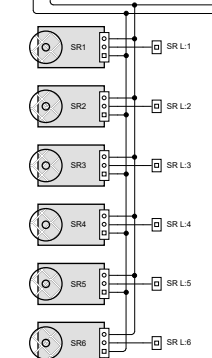
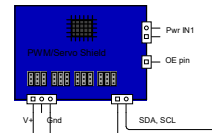


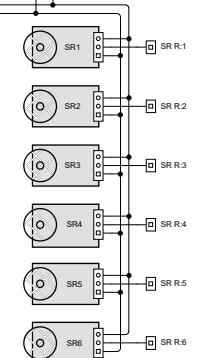
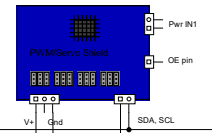
Adafruit 16-Channel 12-bit PWM/Servo Driver I2C interface (PCA9685)  
 SDA = Arduino pin 20 (SDA), Brown  
 SCL = Arduino pin 21 (SCL), Gray  
 OE = Output Enable Arduino pin 16, Blue

I2C address Left hand board: 0x41

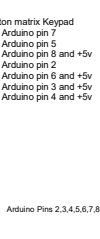


LEFT ARM  
 6 x Servo KS-3518  
 15kg torque, angle of 180 degree

I2C address Right hand board: 0x42

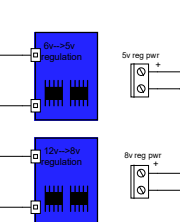


RIGHT ARM  
 6 x Servo KS-3518  
 Full Metal Digital Servo  
 15kg torque, angle of 180 degree

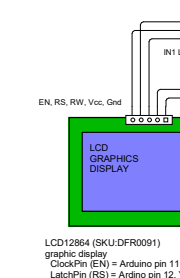


Keypad Pins 1, 2, 3, 4, 5, 6, 7

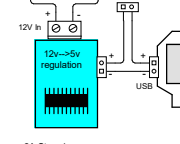
5v reg power:  
 - Eicom Pro  
 - Amplifier Speech loader  
 - Camera Y1 Dome  
 6v direct power:  
 - Siren, Servo Driver power (12 servos)



8v reg power:  
 - Arduino logi ja navi  
 Arduino 5v Out power:  
 - Sensors, Sound Detector, Real time Clock  
 - Pwm Servo Shield, FX Sound Board  
 - SD Card, LCD Display  
 - 4 and 8 relay card

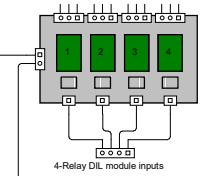


LCD12864 (SKU:DFR0091)  
 graphic display  
 ClockPin (EN) = Arduino pin 11, White  
 LatchPin (RS) = Arduino pin 12, Yellow  
 DataPin (RW) = Arduino pin 13, Orange

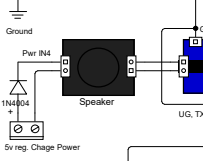
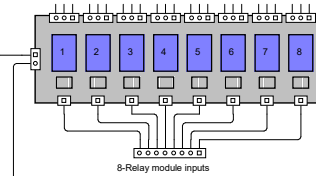


2 x Adafruit Hallwing modules for the eyes.  
 Processor ATSAM021G18 Cortex M0+  
 Including 2 x TFT ST7735 Graphic display  
 Vcc = 5.0V (micro usb)  
 Gnd = Gnd (micro usb)  
 Pin G = Gnd (G)  
 Pin 9 = Arduino pin A12, Yellow (bit4)  
 Pin 10 = Arduino pin A13, Blue (bit3)  
 Pin 11 = Arduino pin A14, Green (bit2)  
 Pin 12 = Arduino pin A15, Purple (bit1)

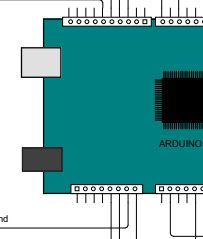
4-Relay DIL module inputs (Default 3xOff, 1xOn)  
 IN1 = LCD Graphic Display power On/Off Arduino pin 26, Violet (Default Off)  
 IN2 = <free> Arduino pin 27, Orange (Default Off)  
 IN3 = <free> Arduino pin 24, Blue (Default Off)  
 IN4 = <free> Arduino pin 25, Green (Default On)  
 Test Switch = On/Off Arduino pin 22, Yellow



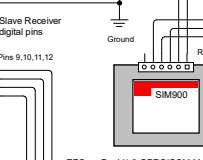
8-Relay module inputs (Default OFF)  
 IN1 = Servo Driver power On Arduino pin 30, White  
 IN2 = Front Laser Servo power On Arduino pin 31, Yellow  
 IN3 = Camera Xicomi Y1 1080p Dome power On Arduino pin 32, Violet  
 IN4 = Amplifier Speech loader power On Arduino pin 33, Light Violet  
 IN5 = Siren (6-14V 115dB) power On Arduino pin 34, Blue  
 IN6 = Navigation unit and sensor power On Arduino pin 35, Green  
 IN7 = Eye Module power On Arduino pin 36, Gray  
 IN8 = <free> Arduino pin 37, Orange



Eicom Pro V1.0 GPRS/GSM Module pins  
 Eicom TX = Arduino pin RX A10 (64), White  
 Eicom RX = Arduino pin TX A11 (65), Orange  
 Eicom PWR = Arduino pin 17, Brown



Slave Receiver digital pins  
 Pins 9, 10, 11, 12



Arduino Master Sender digital pins  
 Pins A12, A13, A14, A15

Sparkfun Sound Detector ISR Sensor variables:  
 Gate digital input pin = Arduino pin 9, Light Violet  
 Envelope analog input pin = Arduino pin A9, Red

Adafruit S77021 Temperature Humidity Sensor setup.  
 The I2C address is 0x40 and it can not be change.  
 SDA = Arduino pin 20 (SDA), Brown  
 SCL = Arduino pin 21 (SCL), Gray

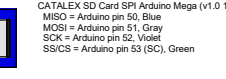
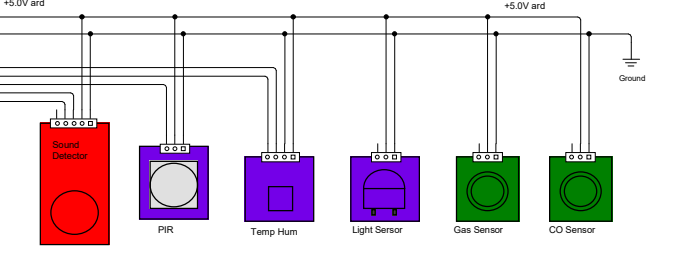
Analog Ambient Light Sensor V2.1  
 S = Arduino pin A6, Green

MQ-2 Gas Sensor  
 A0 = Arduino pin A7, Blue  
 D0 = Arduino pin 29, Violet

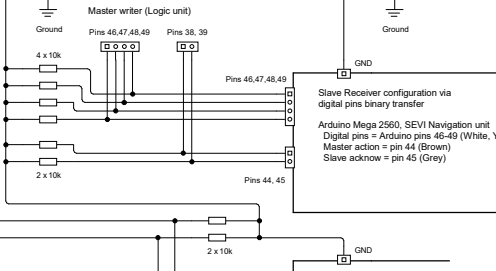
Adafruit Audio FX Sound Board WAV/OGG  
 Trigger with 16MB Flash (SFX):  
 Pin UG = FX Sound Board Pin GND  
 Pin TX = Arduino pin 18 (TX1), Violet  
 Pin RX = Arduino pin 19 (RX1), Orange  
 Pin RST = Arduino pin 23, Yellow

PIR motion sensor  
 Digital input = Arduino pin 10, Orange

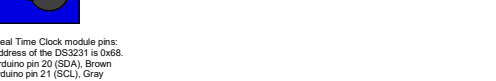
MQ-7 CO Sensor (Flying fish)  
 A0 = Arduino pin A8, White  
 D0 = Arduino pin 29, Yellow



CATALEX SD Card SPI Arduino Mega (v1.0 11/01/2013):  
 MISO = Arduino pin 50, Blue  
 MOSI = Arduino pin 51, Gray  
 SCK = Arduino pin 52, Violet  
 SS/CS = Arduino pin 53 (SC), Green



Slave Receiver configuration via digital pins binary transfer  
 Arduino Mega 2560, SEVI Navigation unit  
 Digital pins = Arduino pins 46-49 (White, Yellow, Green, Blue)  
 Master action = pin 44 (Brown)  
 Slave acknow = pin 46 (Grey)



ATmega328 Nano and Logic Unit voltage info pins:  
 ATmega D7 = Logic Unit In pin A4, White  
 ATmega D6 = Logic Unit Out pin A5, Yellow



DS3231 Real Time Clock module pins:  
 The I2C address of the DS3231 is 0x68  
 SDA = Arduino pin 20 (SDA), Brown  
 SCL = Arduino pin 21 (SCL), Gray