

# Use our 3D visualizer with your own software with MEVP.dll and our Intelligent Dmx Interface

## Overview

Our MEVP.dll is a 32 bit Windows DLL (Dynamic Link Library). and works on Windows ME, 2000 and XP. It has been tested on Visual C++.

## Files

The required files are :

- MEVP.h
- MEVP.dll

## Functions prototypes

The MEVP.dll contains four functions :

- **int** DasMevStart(**char\*** sController, **char\*** sPassWrd)

Start the 3D visualizer and open shared memory.

Parameters:

**sController**                      Your software's name

**sPassWrd**                        Your password

Return value:

1 if succeeds, 0 if failed

- **int** DasMevCommand(**int** iType, **int** iParam)

The first parameter **<iType>** defines the thing to do :

<i>iType</i>	<i>explanation</i>	<i>iParam</i>	<i>return value</i>
MEVP_CLOSE_VISUALIZER	Close the 3D visualizer	not used	1 if the function succeeds,0 if the function failed
MEVP_SET_LANGUAGE	Set the language	Specifies the language to set	1 if the function succeeds,0 if the function failed
MEVP_READ_PATCH	Specifies to the 3D visualizer that It has to write its fixture's patch	not used	The number of fixtures written if the function succeeds,0 if the function failed

- **int** DasMevWriteDmx(**int** iUniverse, **BYTE\*** DmxArray)

Write a DMX universe to the shared memory.

Parameters:

<b>iUniverse</b>	Index of the universe to write (must be < MEVP_NB_UNIVERSES)
<b>DmxArray</b>	DMX data array (length = MEVP_DMX_MAX_CHANNEL)

Return value:

1 if succeeds, 0 if failed

- **int** DasMevGetFixtureParam(**int** iIndex, **int\*** iDmxAddress, **int\*** iDmxUniverse, **int\*** iNbChannels, **char\*** sName, **float\*** fPosX, **float\*** fPosY, **float\*** fPosZ, **float\*** fRotX, **float\*** fRotY, **float\*** fRotZ)

Get the fixture's patch parameters.

Must be called after DasMevCommand(MEVP\_READ\_PATCH, 0) to inform the 3D visualizer that It has to write its fixture's patch.

Parameters:

<b>iIndex</b>	Index of the fixture to read
<b>iDmxAddress</b>	DMX address of the fixture
<b>DmxUniverse</b>	DMX universe of the fixture
<b>iNbChannels</b>	Number of DMX channels used by the fixture
<b>sName</b>	Name of the fixture
<b>fPosX</b>	X axis coordinate of the fixture
<b>fPosY</b>	Y axis coordinate of the fixture
<b>fPosZ</b>	Z axis coordinate of the fixture
<b>fRotX</b>	X axis rotation of the fixture
<b>fRotY</b>	Y axis rotation of the fixture
<b>RotZ</b>	Z axis rotation of the fixture

Return value:

1 if succeeds, 0 if failed

- **int** DasMevGetVersion(**void**)

Returns the DLL version.

## Exemple of code using our DLL - C++ style

### *Write 1st DMX universe on shared memory:*

```
BYTE ucDmxArray[512];

/* Fill the DMX buffer */

DasMevWriteDmx(0, ucDmxArray);
```

### *Get fixture's parameters of the 3D visualizer:*

```
int iDmxAddress, iDmxUniverse, iNbChannels;
float fPosX, fPosY, fPosZ, fRotX, fRotY, fRotZ;
char sName[MEVP_MAX_STR_LEN];

int iNbFixt = DasMevCommand(MEVP_READ_PATCH, 0);

if (iNbFixt > 0)
{
    for (int i=0; i<iNbFixt; i++)
    {
        if (DasMevGetFixtureParam(i, &iDmxAddress, &iDmxUniverse,
                                   &iNbChannels, sName,
                                   &fPosX, &fPosY, &fPosZ,
                                   &fRotX, &fRotY, &fRotZ))
        {
            /* You can use fixture's parameters */
        }
    }
}
```

Please report any problems to [marc@nicolaudie.com](mailto:marc@nicolaudie.com)