

Region	Component	Functional description
Menus	Load Video	Importing video into the software by calling MATLAB built-in function VideoReader. The supporting formats includes MPEG-4, H.264 encoded video (.mp4, .m4v), Apple QuickTime Movie (.mov) or any format supported by Microsoft Media Foundation. File in DICOM format should export into available format by other software (e.g. the RADIAUT DICOM VIEWER).
	Load Mat File	Importing data in a .mat file that saved by the software. It can restore the state of the software when the file saved.
	Save Mat File	Saving data in a .mat file of the current software state which including all variables and variables' value. No video changes will be made of the original video during software use.
	Export ROIs	Exporting all images within each bounding box.
	Tracking Method	Choosing Tracking method while the default method is CARD 128.
Trak Control Region	Position Selecting Bar	The selecting bar has two value (left and right) which works when the CEUS's mode is double. The left value means CEUS window on the left while right value means CEUS window on the right. The value should be set before handling a new video.
	Automatic Analysis	The software will conduct automatic analysis of the import video when you click the option. It will analysis the recording window position and recording mode. It works automatic when your load a new video and if you click the option to cancel the analysis result in case of wrong results.
	Tracking Length	Tracking length can be set by input the number manually or drag the progress bar below.
	Tracking	When you click the option, the current drawing bounding box will initialize one tracking progress back and forth around the current frame.
	Mirror	The option is default setting after automatic analysis. The option is setting in case of wrong analysis.
	Video Basic Information Text	These texts representing how long the loading video and the frame width and height to make user aware of spatial resolution and duration of the processed video.
	Current Time	The text indicates the time of the current frame within the entire video. The text can put manually to jump to the specific moment fast and accurately.

	Tracking Control Buttons	These 8 buttons represent 8 different tracking sequences. The process can begin at any frame and any position within the recording screen. They use grey, green, red color to indicate no tracking sequence, recording a tracking sequence and under processing respectively. When the button is gray, press the button can sketch a bounding box on current frame. When the button is green, press the button can jump to the corresponding frame,
Video Play Window	Playing Context Menu	When you click the image in current frame, the context menu will appear. The options include “next picture”, “previous picture”, “next second picture”, “last second picture”. They are set for check or fine-tune bounding box frame by frame.
	Delete Context Menu	When you click the area within the bounding box of the current frame, the context menu will appear. Right-click will display the next options, which are “delete this one,” “delete all before this one”, “delete all after this one”, and “delete the whole sequence”. These operations will only affect the current tracking sequence.
	Mirror Context Menu	When you click the area within the bounding box of the current frame, the context menu will appear. Right-click will display the next options, which are “mirror this one”, “mirror all before this one”, “mirror all after this one”, and “mirror the whole sequence”. These operations only affect the current tracking sequence. Using mirror means that the position of the bounding box will switch to the figure of another mode.
Video Control Region	Video Play Control Bottoms	The series of button to control video play. They are “last second”, “last frame”, “play/stop”, “next frame”, “next second” from left to right.
	Video Timeline	The timeline is a slider bar and allows manually dragging. The current value of the slider bar shows the current frame position within the whole video.
	Sketch Indicator	The color bar indicates whether there is a bounding box at the corresponding position of the Video Timeline by different colors. White indicates that there is no bounding box of this duration. Different color but for white indicates different tracking sequence.
	Automatic Analysis Indicator	The color bar indicates the image mode at the corresponding position of the Video Timeline by different colors. Green indicates that the frame is in single mode, brown indicates double mode, and gray indicates that the automatic analysis function is not used or this duration is paused.