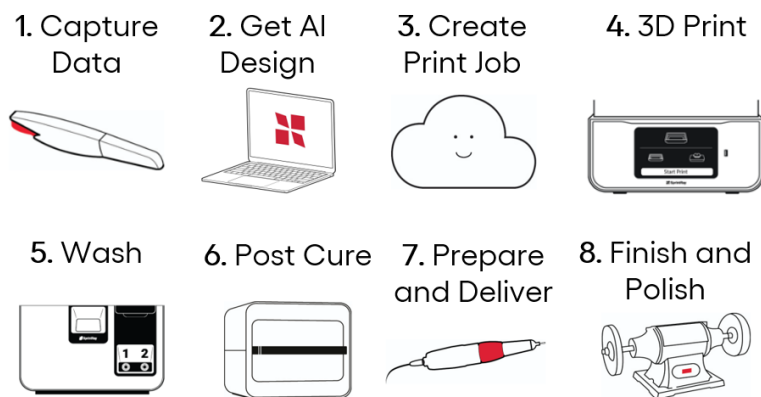


3D Printing Occlusal Guards



With SprintRay in your office, you can fight the rise in grinding and clenching by delivering more occlusal guards. Go from scan to placement in less than 60 minutes with SprintRay 3D printing.

Occlusal Guard Workflow At a Glance



1. Capture Data

- Scan Upper, Lower, and Bite

2. Get AI Design

- Submit Treatment request
- Review and Approve Design



3. Create Print Job

- Import into RayWare
- Sending to printer

4. 3D Print

- Preparing printer

5. Wash

- Wash the Night Guard

6. Post Cure

- Cure in Pro Cure 2

7. Smoothen and Try-in

- Smoothen and Polish
- Patient Try-in and Adjustment

8. Finish and Polish

- Pre-polish
- Polish with Tripoli
- High Shine
- High Gloss (Optional)

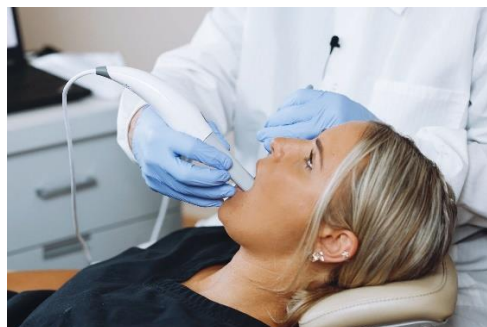
Workflow Deep Dive

1. Capture Data

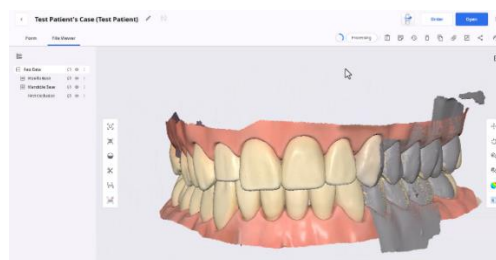


Scan Upper, Lower, and Bite

Perform a full scan of the patient to capture their digital anatomy. Make sure there are no holes in your scan and do your best to capture as much of the surrounding tissue as possible. Complete the bite scan in a closed, resting position for best results.

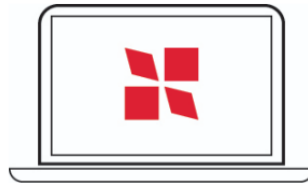


Export the scans as an STL with the upper and lower arch in occlusion. This is the default export style for most scanners and eliminates the need for a bite scan.



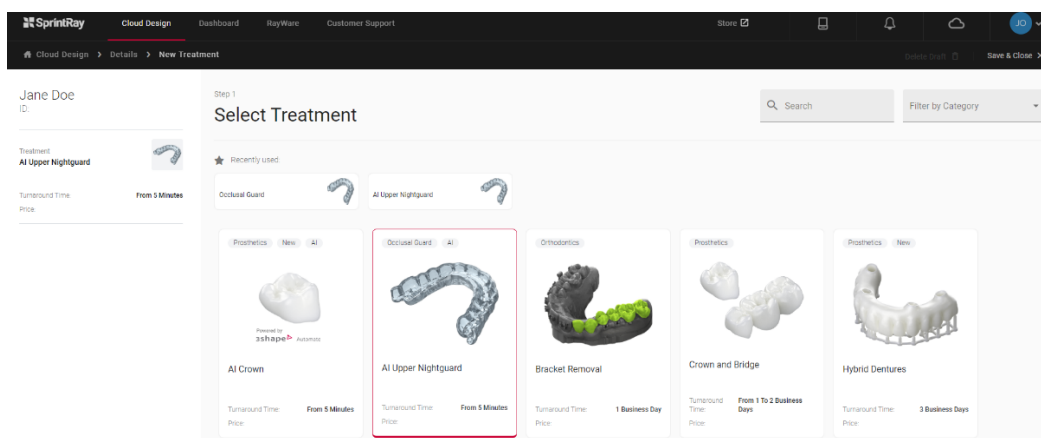
Note: *If you do not export your scans in occlusion, this treatment will not be compatible with AI Design*

2. Get AI Design



Submit Treatment Request

Visit dashboard.sprintray.com and sign in or sign up for a SprintRay account. Select or add your patient, then choose the 'AI Nightguard' treatment type. Set the desired parameters and upload the patient files, then submit.



Note: AI Design is great for most cases, but choose the manual design option if your treatment needs special attention



Review and Approve Design

SprintRay AI will design the night guard in around 5 minutes. You'll receive an email notification when it's ready. Review and approve the file from your Cloud Design dashboard.



If the AI design doesn't satisfy your requirements, switch to a manual design for human intervention.

3. Create Print Jobs

Import into RayWare

Once the night guard design has been approved, the 'Add To Print Job' button on the Cloud Design treatment page will automatically generate a build platform in RayWare Cloud.

If setting up the build platform manually, select the 'Occlusal Guard' print job type. Select the printer and resin you'll be using. We recommend printing night guards at 100 microns.

Import your design. RayWare will automatically orient the model with the intaglio facing away from the build platform and with the model at an optimal 25-degree angle with supports.

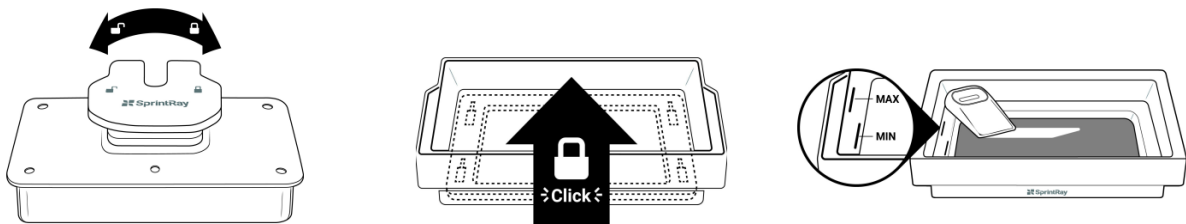
Queue to Printer

Once you're happy with the setup of your print, select the 'Send to Queue' button, then choose the printer you'd like to use for this print job.

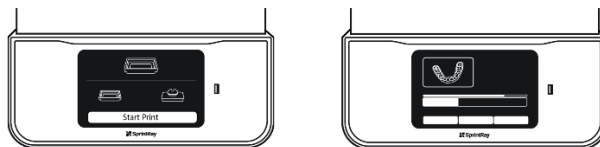
***Note:** You can also use the 'Print Now' button, but be sure to thoroughly inspect your printer before you start printing.*

4. 3D Print

Prepare and Start the Print Job

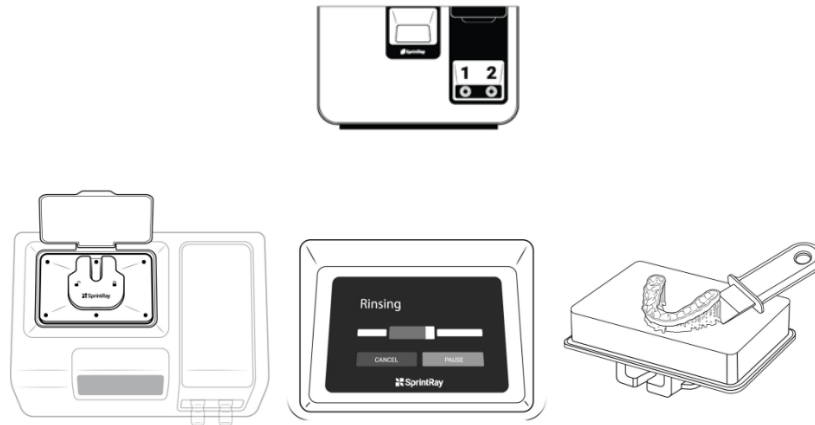


- Check that the platform is clean and ready
- Check that the resin tank is seated in its cradle
- Fill the tank to the max line with Nightguard Flex or Firm resin and mix to incorporateGo to the Queue and press **Start Print**



- You can monitor progress on the touchscreen or on SprintRay Cloud. The print job should take around 60 minutes

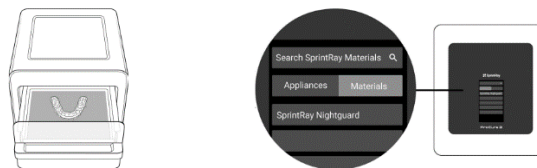
5. Wash



- Transfer the build platform to ProWash
- Run a standard cleaning cycle
- Remove the night guard from the platform

6. Post Cure

Cure in ProCure 2



- Place the night guard on the centre line in the ProCure 2
- Select the resin you printed with, select to cure on the centre line, and press 'Start'

Remove Supports

Twist the supports away from the night guard to remove. Don't worry if small support nubs are left on the guard, you'll remove them in the next step.

7. Smoothen and Try-in

Smoothen and Polish



Use low RPM with a Scotch Brite wheel or carbide bur to remove any stumps left over from supports. Use 10,000-12,000 RPM.

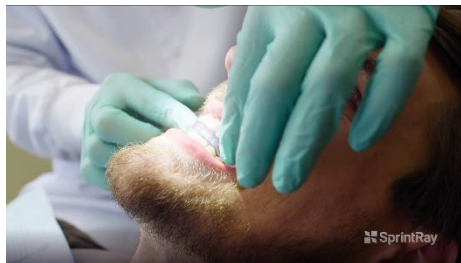


Use a steamer and or give the night guard a rinse with warm soapy water. Brush with a toothbrush to remove residue.

Patient Try-in and Adjustment



Soak the guard in a bowl of warm water (no hotter than 50C) for 15 seconds to soften.



Seat the guard and let the patient try the appliance. Adjust chairside to adjust contacts.

8. Finish and Polish

Pre-polish with Pumice

Use a muslin wheel and pumice on a dental lathe with firm, consistent pressure. Reach all areas of the guard. Keep the wheel damp and the pumice flowable.



Polish with Tripoli

Use a fresh muslin wheel and Tripoli. Use firm and consistent pressure, reaching all areas of the guard. Once finished, apply again and repeat using light pressure.



High Shine

Use a fresh muslin wheel and Hatho beige. Use firm and consistent pressure, reaching all areas of the guard. Achieve a uniform shine across the full appliance.



High Gloss (Optional)

Use a cotton buff wheel and Hatho pink. Use consistent pressure, reaching all areas of the guard until you achieve a mirror finish.



Clean

Use a toothbrush with warm soapy water and/or a steamer to clean the guard before delivering it to the patient.



Your night guard is now ready for delivery.

www.eurodontic.co.uk

sales@eurodontic.co.uk