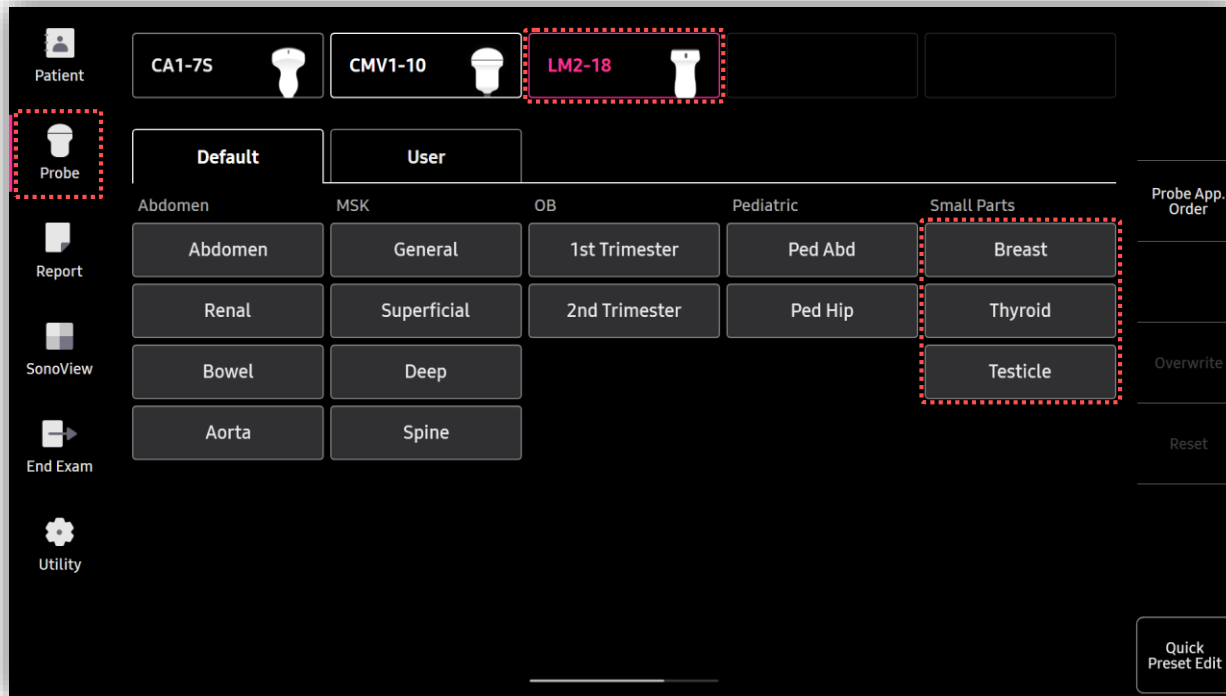


# E-Strain™

## HERA Z20 Quick Guide



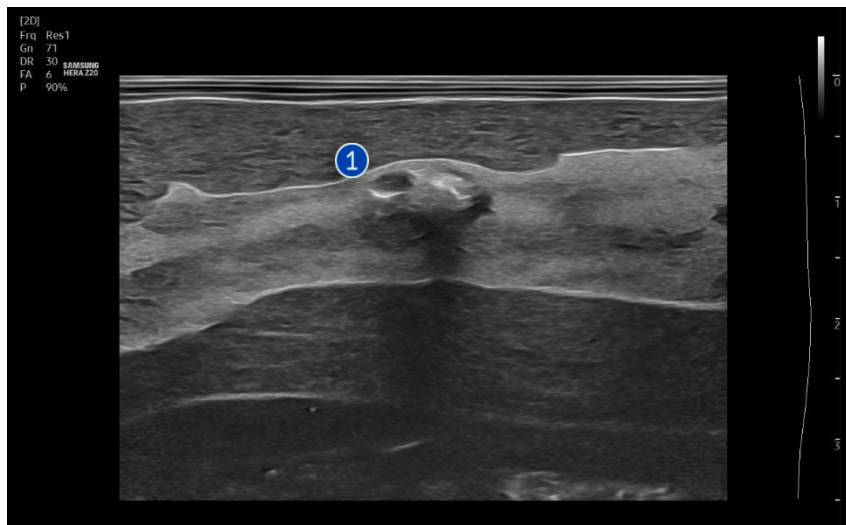
# 1. Probe and Preset



※ E-Strain™ can be operated under the following conditions :

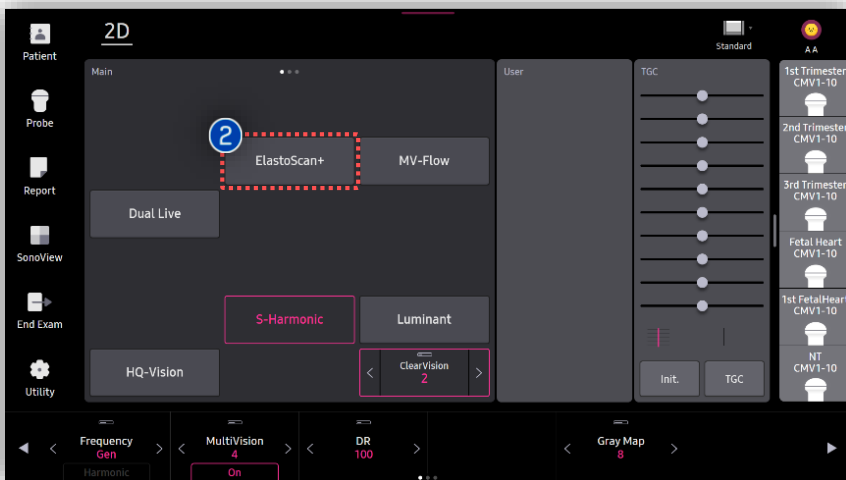
Probe	Application
LM2-18	All Small Parts presets MSK (General)
EA2-11AR/AV EV2-12	All GYN presets Urology (Prostate)

## 2. Start ElastoScan+



1 Scan

Image the suspicious lesion in the breast.



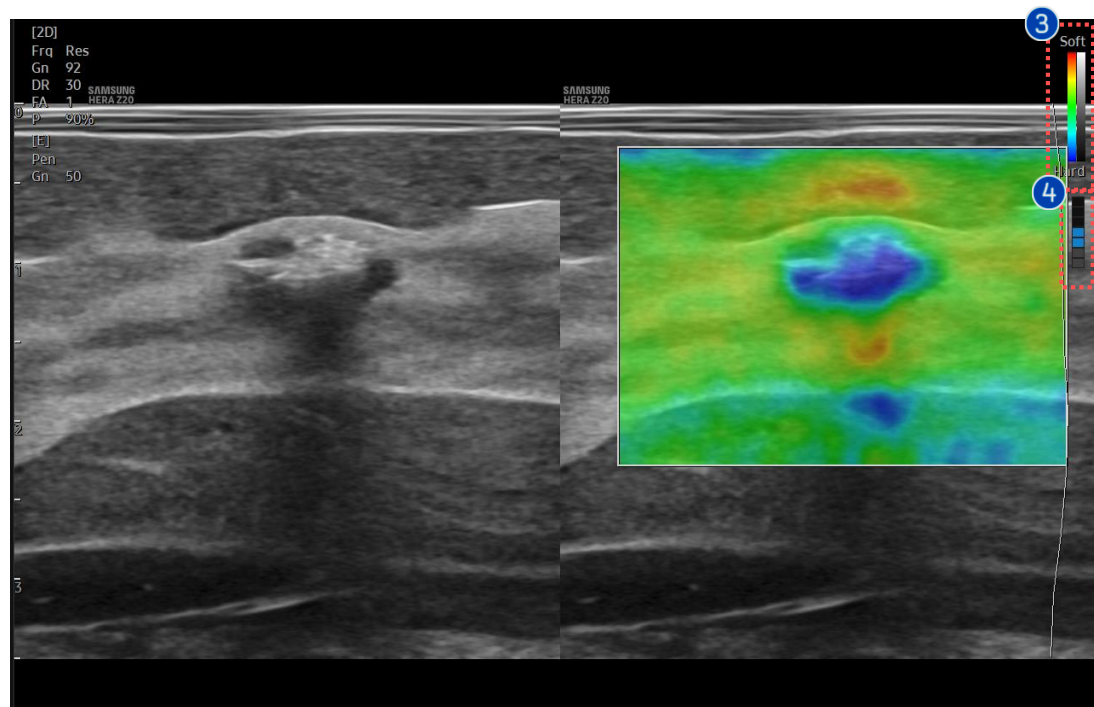
2 ElastoScan+

Tap [ElastoScan+] button on the touch screen to start E-Strain.

### ★ Tips

E-Strain™ is a tool to measure strain based on a 2 ROI method.

### 3. Indicators of ElastoScan+



#### 3 Color bar

It represents stiffness of tissues.

The color map can be changed. There are 6 color map options.

#### 4 Compression guide bar

Apply gentle compressions with the probe while imaging the breast. Capture the image when compression guide bar is between Step 3 and 7 (indicates appropriate pressure).

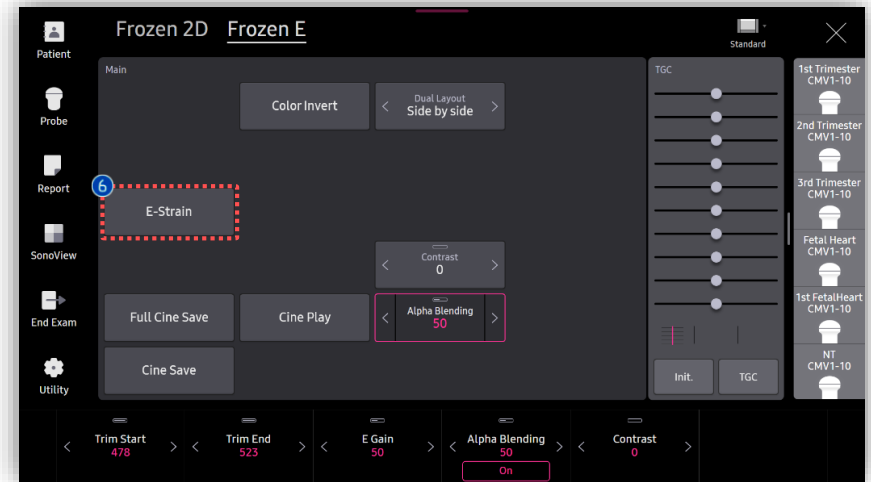
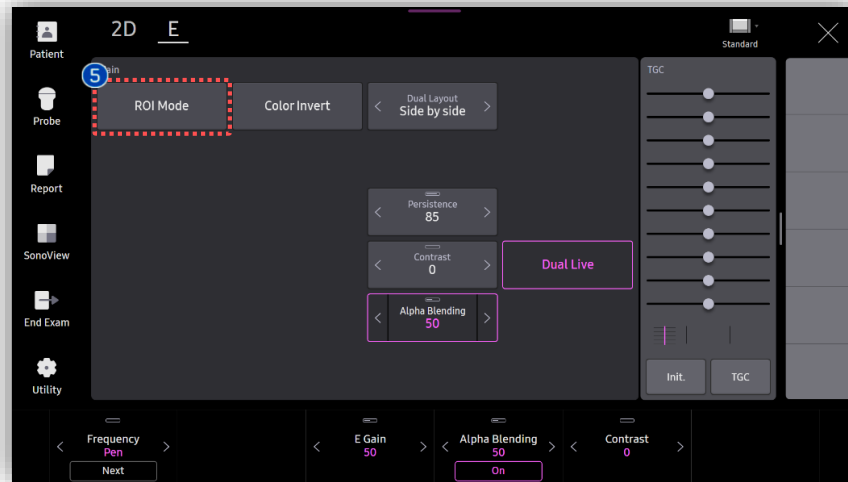
#### ★ Tips

Step 0 : The probe is almost stationary.

Step 1 - Step 2 : There is not enough pressure.

Step 3 - Step 7 : There is appropriate pressure.

## 4. Activate E-Strain™



### 5 ROI Mode

When using E-Strain, you can select or deselect [ROI Mode] depending on the area of interest.

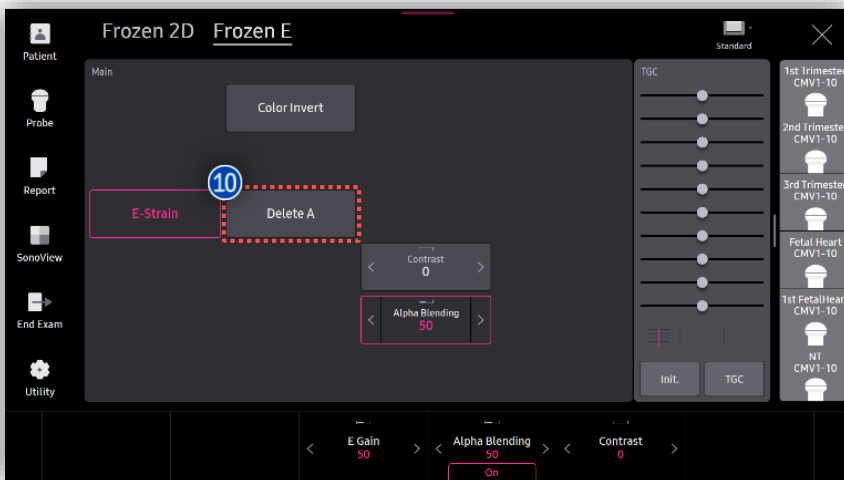
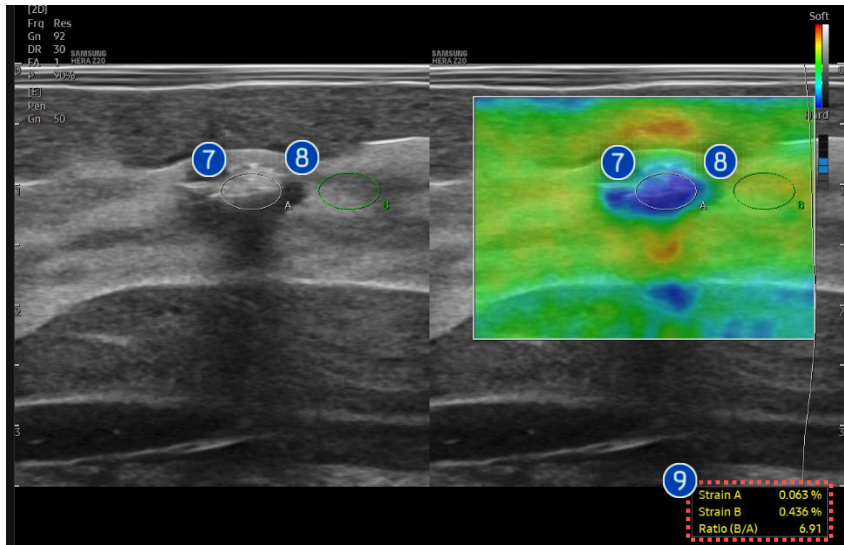
### 6 E-Strain

After the image is frozen, the [E-Strain] button appears on the touch screen. Tap [E-Strain] button to measure the strain ratio.

### ★ Tips

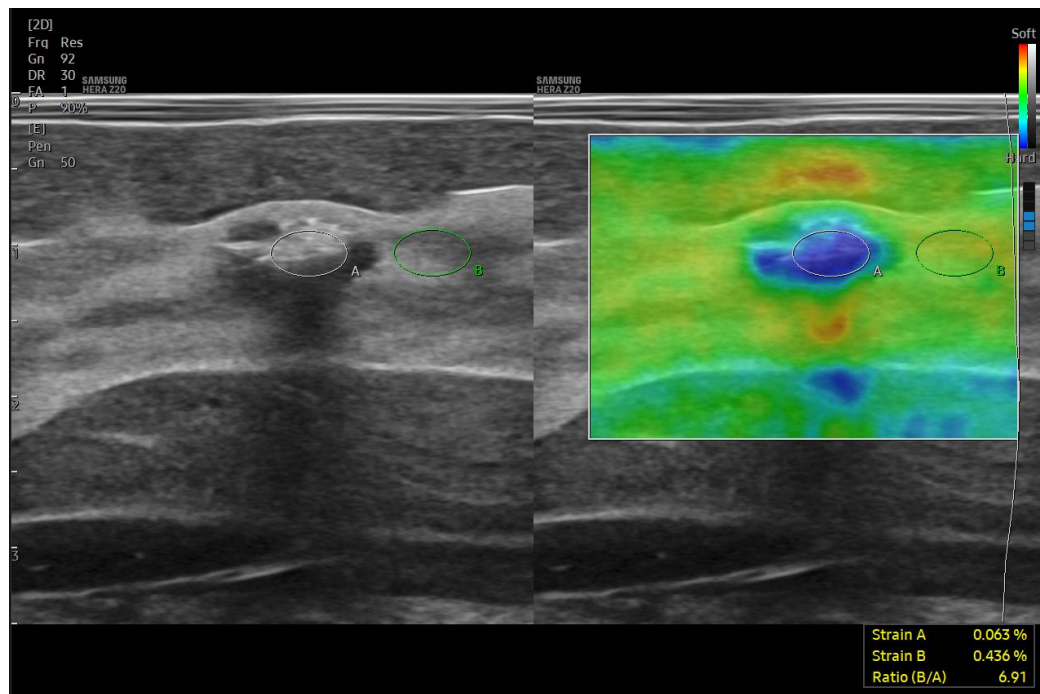
The strain elastography image quality and the proper placement of the ROI are important to reduce the strain ratio measurement errors.

## 5. Set ROI for Strain Ratio Calculation



7 ROI A	Place the ROI over the lesion on the 2D image and press the [Set] button. If necessary, adjust the position and size of the ROI circle using the trackball before pressing [Set] button.
8 ROI B	Next, place ROI B on the reference area (when imaging the breast, it should be placed on fatty breast tissue) and press the [Set] button.
9 Result	The Strain A, Strain B, and Ratio (B/A) results are shown on the bottom right of display monitor. ※ The displayed results may vary according to the regulatory approval status of each country.
10 [Delete A] or [Delete B]	If you want to delete ROI A or B, select [Delete A] or [Delete B] button on the touch screen.

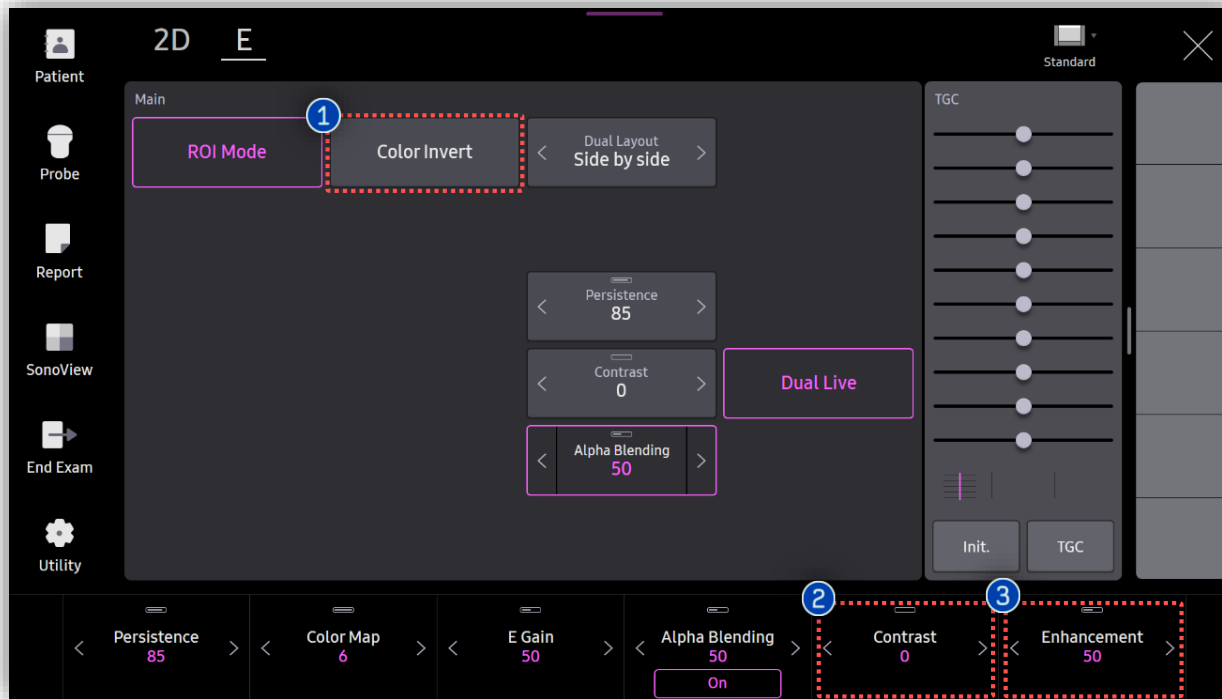
## 6. Result of E-Strain™



### Results

- Strain A: Mean strain value inside the ROI A (not supported in USA and Canada).
- Strain B: Mean strain value inside the ROI B (not supported in USA and Canada).
- Ratio(B/A): Ratio of Strain values (Strain B/Strain A) (not supported in Europe, China and Japan).

## 7. Adjust Parameters (1)



### ① Color Invert

To reverse the color map, press [Color Invert] button on the touch screen.

### ② Contrast

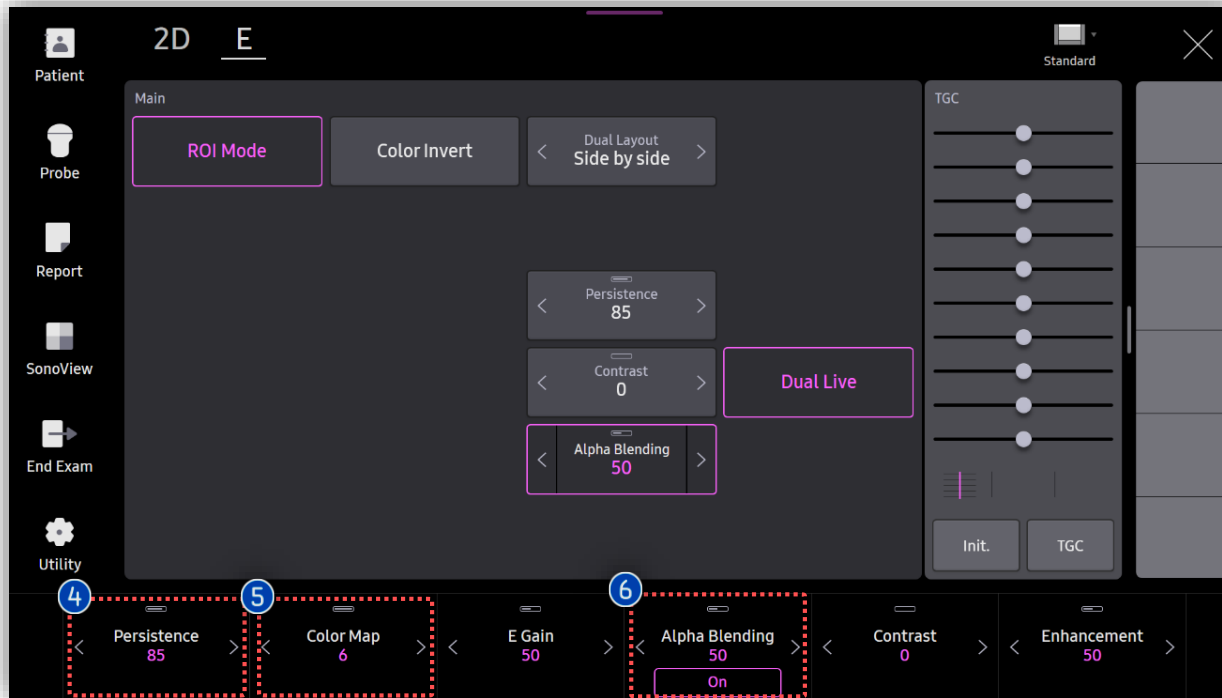
This feature adjusts the contrast based on the image mode. It has values between 0% and 100%.

### ③ Enhancement

Adjust the enhancement of the image between 0 and 100%. A higher value provides more clearly defined boundaries.



## 7. Adjust Parameters (2)



### 4 Persistence

The feature controls the E-Strain frame average. The higher this value is, the higher the frame averaging will be. Increasing the persistence level will reduce the frame rate. For a higher frame rate, decrease the persistence level.

### 5 Color Map

Select the color map of the Elastocan.  
Press the button on the touch screen or use the dial-button to select from up to six types.

### 6 Alpha Blending

This feature superimposes the E-mode image over the 2D image. It has values between 0% and 100%. Setting it to 0% shows an E image only, and setting it to 100% shows a 2D image only.

- The features mentioned in this document may not be commercially available in all countries. Due to regulatory reasons, their future availability cannot be guaranteed.
- Do not distribute this internal document to customers unless relevant regulatory and legal affairs officers approve such distribution.
- This product is a medical device, please read the user manual carefully before use.
- This document is provided to help you understand the feature.
- This User Quick Guide is based on HERA Z20 V1.00.
- Disclaimer: Some Images in this content were obtained from other system.

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