Heavy Station Kit base 2
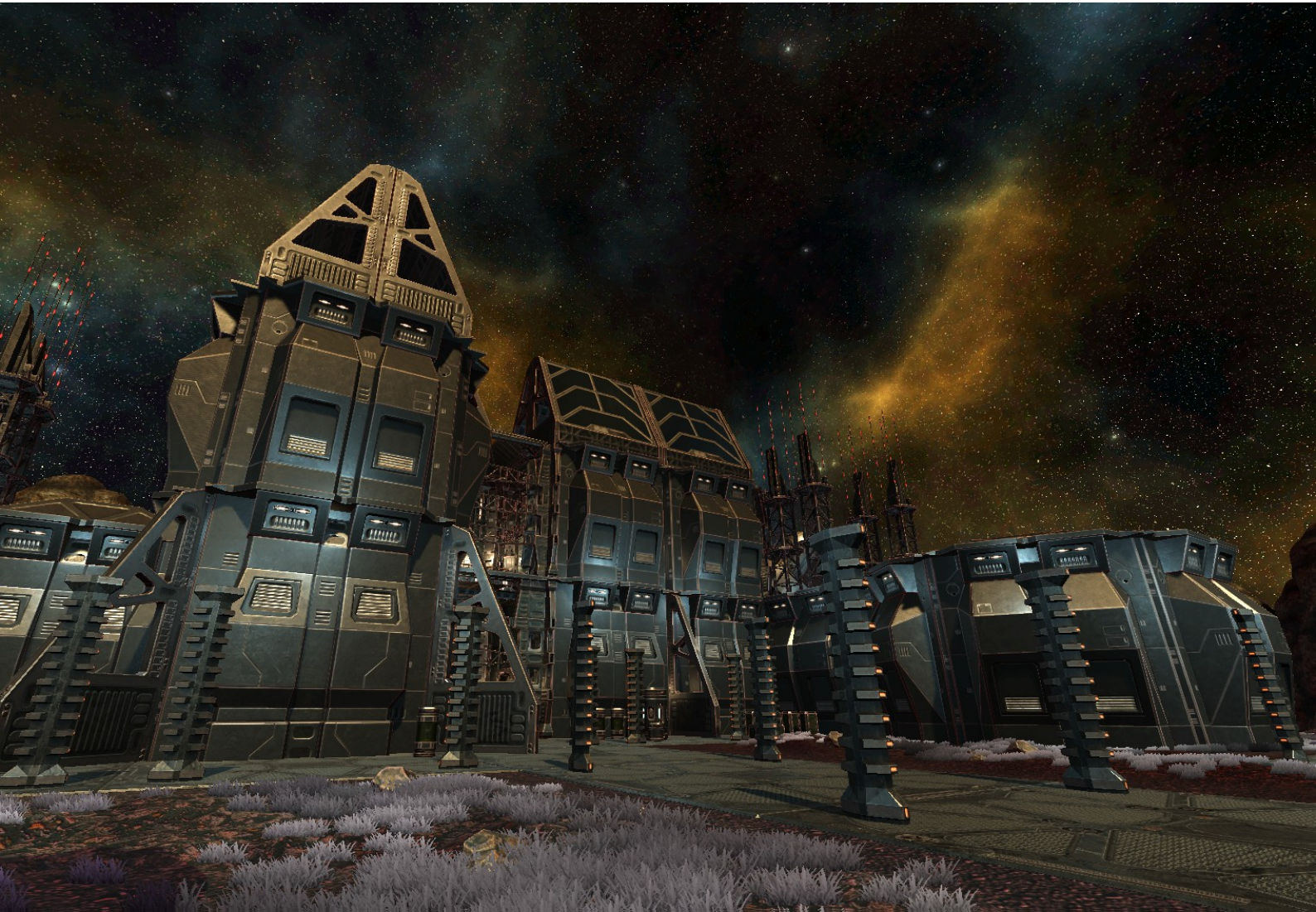

The huge loads are distributed on the strong support pillars,
securing space for the bunker or the center of operations.
This heavy looking interior/exterior/top-down Kit is made to suit
extreme environments — Space, Underwater, Underground, and On-ground.

www.dotteam.pro

INSTALLATION NOTES

For Unity3D up to 2017.4.9

1. Download*) and install Standard Assets (Characters and Effects)

2. Import Heavy Station Kit Base Asset

For Unity3D 2018.1.0 and above

1. Download*) and install Standard Assets (Characters and Effects)

IMPORTANT:
for Unity3D 2018.2.0 and above you need to install Standard Asset for Unity3D 2018.1.9, then open CrossPlatformInputInitialize.cs script (in folder {project_path}\Assets\Standard Assets\Editor\ CrossPlatformInput) and change lines 95 and 96

from

BuildTargetGroup.PSM,

BuildTargetGroup.Tizen,

to

// BuildTargetGroup.PSM,

// BuildTargetGroup.Tizen,

2. Import Heavy Station Kit Base Asset

3. Open DotUwsDoorSlide.cs (in folder {project_path}\Assets\Heavy Station Kit\Common\Door\Deprecated) and change line 22

from

private AudioClip _beep = new AudioClip();

to

private AudioClip _beep = null;

----
*) Download link for Standard Assets
https://unity3d.com/get-unity/download/archive

WHAT'S NEW

What should You expect from 2.21 version?

ENHANCED EDITION

MODELING
The new look for many objects. Flat surfaces got less tris. Round ones like the railings got more. To widen the possibilities new objects were added.

MAPPING
To reduce the drawcalls, most models were packed into themes. Each theme is a single Material.
Some UVs has a bit of free space. This is reserved for future updates, so adding new objects will not require additional material.

TEXTURING
All the materials now has Metallic, Height and Occlusion maps, in addition to Albedo, Normal, and if it fits, Emission.

SCRIPTING
Corrected and amplified previous, and for widening the possibilities of the Kit made the New ones – all to work properly with the Unity 5.3 or higher.

HSKb2.21

Includes everything of **"base v1.3"**, plus:
– Exterior Prefabs
– Pentagonal and Hexagonal Rooms
– Transparent Roofs
– Animated materials for Displays
– Universal 6 in 1 Doors Control
– Animated Door Mode Console
– Animated Door Power Console
– One-sided Floors and Ceilings
– Additional Equipment
– More than 120 additional Prefabs

INSIDE

– More than 270 Prefabs in 18 Categories
– Albedo, Metalic, Normal, Height, Occlusion and Emission maps included
– Textures up to 4096 px
– Ambient and Door sounds
– Colliders are made for speed, however some has details for shooting through
– One FPS Exterior & Interior Demo Scene
– Two FPS Interior Demo Scenes
– One Top-Down Demo Scene
– One Pentagonal and Hexagonal Rooms Demo Scene
– One Prefabs Demo Scene

IMPORTANT

Before downloading and installing Heavy Station Kit base 2.21 it is necessary downloading and installing Standard Assets (Characters and Effects) first.

Prefab Dot_FPC (First Person Controller from DotTeam) have to be used in order for character to interact properly with the scene.

Scripts are safe using in Unity version 5.3 or higher and 3D models may be used in much earlier versions.

THE DEMO Scenes

The main addition to the Kit v2.21 are the new consoles for controlling doors.

The **Console 'Mode'** allows for choosing if the door is either Active or Blocked. For example, if the door is Blocked meaning it is locked, a player may unlock it so the door will become Active.

The **Console 'Power'** allows for choosing if the door is either operating properly or inactive. For example, a player is shutting down the power of the door, so the door slider becoming powerless, will go down – opening the way for a player to go through.

For the console setup, please refer to 'the Door and Consoles Setup', in this documentation.

Welcome to the demo scenes, where You may play with consoles for better understanding on how they behave.

PRACTICE
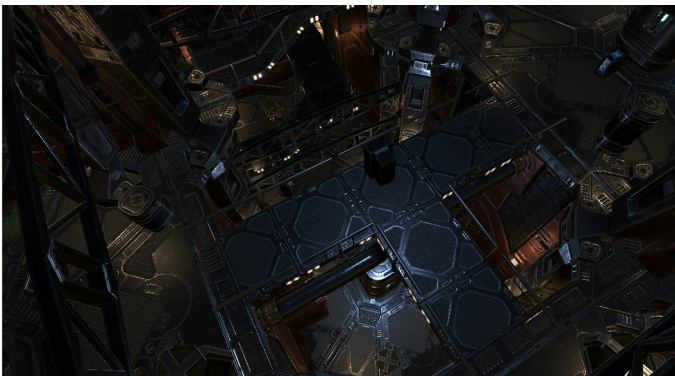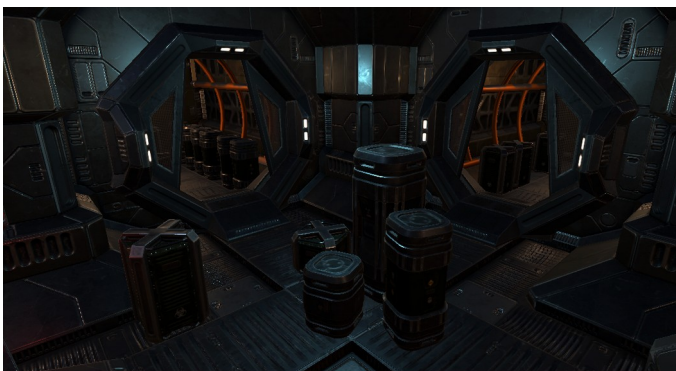

Demo Scene
Base2_1

We've got overload, so the tunnels was cutoff. Restore the power and open that doors.
Nothing serious though.

Demo Scene
Base2 Outside

These strange mountains are blocking the signal. Get on the top of the hexagonal command center.


Demo Scene
Base2_2

Find one's way to abandoned storage and seal it.
Turning off the power will do the trick.
Find that 'Power' console.

THE PREFABS

The side and the height of the smallest cell or room possible is 10 metres.
If the scene is new, for just snapping the prefabs, we do recommend start building at the position x(0) – y(0) – z(0).

When you do this, most of the prefabs will appear right at their place. Some regular edits at the building of the cell:
• Walls and the like may be duplicated and rotated into the desired position
• The arches and doors will require 5m adjustment to the desired direction
• If the Top-Bottom prefab is placed at the ceiling, then it should have 10 metres offset by Y, 180 rotation by Z
• The most hard asset for placing is the Stairs prefab. It require vertical adjustment by Y. But horizontal offset is 2m

At building the second cell there is 10 metres offset, because the side of the cell is 10 metres. So it is possible just duplicating the existing prefabs that are close to the position, and setting the required offset.

The Heavy Station Kit base 2 has more than 270 prefabs.
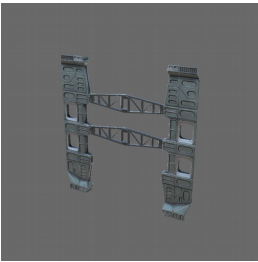
ARCHES

Prefabs	Tris	Colors	Materials	Position
15	450 – 2316	5	Prefabs/Walls/Meshes/Materials/... B2_Walls0, B2_Walls1, B2_Walls2, B2_Walls3, B2_Walls4	Position X 5 y 0 z 5
			Customize the color of the vertical elements.	Offset X 10 Y 10 Z 10

There are intentional gaps between the walls. Arches do fill these. Also they may work as visual strengthening of the level.
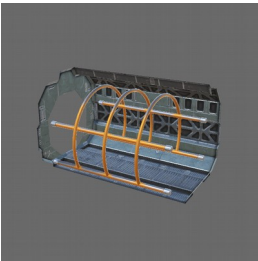
CHANNELS

Prefabs	Tris	Colors	Materials	Position
10	660 – 2270	5	Prefabs/Equipment/Meshes/Materials/... B2_Eq0, B2_Eq1, B2_Eq2, B2_Eq3, B2_Eq4	Position X 0 y 0 z 0
			Customize the color of the main elements of the walls.	Offset X 10 Y 10 Z 10

The corridors between the rooms and/or a web of tunnels.

DISPLAYS

Prefabs	Tris	Colors	Materials	Position
26	2 – 18	1	Prefabs/Displays/Meshes/Materials/...	Free
			Each screen has its own independent material.. However there are the same in size screens, so You may exchange their materials.	

The Displays are possible to place on every appropriate surface, for example the walls. All Displays Prefabs are included in the Equipment Prefabs. The screens are animated.

DOORS

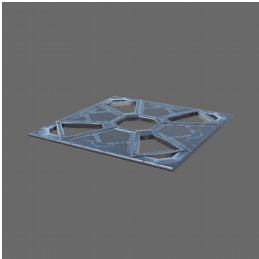| Prefabs	Tris	Colors	Materials	Position
9	4 – 920	1	Prefabs/Doors/Meshes/Materials/... *B2_EG, Glass_Dark, Glass_Green, Glass_Red*	Position X 5 y 0 z 5
			Prefabs/Equipment/Meshes/Materials *B2_Eq0*	Offset X 10 Y 10 Z 10
			Prefabs/Top-Down/Meshes/Materials *B2_TopDown, B2_TopDown1*	

The Doors and Energy Gates for inside and outside. The special floor piece for the transport to move over. The railings are also available for the free positioning.

EQUIPMENT

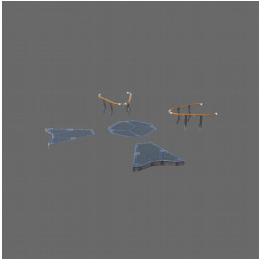| Prefabs	Tris	Colors	Materials	Position
29	76 – 6160	5	Prefabs/Equipment/Meshes/Materials/... *B2_Eq0, B2_Eq1, B2_Eq2, B2_Eq3, B2_Eq4*	Free

Customize the color of the band of the stands.

The Digital Equipment – from the little boxes, to the tables and the controlling door consoles – all with the animated displays. On how to setup consoles, please refer to "the Door and Consoles Setup", in this documentation

FLOORS

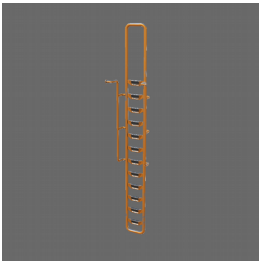| Prefabs	Tris	Colors	Materials	Position
29	128 – 592	1	Prefabs/Floors/Meshes/Materials/... *B2_Floors, B2_Floors_PH*	Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

The different variations of the floors (and ceiling) pieces for small and large rooms. If the building is one-story-tall, pick the one-sided piece to save on triangles.

FLOORS FILL

Prefabs	Tris	Colors	Materials	Position
37	6 – 17804	1	Prefabs/Floors Fill/Meshes/Materials/... *Floors Fill, FF_Hex&Pent*	Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

Plan the floors and ceilings in Your scene. Whether it be total fill of the surface, or some clear parts with railings, or the center piece removed for placing the ladder.

LADDERS

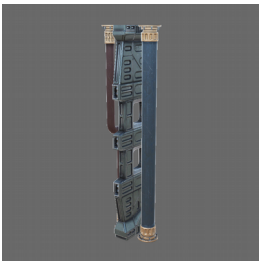| Prefabs	Tris	Colors	Materials	Position
2	3240 – 3840	1	Prefabs/Stairs/Meshes/Materials/... *B2_Stairs, B2_TopDown*	Position X 0 y 0 z 0 Offset X 10 Y 10 Z 10

Vertical climbing on the walls outside or the ladder into the storage room. And who know where else these will simplify the way.

PARTITIONS

Prefabs	Tris	Colors	Materials	Position
7	1420 – 3192	5	Prefabs/Walls/Meshes/Materials/... *B2_Walls0, B2_Walls1, B2_Walls2, B2_Walls3, B2_Walls4* *Customize the color of the warning stripes.*	Position X 0 y 0 z 0 Offset X 10 Y 10 Z 10 or Free

Made for the visual zoning of the room, Partitions may be placed using the recommended position or freely.

PARTITIONS 2

Prefabs	Tris	Colors	Materials	Position
15	782 – 5526	5	Prefabs/Walls/Meshes/Materials/... *B2_Walls0, B2_Walls1, B2_Walls2, B2_Walls3, B2_Walls4* *Customize the color of the vertical elements and the pipes itself.*	Position X 0 y 0 z 0 Offset X 10 Y 10 Z 10

Many Partitions 2 has horizontal and vertical pipelines. It enhances the industrial or bunker feeling, where appropriate.

PIPELINE

Prefabs	Tris	Colors	Materials	Position
8	1336 – 1696	5	Prefabs/Walls/Meshes/Materials/... *B2_Walls0, B2_Walls1, B2_Walls2, B2_Walls3, B2_Walls4* *Customize the color of the pipes.*	Free

Pipe alone, for making Your own pipelines. So it is possible combining them in length, making the lines of pipes for positioning for example horizontally along the walls.
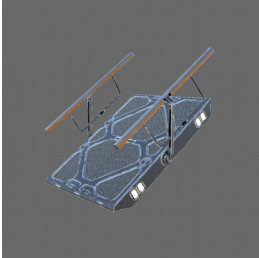
PROPS

Prefabs	Tris	Colors	Materials	Position
6	1948 – 4340	5	Prefabs/Props/Meshes/Materials/... *B2_Props0, B2_Props1, B2_Props2, B2_Props3, B2_Props4*	Free

Customize the color of the painted elements of the boxes and barrels.

Boxes, Barrels and Tanks for free positioning.

STAIRS

Prefabs	Tris	Colors	Materials	Position
31	44 – 3146	1	Prefabs/Stairs/Meshes/Materials/... *B2_Stairs*	Position X Free Y 0 Z Free
				Offset X 2 Y Free Z 2

With independent pieces of the prefab Stairs, it is possible making not only the way up, but also various platforms and transitions with crossings.

SUPPORT

Prefabs	Tris	Colors	Materials	Position
4	656 – 2624	1	Prefabs/Floors/Meshes/Materials/... *B2_Floors*	Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

Made to look strong, they enhance the feel of heaviness and safety of the construction. It is possible not to use Support prefab.

TOP-BOTTOM

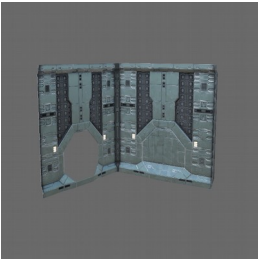| Prefabs	Tris	Colors	Materials	Position
5	3550 – 5472	1	Prefabs/Top-Bottom/Meshes/Materials/... *B2_Top_Bottom, B2_TB_PH*	Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

The little details does matter. Placed at the floor/ceiling, Top-Bottom prefab is meant for enhancing the atmosphere, telling the different stories – like the area under maintenance or technical zone.

TOP-DOWN

Prefabs	Tris	Colors	Materials	Position
17	68 – 1184	1	Prefabs/Top-Down/Meshes/Materials/... B2_TD_2_RGlass, B2_TD_Roof, B2_TD_Roof1, B2_TopDown, B2_TopDown1	Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

Outside-styled walls and closing elements to make a scene for the Top-Down view.

WALLS

Prefabs	Tris	Colors	Materials	Position
22	100 – 384	5	Prefabs/Walls/Meshes/Materials/... B2_Walls0, B2_Walls1, B2_Walls2, B2_Walls3, B2_Walls4	Position X 0 y 0 z 0
			Customize the color of the main elements of the walls.	Offset X 10 Y 10 Z 10

The Wall Lights and Walls prefab. With/without the opening for placing the door. From one wall piece to four wall pieces combined.

THE Doors and Consoles Setup

DOORS

Prefab **Base2_Door** allows switching the operating modes of the door at Edit and Game modes, including:

Active the door is opening and closing automatically, at approaching of a Player. Sound is being played, and opening and closing sounds of the panel sliding differ;

Blocked the door is closed. Sound of "the closed door" is being played, at approaching of a Player;

Inactive Open the door is disabled, being fully open;

Inactive Closed the door is disabled, being fully closed;

Broken Open the door is disabled, being almost fully open;

Broken Closed the door is disabled, being almost fully closed;

Selecting of the door operating mode is instant - happening immediately.
In order for the doors automatically trigger at approaching of a character, object **DotFirstPersonController** or other Character Controller should be marked with the tag "Player".

DOORS CONSOLES

Heavy Station Kit base2 has two types of prefabs:

Prefab **B2_Cons_Power** – "the Power console" allows for choosing if the door is either operating properly or inactive
Prefab **B2_Cons_Mode** – "the Mode console" allows for choosing if the door is either Active or Blocked

- Both consoles **B2_Cons_Power** and **B2_Cons_Mode** aren't available for manipulation, if the first door in the theirs **ControlledDoors** list has mode either *brokenOpen* or *brokenClosed*.
- The Console **B2_Cons_Mode** does not work if the first door in the **ControlledDoors** list has mode either *inactiveOpen* or *inactiveClosed*.

TO SETUP THE CONSOLE:

1. Attach the script **DotHskDoorControl** to all instances of the door prefab, which you would like to manipulate.
2. Set **DotHskDoorControl** script parameters:
2.1. **OpenIfPowerOff** to "true" for door that you would like automatically opened if the power will go down.
2.2. Specify **PowerOnStatus** so after the Power is restored doors will get:
- *blocked*. The doors will get locked, and the Red light will signalize that
- *active*. The doors will get unlocked, and the Green light will show this
- *previous*. The doors will get into their previous state when the Power went off. If initially inactive, then value set at **BlockedByDefault** parameter will be used.
3. Specify all the doors to be controlled via this particular console, using the **ControlledDoors** parameter (of the **DotHskDoorConsole** script, which is attached at the instance of the console prefab).
Same doors can be placed to **ControlledDoors** list of many consoles.
4. Check the **ConsoleList** parameter of the **DotHskDoorControl** script, for there should be all the consoles that are controlling this door. Please do not edit this list, because it is automatically made.

TIPS:

To set mode for multiple doors which are handled by single console, specify mode of the First door in the **ControlledDoors** list.
Sometimes, multiple consoles can manage one door and single console can manage many doors. If having such tricky situation, please keep in mind:
- the mode of the first door in the **ControlledDoors** list is displayed by the console, and only the mode of the first door in that list is taken into account when switching modes.
- all the consoles that handle same doors are equal in functionality

Be careful at making complex door control configurations. If setup incorrectly, some doors may get into unexpected Modes.

THE Doors Script Setup

For changing door mode via Script, as in the basic examples, using C#, there are following guidelines.

DOORS

Script **DotHskDoor** allows switching the operating modes of the door prefab at Edit and Game modes. Script is attached to **Base2_Door** container in prefab.

1. Getting reference on container GameObject of **Base2_Door** instance.

```
GameObject Door2 = GameObject.Find("Door2");
```

2. Getting reference on **DotHskDoor** component.

```
DotHskDoor Door2_script = Door2.GetComponent<DotHskDoor>();
```

3. Assigning identifier of an appropriate door Mode to public property **Door2_script.mode**:

```
Door2_script.mode = dotHskDoorMode.{mode},
```

where {mode} - is one of the following values*: *active*, *blocked*, *inactiveOpen*, *inactiveClosed*, *brockenOpen*, *brockenClosed*.

Setting of the door operating mode is instant - happening the next Update cycle.

DOOR CONSOLES

If the doors are operated by the console, it is possible to switch their mode via this way:

1. Getting reference on container GameObject of **B2_Cons_Power** or **B2_Cons_Mode** instance.

```
GameObject Console = GameObject.Find("Console");
```

2. Getting reference on **DotHskDoorConsole** component.

```
DotHskDoorConsole Console _script = Console.GetComponent<DotHskDoorConsole>();
```

3. Call one of the methods shown below:

a) for switching on/off the Power of the door. For each door, this method saves and restores its stance "active/blocked" and considers the value of the parameter **OpenIfPowerOff**.

```
Console _script.SetPowerMode({On}),
```
- where {On} = "true" for turning power on, and
- where {On} = "false" for turning power off

b) for doors blocking and unblocking. Method allows for choosing of any of the available modes, however for switching the power on/off, it is recommended using **SetPowerMode** method:

```
Console _script.SetMode(dotHskDoorMode.{mode}),
```
where {mode} - is one of the following values*: *active*, *blocked*, *inactiveOpen*, *inactiveClosed*, *brockenOpen*, *brockenClosed*.

*) see details in "Doors and Consoles Setup" section

THE Scripts C#

The Scripts that are included in package **Heavy Station Kit base2**:

DOORS

DotHskDoor – interface for switching the door operation mode.
DotHskDoorSlider – universal multipurpose script supporting the main functions of the doors with sliding panels.
DotHskDoorBase – script supporting specific features of Base2 Kit door prefab.
DotHskDoorControl – door console support script.

DOOR CONSOLES

DotHskDoorConsole – door console interface for customizing the list of controlled doors.
DotHskDoorConsoleCollider – supporting the main functions of the doors consoles.

LADDER

DotLadder – script supporting movement on vertical ladder.

ANIMATED TEXTURE

DotAnimatedTexture – script supporting animated displays and equipment indicators.

DOT FIRST PERSON CONTROLLER

DotFirstPersonController – standard FirstPersonController, adapted for additional features of family of the Heavy Station Kit assets.
DotFPCCrouch – script supporting crouching and moving in vertically limited space.
DotFPCLight – simple flashlight script.
DotLadderController – ladder script support.
DotFPCElevatorSupport – elevator script support (elevator prefab is included in the Heavy Station Kit Colony package).

CHARACTER CONTROLS

Move	W, A, S, D
Jump	Space
Crouch	C
Light	L
Interaction	E

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