

# Application GUIDE



## SCORE CT-HR

The purpose of SCORE CT-HR is depiction of the fine object in head and neck. It is a mode that a reconstruction image is provided with higher space resolving power.

SCORE CT-HR reconstitutes a limited area by high pitch. Therefore, it becomes important that it locates an interest area (object) in the iso-center surely unlike normal SCORE CT.

### PROCEDURE

**1** Select DUP as “SCORE CT-HR” on Ref monitor.

**2** Set the C-arm to **HEAD** position and return it to **CENTER** position pressing  switch.

**3** Fasten patient's head tightly.

- If the patient's body moves during 3D angiography, the reconstructed image suffers artifact and does not show the region with the required clarity. Body movement should be suppressed during the acquisition process.



**4** Open all the leaves of the collimator **fully**.

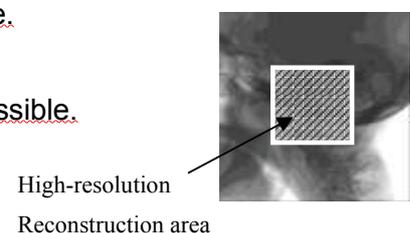
\*You can only use C-leaves to reduce direct X-ray.

**5** Position the head to the center of FOV using table top floating.  
**(Minimize direct X-ray)**

\*SCORE CT-HR image is acquired with FOV8 inch, but the center part of 4inch (6cm) will be reconstructed for high-resolution mode.

(The indication area is modifiable by post processing.)

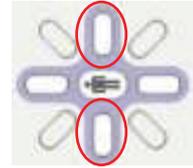
To set a target object in the center of FOV as much as possible.



**6 Use the DIRECT MEMORY to set the C-arm to Lateral position and adjust table height only.**

(Set LAO 90 degree for MH-200s, RAO 90 degree for MH-300)

\*Be sure to keep patient's safety during acquisition.



**7 Press “3D” switch and “SET” switch will blink.  
Move the C-arm to start position by “SET” switch.**

- We recommend you to check fluoroscopy image to confirm the targeted region is still in the field of view during C-arm movement.
  - After positioning in the upper part on ACQ-monitor.
- \*When you do not need the contrasting, please advance to 9.

**8 Set up the injector with the contrast medium is filled up to the front edge of catheter.**

**9 Acquire image.**

- \*Set up proper Inj-ACQ delay time according conditions of patient or targeted region using side menu on Ref-monitor.
- \*Explain to a patient that the C-arm moves and pay enough attention to safety, please.

**The acquisition is completed.**

### Injector Conditions

- On SCORE CT-HR imaging, in case of using the undiluted contrast media; it becomes a cause of the artifact or drop of the visibility. We recommend using diluted contrast medium.
  - Depict a intracranial STENT and blood vessel : **About 7 times dilution**
- The target vessel needs to be filled with the contrast medium. Before the acquisition, fill the contrast medium to the catheter front edge.
- Please find Inj-ACQ delay from a DSA image. The time is until a target blood vessel is full of contrast media.
- 
- Injector setting,
  - Injection Time: Inj.-ACQ Delay + Rad Time
  - Rate : **About 0.5~1.0ml/sec**

Make fine adjustment of contrast medium according to region or/and condition of the disease. (Don't set delay of an injector.)
- Please refer to the next list for the common setting.

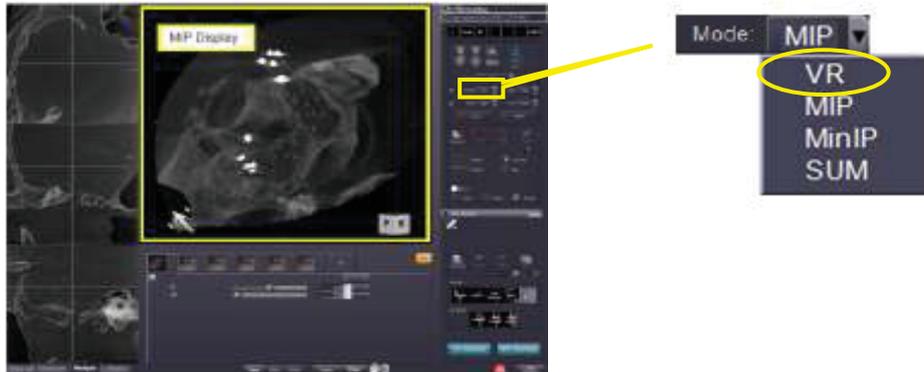
	C-arm speed (deg/sec)	Rad Time (sec)	Inj.-ACQ Delay (sec)	Injector Configuration				
				Delay (sec)	Rate (ml/sec)	Injection time (sec)	Total (ml)	Rise Fall (sec)
Intracranial STENT (SCORE CT-HR)	10	20	2	0	1	22	22	0.4

## Operation method of SCORE 3D-WS

### ●Image Display

A reconstruction image of after SCORE CT-HR is MIP display.

In case of switch to VR image from MIP, please choose it from pull-down menu of mode.



### ●MASK Processing

It becomes easy to see a stent and/or blood vessel by using mask processing.

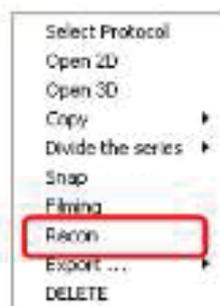


### ●Reconstruction

If an object is out of the reconstruction area, it can enlarge the reconstruction area.

① Select the rotation data to reconstruct from the series data list and right click.

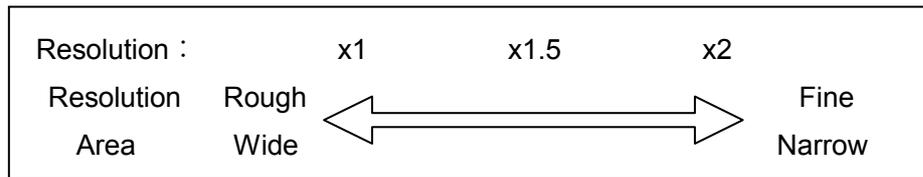
Select [Recon] and click [OK].



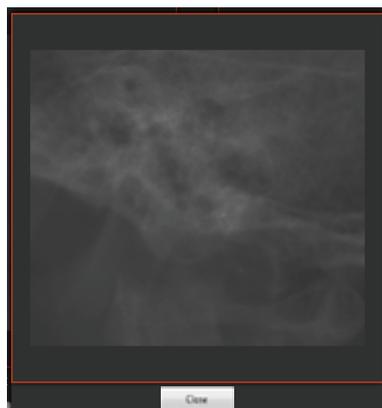
- ② Check into [Zoom] and click [ROI].
- ③ Open the Reconstruction Area window.



It can select resolution value from x1, x1.5, x2 from the [Resolution].  
 Image size changes by selected magnification.



- ④ Click [Check].  
 An object confirms whether there is not it outside a range.



If there is it outside a range, back to [Reconstruction Area] window by [Close] button.  
 After that, select resolution value again.

- ⑤ Click [OK] without a problem in the range.
- ⑥ Return to 3D Reconstruction window, click [OK].