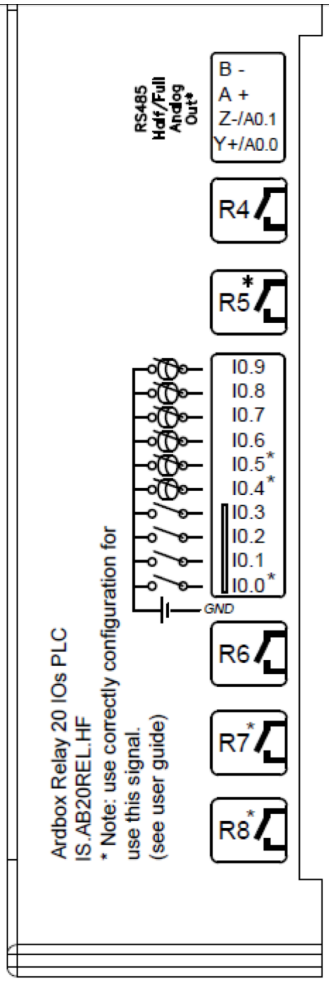
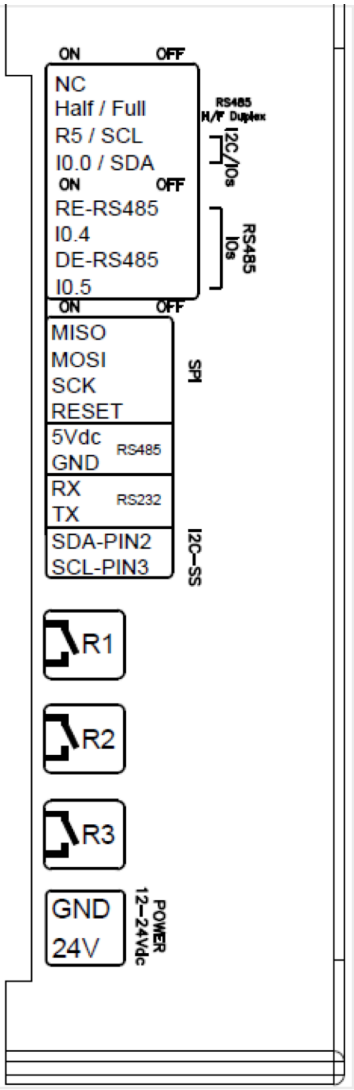
Ardbox Connector	*Arduino Pin RS-485 HD**	*Arduino Pin RS-485 FD**	Function
B-	-	-	RS485
A+	-	-	RS485
Z-/A0.1	*11*	-	RS485/Analog Output
Y+/A0.0	*13*	-	RS485/Analog Output
R4	*5*	5	*Relay 4 Out*
R5	*3*	*3*	*Relay 5 Out*
I0.9	*23*	*23*	Analog/Digital Input
I0.8	*22*	*22*	Analog/Digital Input
I0.7	*21*	*21*	Analog/Digital Input
I0.6	*20*	*20*	Analog/Digital Input
I0.5[1]	*19*	*19*	Analog/Digital Input
I0.4[1]	*18*	*18*	Analog/Digital Input
I0.3[2]	*8*	*8*	Digital Input
I0.2[2]	*4*	*4*	Digital Input
I0.1	*12*	*12*	Digital Input
I0.0[1]	*2*	*2*	Digital Input/ Interrupt
R6	*7*	*7*	Relay 6 Out
R7[1]	*0*	*0*	Relay 7 Out
R8[1]	*1*	*1*	Relay 8 Out



Base (common unit)			
LEFT ZONE			
Ardbox Connector	*Arduino Pin RS-232 HS**	*Arduino Pin RS-232 SS**	Function
MISO	*14*	14	SPI-MISO
MOSI	*16*	16	SPI-MOSI
SCK	*15*	15	SPI-CLOCK
RESET	-	-	SPI-RESET
5VdC	-	-	5V Output
GND	-	-	GND
RX-RS-232[1,2]	*0*	8	Serial/RS232
TX-RS-232[1,2]	*1*	4	Serial/RS232
SDA-PIN2[1]	*2*	2	I2C/SPI SS
SCL-PIN3[1]	*3*	3	I2C/SPI SS
R1	*10*	*10*	Relay 1 Out
R2	*9*	*9*	Relay 2 Out
R3	*6*	*6*	Relay 3 Out
GND	-	-	GND
24V	-	-	-



HS: Hardware Serial*

SS: Software Serial*

PORTS	PINS	WHAT IS IT	PROGRAM NAMES
R1	10	10V - BOTTOM VALVE - STORAGE ROOM	valveOneOut
R2	9	10V - UPRIGHT VALVE - STORAGE ROOM	valveTwoOut
R3	6	10V - UPRIGHT VALVE - CLEANING ROOM	valveThreeOut
R4	5	GREEN LED ONE	greenLightOne
R5	3	RED LED ONE	redLightOne

R6	7	GREEN LED TWO	greenLightTwo
R7	0	RED LED TWO	redLightTwo
R8	1		
A.0	13	FAN 1 - STORAGE ROOM	fanOne
A.1	11	FAN 2 - CLEANING ROOM	fanTwo
IO.0	2		
IO.1	12		
IO.2	4		
IO.3	8	VALVE THREE INPUT	valveThreeIn
IO.4	18	VALVE TWO INPUT	valveTwoIn
IO.5	19	VALVE ONE INPUT	valveOneIn
IO.6	20	RED BUTTON TWO	redButtonTwo
IO.7	21	GREEN BUTTON TWO	greenButtonTwo
IO.8	22	RED BUTTON ONE	redButtonOne
IO.9	23	GREEN BUTTON ONE	greenButtonOne

Void	WHAT IT NEEDS TO DO
greenButtonOptionOne	If ether of green buttons are pressed -> both green lights to flash 1 time then stay on -> fan 1 and fan 2 to got to fanSpeedOne for 4h and then off for 20h looping forever — valve 1 = closed, valve 2 = open, valve 3 = closed

greenButtonOptionTwo	If ether of green buttons are pressed and held for 5seconds -> both green lights to flash 2 time then stay on -> fan 1 and fan 2 to got to fanSpeedOne for 2h and then off for 10h looping forever — valve 1 = closed, valve 2 = open, valve 3 = closed
redButton	If ether of red buttons are pressed -> fan to go to fanSpeedTwo for 1 min with both red lights flashing on and off for 1 minute -> both fans stop and light stays red — valve 1 = closed, valve 2 = open, valve 3 = closed
serviceMode	If both red and green buttons are pressed on ether of the stations — valve 1 = open, valve 2 = open, valve 3 = open both fans off red and green lights flashing on and off till ether of red buttons are pressed for 5 seconds
fanSpeedOne	Both fans @20% 0-10v signal
fanSpeedTwo	Both fans @5% 0-10v signal
Error	If any of the valves don’t open flash red on and off