# Standards Messages Sent

Format: **Sender**|**Receiver**|**Action**|**Data**

Note: Omit white spaces/other forms of delimiters

**Command Enum (0-10) in order**

FORWARD, TURN\_LEFT, TURN\_RIGHT, BACKWARD, ALIGN\_FRONT, ALIGN\_RIGHT, SEND\_SENSORS, ERROR, STARTEXP, ENDEXP, STARTFAST, ENDFAST, STOP, ROBOT\_POS;

**Direction Enum:**

UP, LEFT, DOWN, RIGHT;

**Algo to Android Messages**

1. Alg|And|MD1|Data (hex)
2. Alg|And|MD2|Data (hex)

Movement Commands (refer to enum for exact Command)

1. Alg|And|0|{1-10} (Steps)
2. Alg|And|1|
3. Alg|And|2|
4. Alg|And|3|{1-10} (Steps)
5. Alg|And|4|

Status Commands

1. Alg|And|{6-10}|

Update Robot

1. Alg|And|11|{0-19}(row),{0-14}(col)

**Android to Algo Messages**

Status Commands

1. And|Alg|{6,7,8,9}|

Update Robot

1. Alg|And|11|{0-19}(row),{0-14}(col)

**Android to Arduino Messages**

Movement Commands (manual remote control navigation via Android controller)

1. And|Ard|0|
2. And|Ard|1|
3. And|Ard|2|
4. And|Ard|3|

**Algo to Arduino Messages**

Movement Commands (refer to enum for exact Command)

1. Alg|Ard|0|{1-9} (Steps)] //Forward
2. Alg|Ard|1|{1-3} (Rotate)] //Left
3. Alg|Ard|2|{1-3} (Rotate)] //Right
4. Alg|Ard|3|{1-9} (Steps)] //Back
5. Alg|Ard|4|0] //Align Front
6. Alg|Ard|5|0] //Align Right
7. Alg|Ard|6|0] //Send Sensor

**Arduino to Algo Messages**

Sensor Data (refer to enum for exact Command)

1. Ard|Alg|Sensor|1:Data,2:Data,3:Data,4:Data … (First number corresponds to sensor number)