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NOTE:  
"Standard tab" (eg, extra-Institute) git.isis.v.e accounts currently require approval after registration. Please contact ISIS IT if needed.  
Those with ISIS credentials should authenticate with via the "ISIS" tab.

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Last edited by  Brian Swenson 7 months ago

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## UAM Component Information

This page should cover some frequently asked questions regarding the UAM corpus components.

### What are the correct Prop\_type/Direction for a downward/upward/front/back facing prop?

- Upward and Forward:
  - 1/1 or -1/-1
- Downward and back facing: (this assumes that you want a downward facing motor to give upward thrust and a back facing prop to give forward thrust)
  - 1/1 or 1/-1

This table outlines all the connections that can be made with the current corpus

Component	Connector	Available connections
Propeller	MOTOR_CONNECTOR_CS_IN	Motor - Prop_Connector
Motor	Prop_Connector	Propeller – MOTOR_CONNECTOR_CS_IN
Motor	Base_Connector	Fuselage – left, right, top, bottom or rear_connector
		Cylinder - left, right, top, bottom or rear_connector
		Beam – TOP_CONNECTOR_IN, BOTTOM_CONNECTOR_OUT
		Cyl_Flip – rear, front_connector
Motor	MotorPower	BatteryController - MotorPower
Fuselage	Top, Bottom, Left, Right_Connector	Wing – Connector_1, Connector_2
		Cylinder – Front_Connector
		Beam – END_CONNECTOR_1_OUT, END_CONNECTOR_2_OUT
		Motor – BaseConnector
		NACA_connector – bottom_connector
		Cyl_Flip_Out – Flip_Connector_1, Flip_Connector_2
Fuselage	Rear_Connector	Cylinder – Cylinder - front_connector
		Beam – END_CONNECTOR_1_OUT, END_CONNECTOR_2_OUT
		Motor – BaseConnector
Fuselage	Seat_1_Connector, Seat_2_Connector	Passenger - Connector
Wing	Connector_1	Naca_Connector – End_Connection_1,  (can connect to End_Connection_2, but the wing will be upside-down)
		Fuselage – left_connector,  (can connect to right_connector, but the wing will be upside-down)
		Cylinder – left_connector, can connect to the other side ports but the wing may be flipped.
Wing	Connector_2	Naca_Connector – End_Connection_2,  (can connect to End_Connection_1, but the wing will be upside-down)
		Fuselage – right_connector,  (can connect to left_connector, but the wing will be upside-down)
		Cylinder – right_connector, can connect to the other side ports but the wing may be flipped.
Cylinder	Front_connector	Fuselage – left, right, top, bottom or rear_connector
		Cylinder - left, right, top, bottom or rear_connector
		Beam – TOP_CONNECTOR_IN, BOTTOM_CONNECTOR_OUT
		Cyl_Flip – rear, front_connector
Cylinder	Rear_Connector	Cylinder – Front_connector
		Motor - BaseConnector
Cylinder	Top, bottom, right, left_connector	Wing – Connector_1, Connector_2
		Cylinder – Front_Connector
		Beam – END_CONNECTOR_1_OUT, END_CONNECTOR_2_OUT
		Motor – BaseConnector
		NACA_connector – bottom_connector
		Cyl_Flip_Out – Flip_Connector_1, Flip_Connector_2
Beam	END_CONNECTOR_1 and 2	Fuselage – left, right, top, bottom or rear_connector
		Cylinder - left, right, top, bottom or rear_connector
		Beam – TOP_CONNECTOR_IN, BOTTOM_CONNECTOR_OUT
		Cyl_Flip – rear, front_connector
Beam	TOP_CONNECTOR_IN & BOTTOM_CONNECTOR_OUT	Wing – Connector_1, Connector_2
		Cylinder – Front_Connector
		Beam – END_CONNECTOR_1_OUT, END_CONNECTOR_2_OUT
		Motor – BaseConnector
		NACA_connector – bottom_connector
Naca_2_Port	Bottom_connector	Fuselage – left, right, top, bottom or rear_connector
		Cylinder - left, right, top, bottom or rear_connector
		Beam – TOP_CONNECTOR_IN, BOTTOM_CONNECTOR_OUT
		Cyl_Flip – rear, front_connector
Naca_2_Port	End_Connection_1	Wing - Connector_1, can be connected to connector_2 but will flip
		Beam – END_CONNECTOR_1_OUT, END_CONNECTOR_2_OUT will flip
Naca_2_Port	End_Connection_2	Wing - Connector_2, can be connected to connector_1 but will flip
		Beam – END_CONNECTOR_2_OUT, END_CONNECTOR_1_OUT will flip
WingBattery	Battery_Connector_1_Out	Wing – Battery_Connector_1
WingBattery	Battery_Connector_2_Out	Wing – Battery_Connector_2
WingBattery	PowerBus	BatteryController – BatteryPower

Clone repository

Component and Design Authoring to Graph

Geometric Parameters for Component Types

UAM Component Information

UAV Component Information

UAV Component Parameters

corpus

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