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Anima

Sierra

Winnie

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Interface Table

Interface	Type	Properties
pet_input	User Input (usrin)	Pet movement detected within 3ft and 120 degrees of the sensor
user_input	User Input (usrin)	User input on buttons. Button presses List of Buttons: ● Lock/Unlock (for manual) ● Up ● Down ● Cancel ● Enter
switch_input	User Input (usrin)	Input on door for mode (manual or automatic)
power_input	DC Power (dcpwr):	Vmax - 9V Vmin - 4.8V Inominal - 25mA Ipeak - 1A (if more than that, it will damage the arduino)
pet_detection	Digital Signal (dsig)	High (3.3V) - Pet detected Low (0V) - Pet not detected
User_settings	Analog Signal (asig)	(4.9 mV per unit) Sw1 - Vmin: 925 (4.52 V) Sw1 - Vmax: 935 (4.57 V) Sw2 - Vmin: 835 (4.08 V) Sw2 - Vmax: 845 (4.13 V Sw3 - Vmin: 765 (3.74 V) Sw3 - Vmax: 775 (3.79 V) Sw4 - Vmin: 695 (3.40 V) Sw4 - Vmax: 705 (3.45 V) Sw5 - Vmin: 650 (3.18 V) Sw5 - Vmax: 660 (3.23 V) Sw6 - Vmin: 1000 (4.89 V) Sw6 - Vmax: 1023 (5.00 V)
man/auto_setting	Digital Signal (dsig)	On - automatic Off - manual (4.9 mV per unit) Off - Sw6 - Vmin: 1000 (4.89 V) Off - Sw6 - Vmax: 1023 (5.00 V)
curr_time	Data (Code)	Current time passed as integer 0000 to 2359

open_time	Data (Code)	Int value (5-20) How long door should remain open in seconds
lock_set	Data (Code)	Bool: 1: set 0: not set
past_open	Data (Code)	Past time/date of opening times Stored on SD card Stored whether it is a lock/unlock time (1 = lock, 0 = unlock)
save_time	Data (Code)	Int: tells Clock whether or not it should save the current time 1: save time 0: do not save time
door_open	Dynamic Mechanical Connection (mech)/Digital Signal	Digital Signal - Sends signal of different length to tell servo what degree to turn to Turns -90 to 90 degrees PWM input
door_lock	Dynamic Mechanical Connection (mech)/Digital Signal	Digital Signal - Sends of different length to tell servo what degree to turn to Turns -90 to 90 degrees PWM input
display_out	Digital Signal (dsig)	Bits for display pins (I2C) Baud rate: 9600 Voltage: 5V
view_screen	User Output (usrout)	User views screen, settings/previous times opened
pcb_power	DC Power (dcpwr):	Vmin - 5V Vmax - 4.8V Inominal - 20mA Ipeak - 0.8 (peak draw from arduino)