

# Lesson 1 Facial Recognition



The images under the same directory can be used directly.

## 1. Instructions

Before starting this game, please read and follow the notices below, otherwise, the outcome of this game will be influenced.

- ① To learn face, point the “+” on WonderCam (AI vision module) at the the center of face for higher accuracy in learning.
- ② Use proper front face photograph for Face Template.
- ③ Ensure environment is bright enough or use Fill Light on WonderCam when required.

## 2. Facial Recognition Introduction

Through face detection and facial recognition on the screen display, WonderCam provides data such as Face position and size etc.

## 3. Facial Recognition Operations

### 3.1 Enter Function

Push Navigation button to Facial Recognition menu.



## 3.2 Face Detection

Once WonderCam is in Facial Recognition mode, face detection will automatically be activated. When face is detected, a white frame will appear on screen to enclose the detected face.



## 3.3 Learn and Recognize Face

To recognize a specific face, WonderCam need to learn to recognize the face first.

### 1. Learn a Single Face

Step 1: Left push Function button to enter Learning mode.



After entering Learning model, the mark “+” will appear in the middle of screen, and the menu bar will show “Face ID:1”, “Face ID:2” etc. The ID is to tag and save different Faces.

Step 2: Point the mark “+” on screen to the center of Face. Take note of the given instructions.



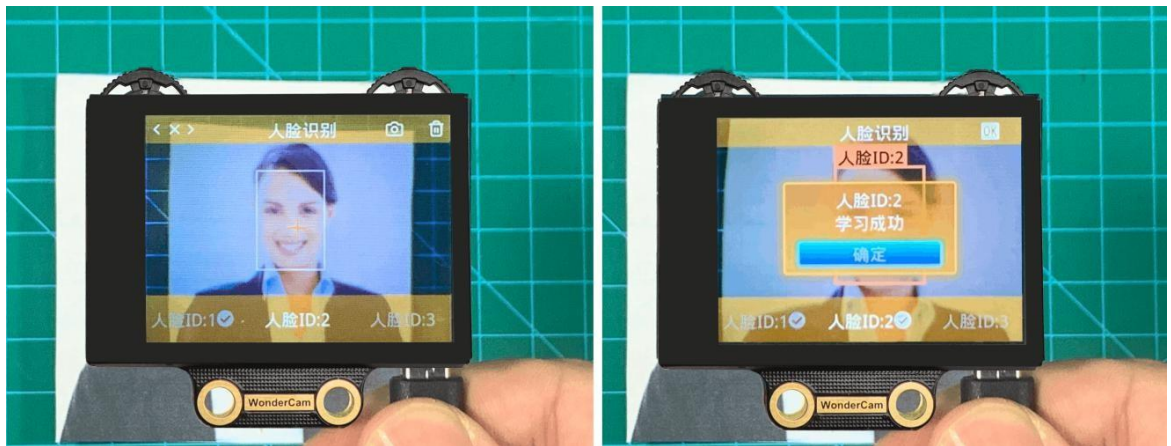
Step 3: When face is centered, left push Function button to the camera icon to learn the face. When learning is successful, push Function button down once to select OK and complete the learning process. If the learning is successful, when the face is detected,



WonderCam will display the corresponding ID on screen.

## 2. Learn Multiple Faces

To learn more faces, when in Learning mode, right push Navigation button to another ID number and repeat earlier process.



## 3. Recognizing Faces

After the learning is completed, when the same face is recognized again, the face will be framed in different color, and the corresponding ID will be displayed.





## 3.4 Delete Face

To delete Face ID that is no longer required. In Face Recognition Learning mode, push Navigation button to the Face ID number targeted to delete. Push Function button to the right toward Bin icon, push Function button down to OK to delete.



## 4. Facial Recognition Function Settings

In Facial Recognition main menu, press Function button down toward Gear icon to enter Settings interface.



Available for configurations are: Detecting Threshold, NMS Threshold, Recognition Threshold and Reset.

- **Detecting Threshold:** To set threshold for face detection. Higher value will have higher accuracy rate. However, too high a value will also resulted in lower face detection rate, or even failure face detection
- **NMS Threshold:** Non- Maximum Suppression is a computer vision method. Leave it at default value.
- **Recognition Threshold:** Settings for specific Face ID. Higher value will have higher accuracy rate. However, higher value may result in unable to recognize or only recognize at specific part or angle of the face.
- **Reset:** This will erase all previous records and reset to factory defaults. Please take care to Save the settings so that the reset settings take effect.