

uScann

Thermal Body Temperature Scanner

Instructions for Installation

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General Parameters

- Body Temperature Measurement Range: 30° C to 40.56° C (86° F to 105° F)
- The performance of temperature scanner is affected by the environment, as such read through this document and follow the instructions carefully

Prerequisites

Please make sure, you have the following:

- Two 7 mm nails for wall mounting purpose
- 5 mm slotted screwdriver to remove to case, only if advised by developers

In the box

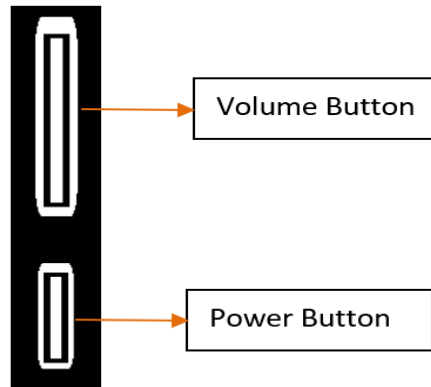
You can find:

- The uScann device (a USB cable out of the device from the microcontroller)
- A charger adapter
- USB A-Male to Jack Y Splitter 2 female USB Ports USB Hub
- USB 2.0 (USB A-male to male B micro)
- USB A male-to-female B-micro connector
- Instructions manual
- User manual
- Device ID and Microcontroller ID listed at **rear part** of the uScann device. Please save these details in your local storage. The IDs can be used to register the device on the portal (www.customerportal.uscann.net) and to log on device data for analytics purposes and also for employee tagging (if you have opted for such service).

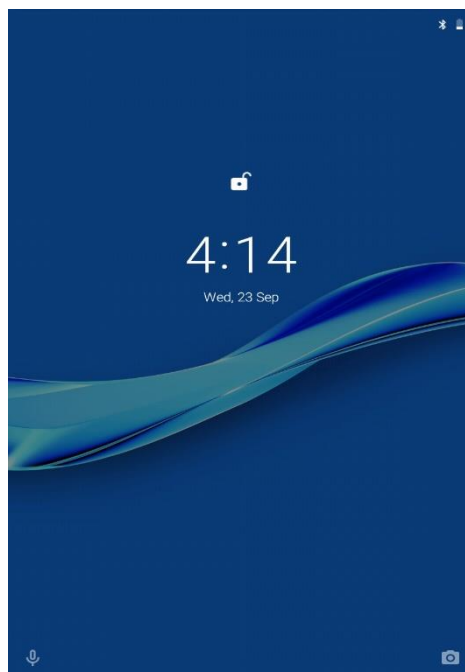


Getting Started

- Connect one side of the Jack Y splitter female USB to the USB A-Male, connect the other end of the USB 2.0, which is a B micro Male connector to the device, connector at the bottom of the device in the middle
- Connect the other female USB pin of the Jack Y splitter to the USB A-male pin coming out of the uScann device
- Now connect the other side of the Jack Y splitter, which is the USB A-male to the charging adapter
- Connect the charging adapter to a 2-pin plug point, switch on power of the plug point and leave the device to charge for 10 minutes
- After 10 minutes, look on the right side of the device facing the screen, there would be 2 buttons, as shown below, press and hold the power button. The device will power up



- After the device starts up, swipe up from the screen shown below




- Once you've swiped up, you'll be on the screen shown below. The app that is circled in red is the app that needs to be opened.



- Please follow the onscreen instructions and accept the End User License Agreement (if you agree) after opening the app
- Please type in the Microcontroller ID, Device ID and a password for the device settings. Microcontroller ID and device ID can be found at the rear side of the device. Page looks as follows:

A screenshot of the uScann app's login screen. At the top, the uScann logo is displayed in blue and red, with 'BT 983' written below it. The background shows a blurred image of a person's face. Below the logo, there is a white rectangular box containing three input fields. The first field is labeled 'Micro Controller ID(Mc Id)', the second is labeled 'Device Id', and the third is labeled 'PIN'. At the bottom of this box is a blue button with the text 'OK' in white.


- Once you are done setting up the device, please proceed with the portal registration navigating to www.customerportal.uscann.net, and hit **Sign up**:


Sign Up


Product Information

Personal Information

Signup

Device ID	Location	Action
<input type="text" value="Device ID"/>	<input type="text" value="Location"/>	

Purchase Date



Price Paid

Retailer Name

Did you purchase this online or in-store?

☒ Purchased Online

☐ Purchased In-store

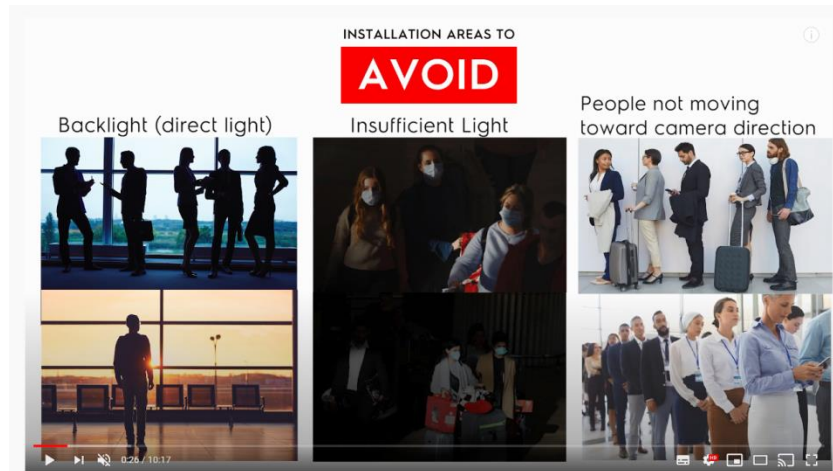
Next

Already have an account? [Sign In](#)

Site Planning



- Do not install in areas of high temperature such as direct sunlight, near a heater, hot water point, microwave oven, high powered lamps, radiators, etc. Any excessive heat source could cause damage to the uScann device.
- Do not install the uScann device under the air conditioner vent. Make sure that there are no such hot or cold sources within 9 feet radius of the device.



- Set up the uScann device on a tripod or against the flat surface of a wall. The thermal sensor shall be set in a straight line, to the position of the face of the person being scanned.



Wall Fixtures

Dimensions

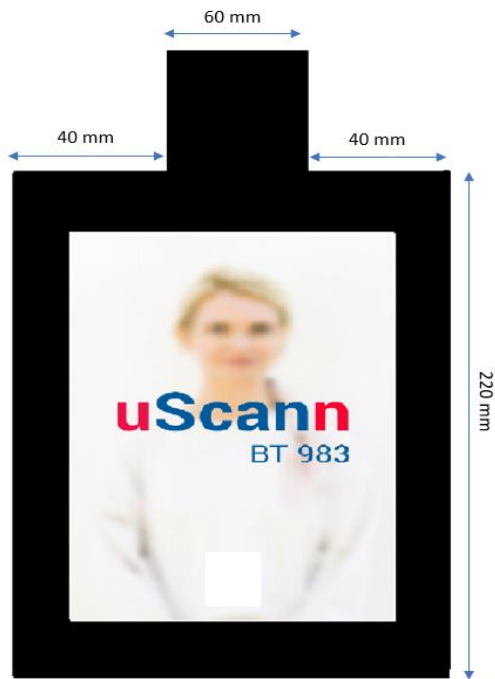


Figure 9: Front side of the uscann

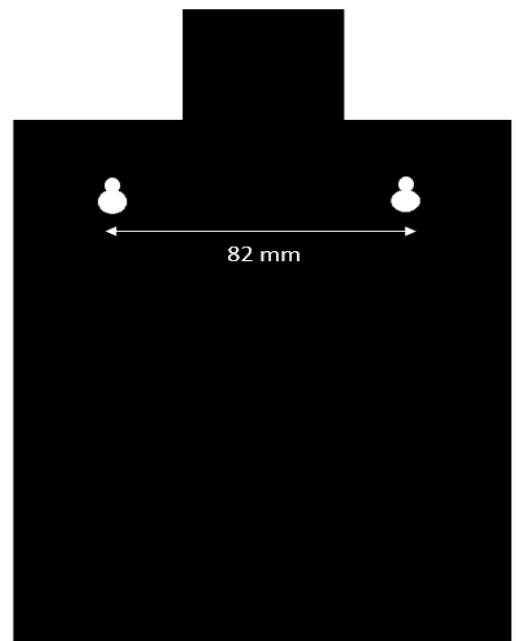


Figure 10: Backside of the uscann

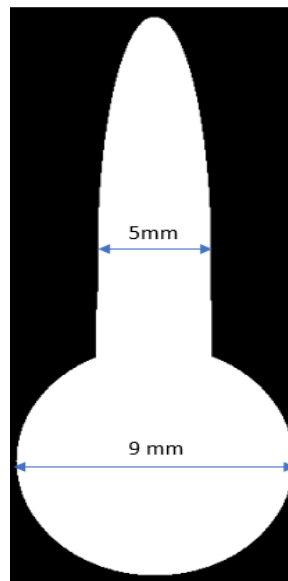


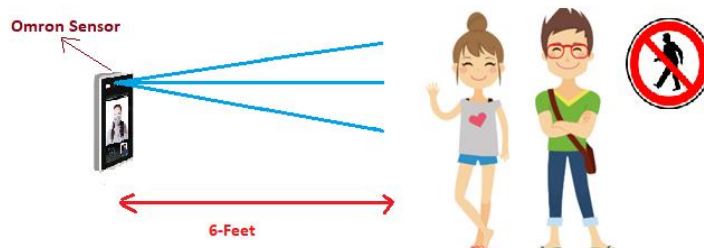
Figure 11: Cavity on the backside

Fixture

At the back of the uScann device, there are 2 cavities for wall mounting purposes. They are 82 mm apart. The size of each cavity is 9 mm as shown in the picture above. Head of the cavity closes is 5 mm, which makes wall mounting possible. Ideally, nail down 7 mm nails to the wall, 82 mm apart. After nailing those into the wall, hang the device carefully onto the nails. Make sure both the nails are into the cavity and slide the device downwards for completing the wall mounting procedure.

Powering Up and Calibration

- Power up the uScann device and wait for it to warm-up. Time required for the uScann device to warm up is around 20 minutes after power-up. Once it warms up, the uScann device automatically initiates an ambient temperature adaptive routine. This task will take up to 5 minutes. During this time, make sure that no one approaches the uScann device within a distance of 6 feet.

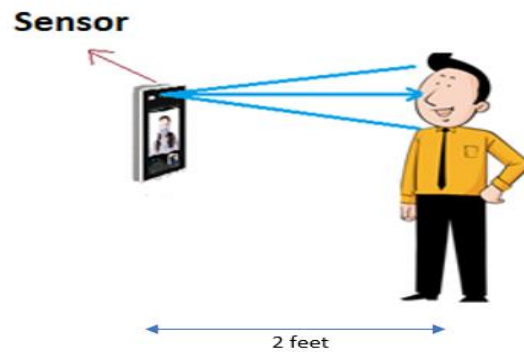


- Please follow this calibration procedure for most accurate results. Before calibrating the uScann device, please measure your body temperature using a touch-based thermometer. Then scan your temperature in device, the difference in temperatures displayed by the thermometer and the device, need to be the temperature offset in the settings as shown in the figure. For example, if the temperature after taking a measurement from a touch-based thermometer is 97.2 and when scanned in the device if the temperature is 98.3. Go to settings > Temperature offset, change the value from 0 to 1.1. **This is a one-time procedure.**

A screenshot of the 'Settings' app for the uScann device. The 'Temperature' section is expanded, showing several settings: 'Show Temperature Reading' (toggle off), 'Temperature Unit' (set to '°F'), 'Elevated Temperature Threshold' (set to '100.4'), 'Temperature Offset' (set to '0' and highlighted with a red box), and 'Distance Threshold (cm)' (set to '90'). Below this is the 'Beep Sound' section with settings for 'Person Allowed Sound' (set to 'Entry'), 'Allowed Beep Play' (toggle off), 'Person Not Allowed Sound' (set to 'Denied'), and 'Not Allowed Beep Play' (toggle off). At the bottom, there is a 'Show Person Photo' toggle (set to on) and an 'Update Settings' button.

Usage

- The ideal distance at which the uScann device scans best, is 2 feet. Look straight at the uScann device with no phones in and around the face or in the shirt pocket.



- The UI looks as shown in the figure 15, make sure the face is fully in the face overlay as shown in figure 16. Takes a second or two to detect the face inside the lobe, the face overlay goes green as shown in figure 17 as there is a face detected in it. Takes two seconds to process the temperature and to upload them onto the portal, then the result, which displays the temperature (if the Show Temperature Reading setting is ON) and the time stamp. All in all, takes about 5 seconds from one scan to another.

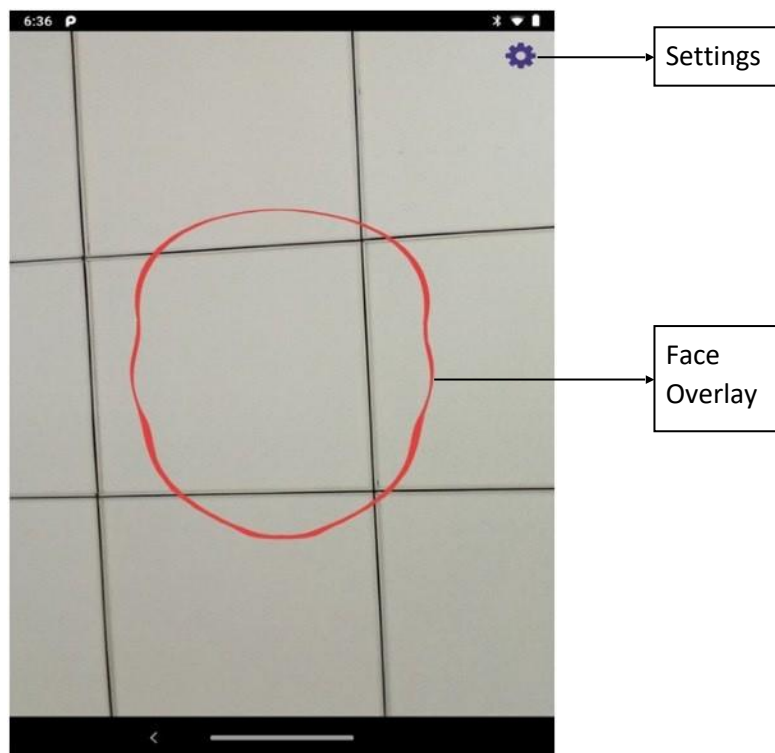


Figure 15: UI of the scanning page

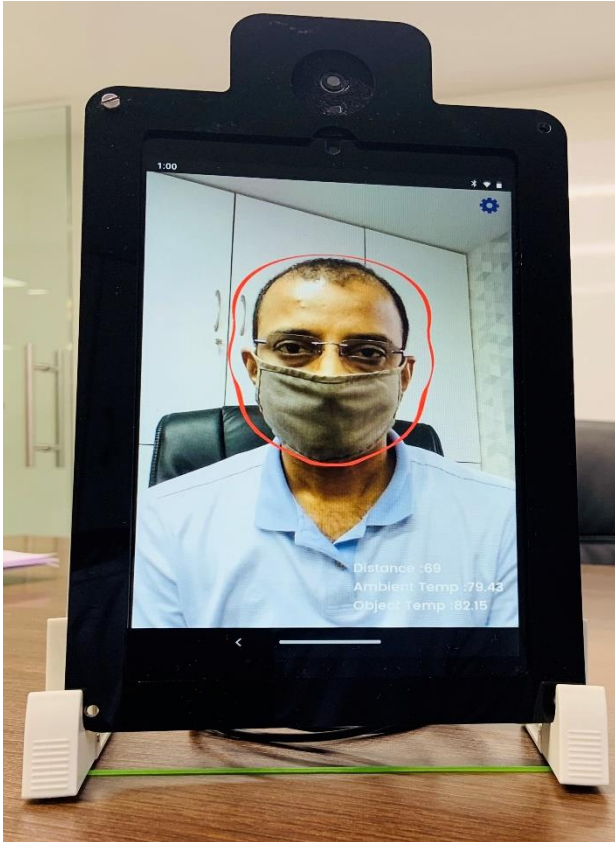


Figure 16: Face fully inside the face overlay

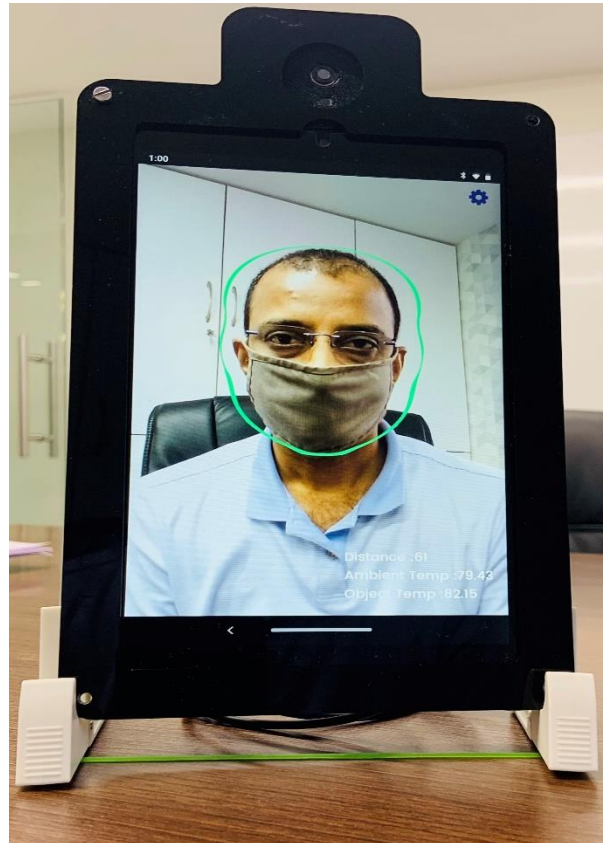


Figure 17: Face after been detected inside the face overlay

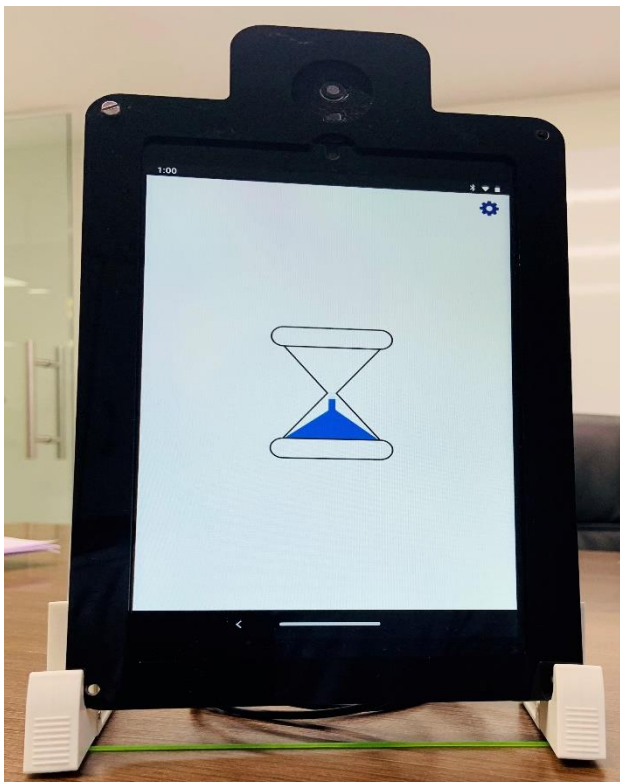


Figure 18: Processing for a few seconds, obtaining temperature

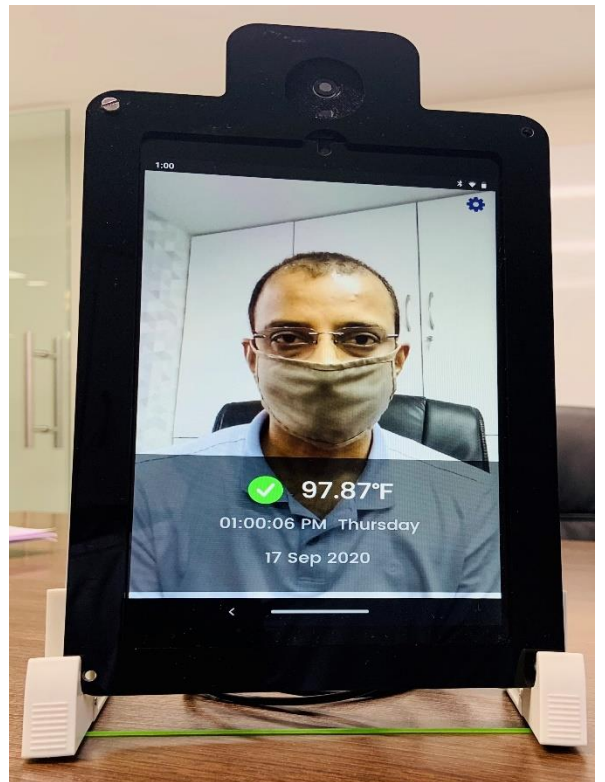


Figure 19: Result, temperature scanned

Precautions for Proper Use

- Make sure the device is not under any IR radiation like a tube light. Also make sure there is no blower or a ceiling fan directly on the uScann device.
- Determine if conditions are optimal for use. Typically, the environmental temperature should be between 60.8-104 °F (16-40 °C) and relative humidity below 85 percent
- When a person enters the room from a cold/hot outdoor environment, immediate measurement will affect the accuracy of the reading. So, wait for a 2 minutes to stabilize the temperature of the subject.
- Temperature read by the uScann device shall be the heat radiation emitted by the subject's forehead area. When there is water, sweat, oil or thick makeup on the face or if the subject is an elderly person with wrinkles, the temperature reading will be lower than the actual temperature.
- Make sure that there is no hair or clothing covering the face of the subject.
- Subject cannot have a mobile phone or heating source in a shirt pocket or any place which is in the measuring frame of the uScann device.
- This uScann device is not meant for using outdoors or under direct sunlight, rain or water splashes.

Safety

- Do not open the uScann device. It may injure you and will also void the warranty.
- Do not operate the uScann device if there are any signs of damage on the housing, mains unit or connected cables. Return the uScann device with complete packing set for repair or replacement.
- Do not store the uScann device together with solvents.
- Perform only the maintenance of this uScann device that is described in this user manual.
- Follow the prescribed steps exactly. During operation, this uScann device must not be pointed at the sun or other intensive sources of radiation (e.g. objects with temperatures exceeding 100 °C). This can lead to serious damage to the detector.
- The uScann device is NOT water resistant. Do NOT use it at places exposed to rains or water splashes/leakages.
- The manufacturer does not offer any warranty or accept any liability for any such damage, due to improper usage.
- Operate the uScann device in a proper manner, only for its intended purpose and within the parameters as specified in the user manual or this document.