

#### PIERO Asset Requirements

This document outlines the technical specifications for assets used in PIERO 20.3. All asset types must adhere to the defined requirements to ensure compatibility.

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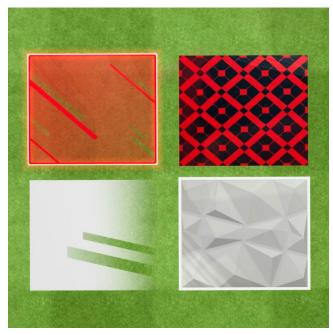
Virtual Stadium 33

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#### Area

The table below lists the specifications for each Area option, all of which share the same example image shown below.



Shared Example Image for All Area Textures

Area Option:	Specifications:
Single Asset	• File Type: PNG
	• Recommended Dimensions: 1080 x 1080
	Maximum Dimensions: 2160 x 2160
	Supports Transparency: True
	Bit Depth: 8 bit
Image Border Assets	• File Type: PNG, TGA, JPG
	• Recommended Dimensions: 1080 x 1080
	Maximum Dimensions: 2160 x 2160
	• Supports Transparency: True (PNG, TGA), False (JPG)
	Bit Depth: 8 bit





Area Option:	Specifications:
Chalk Board Assets	File Type: PNG
	Recommended Dimensions: 128 x Any custom width under 512 px
	Maximum Dimensions: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
	★Images should be white, so they can be recolored in PIERO.
Wall Assets	File Type: PNG
	• Recommended Dimensions: 1080 x 1080
	Maximum Dimensions: 2160 x 2160
	Supports Transparency: True
	Bit Depth: 8 bit
Sequence Assets	File Type: TGA
	• Recommended Dimensions for Sequences: 256 x 256
	Maximum Dimensions for Sequences: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit

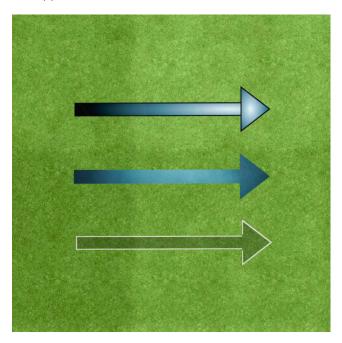




#### **Arrow Textures**

The table below lists the specifications for each Arrow option, all of which share the same example image shown below.

Important: When importing arrow assets in the Asset Manager, ensure that the Arrow Body has a corresponding head asset (Head, T Head, or Dashed Head) with the exact same name. PIERO supports only one texture selection and searches for all related parts by matching name. A mismatch will result in an error and system exception when the application is launched.



Shared Example Image for All Arrow Textures

Arrow Option:	Specifications:
Body Asset	• File Type: PNG
	• Recommended Dimensions: 632 x 68
	Maximum Dimensions: 1600 x 68
	Supports Transparency: True
	Bit Depth: 8 bit
Head Asset	• File Type: PNG
	Recommended Dimensions: 168 x 168
	Maximum Dimensions: 168 x 168
	Supports Transparency: True
	Bit Depth: 8 bit



Arrow Option:	Specifications:
T Head Assets	• File Type: PNG
	• Recommended Dimensions: 44 x 68
	Maximum Dimensions: 44 x 68
	Supports Transparency: True
	Bit Depth: 8 bit
Dashed Head Assets	• File Type: PNG
	• Recommended Dimensions: 168 x 168
	Maximum Dimensions: 168 x 168
	Supports Transparency: True
	Bit Depth: 8 bit
Sequence Assets	• File Type: TGA
	• Recommended Dimensions for Sequences: 256 x 128
	Maximum Dimensions for Sequences: 512 x 256
	Supports Transparency: True
	Bit Depth: 8 bit



#### Caption

The table below lists the specifications for each Caption option, all of which share the same example image shown below.



Shared Example Image for All Caption Options

Caption Option:	Specifications:
Single Assets	• File Type: PNG, JPG
	Recommended Dimensions: 156 x 140
	Maximum Dimensions: 312 x 280
	Supports Transparency: True (PNG), False (JPG)
	Bit Depth: 8 bit
Anchor Body Assets	File Type: PNG
	Recommended Dimensions: 632 x 68
	Maximum Dimensions: 1600 x 68
	Supports Transparency: True
	Bit Depth: 8 bit



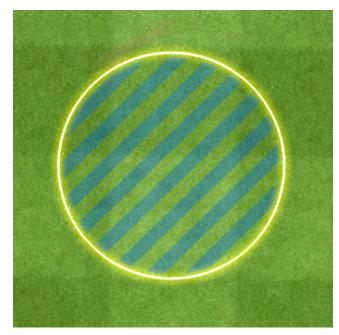


Caption Option:	Specifications:
Anchor Head Assets	• File Type: PNG
	Recommended Dimensions: 168 x 168
	Maximum Dimensions: 168 x 168
	Supports Transparency: True
	Bit Depth: 8 bit
Anchor T Head Assets	• File Type: PNG
	Recommended Dimensions: 44 x 68
	Maximum Dimensions: 44 x 68
	Supports Transparency: True
	Bit Depth: 8 bit
Anchor Dashed Head Assets	• File Type: PNG
	Recommended Dimensions: 168 x 168
	Maximum Dimensions: 168 x 168
	Supports Transparency: True
	Bit Depth: 8 bit
Anchor Sequence Assets	• File Type: TGA
	Recommended Dimensions for Sequences: 256 x 128
	Maximum Dimensions for Sequences: 512 x 256
	Supports Transparency: True
	Bit Depth: 8 bit



#### **Circle Textures**

The table below lists the specifications for each Circle option, all of which share the same example image shown below.



Shared Example Image for All Circle Options

Circle Options:	Specifications:
Single Assets	File Type: PNG
	• Recommended Dimensions: 854 x 854
	Maximum Dimensions: 1000 x 1000
	Supports Transparency: True
	Bit Depth: 8 bit
Border Assets	• File Type: PNG, TGA, JPG
	• Recommended Dimensions: 1080 x 1080
	Maximum Dimensions: 2160 x 2160
	• Supports Transparency: True (PNG, TGA), False (JPG)
	Bit Depth: 8 bit





Circle Options:	Specifications:
Chalk Assets	File Type: PNG
	• Recommended Dimensions: 128 x Any custom width under 512 px
	Maximum Dimensions: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
	★ Images should be white, so they can be recolored in PIERO.
Wall Assets	• File Type: PNG
	• Recommended Dimensions: 1080 x 1080
	Maximum Dimensions: 2160 x 2160
	Supports Transparency: True
	Bit Depth: 8 bit
Sequence Assets	• File Type: TGA
	• Recommended Dimensions for Sequences: 256 x 256
	Maximum Dimensions for Sequences: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit





#### Colour Palette

The specifications for the Colour Palette are outlined in the table below.

#### Values:

#### **Specifications:**

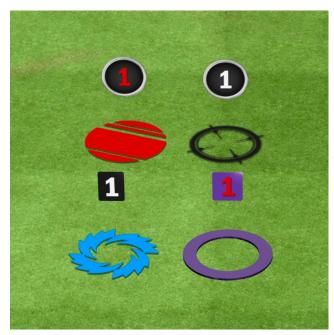
Α	В	С	D	E
White	250	250	250	25
Grey	153	153	153	25
Black	25	25	25	25
Red	204	26	26	25
Bordeaux	105	29	18	25
Burgundy	206	0	97	25
Violet	92	54	151	25
Purple	178	26	244	25
Green	26	166	26	25
Blue (light)	0	153	255	25
Blue	0	56	255	25
Yellow (light)	245	245	102	25
Yellow	254	193	13	25
Orange	255	128	0	25
Brown	74	50	20	25
6 Semi Transp Ref	198	168	118	15
7 Argentina Blue	117	178	249	25
Argentina Dark Blue	22	30	114	25
9 Argentina Purple	86	78	192	25
0 Australia Gold	245	188	65	25
1 Australia Green	73	164	158	25
2 Belgium Cyan	226	249	247	25
3 Belgium Red	231	49	35	25
4 Belgium Yellow	249	213	72	25

- File Type: CSV
- Colour Palettes are CSV files which define a list of colours by RGBA values (values are from 0 to 255).
- Each line should start with a colour name followed by Red, Green, Blue, then Alpha (transparency) values.
- It is possible to alter their values but not their name.
- Add as many colours as you need per palette.

**★ Important**: The colours White, Red, Black, Blue (light), Blue, Grey, Orange, Yellow (light), Yellow, and Green must be present for PIERO effects to work.

#### Counter

The table below lists the specifications for each Counter option, all of which share the same example image shown below.



Shared Example Image for All Counter Options

Counter Options:	Specifications:
Single Assets	• File Type: PNG, TGA
	Recommended Dimensions: 256 x 256
	Maximum Dimensions: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
X Single Asset	• File Type: PNG
	Recommended Dimensions: 256 x 256
	Maximum Dimensions: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit



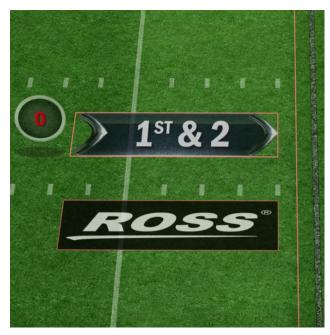


Counter Options:	Specifications:
Sequence Assets	• File Type: TGA, PNG
	• Recommended Dimensions for Sequences: 256 x 256
	Maximum Dimensions for Sequences: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
Background Single Asset	• File Type: PNG, TGA
	• Recommended Dimensions: 256 x 256
	Maximum Dimensions: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
Background Sequence Asset	• File Type: TGA, PNG
	• Recommended Dimensions for Sequences: 256 x 256
	Maximum Dimensions for Sequences: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
Wings Single Asset	• File Type: PNG
	• Recommended Dimensions: 512 x 512
	Maximum Dimensions: 512 x 256
	Supports Transparency: True
	Bit Depth: 8 bit



#### **Down and Distance**

The table below lists the specifications for each Down & Distance option, all of which share the same example image shown below.



Shared Example Image for All Down & Distance Options

Down & Distance Options:	Specifications:
Advert Assets	• File Type: PNG, TGA
	Recommended Dimensions: 1024 x 512
	Maximum Dimensions: 2048 x 1024
	Supports Transparency: True
	Bit Depth: 8 bit
Advert Sequence Assets	File Type: TGA
	Recommended Dimensions for Sequences: 256 x 256
	Maximum Dimensions for Sequences: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit



Down & Distance Options:	Specifications:
Feather Assets	• File Type: PNG, TGA
	Recommended Dimensions: 512 x 256
	Maximum Dimensions: 512 x 256
	Supports Transparency: True
	Bit Depth: 8 bit
Feather Sequence Assets	• File Type: TGA
	• Recommended Dimensions for Sequences: 512 x 512
	Maximum Dimensions for Sequences: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
Timer Background Assets	• File Type: PNG, TGA
	• Recommended Dimensions: 512 x 512
	Maximum Dimensions: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
Line Assets	• File Type: PNG
	• Recommended Dimensions: 1080 x 1080
	Maximum Dimensions: 2160 x 2160
	Supports Transparency: True
	Bit Depth: 8 bit
	• File Type: TGA
	• Recommended Dimensions: 512 x 512
	Maximum Dimensions: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
Chalk Line Assets	• File Type: PNG
	• Recommended Dimensions: 128 x any custom width under 512 px
	Maximum Dimensions: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
	★ Images should be white, so they can be recolored in PIERO.
Area assets	• File Type: PNG



Down & Distance Options:	Specifications:
	Recommended Dimensions: 1080 x 1080
	Maximum Dimensions: 2160 x 2160
	Supports Transparency: True
	Bit Depth: 8 bit
Area Sequence Assets	• File Type: TGA
	• Recommended Dimensions for Sequences: 256 x 256
	Maximum Dimensions for Sequences: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit



#### **End Zone**

The table below lists the specifications for each End Zone option, all of which share the same example image shown below.

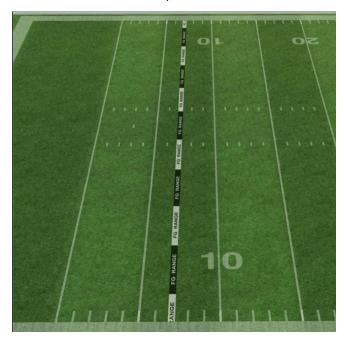


Shared Example Image for All End Zone Options

End Zone Options:	Specifications
Single Assets	File Type: PNG
	• Recommended Dimensions: 1024 x 200
	Maximum Dimensions: 2048 x 400
	Supports Transparency: True
	Bit Depth: 8 bit
Sequence Assets	• File Type: TGA
	• Recommended Dimensions for Sequences: 256 x 256
	Maximum Dimensions for Sequences: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit

#### Field Goal Line

The table below lists the specifications for the Field Goal Line asset.



Example Image - Field Goal Line

Field Goal Line Asset:	Specifications
Single Assets	File Type: PNG
	• Recommended Dimensions: 1080 x 1080
	Maximum Dimensions: 2160 x 2160
	Supports Transparency: True
	Bit Depth: 8 bit



### **PIERO**

#### **Font**

The specifications for the Font Asset are outlined in the table below.

# ABCDEFGHI JKLMNOPQR STUVWXYZ 0123456789

#### Example - Font Asset

Font Asset:	Specifications:
Fonts	File Type: TTF
	Fonts Supported: Accents, Arabic, Japanese, and Chinese



#### Laser Eye Texture

The table below lists the specifications for each Laser Eye option, all of which share the same example image shown below.



Shared Example Image for All Laser Eye Options

Laser Eye Options:	Specifications
Single Assets	File Type: PNG
	• Recommended Dimensions: 1218 x 452
	Maximum Dimensions: 1218 x 452
	Supports Transparency: True
	Bit Depth: 8 bit
	The Laser Eye is a fixed texture size.
	• For PNGs, square or wide image ratios may be used.
	PIERO will distort the image as needed.
Sequence Assets	File Type: TGA
	• Recommended Dimensions for Sequences: 256 x 256
	Maximum Dimensions for Sequences: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit



### Line-up Cards

The specifications for the Line-up Cards asset are outlined in the table below.



Example - Line-up Asset

Line-up Cards Asset:	Specifications:
Single Asset	File Type: PNG
	Fixed Dimensions: 292 x 766
	Supports Transparency: True
	Bit Depth: 8 bit

#### Logos

The specifications for the Logos asset are outlined in the table below.

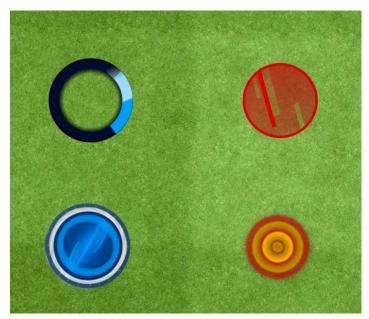


Example - Logo Asset

Logo Asset:	Specifications:
Single Asset	• File Type: PNG, TGA
	• Recommended Dimensions: 1080 x 1080
	Maximum Dimensions: 2160 x 2160
	Supports Transparency: True
	Bit Depth: 8 bit
	• File Type: JPG
	• Recommended Dimensions: 1080 x 1080
	Maximum Dimensions: 2160 x 2160
	Supports Transparency: False
	Bit Depth: 8 bit

#### Magnifier

The table below lists the specifications for each Markers option, all of which share the same example image shown below.



Shared Example Image for All Markers Options

Markers Options:	Specifications
Single Assets	• File Type: PNG, TGA
	Recommended Dimensions: 256 x 256
	Maximum Dimensions: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
X Single Assets	• File Type: PNG
	Recommended Dimensions: 256 x 256
	Maximum Dimensions: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
Sequence Assets	• File Type: TGA, PNG
	Recommended Dimensions for Sequences: 256 x 256
	Maximum Dimensions for Sequences: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit



#### **Markers**

The table below lists the specifications for each Magnifier option, all of which share the same example image shown below.



Shared Example Image for All Magnifier Options

Magnifier Options:	Specifications
Circle Sequences	• File Type: TGA
	Recommended Dimensions for Sequences: 256 x 256
	Maximum Dimensions for Sequences: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
Square Sequences	• File Type: TGA
	Recommended Dimensions for Sequences: 256 x 256
	Maximum Dimensions for Sequences: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit

#### Measurement Table

The table below lists the specifications for the Measurement Table.



Example Image - Measurement Table

Magnifier Options:	Specifications
Single Assets	• File Type: PNG, TGA
	• Recommended Dimensions: 256 x 256
	Maximum Dimensions: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit

#### Movies

The table below lists the specifications for the Movies asset option.



Example Image - Movies Asset

Movies Option:	Specifications
Movies Assets	• File Type: TGA
	• Recommended Dimensions for Sequences: 256 x 256
	Maximum Dimensions for Sequences: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit

#### Red Zone

The table below lists the specifications for the Red Zone asset option.



Example Image - Red Zone

Red Zone Option:	Specifications
Single Asset	• File Type: PNG, TGA
	• Recommended Dimensions: 2048 x 1160
	Maximum Dimensions: 3000 x 1698
	Supports Transparency: True
	Bit Depth: 8 bit
	• File Type: JPG
	• Recommended Dimensions: 2048 x 1160
	Maximum Dimensions: 3000 x 1698
	Supports Transparency: False
	Bit Depth: 8 bit

#### Safe Area

The table below lists the specifications for the Safe Area asset option.



Example Image - Safe Area

Safe Area Option:	Specifications
Single Asset	• File Type: PNG
	Recommended Dimensions: 1920 x 1080
	Maximum Dimensions: 1920 x 1080
	Supports Transparency: True
	Bit Depth: 8 bit
	★The texture is toggled on an off by the operator at runtime. It is displayed in 2D full screen over the incoming video. It is encouraged to mark areas reserved for the clock, dog, and lower thirds to help the PIERO operator.

### **Spotlight Base**

The table below lists the specifications for the Spotlight asset option.

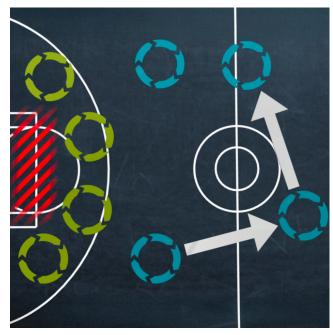


Example Image - Spotlight

Spotlight Option:	Specifications
Spotlight Base Asset	• File Type: PNG
	Recommended Dimensions: 256 x 256
	Maximum Dimensions: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit

#### **Tactical Board**

The table below lists the specifications for the Tactical Board asset option.



Example Image - Tactical Board Asset

Tactical Board Option:	Specifications
Single Asset	File Type: PNG
	• Recommended Dimensions: 2266 x 1511
	Maximum Dimensions: 2266 x 1511
	Supports Transparency: True
	Bit Depth: 8 bit
	• File Type: JPG
	• Recommended Dimensions: 2266 x 1511
	Maximum Dimensions: 2266 x 1511
	Supports Transparency: False
	Bit Depth: 8 bit

#### **Text**

The table below lists the specifications for each Text option, all of which share the same example image shown below.



Shared Example Image for All Text Options

Text Options:	Specifications:
Background Single Asset	File Type: PNG, TGA
	• Recommended Dimensions: 256 x 256
	Maximum Dimensions: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
Background Sequence Asset	• File Type: TGA
	• Recommended Dimensions for Sequences: 256 x 256
	Maximum Dimensions for Sequences: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
Wings Single Assets	• File Type: PNG
	• Recommended Dimensions: 512 x 512
	Maximum Dimensions: 512 x 256
	Supports Transparency: True
	Bit Depth: 8 bit



Text Options:	Specifications:
Coloured Background Single Asset	File Type: PNG
	• Recommended Dimensions: 256 x 256
	Maximum Dimensions: 512 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
	These images must be grayscale



#### Title Text

The table below lists the specifications for the Title Text asset option.



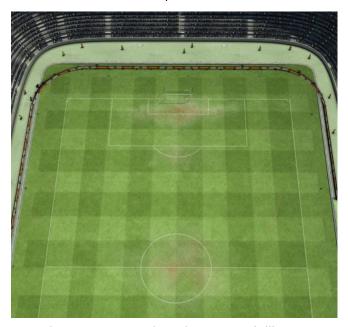
Example Image - Title Text Asset

Title Text Option:	Specifications
Single Asset	• File Type: PNG
	Recommended Dimensions: 1920 x 256
	Maximum Dimensions: 1920 x 512
	Supports Transparency: True
	Bit Depth: 8 bit
	• File Type: JPG
	Recommended Dimensions: 1920 x 256
	Maximum Dimensions: 1920 x 512
	Supports Transparency: False
	Bit Depth: 8 bit



### Virtual Stadium

The table below lists the specifications for the Virtual Stadium asset options.



Example Image - Virtual Stadium Asset (All)

Virtual Stadium Option:	Specifications
Stadium Adverts	• File Type: PNG
	• Recommended Dimensions: 1080 x 1080
	Maximum Dimensions: 2160 x 2160
	Supports Transparency: False
	Bit Depth: 8 bit
	Adverts must come in pairs and be named as follows:
	> They must be stored in a folder with nothing else.
	➤ The name of the folder will appear on the user interface to select the adverts - example Folder "Ross Video" containing advert1.png and advert2.png.
	> The first file of the pair must be named: advert1.png.
	> The second file of the pair must be named: advert2.png.



Virtual Stadium Option:	Specifications
Pitch Logos	File Type: PNG
	• Recommended Dimensions: 1080 x 1080
	Maximum Dimensions: 2160 x 2160
	Supports Transparency: True
	Bit Depth: 8 bit
	The PNG textures MUST match the stadium dimension aspect ratio.
	★The pitch lines are provided for guidance only and should not be part of the textures.

**Note**: While the resolution can vary within the specified range, the aspect ratio must match the intended placement on the pitch or stadium. This can vary depending on how and where the asset is used. If unsure, please contact Technical Support as behavior may differ across setups.