics	823.00	
	Resistor components	60.00	
	transport	560.00	
07/04/2025	Online order - Duino Electronics	836.28	Thiviru
21/04/2025	Sound senso- Duino Electronics (online)	947.51	Thiviru
29/04/2025	Online order- Duino Electronics	4 516.11	Thiviru
	Sky tronic	2 032.00	
	transport	360.00	
17/05/2025	OLED Desplay - Duino Electronics	1 678.74	- Hasindu
31/05/2025	PCB Order	2019.00	Thiviru
08/06/2025	PCB delivery	915.00	
24/06/2025	Sky tronic components	2210.00	Thiviru
	transport.	600.00	
26/06/2025	jumper wires (20 cm)	310.00	Jaindu
26/06/2025	Sky tronic - jack - 10 cm jumpers	390.00	
28/06/2025	Duino Electronic (online)	1472.76	- Thiviru
03/07/2025	enclosure	7600.00	- Jaindu
04/07/2025	paper cutter	160.00	- Aroshana
	candle	60.00	- Jaindu.
07/07/2025	stickers	80.00	- Hasindu
		27,920.40	

cost per 1 person - 6,980.10

Thiviru -	17,641.66	+ 10,661.56
Jaindu -	8,360.00	+ 1,379.90
Hasindu -	1,758.74	- 5,221.36
Aroshana -	160.00	- 6,820.10

MONTHLY PLAN

March

SUN	MON	TUE	WED	THU	FRI	SAT
					07/03/2025 We officially decide to do the project on Auto gain Amplifier system	
			12/03/2025 We did some research about amplifiers, and gain controllers		14/03/2025 We shared a google form.	15/03/2025 We recieved 32 responses.
16/03/2025 We prepared the proposal for our project.	17/03/2025 uploaded the project idea to the moodle page.		19/03/2025 got the feedback from sir.			
					28/03/2025 Decided the method, sound sensor and circuit diagram.	

MONTHLY PLAN

April

SUN	MON	TUE	WED	THU	FRI	SAT
	07/04/2025 online ordered components from Daino Electronics.	08/04/2025 Received the order. Build the Amplifier circuit.				
	21/04/2025 placed an online order to buy sound sensor			24/04/2025 received the ordered sensor. build both the sensor circut and Amplifier circuit and tested. encounted some issures.	25/04/2025 Soldered the Amplifier circuit. *discussed to change the method	26/04/2025 We changed the method we use to solve the problem. No sensor. only one device
	28/04/2025 rebuild the circuit without the sensor. we were succesfully able to make the gain amplified automatically	online order කළා, skytonic එකේ Digital poten and other stuf ගෙන්නුවා.	online. diliver වුනා Digital Potent එක ආවා. solder කළා Digital gain එක හරියට වුනේ නෑ. 100Ω වෙනුවට 300Ω.			

MONTHLY PLAN

MAY

SUN	MON	TUE	WED	THU	FRI	SAT
				1/05 servo ยังต้อง ต่อวงจร external IC ก่อน use งานนี้ เท่านั้น		
						17/05 ordered OLED desplay from Duino Elec.

07 / 03 / 2025

Initially, we had 3 main ideas for our project.

1. A water leakage detection system.
2. An auto-gain audio amplifier .
3. Asmart fan.

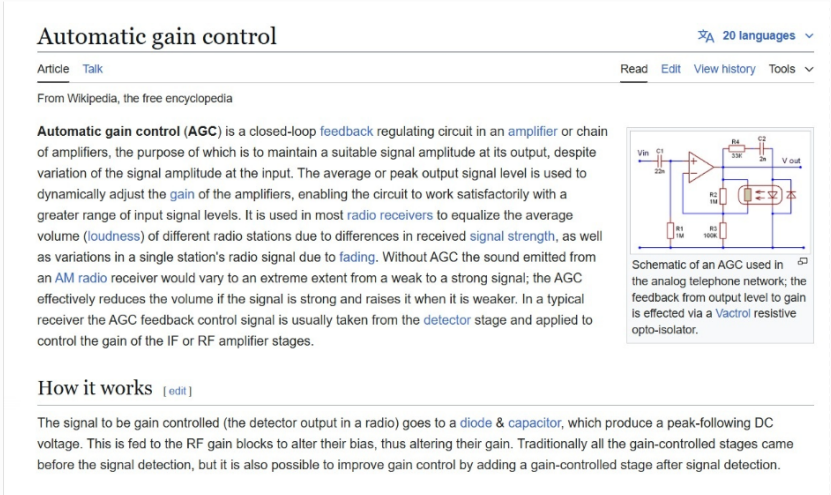
Out of these three, we chose the auto-gain audio amplifier, which we thought would be the most suitable.

This project mainly consists of two parts (devices) : A sensor and an amplifier. The sensor is placed at the location where we want to measure the volume level. Based on the signal received from the sensor, ty:in amplifier will automatically adjust the gain- either increasing or decreasing it accordingly.

12 / 03 / 2025

We conducted research on automatic gain control (AGC) circuits and other related topics through YouTube and various websites. During our exploration, we discovered several existing systems that are similar to our proposed solution, though not identical. Our idea is to develop a system capable of controlling audio levels in real time.

https://youtube.com/shorts/nxJ-2otxzvM?si=dYRR9HzCQ1RPe52K



Automatic gain control

20 languages

Article Talk Read Edit View history Tools

From Wikipedia, the free encyclopedia

Automatic gain control (**AGC**) is a closed-loop feedback regulating circuit in an amplifier or chain of amplifiers, the purpose of which is to maintain a suitable signal amplitude at its output, despite variation of the signal amplitude at the input. The average or peak output signal level is used to dynamically adjust the gain of the amplifiers, enabling the circuit to work satisfactorily with a greater range of input signal levels. It is used in most radio receivers to equalize the average volume (loudness) of different radio stations due to differences in received signal strength, as well as variations in a single station's radio signal due to fading. Without AGC the sound emitted from an AM radio receiver would vary to an extreme extent from a weak to a strong signal; the AGC effectively reduces the volume if the signal is strong and raises it when it is weaker. In a typical receiver the AGC feedback control signal is usually taken from the detector stage and applied to control the gain of the IF or RF amplifier stages.

Schematic of an AGC used in the analog telephone network; the feedback from output level to gain is effected via a Vactrol resistive opto-isolator.

How it works [edit]

The signal to be gain controlled (the detector output in a radio) goes to a diode & capacitor, which produce a peak-following DC voltage. This is fed to the RF gain blocks to alter their bias, thus altering their gain. Traditionally all the gain-controlled stages came before the signal detection, but it is also possible to improve gain control by adding a gain-controlled stage after signal detection.

15 / 03 / 2025

We shared a google form yesterday (14/03), asking few questions about our project idea. Here is the link to the data collection Form we got.
https://docs.google.com/forms/d/1L3mllVbhnqD2bDJGBAnU1faHd7aBrT4M845fI4TmGZ4/edit?ts=67d59b93

16 / 03 / 2025

we prepared the proposal for our project. PDF has been uploaded to google drive.

Link -https://drive.google.com/drive/folders/1aF3lm3MIGhPOu5tYx7dLkw1nuetLRqXC

19 / 03 / 2025

we got the feedback for the project idea, we uploaded 17/0312025

- I do see lot of challenges here. Please think about the technical as well as user experience. How do you control the existing amplifier settings? Is there a remote control feature? Lecture and other similar rooms use different audio setups. How do you make your device compatible with all of them?

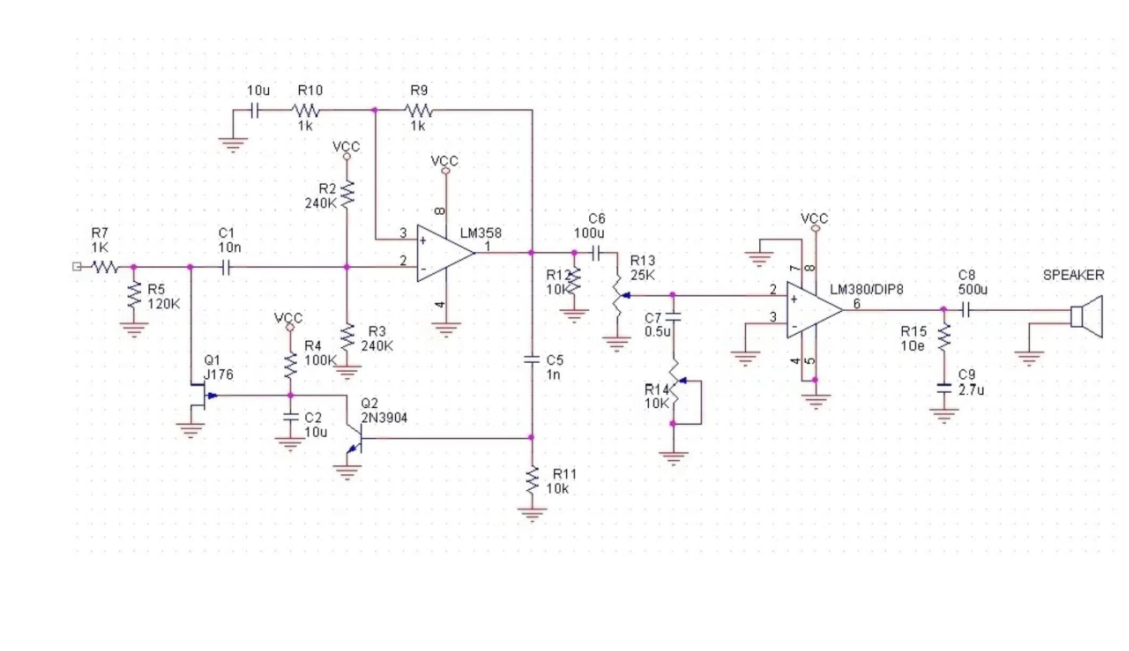
I do see lot of challenges here. Please think about the technical as well as user experience. How do you control the existing amplifier settings? Is there a remote control feature? Lecture and other similar rooms use different audio setups. How do you make your device compatible with all of them?

28 / 03 / 2025

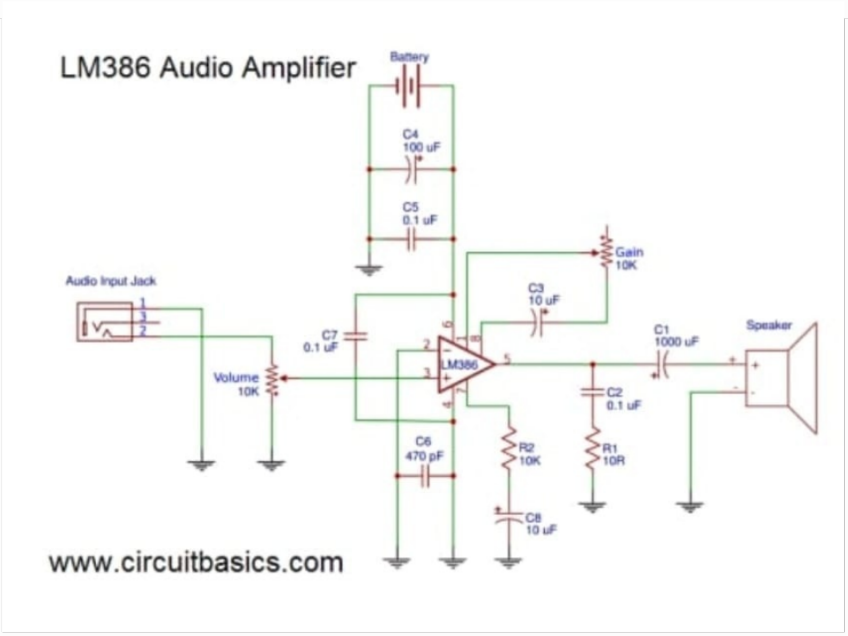
we conducted research, found Auto gain Amplifier circuit diagram and decided on the method and sound sensor to use.

https://youtu.be/PYkzJQhFNlA?si=PSCj9JUMlzX1Zx85

https://www.scribd.com/document/6581609/Audio-Power-Amplifier-With-Speaker-AGC-Load-With-AGC-Circuit-docx



08 / 04 / 2025



15 / 03 / 2025

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WEEKLY PLAN