

## 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": ""  
}
```

**// End Game command. Target are both teams**

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

**// Game Over command. Target are both teams. After this command only RESET can be issued**

```
{  
  "command": "GAME_OVER",  
  "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"  
}
```

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