

**PLANMECA®**

**ProMax® 3D**

**iDent**   
Dental Implants With Confidence

# ProMax 3D Scanning Protocol



# Scanning Protocol for the ProMax 3D

## For Use with iDent

### General

This protocol is written specifically for users of ProMax 3d CBCT scanner.

- Patient Scan - with the appliance firmly fixed in the patient's mouth, as instructed by the dentist.
- Dual Jaw Scans (where necessary): mandible and maxilla must be scanned separately.
- Radiographic Appliance Scan - appliance alone in a Styrofoam holder.
- Remove metallic objects such as jewelry and metal prostheses.

## Patient Preparation, Positioning and Scanning

- a) **Appliance Positioning:** Ensure that the appliance is fixed and stable in the patient's mouth. The technologist should not perform the scan if the appliance does not fit easily and soundly in the patient's jaw – contact the dentist.
- b) **Patient Positioning:** The patient should enter the machine either standing or sitting in a chair. Center the patient so that the upper laser divides the face into two symmetrical halves (midline). The patient's head should be tilted to minimize the interference of the jaw and teeth images with artifacts stemming from metal fillings. It's best to position the occlusal plane parallel to the floor.

Note: Preview function option can be enabled to check scout images for patient positioning.

The position of the layer light denotes the front of the volume being scanned and should be placed touching the anterior most surface of the teeth or scan appliance.

- c) **Patient Scanning:** Prior to the scan, the patient should be instructed not to swallow. The CT Technologist may wish to instruct the patient to swallow several times before starting the CT scan.
  - a. Select 3D Standard program
  - b. Select Teeth targeting
  - c. Select FULL for diameter and FULL for height
  - d. If the lower jaw (mandible) is to be scanned, position the chin cup in the highest position on the patient positioning mask. For upper jaw (maxilla), position the chin cup in the lowest position in the patient support mask
  - e. Select the Go 3D button on the graphical user interface (GUI)
  - f. Select NORMAL resolution
  - g. Perform the scan

## The Appliance Positioning and Scanning

- a) **Positioning:** The appliance should be placed in a Styrofoam (Polystyrene) scan box. The scan box should be placed on the guide holder (Figure 1), in the same orientation as scanned in the patient's mouth. Position the guide holder in the center position on the patient support mask.

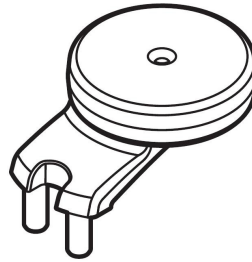


Figure 1

- b) **Appliance Scanning:**
- a. Select 3D Standard program
  - b. Select teeth target
  - c. Select FULL for Diameter and LOWER for Height
  - d. Select NORMAL resolution
  - e. Set the kVp to 70 and the mA to 8  
Note: These values may vary depending on the material of the scan appliance
  - f. Select the Go 3D button on the GUI
  - g. Set the Layer Light to be just forward (anterior) of the scan appliance
  - h. Perform the scan



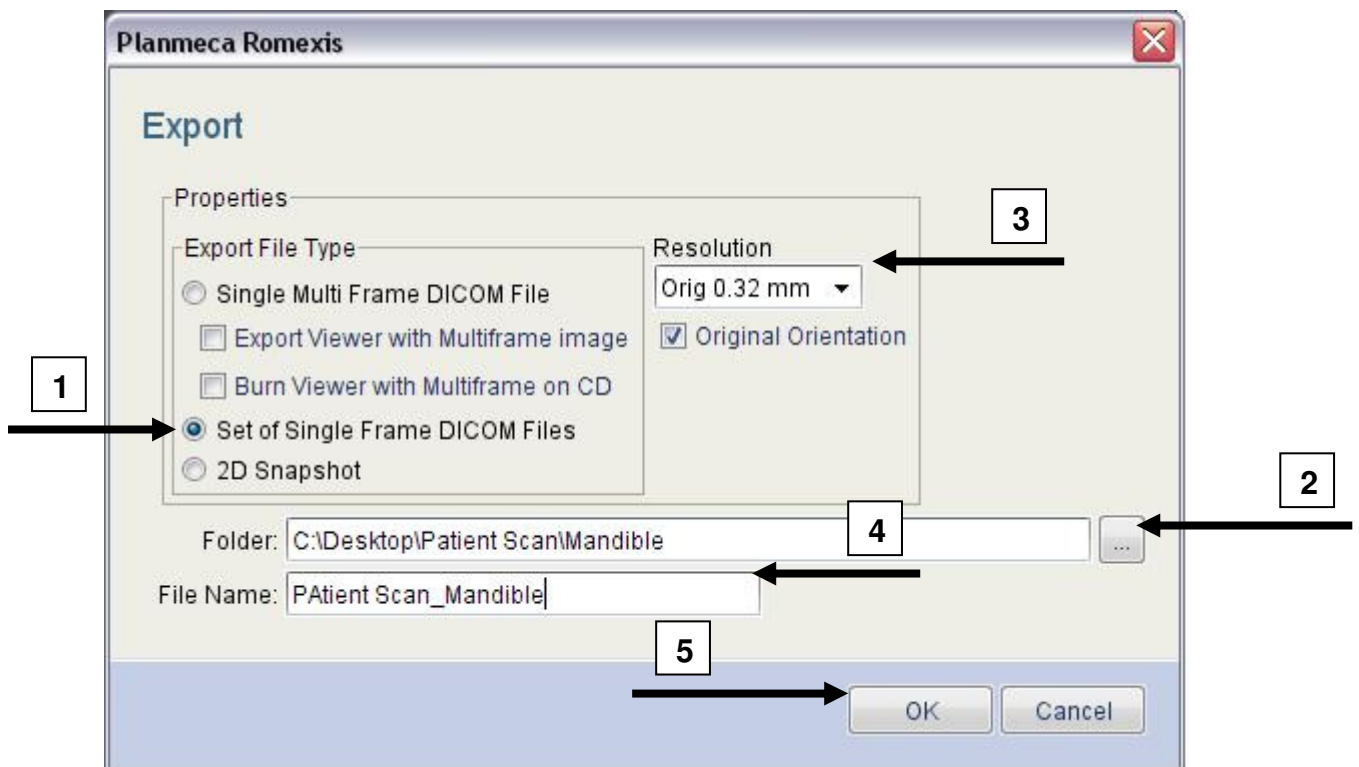
**Never** place the appliance in a vertical position.

## Data Export

Click Export button on the top toolbar of the Romexis software



- a. Select Single Frame DICOM (1)
- b. Select export path (2)
- c. Select 0.32 mm slice (3)
- d. Name file (4)
- e. Click OK (5)



## Data Saving

- a) Data for each jaw should be saved in **separate datasets (see below)**.  
The data for each template should correspond to the data of the patient.
- b) Each patient and template datasets should be copied to separate folder, compressed (right click on folder > send to compressed zipped folder).
- c) Send zipped file(s) to iDent partner via the internet (contact your iDent partner for upload information).

