

## TVT280 Visual IR Thermometer – Operation Flow (rev 0.5)

### A) Key Definition (6 keys)

Front: Menu, Up, Down, Left, Right  
Back: Measure

### B) Operation Flow

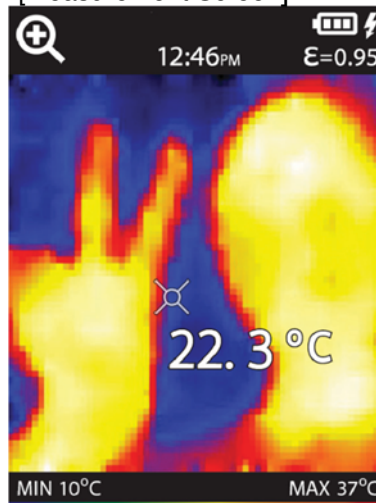
#### 1) Power ON: Press & Hold “Left” for 3sec

[Opening Screen] (2 sec)



→


[Measurement Screen]





#### 2)

Measurement Screen	Keys Functions
	<p><b>Up/Down:</b> Increase/decrease blending level 0%, 25%, 50%, 75%, and 100%</p> <p><b>Left/Right:</b> Enlarge/Reduce the thermal image</p> <p><b>Menu:</b> Press to enter menu mode</p> <p><b>Measure:</b> Press to capture thermal image</p> <p><b>Measure:</b> Press &amp; Hold to take video</p>

3)

Menu Screen	Keys Functions
 <p>The image shows a menu screen with a 4x4 grid of 16 icons. The icons represent various functions: temperature, humidity, clock, alarm, etc. At the bottom, there is an orange bar with the word 'EMISSIVITY'.</p>	<p><b>Up/Down/Left/Right:</b> Select the Icon  <b>Menu:</b> Press to open the selected item  <b>Measure:</b> Exit to [Measurement Screen]</p>

#### 4) Sub Menu

Graphic	Items	Remark
	<b>View Image</b> 	<b>To view the captured thermal image/video</b>  <b>Keys Description:</b> See Below

##### (1) Select Image/Video View

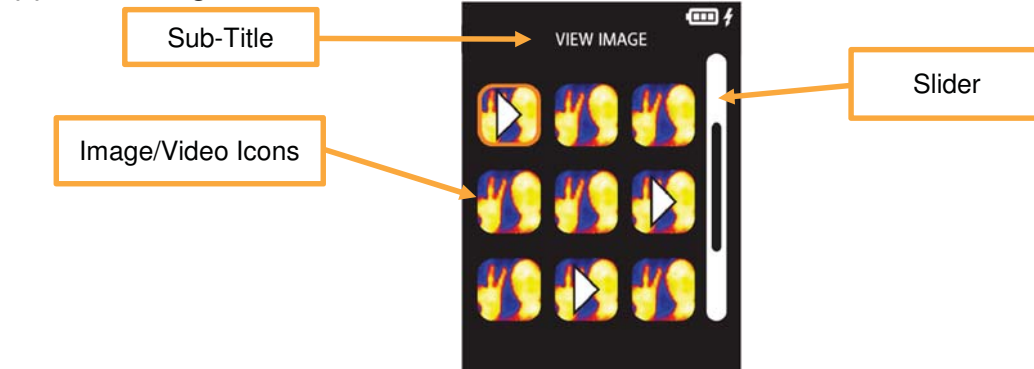


Image icon



Video icon



Selected Image icon



Selected Video icon

**Up/Down/Left/Right:** Move the cursor to select Image/Video icon

**Menu:** Press Once to enlarge the image → (2)

**Menu:** Press & Hold to delete the image/video → (3)

**Measure:** Exit to [Menu Screen]

##### (2) Image/Video View



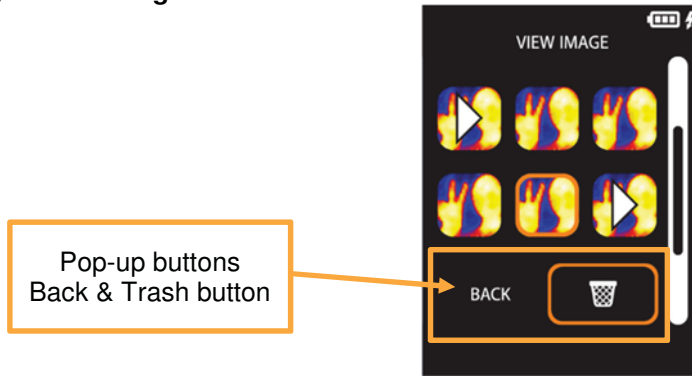
**Left/Right:** Press to view Prev/Next Image

**Up/Down:** N/A

**Menu:** Press to Play/Pause video

**Measure:** Back to (1)

### (3) Delete Image



**Back button:** Back to (1)



**Trash button:** Move the selected Image/Video to Trash



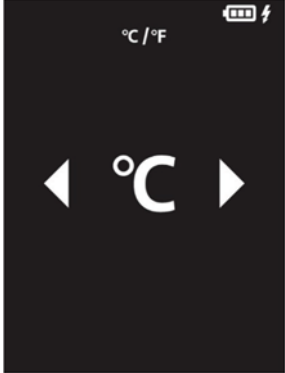



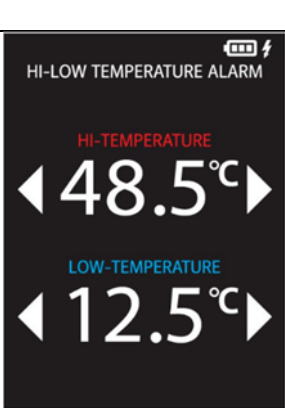

**Left/Right:** Select the Back or Trash button

**Up/Down:** N/A

**Menu:** Press to confirm

**Measure:** Back to (1)

	<p><b>Emissivity</b></p>	<p><b>To adjust the emissivity from 0.1 to 1.0</b></p> <p><b>Keys Description:</b>  <b>Left/Right:</b> N/A  <b>Up/Down:</b> Increase/Decrease Emissivity  <b>Menu:</b> Confirm and back to [Menu Screen]  <b>Measure:</b> Exit to [Menu Screen]</p>
	<p><b>Color Palette</b></p>	<p><b>To select the thermal image color palette</b></p> <p><b>Keys Description:</b>  <b>Left/Right:</b> N/A  <b>Up/Down:</b> Select the color palette  <b>Menu:</b> Confirm and back to [Menu Screen]  <b>Measure:</b> Exit to [Menu Screen]</p> <p><b>Color Palette:</b>  Color, Globow, Sepia, Ironbow, Black hot, White hot</p>

	<p><b>Background Temperature</b></p> 	<p><b>To set the reflected background temperature</b></p> <p><b>Keys Description:</b>  <b>Left/Right:</b> N/A  <b>Up/Down:</b> Increase/Decrease Temperature value  <b>Menu:</b> Confirm and back to [Menu Screen]  <b>Measure:</b> Exit to [Menu Screen]</p>
	<p><b>Temperature Unit</b></p> 	<p><b>To set temperature unit degree C / degree F</b></p> <p><b>Keys Description:</b>  <b>Left/Right:</b> Select degree C / degree F  <b>Up/Down:</b> N/A  <b>Menu:</b> Confirm and back to [Menu Screen]  <b>Measure:</b> Exit to [Menu Screen]</p>
	<p><b>Time &amp; Date Set</b></p> 	<p><b>To set time and date</b></p> <p><b>Keys Description:</b>  <b>Left/Right:</b> Select setting items YYYY → MM → DD → HH → MM → AM/PM  <b>Up/Down:</b> Increase/Decrease the selected item  <b>Down button:</b> Decrease the selected item  <b>Menu:</b> Confirm and back to [Menu Screen]  <b>Measure:</b> Exit to [Menu Screen]</p>
	<p><b>Hi-Low Temperature Alarm</b></p> 	<p><b>To set the high or low temperature alarm</b></p> <p><b>Keys Description:</b>  <b>Left/Right:</b> Decrease/Increase temperature value  <b>Up/Down:</b> Select High/Low temperature  <b>Menu:</b> Confirm and back to [Menu Screen]  <b>Measure:</b> Exit to [Menu Screen]</p> <p><b>Clear Temperature Alarm:</b>  <b>Menu+Measure:</b> Press &amp; Hold Menu button for 2 seconds, then press Measure to turn OFF Temperature Alarms  Display "OFF" instead of temperature value for Hi-Temperature and Low-Temperature.</p> <p><b>Notes:</b>  Please note Hi-Temperature alarm must larger than Low-Temperature value.  E.g. If Hi-Temperature = 48.5, the Low-Temperature can only set to 48.4.</p>



## Measurement Screen

### (1) No Temperature Alarm

Color Palette  
Ref. Guide



Temperature Alarm Icon  
appears when Hi/Low  
Temperature Alarm with  
value

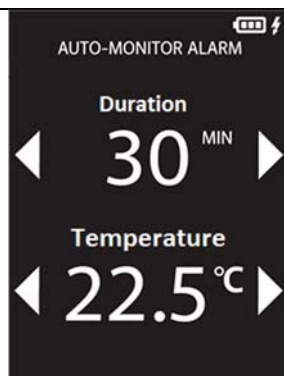
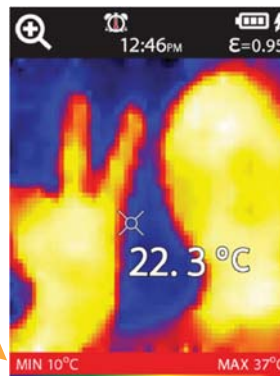
### (2) Low Temperature Alarm

Change to  
BLUE Color



### (3) High Temperature Alarm

Change to  
RED color



To capture the thermal image when over the  
Temperature Alarm in a period of time

#### Keys Description:

**Left/Right:** Decrease/Increase selected item

**Up/Down:** Select Duration or Temperature

**Menu:** Confirm and back to [Menu Screen]

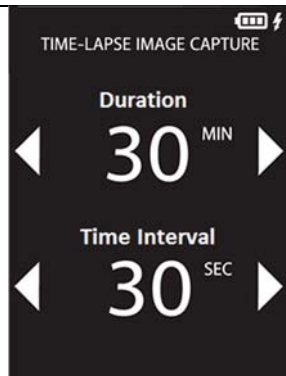
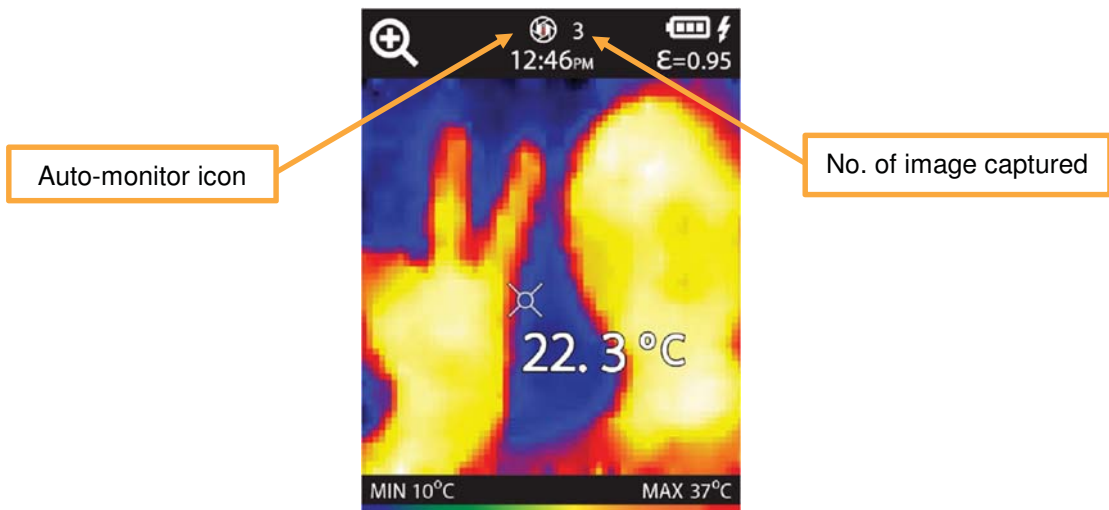
**Measure:** Exit to [Menu Screen]

#### Notes:

Duration: 15min,30min,45min,60min,90min,120min



## Measurement Screen



### Time-lapse image capture



### To set the time period and interval to capture thermal image

#### Keys Description:

**Left/Right:** Decrease/Increase selected item

**Up/Down:** Select Duration or Interval

**Menu:** Confirm and back to [Menu Screen]

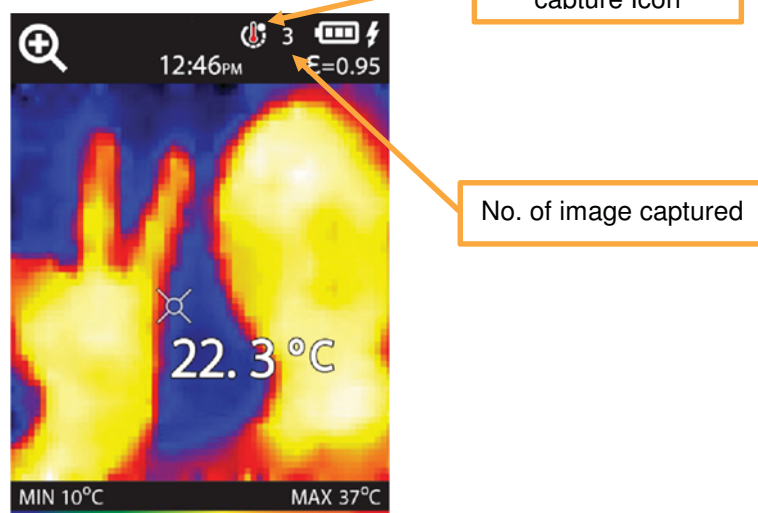
**Measure:** Exit to [Menu Screen]









#### Notes:

Duration: 15min, 30min, 45min, 60min, 90min, 120min



Interval: 15sec, 30sec, 45sec, 1min, 2min, 5min, 10min



## Measurement Screen



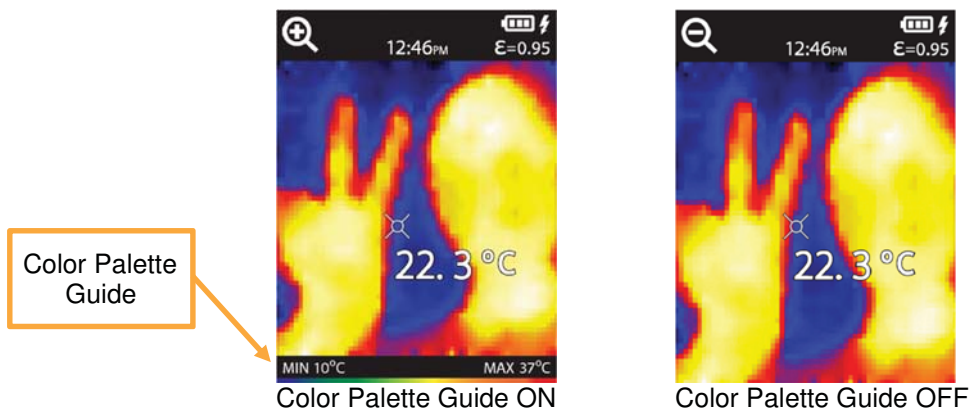
	<p><b>Auto-Off timer</b></p> 	<p><b>To set the auto-off timer</b></p> <p><b>Keys Description:</b>  <b>Left/Right:</b> Decrease/Increase selected Items  <b>Up/Down:</b> Select MIN or SEC to adjust  <b>Menu:</b> Confirm and back to [Menu Screen]  <b>Measure:</b> Exit to [Menu Screen]</p> <p>Remark:  1. The minimum auto-off timer is 0min,30sec  2. The maximum auto-off timer is 30min,0sec  3. The SEC item is 0 or 30  4. The MIN item can be 00→01→02→...→30</p>
	<p><b>Display Brightness</b></p> 	<p><b>To set the brightness of display</b></p> <p><b>Keys Description:</b>  <b>Left/Right:</b> Decrease/Increase Brightness level  <b>Up/Down:</b> N/A  <b>Menu:</b> Confirm and back to [Menu Screen]  <b>Measure:</b> Exit to [Menu Screen]</p>
	<p><b>Image format</b></p> 	<p><b>To set the image output format (Bitmap or JPEG)</b></p> <p><b>Keys Description:</b>  <b>Left/Right:</b> Select BMP or JPG  <b>Up/Down:</b> N/A  <b>Menu:</b> Confirm and back to [Menu Screen]  <b>Measure:</b> Exit to [Menu Screen]</p>
	<p><b>Factory Reset</b></p> 	<p><b>To reset factory setting</b></p> <p><b>Keys Description:</b>  <b>Left/Right:</b> Select YES or NO  <b>Up/Down:</b> N/A  <b>Menu:</b> Confirm and back to [Menu Screen]  <b>Measure:</b> Exit to [Menu Screen]</p>





	<p><b>Language</b></p> 	<p><b>To change the language</b></p> <p><b>Keys Description:</b>  <b>Up/Down/Left/Right:</b> Select the language  <b>Menu:</b> Confirm and back to [Menu Screen]  <b>Measure:</b> Exit to [Menu Screen]</p> <p><b>Notes:</b>  1. The 1<sup>st</sup> version is English language. For other language version, it is pending.</p>
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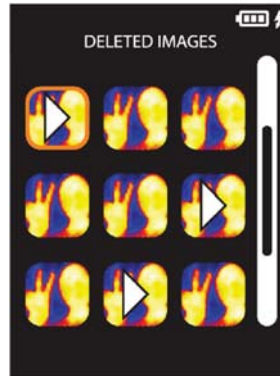
	<p><b>Color palette guide</b></p> 	<p><b>To turn on/off the color palette temperature reference guide</b></p> <p><b>Keys Description:</b>  <b>Left/Right:</b> Select ON or OFF  <b>Up/Down:</b> N/A  <b>Menu:</b> Confirm and back to [Menu Screen]  <b>Measure:</b> Exit to [Menu Screen]</p>
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#### Measurement Screen



	<p><b>Deleted Image</b></p> 	<p><b>To delete image/video permanently</b></p> <p><b>Keys Description:</b> See Below</p>
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### (1) Deleted Image/Video



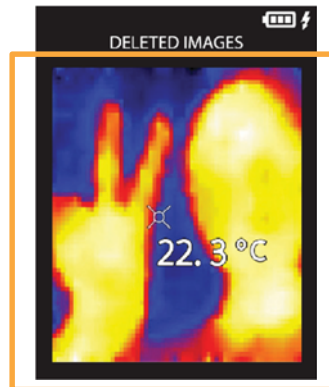
**Up/Down/Left/Right:** Move the cursor to select deleted Image/Video icon

**Menu:** Press Once to enlarge the image → (2)

**Menu:** Press & Hold to permanent delete the image/video → (3)

**Measure:** Exit to [Menu Screen]

### (2) View Deleted Image/Video



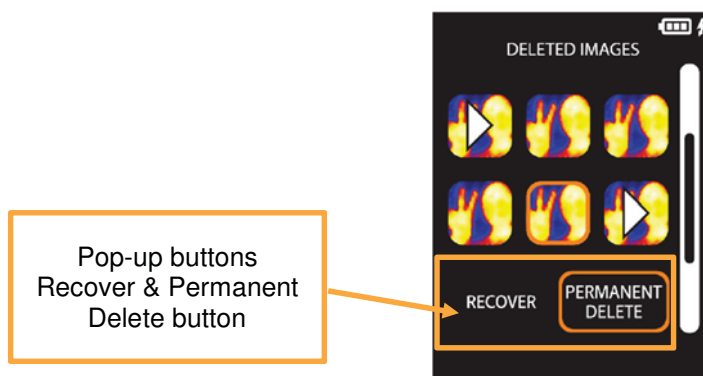
**Left/Right:** Press to view Prev/Next Deleted Image

**Up/Down:** N/A

**Menu:** Press to Play/Pause video

**Measure:** Back to (1)

### (3) Permanently Delete Image/Video



**Left/Right:** Select the Recover or Permanent Delete button

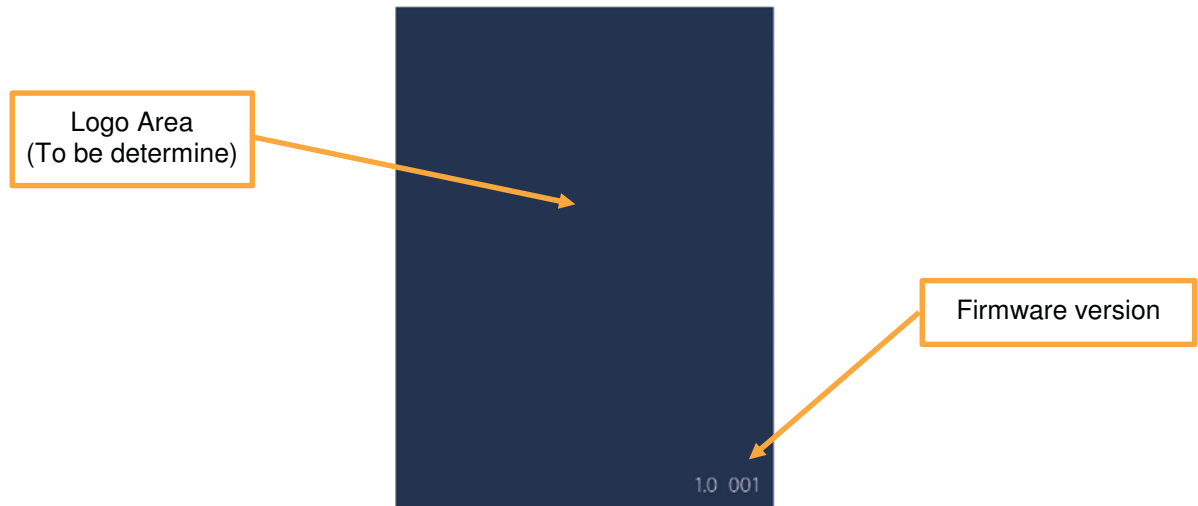
**Up/Down:** N/A

**Menu:** Press to confirm

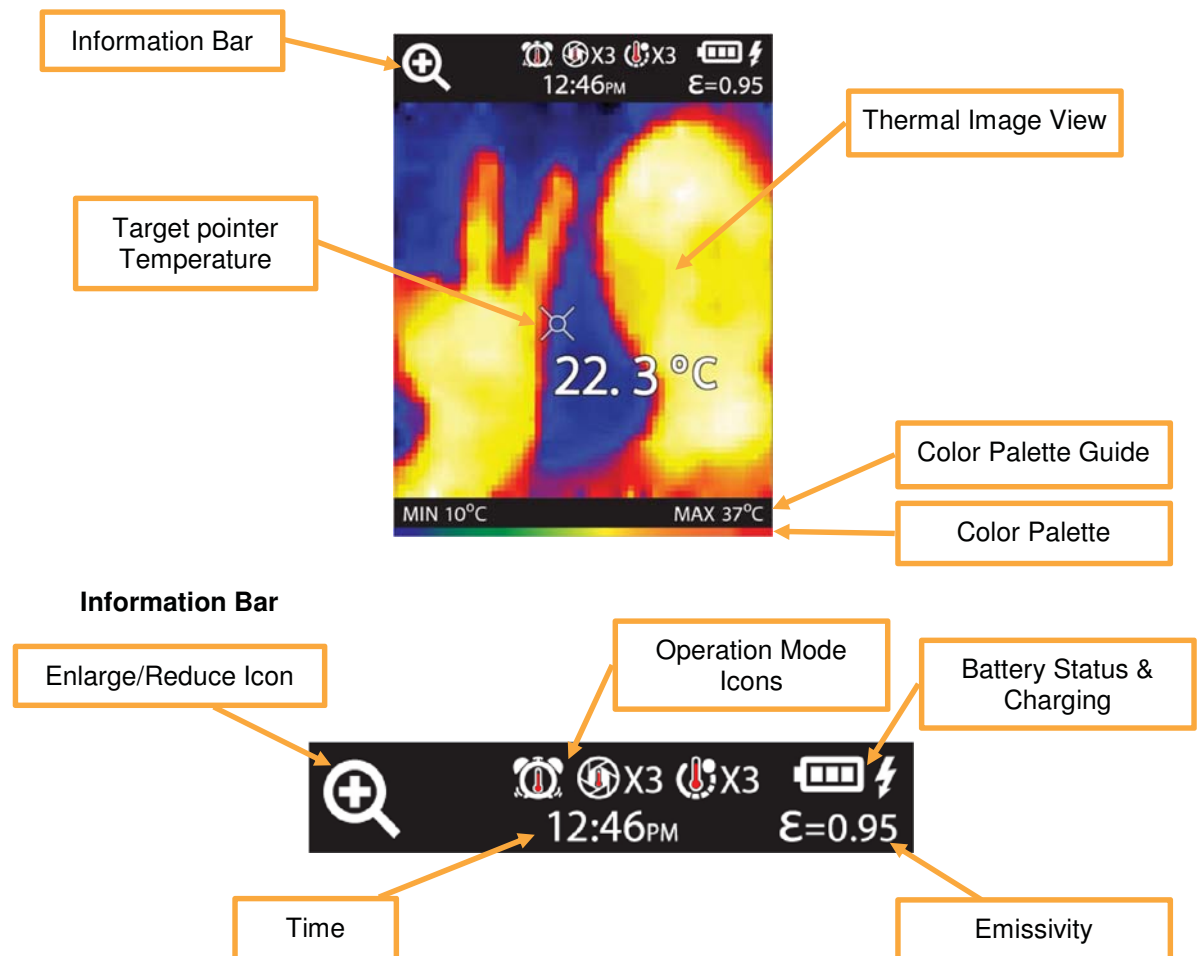
**Measure:** Back to (1)

## C) Screen description (information included in screen):

### 1) [Opening Screen]



### 2) [Measurement Screen]



### 3) [Menu Screen]



	View Image - To view the captured thermal image/video
	Emissivity - To adjust the emissivity from 0.1 to 1.0
	Color Palette - To select the thermal image color palette
	Background Temperature - To set the reflected background temperature
	Temperature Unit - To set temperature unit degree C / degree F
	Time & Date Set - To set time and date
	Hi-Low Temperature Alarm - To set the high or low temperature alarm
	Auto-monitor Alarm - To capture the thermal image when over the Temperature Alarm in a period of time
	Time-lapse image capture - To set the time period for recording the thermal image
	Auto-Off Timer - To set the auto-off timer
	Display Brightness - To set the brightness of display
	Image format - To set the image output format (Bitmap or JPEG)
	Factory Reset - To reset factory setting
	Language - To change the language
	Color palette guide - To turn on/off the color palette temperature reference guide
	Trash - To delete image/video permanently

### ***FCC Notice***

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.