To contain the haptics working volume, scenes must have:

<IMPORT inlineDEF='H3D\_EXPORTS' exportedDEF='HDEV' AS='HDEV'/>

then elements must be enabled by switching auto-reporting on:

/VESC/HDEV/mainButton/setAutoReport 1

|  |  |  |  |
| --- | --- | --- | --- |
| buttons | SFInt32 | OUTPUT\_ONLY |  |
| deviceOrientation | SFRotation | OUTPUT\_ONLY |  |
| devicePosition | SFVec3f | OUTPUT\_ONLY |  |
| deviceVelocity | SFVec3f | OUTPUT\_ONLY |  |
| enabled | SFBool | OUTPUT\_ONLY |  |
| followViewpoint | SFBool | INPUT\_OUTPUT |  |
| force | SFVec3f | OUTPUT\_ONLY |  |
| forceLimit | SFFloat | INPUT\_OUTPUT |  |
| hapticsLoopTime | SFTime | OUTPUT\_ONLY |  |
| hapticsRate | SFInt32 | OUTPUT\_ONLY |  |
| initialized | SFBool | OUTPUT\_ONLY |  |
| inputDOF | SFInt32 | OUTPUT\_ONLY |  |
| mainButton | SFBool | OUTPUT\_ONLY |  |
| orientationCalibration | SFRotation | INPUT\_OUTPUT |  |
| outputDOF | SFInt32 | OUTPUT\_ONLY |  |
| positionCalibration | SFMatrix4f | INPUT\_OUTPUT |  |
| proxyPosition | SFVec3f | OUTPUT\_ONLY |  |
| proxyPositions | MFVec3f | INPUT\_OUTPUT |  |
| proxyWeighting | SFFloat | INPUT\_OUTPUT |  |
| secondaryButton | SFBool | OUTPUT\_ONLY |  |
| set\_enabled | SFBool | INPUT\_ONLY |  |
| torque | SFVec3f | OUTPUT\_ONLY |  |
| torqueLimit | SFFloat | INPUT\_OUTPUT |  |
| trackerOrientation | SFRotation | OUTPUT\_ONLY |  |
| trackerPosition | SFVec3f | OUTPUT\_ONLY |  |
| trackerVelocity | SFVec3f | OUTPUT\_ONLY |  |
| weightedProxyPosition | SFVec3f | OUTPUT\_ONLY |  |

INPUT\_OUTPUT are:

* followViewpoint
* forceLimit
* orientationCalibration
* positionCalibration
* proxyPositions
* proxyWeighting
* torqueLimit

INPUT\_ONLY are:

* set\_enabled

OUTPUT\_ONLY are:

* buttons
* deviceOrientation
* devicePosition
* deviceVelocity
* force
* hapticsLoopTime
* hapticsRate
* initialized
* inputDOF
* mainButton
* outputDOF
* proxyPosition
* secondaryButton
* torque
* trackerOrientation
* trackerPosition
* trackerVelocity
* weightedProxyPosition