Radar unit interface specification

**v1.1**

# Revision history

|  |  |  |
| --- | --- | --- |
| Date | Version | Description |
| 2015.10.04 | 1.0 | Setup document |
| 2015.10.07 | 1.1 | Data type and range review |

# World-Radar requirements

## Method name: GetObjcetsByTriangle

Parameters:

|  |  |  |  |
| --- | --- | --- | --- |
| Property name | Type | Range | Description |
| PositionA | Pair<Integer,Integer> | - | K:= x; V:=y |
| PositionB | Pair<Integer,Integer> | - | K:= x; V:=y |
| PositionC | Pair<Integer,Integer> | - | K:= x; V:=y |

Return set (List of):

|  |  |  |  |
| --- | --- | --- | --- |
| Property name | Type | Range | Description |
| Id | int | - | Identify the object |
| PositionX | Pair<Integer,Integer> | - | K:= x; V:=y |
| PositionY | Pair<Integer,Integer> | - | K:= x; V:=y |
| ObjectType | int | - | See the values below ([5](#_ObjectType_values:)) |

Other requirements:

Id value must be the same on each query per object!

## Method name: GetOwnCarPosition

Return:

|  |  |  |  |
| --- | --- | --- | --- |
| Property name | Type | Range | Description |
| CarPosition | Pair<Integer,Integer> | - | K:= x; V:=y |

# Radar-Bus requirements

## Method name: SetRadarDetectedObjects

Parameters:

|  |  |  |  |
| --- | --- | --- | --- |
| Property name | Type | Range | Description |
| PositionX | Integer | Range of Integer |  |
| PositionY | Integer | Range of Integer |  |
| RelativeSpeed | Integer | -150 to 150 | Actual speed from wheels (km/h) |

# Radar-Wheel requirements

## Method name: GetCurrentSpeed

Parameters:

|  |  |  |  |
| --- | --- | --- | --- |
| Property name | Type | Range | Description |
| CarSpeed | Integer | 0-150 | Actual speed from wheels (km/h) |

# ObjectType values:

Provided by the World team.