## **Trigger Setting**



Internal clock is the most common shooting method. The camera shoots video at a set frame rate and with a clock (frequency) generated by the camera's internal clock. When an external trigger signal is input to the camera, data is recorded in the camera memory and recording finishes when the memory capacity is full.

- Start trigger is to record data after trigger input in memory.
- Center trigger is to record 50% of the data before and after the trigger input in memory.
- End trigger is to record data before the trigger input in memory.
- Custom trigger is to record data before and after the trigger input at any ratio in memory.



It is possible to record the frame count that corresponds to 95% of the recording time from trigger input to the end of recording.



It is possible to record the frame count at half of the recording time.





It is possible to record the frame count that corresponds to 95% of the recording time from the beginning of recording to trigger input.



It is possible to set the frame count to record from the trigger input to the end of recording in required proportion (1% increments).



When selecting custom settings for trigger timing, we can select minus percent ( - %). It can set delay against the trigger.

When we want to set delay against the trigger timing roughly, '-%' on custom settings is useful because we do not have to arrange timing generator. But amount of delay depends on memory size and shooting frame rate.



If an external trigger signal is input at a certain timing while the camera is operating with its internal clock, there will be a variation of "1/(frame rate). It means shooting interval between the timing the trigger is input and the timing the exposure starts on the recorded image.

When shooting an injection and the injection timing signal is input to the camera as a trigger signal, there is no correlation between the actual injection timing and the camera's exposure start timing. The trigger input timing can cause variations in the shooting timing, as shown in the example in the diagram, because there is no correlation between the actual injection timing and the camera's exposure start timing.

First frame of recorded image		
Exposure timing of		
Camera	$\checkmark$	
	n → Delay:a	Injection timing
Trigger timing A	•	
	Delay:b	
Trigger timing B		
	-	
	(Trigger timing A)	(Trigger timing B)
	Recorded First frame	Recorded First frame