

CALIBRATION JIG SPECIFICATION

Computed tomography (CT) imaging involves the use of both x-ray equipment and a digital computer to produce images of the body. CT imaging has the unique capability to offer clear views of soft tissue, bone, muscle, and blood vessels. Cone Beam CT scans are advantageous as they are able to differentiate between various types of tissue and can identify infections and even tumors. The Cone Beam CT scan is a cost effective way to visualize the anatomy and plan the proper treatment while taking any risks into account. The CT scanner is calibrated to correct for beam hardening in tissue. Follow the steps below and discover how easy it is to scan the calibration jigs and upload the information.



Specifications

Dimensions of External Field of View:

Height – 5.25 in
Width – .039 in
Length – 5.5 in

Dimensions of Internal Field of View:

Height – 5.25 in
Width – .039 in
Length – .157 in

Material

Each Calibration Jig is made of FDM ABS Plastic, which is strong and durable. Fused Deposition Modeling uses Acrylonitrile Butadiene Styrene, a shiny plastic, in a layered manufacturing method that extrudes a thin bead of plastic one layer at a time. The melted material is deposited by the extruder, cools, bonds and hardens. Each jig has 13 bb's roping around the outside diagonally.

Calibration Jig Scanning

Follow these steps to scan the jigs to calibrate the machine:

- 1) **Timing** - Scan each jig separately.
- 2) **Scan Settings** – Apply patient scan settings, and ensure the slices are **.25 to .3 mm**.
- 3) **Secure Foam** - Secure **1 in** thick square piece of foam on the chin holder.
- 4) **Secure External Jig** - Place External Field of View jig on top of the foam and scan it.
- 5) **Secure Internal Jig** – Place Internal Field of View jig on top of the foam and scan it.
- 6) **Export File** – Create Two folders locally on your drive.
 - I. **External Field View** – Export and save **.DCM** format.
 - II. **Internal Field View** – Export and save **.DCM** format.
- 7) Follow **upload instructions** to the right of this page.

Data Upload

Follow these steps to upload the data to InPronto FTP servers:

- 1) Contact InPronto to acquire FTP access rights
- 2) Open Windows Explorer and in the address bar, type <ftp://files.inpronto.com>
- 3) Login with your assigned credentials
- 4) Locate the folder on your Hard Drive to upload to InPronto's FTP server
- 5) Drag and drop the folder from your Hard Drive into your InPronto's assigned directory

Note: Be sure to upload the calibration jig DICOM files before uploading any patient's files.

FAQ'S

1. Why use the Calibration Jig?

The Calibration Jig is used because it is necessary to calibrate the density. When this particular plastic is put in a machine, we will know the exact density of the plastic as it is measured by that machine. Thus, when the final product is produced in the 3D printer, errors will be minimized.

2. How do I purchase the Calibration Jigs from InPronto?

For doctors, first login to InPronto. Then go to the "Store" tab at the top of the page and click on Calibration Jigs. Click the cart icon to add to your cart and then hit "Submit Order".

For scan centers, please call us at (415) 734-9650 or email us at info@inpronto.com to order the jigs.

3. How much do the Calibration Jigs cost?

The Calibration Jigs cost **\$699.00 U.S. dollars**. We usually ship FedEx Ground unless otherwise specified and paid for by the person who places the order. We only accept checks and or Visa, Master Card, Diners Club and JVC.

4. Once I place an order, how long before I receive the Jig?

It takes about **1 week** for the jig to be created and shipped. These Jigs are only manufactured to order, so once you have paid for it online, it will go into production. The plastic is molded, the bb's are placed on the plastic and then it is shipped.

5. What is the frequency of calibration?

The machine must be calibrated once every three (3) months.

