

Guide to  
The Museum

v0.2

Written by  
Klaus Breuer (sz0759@rzmail.uni-erlangen.de)

- 1 \*Introduction\*
- 2 [How to use this guide]
  - 2.1 \*Tutorial\*
  - 2.2 [Reference]
- 3 [Entrance]
- 4 [The Main Hall]
  - 4.1 \*Domed roof\*
  - 4.2 [Open roof]
  - 4.3 [Pedestal]
  - 4.4 [Windows]
- 5 [Hallways]
  - 5.1 \*Phone Booth\*
  - 5.2 \*Staircase\*
  - 5.3 \*Bridge\*
  - 5.4 \*Cameras\*
  - 5.5 \*Blastable wall (user control)\*
- 6 \*The Machine Room\*
  - 6.1 \*Demo Camera\*
  - 6.2 \*Gears\*
  - 6.3 \*Mirror\*
  - 6.4 \*Conveyor belt\*
  - 6.5 \*The machine\*
  - 6.6 \*The grappler\*
  - 6.7 \*Water drops\*
  - 6.8 \*Pool\*
  - 6.9 \*Sliding door\*
  - 6.10 \*Bad Mirror\*
  - 6.11 \*Light switch\*
  - 6.12 \*Blastable wall (touchpad)\*
  - 6.13 \*Spawning dancers\*
- 7 The Doors
  - 7.1 Swinging (hinged) doors
    - 7.1.1 \*Double swinging door\*
    - 7.1.2 \*Low swinging door\*
    - 7.1.3 \*Center-axis rotating door\*
    - 7.1.4 \*Splitting rotating wall\*
    - 7.1.5 \*Switch-activated cupboard\*
    - 7.1.6 \*Rotating bed\*
  - 7.2 \*DOOM-type doors\*
    - 7.2.1 \*Once-only\*
    - 7.2.2 \*Defect door\*
    - 7.2.3 \*Growing door\*
    - 7.2.4 \*Switch-activated door\*
    - 7.2.5 \*Horizontally split door\*
  - 7.3 \*Other doors\*
    - 7.3.1 \*Star Trek door\*
    - 7.3.2 \*Four-way door\*
    - 7.3.3 \*Curtains\*
- 8 \*The firing range\*
- 9 \*The space room\*
- 10 \*The light room\*

- 10.1 \*Pulsing lights\*
- 10.2 \*Teleporters\*
- 11 \*The ledge room\*
- 11.1 \*Air vents\*
- 11.2 \*Open elevator\*
- 12 \*The quake room\*
- 13 \*Conclusion\*

## 1 \*Introduction\*

This is a very short and rough guide to the museum, the training MAP file included with The UnOfficial Duke Nukem Editing FAQ.

Note that this map is not really meant to be played - it's part II of the FAQ, demonstrating all the how-tos.

The Museum is far from finished - I haven't yet put all the info from the FAQ into it. Heck, the place isn't even shaded yet...

I also plan to number all the features so you can find them more easily.

## 2 [How to use this guide]

This guide is meant to be printed out and kept handy when touring The Museum.

You can either use this as a tutorial or as a reference:

### 2.1 \*Tutorial\*

Assuming you've finished the tutorial in the FAQ, you might be interested in reading through this guide here, walking through The Museum in the game (DUKE3D -MAP MUSEUM.MAP) and then looking through the guide again, this time walking through The Museum in BUILD or Duke3D.

This text only explains what each feature is, it doesn't explain how it was build - that's what part I of the FAQ is for...

### 2.2 [Reference]

Just go straight to the part that interests you and see how it works and how it was done.

## 3 [Entrance]

When this thing is finished, you will start in front of the entrance to The Museum. As it is, you're warping straight into the Main Hall.

## 4 [The Main Hall]

The main hall is the hub of The Museum.

#### 4.1 \*Domed roof\*

The roof is domed: the hall consists of several sectors, which have all been tilted towards the middle, creating a dome-like effect.

Note how the underside of the supporting struts are shaded darker, creating a much better 3D effect.

#### 4.2 [Open roof]

Irritatingly, I haven't found a way to place glass on the roof (especially a tilted one), and so the roof is open to the sky: I just parallaxed the roof of the relevant sectors.

#### 4.3 [Pedestal]

The pedestal in the middle was created by simply raising the floor of the middle panel making up the hall.

On top of the pedestal is a cube (another sector with a raised floor), demonstrating five different ways to end the map:

- \* The smaller red button is the standard 'end level button'
- \* The bigger red button is actually a texture instead of a sprite, but also works as a level end button.
- \* The Green button is the 'secret level' button, in this case bringing you to level 1.
- \* The blue button has just a different palette, and takes you to level 8 (the user level), effectively restarting the museum.
- \* Jumping on top of the pedestal will also end the level (sector is flagged as end-level).

#### 4.4 [Windows]

The main hall has three large windows. Have a look at them: the glass is actually inside the wall. To do this, the window sector has to be split length-wise. Since the window is angled, each window consists of six sectors.

Feel free to shoot the glass :)

### 5 [Hallways]

The hall is connected to the exhibits via three hallways, one of them with an angled roof (it consists of several sectors to create the 'arched roof' effect).

#### 5.1 \*Phone Booth\*

In the south hallway, you can find a telephone, which buzzes if

you try to activate it.

## 5.2 \*Staircase\*

Next to it is a staircase: just a series of sectors with different floor heights. I used [.] to align the textures of the step walls.

## 5.3 \*Bridge\*

At the end of the steps is the bridge. It's a true 3D bridge, meaning you can walk beneath and above it. Of course, it is made up of sprites and can be shot down using explosive weapons.

The railing also simply consists of flat sprites.

## 5.4 \*Cameras\*

You'll have noticed the two cameras. One of them is stationary, the other one rotates. Also have a look how the cameras are actually held in place: the stationary one is affixed to the wall via another sprite, the rotating one hangs straight from the ceiling.

Both cameras are hooked up to the security screen in the corner. It is protected by a harmless force field, and thus can't be shot.

The damaged screen next to it is just decoration.

## 5.5 \*Blastable wall (user control)\*

The wall at the very end of the southern hallway can be blasted open by shooting the fire extinguisher.

This allows you to enter:

## 6 \*The Machine Room\*

The machine room contains several objects of interest.

### 6.1 \*Demo Camera\*

The Sector Effector hanging in the air off to your left is the demo camera. Try running The Museum with 'Demo Recording' set to ON, and you'll see it floating there.

### 6.2 \*Gears\*

Off to the left are some permanently rotating gears. Compare the ceiling and floor textures of the rotating sector: the top one doesn't have the 'relative' bit set and thus looks wrong.

You can step onto the gears.

### 6.3 \*Mirror\*

The dark mess off on the far left wall is actually a mirror, demonstrating the out-of-range syndrome: a mirror will only activate from a certain distance onwards. Try walking towards it - it will suddenly activate.

#### 6.4 \*Conveyor belt\*

In the middle of the room you can see some objects patiently moving along a circular conveyor belt.

The objects are worthy of note: the two trashcans can be shot and will spawn an object. See how the spawned objects are much smaller than the originals? The default sprite size (used for the original cans) is much too big...

#### 6.5 \*The machine\*

The machine itself is nothing but a tunnel with a noise effector in it.

#### 6.6 \*The grapppler\*

The grapppler moves all objects from the finishing spot of the conveyor belt (striped black and yellow) across the water to the beginning of the belt again.

Two things are of interest here:

- \* The grapppler has been placed into a raised part of the roof - it looks a lot better that way.
- \* The grapppler has a strange and slightly unrealistic way of grabbing the objects. I don't know if there's any way around it.

#### 6.7 \*Water drops\*

On the roof next to the grapppler is a water-drop generator. Such things can do wonders for the feeling of your level.

#### 6.8 \*Pool\*

You can jump into the water underneath the grapppler to see the underwater mirror (just a plain mirror, but it's fun to see yourself swimming) and an air-bubble generator.

#### 6.9 \*Sliding door\*

Next to the machine is a sliding door, leading into The Bad Mirror Room.

#### 6.10 \*Bad Mirror\*

In here you can see what happens if you make the mirror sector too small. Try correcting this problem in The Museum yourself - it's real easy, :)

#### 6.11 \*Light switch\*

Also to be found in here is a light switch, turning on the floor lamp. Have a look at it.

Many people take such light shading to extremes, adding a light gradient on the edge of the light sector as well. Lots of work but well worth it.

#### 6.12 \*Blastable wall (touchpad)\*

Back in the machine room, step onto the red touchplate pointing at the wall with the offset texture and see the whole wall disappear cleanly, opening the way into the Armed Dancer Room.

#### 6.13 \*Spawning dancers\*

The dancers have two different palettes so they don't look completely alike. They react differently to being killed, however: while the red (dangerous) one causes a monster and a burning barrel to appear (just to show that it can be done), the blue one drops a weapon.

by the way, I don't recommend hiding weapons in this way. Many people won't shoot the women (like myself) while others are weird enough to play with parental lock on and never get to see them in the first place.

### 7 The Doors

No, not the rock group. Towards the northwest of the Main Hall you can find a corridor branching off. The first door on the right leads into The Doors room.

#### 7.1 Swinging (hinged) doors

All the following doors work the same way:

##### 7.1.1 \*Double swinging door\*

The very first, large doors open slowly and omniously (simply added an Sp effector with a low speed). Both parts of the door open simultaneously as they are hooked to the same channel.

##### 7.1.2 \*Low swinging door\*

Inside, the first door on the right looks like a metallic stable door. It demonstrates a silent, half-height hinged door.

##### 7.1.3 \*Center-axis rotating door\*

Remember the door of the sex shop in E1M1? The black/yellow striped door works just that way, demonstrating what happens if you shift the axis of rotation about. Note that the sound is different, too.

##### 7.1.4 \*Splitting rotating wall\*

The wall right across from the exit can be opened by pressing against it as well. It shows itself to be made up of six sectors, all hooked to the same channel and opening like the door

explained above.

#### 7.1.5 \*Switch-activated cupboard\*

Ignore this one, please. Sometimes it works, sometimes it doesn't - and I haven't yet found out why.

#### 7.1.6 \*Rotating bed\*

But the next one on the right is interesting: press the switch to rotate the bed away from the hole in the wall (like in E1M3).

#### 7.2 \*DOOM-type doors\*

The following doors are all variations on DOOM-type doors:

##### 7.2.1 \*Once-only\*

Press on the light wall to raise it. Once up, it stays up.

##### 7.2.2 \*Defect door\*

The first door on the right is a ring-shaped door, revealing a hidden sector inside it. It's (purposely :) damaged, closing again too soon.

##### 7.2.3 \*Growing door\*

The next door is switch-activated and auto-closes after 256 time units. Note how it seems to grow from above instead of sliding down: the texture is orientated to the floor instead of the ceiling.

##### 7.2.4 \*Switch-activated door\*

The following door works properly, with the texture orientated to the ceiling.

##### 7.2.5 \*Horizontally split door\*

The last door on the right (the metal one) is a splitting door activated by a switch as well. They're easy and quick to do and look good.

#### 7.3 \*Other doors\*

So far, three more doors are exhibited in the museum:

##### 7.3.1 \*Star Trek door\*

That one's placed in the wall opposite the horizontally split door. See that it's standing slightly open? This way, the first activation will first close it completely, before the next one opens it fully.

This might be used as a nasty trick to make sure the player can't get though there in a real hurry...

##### 7.3.2 \*Four-way door\*

Behind the Star Trek door is a door made of milk glass. This is actually a four-way door, with striped doors inside it. Try it to see what I mean.

Here's another bug (and yes, I'm way too tired right now to keep hunting for it): the inner door often doesn't open properly. try triggering the door twice in quick succession, it usually works afterwards.

### 7.3.3 \*Curtains\*

The red curtains to the left of the four-way door is actually a shrinking/expanding sector, controlled by the switch next to it.

## 8 \*The firing range\*

Past the doors is the firing range. With a twist: the targets are shooting at you! Don't worry, though - you're behind armored glass. Play around here to see the different kinds of automatic cannons available.

The radioactive signs at the back of the range are just decorations - actually, invisible sector effectors are shooting at you.

Unfortunately, automatic cannons can't be turned off directly.

## 9 \*The space room\*

On the corridor outside the firing range is the space room, carefully labeled ("Danger - exterior airlock") and hidden behind a striped door. Stepping through this door will kill you even in God mode.

Note how in BUILD, the parallaxed sky looks messed up? In the game itself, it works great.

## 10 \*The light room\*

The room next to the space room will one day contain all the little lightening tricks. It even contains an (armored) window into the space room: if your buddy wants to splatter himself in there, you can watch through there...

### 10.1 \*Pulsing lights\*

These lights are a bother to make as you need to place lots of effectors. But feel free to play around with this one. You might try changing the speed, for example.

### 10.2 \*Teleporters\*



Although not strictly classified as lights, I've added the teleporters here. See how they even transport missiles? Play around, have fun!

## 11 \*The ledge room\*

The last hallway from the great hall leads into the ledge room.

### 11.1 \*Air vents\*

While the air vent is rather straightforward, it might be interesting to know that the inside of the vent (tagged as 'secret', btw) overlaps with the area outside the museum - without being visible outside. So there you have 2.75D already.

### 11.2 \*Open elevator\*

You get to the ledges (and the air vents) via the open teleporter to the left of the entrance. It's currently quite noiseless.

## 12 \*The quake room\*

Well, Quake is out. The perfect moment to demonstrate a small, highly localized earthquake by walking into the quake room from the ledge room.

The Quake is triggered by walking up to the warning sign.

## 13 \*Conclusion\*

Have fun, look around, let me know if this idea is ok or if I should post the FAQ without a corresponding map.

Keep in mind that this description is still rather hasty and preliminary.

Ciao,  
Klaus (curses, 5:30am again)