

## MSL RefBox list of Commands send to Base Stations.

**NOTE:** All Json messages are terminated with char NUL ('\0')

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**// START command. Target are both teams**

```
{  
  "command": "START",  
  "targetTeam": ""  
}
```

**// STOP command. Target are both teams**

```
{  
  "command": "STOP",  
  "targetTeam": ""  
}
```

**// Drop Ball command. Target are both teams**

```
{  
  "command": "DROP_BALL",  
  "targetTeam": ""  
}
```

**// Half Time command. Target are both teams**

```
{  
  "command": "HALF_TIME",  
  "targetTeam": ""  
}
```

**// Park command. Target are both teams**

```
{  
  "command": "PARK",  
  "targetTeam": ""  
}
```

**// First Half command. Indicates beginning of first half time. Target are both teams**

```
{  
  "command": "FIRST_HALF",  
  "targetTeam": ""  
}
```

**// Second Half command. Indicates beginning of second half time. Target are both teams**

```
{  
  "command": "SECOND_HALF",  
  "targetTeam": ""  
}
```

**// First Half Overtime command. Indicates beginning of first half of overtime. Target are both teams**

```
{  
  "command": "FIRST_HALF_OVERTIME",  
  "targetTeam": ""  
}
```

```

// Second Half Overtime command. Indicates beginning of second half of overtime. Target are both teams
{
  "command": "SECOND_HALF_OVERTIME",
  "targetTeam": ""
}

// RESET message. Indicates RefBox has been reset. Target are both teams
{
  "command": "RESET",
  "targetTeam": ""
}

// Welcome message send to a basestation once the team has connected
{
  "command": " WELCOME",
  "targetTeam": "224.16.32.0"
}

// Kick Off command. Team that has the Kick Off is identified by IP
{
  "command": "KICKOFF",
  "targetTeam": "224.16.32.0"
}

// Free Kick command. Team that has the Free Kick is identified by IP
{
  "command": "FREEKICK",
  "targetTeam": "224.16.32.0"
}

// Goal Kick command. Team that has the Goal Kick is identified by IP
{
  "command": "GOALKICK",
  "targetTeam": "224.16.32.0"
}

// Throw In command. Team that has the Throw In is identified by IP
{
  "command": "THROWIN",
  "targetTeam": "224.16.32.0"
}

// Corner Kick command. Team that has the Corner Kick is identified by IP
{
  "command": "CORNER",
  "targetTeam": "224.16.32.0:1"
}

// Penalty command. Team that has the Penalty Kick In is identified by IP
{
  "command": "PENALTY",
  "targetTeam": "224.16.32.0:1"
}

```

**// Add Goal command. Team that has the Goal In is identified by IP**

```
{  
  "command": "GOAL",  
  "targetTeam": "224.16.32.0:1"  
}
```

**// Subtract Goal command. Team that has the Goal withdrawn is identified by IP**

```
{  
  "command": "SUBGOAL",  
  "targetTeam": "224.16.32.0:1"  
}
```

**// Repair message. Team that has removed robot(s) In is identified by IP**

```
{  
  "command": "REPAIR",  
  "targetTeam": "224.16.32.0:1"  
}
```

**// Yellow Card message. Team that received Yellow Card is identified by IP**

```
{  
  "command": "YELLOW_CARD",  
  "targetTeam": "224.16.32.0:1"  
}
```

**// Second Yellow Card message. Team that received Second Yellow Card is identified by IP**

```
{  
  "command": "DOUBLE_YELLOW",  
  "targetTeam": "224.16.32.0:1"  
}
```

**// Red Card message. Team that received Red Card is identified by IP**

```
{  
  "command": "RED_CARD",  
  "targetTeam": "224.16.32.0:1"  
}
```

**// Substitution command. Team that requested substitution is identified by IP. Robot that has to get out of the field  
// is identified by number [1..99]**

```
{  
  "robotID": 3,  
  "command": "SUBSTITUTION",  
  "targetTeam": "224.16.32.0:1"  
}
```

**// Is Alive command. Team that has to prove Alive situation is identified by IP. Robot that has to show that is  
// alive is identified by number [1..99] (under development)**

```
{  
  "robotID": 3,  
  "command": "IS_ALIVE",  
  "targetTeam": "224.16.32.0:1"  
}
```