CASP.ER_V03

	Hardware	
	Logic Board	
	Raspberry pi 2	Install the **CASP.ER Rasbian Install v0.3**
	Dimax USB WiFi	Attach ti USB port on Raspberry pi 2
	piCamera	Attach to camera port on Raspberry pi 2
	USB to USB Micro 2.0 Cable	Attach **USB** to DC converter and **Micro USB** to Raspberry pi 2 to power the Raspberry pi
	Tower Pro 9g 180degree Servo (X Axis)	Connect **RED** to 5V and **Brown** to GND on **Power Splitter Board** then Orange to the **D11** pin on the Arduino Uno
	Tower Pro 9g 180degree Servo(Y Axis)	Connect **RED** to 5V and **Brown** to GND on **Power Splitter Board** then Orange to the **D12** pin on the Arduino Uno
	MotorController	
	Arduino Uno	Install the **MotorController_V03.ino**
	Toro 18 Amp ESC (Electronic Speed Controller)	Connect the **White** Cable to the **D10** pin on the Arduino Uno then the **Black** to GND on the **Power Splitter Board**
	Tower Pro 9g 180degree Servo	Connect **RED** to 5V and **Brown** to GND on **Power Splitter Board** then Orange to the **D9** pin on the Arduino Uno
	Emax B2040-15 3600KV Brushless Inrunner Motor	Connect wires to the 3 Color Coded connectors on the **ESC** that are blue,yellow and orange.
	USB A-B 2.0 Cable	Attach **USB A** to Raspberry pi 2 and **USB B** to Arduino Uno to power the Arduino and establish a serial link
	LidarController	
	Arduino Nano	Install the **Lidar_Mounted_V_02.ino**
	Stepper Motor 28BYJ-48 + Driver board ULN2003	Connect To **Power Splitter Board** and Arduino Nano **D8**,**D9**,**D10**,**D11** pinns
	ELectrolytic Capasitor 1000uf	Connect Between Power Supply and Lidar
	Lidar Lite V2	Connect to the **electrolytic capacitor** and the **Power Splitter Board**, And the I2C to the Arduino Nano A4 (SDA) and A5 (SCL) pinns.
	USB to mini USB 2.0 Cable	Attach **USB** to Raspberry pi 2 and **mini USB** to Arduino nano to power the arduino and establish a serial link
	Power Distrubution	
	11.1V 1000mAh LiPo Battery	**B1** Connector
	0-12V -> 5V Dc Converter (2 USB out)	Connect the **RED** wire to the **RED** cap and the **BLACK** wire to the **BLACK** cap on the **Power Distribution Board**
	USB Cable (any)	Attach USB to DC converter, cut other connector and find the **RED**(5V+) and **BLACK**(GND) cables and connect them to the Power Splitter Board
	Power Splitter board	2 Lane PCB with one lane 5V and one GND
	Power Distribution Board (Hobby King Quadcopter Power Distribution Board)	Connect the **BLACK** wire to the **BLACK Battery Connector** underneath the RC car and the **RED** wire to the **Power Switch** on the RC car
	Chassit	
	RC car	Remove the initial plastic cover, Remove the Original Engine, Remove the Logic Board, Remove the Steering DC and gearbox. **Cut the Battery Connector** (Unless its a **B2** Connector) and replace it with a **B2** connector.