

Astrobee Scanner

Overview:

Astrobee will use a scanning ability to visualize information in the form of color overlays or masks of intractable objects on the International Space Station (ISS). At a minimum, the goal for this scanner is to indicate a range of temperatures from hot to cold with red to blue colors respectively. The implementation of this feature needs to be flexible as it can be applied to dozens of assets to indicate more than temperature, including general intractability to trigger info panels or start missions, objects that can be carried, or objects that work with specific mission types.

Breakdown:

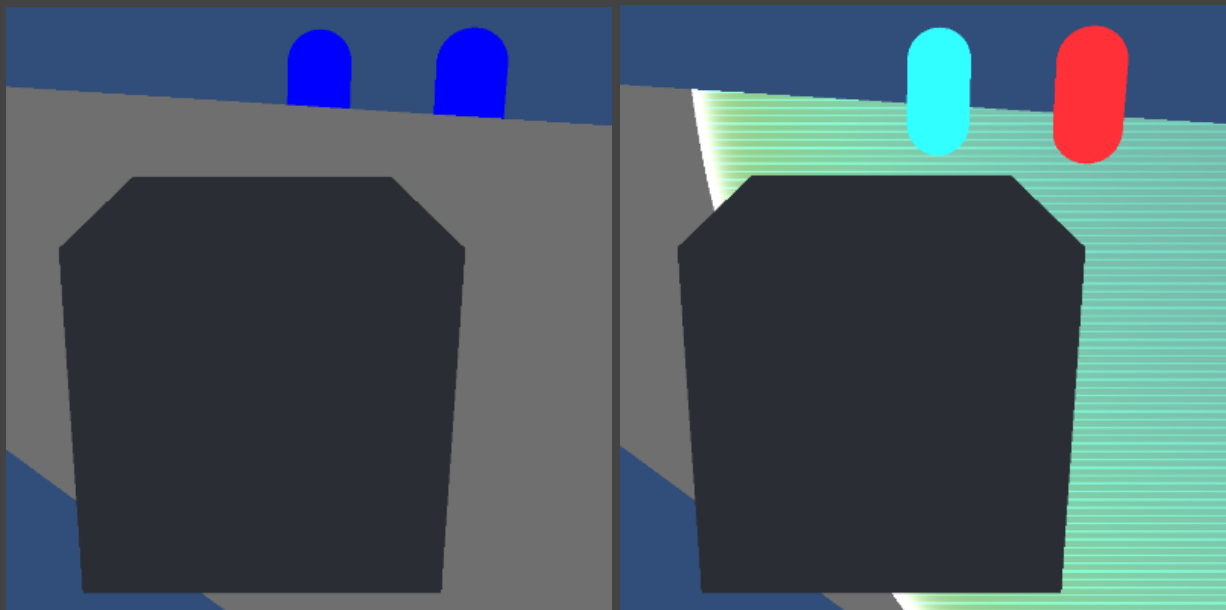
Player presses F/Scan key or screen button.

Sphere or radius (Scanner) grows over 1.5 seconds to a distance of about 10ft,

Then the Scanner shrinks to original size over 1.5 seconds.

If an Interactable object is within Scanner, apply the object's scanned color.

If not, remove scanned color. (Note: Scanned color/integer should be set via "Scannable" script)



Before and After the scan effect. Left capsule is Cold, Right is Hot.

Specifications:

We should not see a sphere or collider component

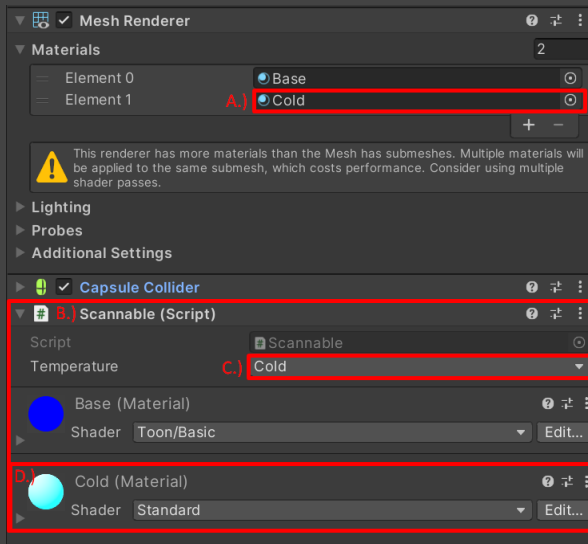
We should see all scene objects entering and exiting the scanners effect

We should see scanned objects with their scanned colors applied through walls

We want to attach the Interactable script and set the color via exposed field for designers

We do not want to duplicate project materials for the scanner mechanic to work

How to Use:

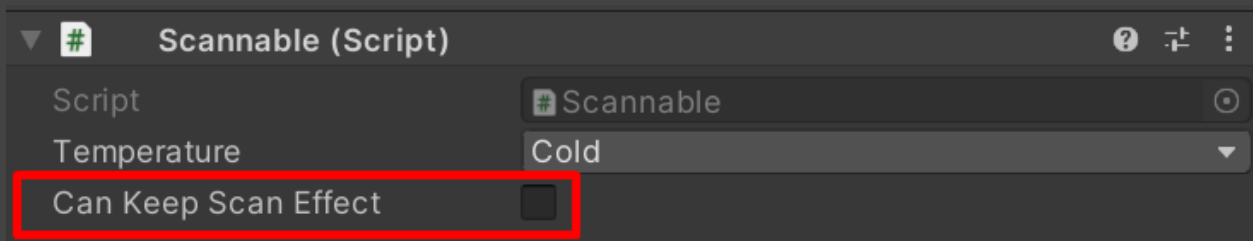


A.) Click the little + on the right to add the material you want the object to have when it is scanned.

B.) Add the “Scannable” script component, which contains logic that enables the ScannerEffect script to switch depending on value chosen for C.

C.) If an object has Cold in this field, Scanner Effect will choose cold material.

D.) Is an optional added component added when trying to make the mechanic. Test with this removed.



If this box is checked, when a scanned object is no longer within the scan ripple, the scanned object WILL keep its hot/cold effect and remain visible through walls.

Known Issues:

Scan sets material in VoidUpdate. Optimally should only set values in scan enter and exit.

Astrobee Scanner Roadmap:

Week 5:

Find scans in games

Find scans made in Unity and dissect them

Week 6:

Spring break: Rebuild scan made in Unity

Week 7:

Set scan starting point to Astrobee, not the world

Detect scannable object with scanner and print names

Week 8:

Change material on objects

Scan return back to astrobee and stop.

Week 9-10:

Push for post processing and masking hot and cold effects

Week 11:

Clean up and merge scanning to project

Week 12:

Play through/short mission: scan something and have interactions to fix things.

Week 13-15:

Polish/Fix stuff