List of tools Required:

S.No	Component Name	Qty
1.	IC SG3525A	1
2.	IRF 840 MOSFET	2
3.	24SWG Copper wire	20metres
4.	EC28 Ferrite Core Transformer 12V	1
5.	Printed PCB	1
6.	100nF Capacitor	2
7.	10nF Capacitor	2
8.	1nF Capacitor	1
9.	1000uF Capacitor	2
10.	4700uF Capacitor	1
11.	220uF Capacitor	1
12.	1uF Capacitor	1
13.	12K Variable Resistor	1
14.	2.2k resistor	1
15.	470ohm resistor	2
16.	1K resistor	5
17.	12K resistor	2
18.	5Amps Bridge Rectifier	1
19.	1N5408 Diode	4
20.	1N4007 Diode	5
21.	4.7nF Capacitor	2
22.	Power Supply Cable	1
23.	12V DC Socket	1

24.	16-Pin IC Base	1
25.	On-Off Switch	1
26.	5mm Red LEDs	5
27.	0.5A Fuse	1
28.	PCB Mount Fuse Holder	1
29.	BA159 Diode	4
30.	Power supply Rectifier PCB	1
31.	100uF 50V Capacitor	1
32.	TO-220 Heat Sink	2
33.	Mounting Screws	12
34.	Spacers	12

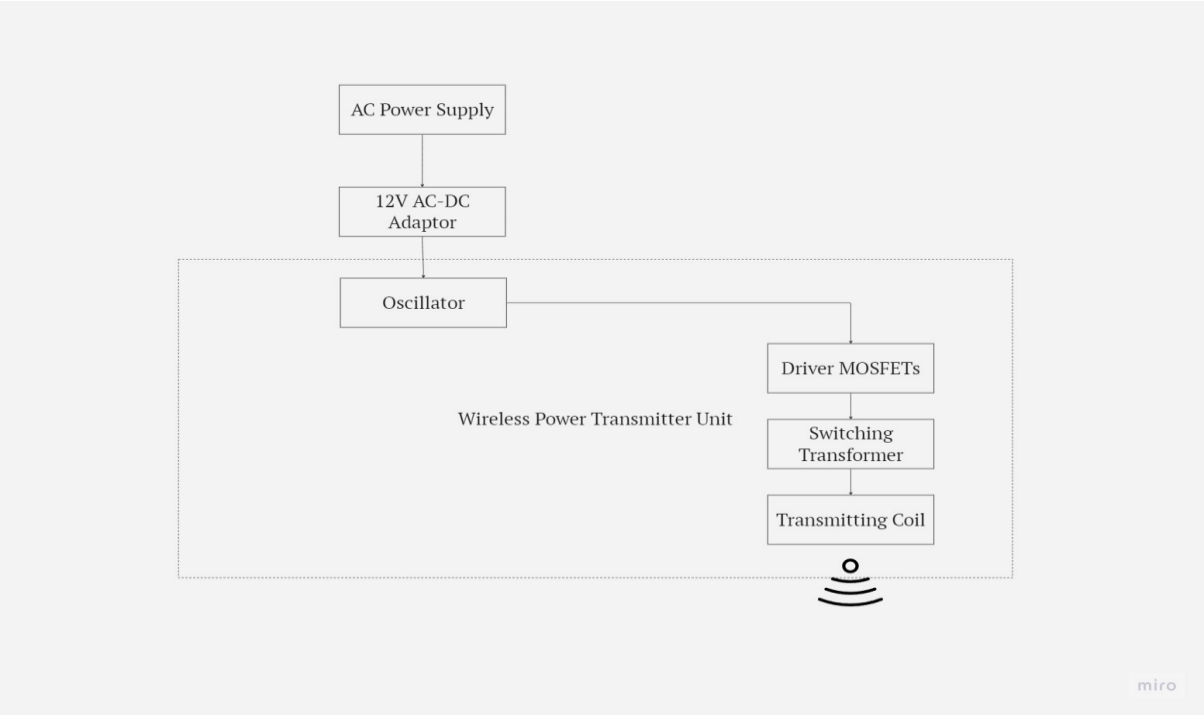
Idea Introduction:

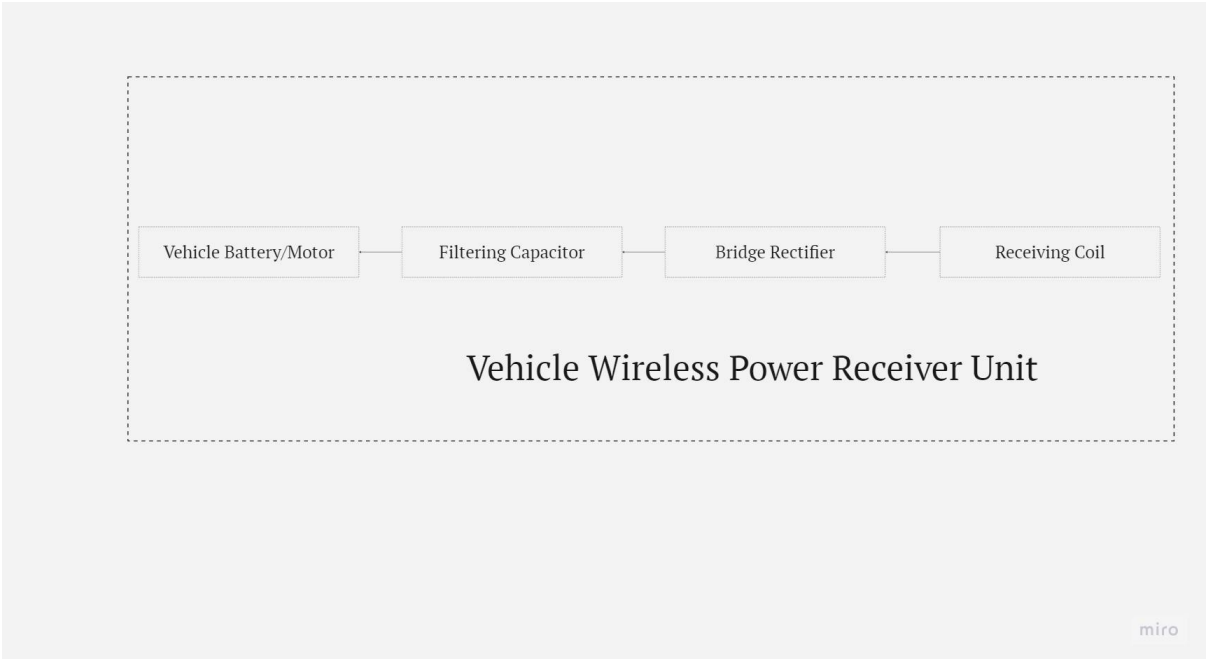
Due to limited resources, electric vehicles have become a feasible option. The creation of quick ways to charge EV batteries will help to encourage their wide adoption. Wireless power transfer (WPT) stands out as a potential technique among these. In this research, we developed a 60 kHz-frequency wireless charging system prototype. Our method offers the benefit of wireless charging, eliminating the need for physical connections, providing electrical isolation, and enabling grid-side control, in contrast to Plug-in Electric Vehicles (PEVs), which depend on cable and plug chargers. Dynamic on-road charging also minimizes the size of on-board energy storage systems (ESS).

Our main objective is to create an antenna system that can be used for cars using wireless power transfer technologies that is resonant magnetic coupled, particularly for charging electric automobiles. WPT technology's incorporation into EVs has advantages for the environment, convenience, and safety. Primary and secondary coils, which operate in loose coupling with a coupling coefficient ranging from 0.1 to 0.5, are at the heart of WPT systems. Both sides of the system

require tuning with resonant capacitors to enable effective power transmission. The coil size and component choices for the power electronic circuits are influenced by the operating frequency, making it crucial to choose the right one. The invention of a resonant wireless transfer system specifically suited for applications in car charging is the outcome of our effort.

Flow Diagram:




Vehicle Battery/Motor
Filtering Capacitor
Bridge Rectifier
Receiving Coil
Vehicle Wireless Power Receiver Unit

Block Diagram:

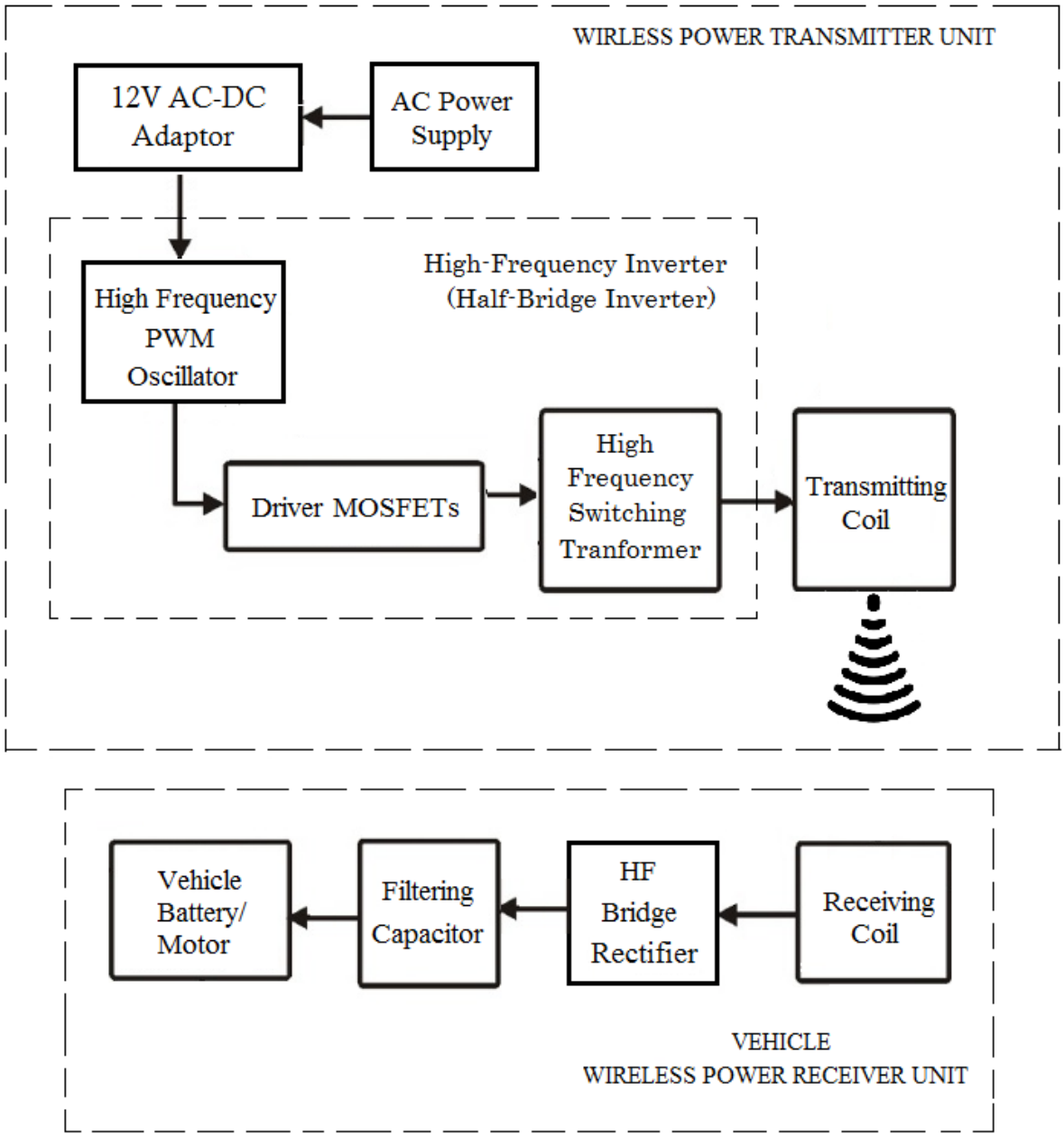


Fig 1.0 Transmitter and Receiver

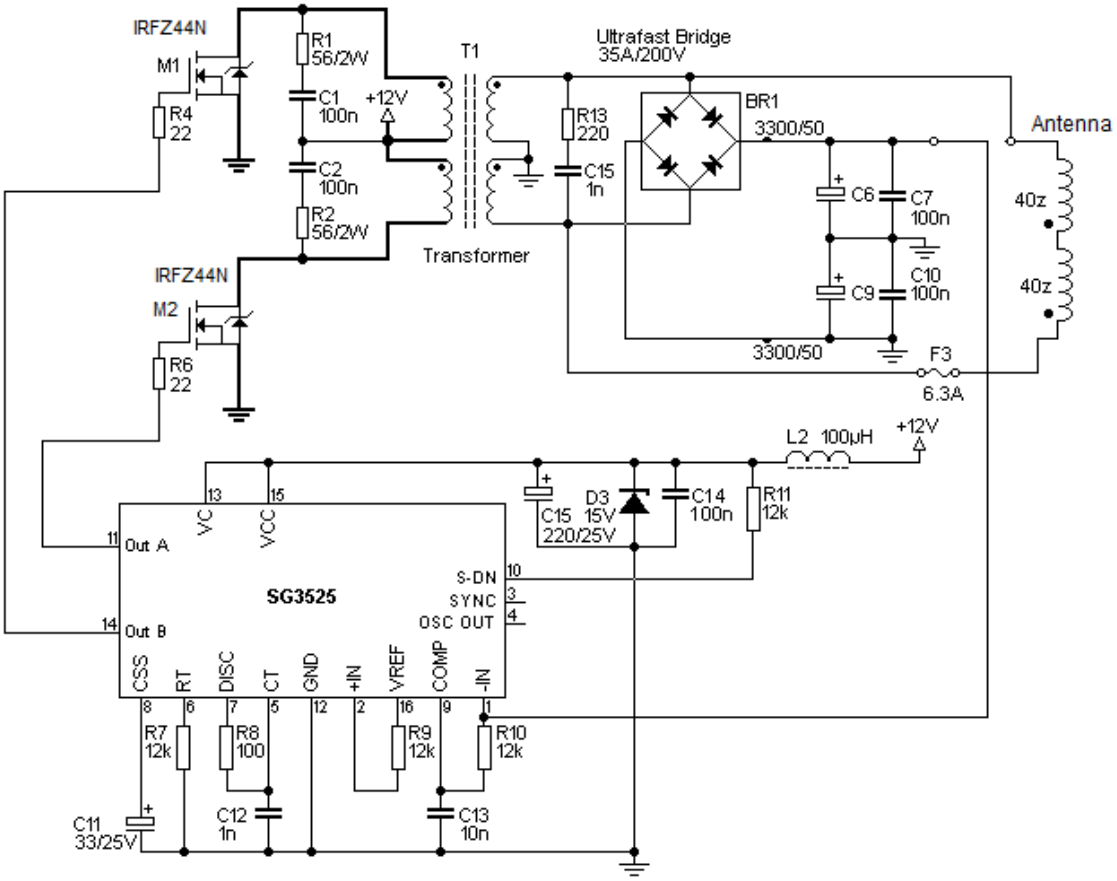


Fig 1.2 Transmitter Circuit Diagram

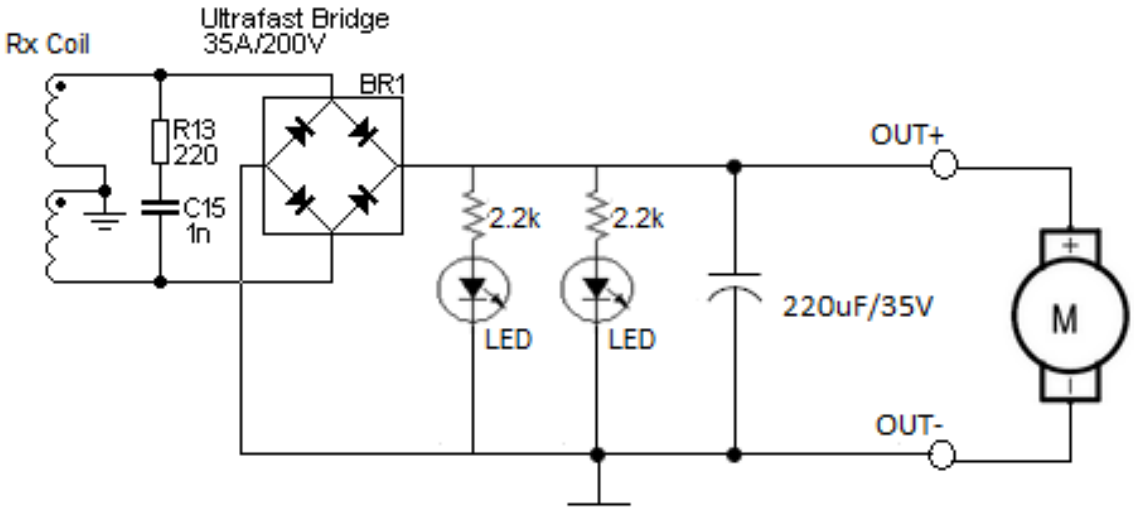


Fig 1.3 Circuit Diagram Receiver