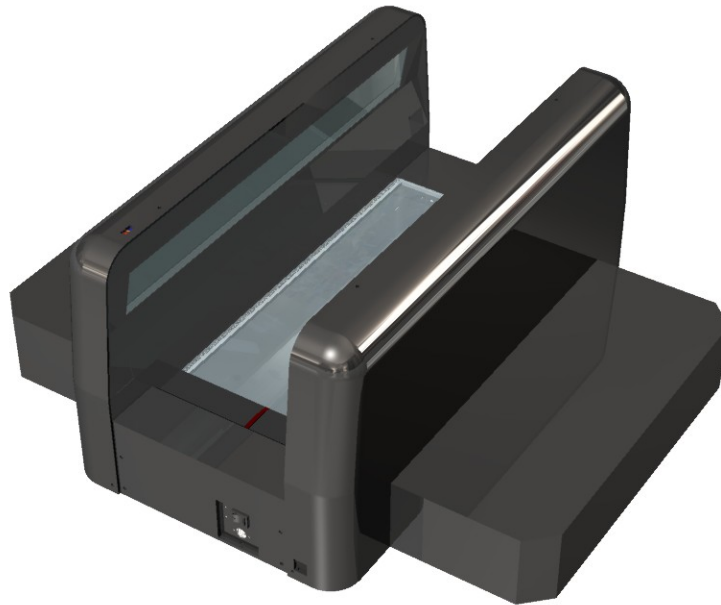


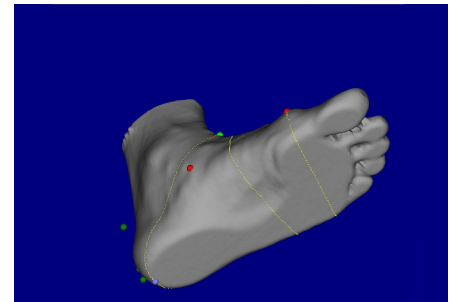
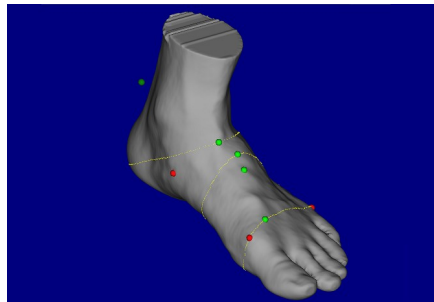
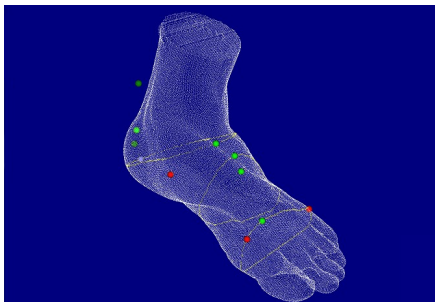
# INFOOT2



Model : IFU2-S-01

## Overview

Infoot 2 is an optical 3D scanning device for measuring the the human foot and its anatomical dimensions. Using an USB 3.0 connection to a host PC, measuring foot data can be done with the included software. The 3D shape data is optically captured by 8 cameras with a red laser plane that sweeps the foot. Scanning takes 2 seconds to perform. Afterwards the data is sent to the PC via USB 3.0 and the 3D shape & dimensions of the foot are available for viewing.



## What kind of data can I obtain?

The foot shape data is saved as a proprietary 3D binary point cloud format. This format can be converted using our optional "File Converter" software into common CAD formats such as CSV, DXF, STL.

To obtain anatomical feature points (bone position, etc) of the foot landmark markers can be applied to the foot. As a result of these anatomical feature points, it is possible to accurately measure foot dimensions such as foot length, ball girth circumference, foot width, etc. All foot scans and dimension measurements are associated with the ID of the subject and stored in the database. For further details see section "Details of Measurements"

## Functions

### 1. Anatomical Dimensions

INFOOT 2 obtains anatomical landmark feature points of the foot by attaching up to 15 landmark markers to the foot. Based on those landmark feature points up to 37 different measurements can be calculated.

### 2. Coverless Scanning

In contrast to previous INFOOT generations, INFOOT 2 can perform coverless scanning indoors without a cover to occlude ambient light.

### 3. Glass Heating System: Foot Sole Noise Prevention

An optional glass heating system can be added to reduce measurement noise along the foot sole caused by moisture condensation on the glass surface.

### 4. Optimal Balance Between Accuracy and Speed

At 2 to 3 seconds of measurement time per foot the INFOOT 2 measures 4x faster than the previous INFOOT-USB generation. The accuracy achieved is less than 1.0 mm of error for a given foot ball girth circumference.

### 5. Reliability and Safety

The INFOOT 2 has undergone CE/MET certification to meet safety standards. In addition the laser system uses Class 1 (JIS C 6802) lasers so there is no need to worry about eye hazards.

### 6. User Historical Foot Data Record

Each measurement subject is issued an iTouch ID. By sending the measured foot data to I-Ware's iTouch server it may be retrieved anytime at a later date.

## Specifications

| Scanner               |                                                                                                                  |
|-----------------------|------------------------------------------------------------------------------------------------------------------|
| Type of Product       | 3D Foot Scanning System                                                                                          |
| Product Name          | INFOOT 2                                                                                                         |
| Product Model Code    | IFU2-S-01                                                                                                        |
| Dimensions            | 633(L)×352(W)×300(H) mm                                                                                          |
| Power Supply          | 100-240V~ ±10% 50/60Hz (AC adapter included)                                                                     |
| Power Consumption     | DC24V 5A (120W max.)                                                                                             |
| Total Weight          | 22 kg (Body weight : 18 kg)                                                                                      |
| Safety Standard       | CE, MET, IEC 60825-1                                                                                             |
| Glass Heating         | ITO thin film, Power Consumption:74W                                                                             |
| Environment           |                                                                                                                  |
| Temperature           | 15°C - 40°C                                                                                                      |
| Humidity              | 35% - 60%                                                                                                        |
| Installation Location | Indoor use only (Avoid direct sunlight. Additionally avoid placing near red/orange colored light sources or POP) |
| Scanning              |                                                                                                                  |
| Scanning Time         | 2 ~ 3 second for each foot (120 mm/s)                                                                            |
| Processing Time       | 15 ~ 20 s/foot (In case 8 or more logical processors are used)                                                   |
| Accuracy              | 1.0mm step : Y(W)-Z(H)=1mm、X(L)=1mm<br>0.5mm step : Y(W)-Z(H)=1mm、X(L)=0.5mm                                     |
| Data Format           | FBD (Proprietary Binary Format)                                                                                  |
| Scan Area             | 380(L)×200(W)×150(H) mm                                                                                          |
| Conditions            |                                                                                                                  |
| Scanning Target       | Human Foot, Landmarks<br>(It may not be possible to scan objects which absorb laser or are lustrous.)            |
| Foot Maximum Size     | L=380mm, W=180mm 以内                                                                                              |
| Maximum Weight        | 200 kg                                                                                                           |

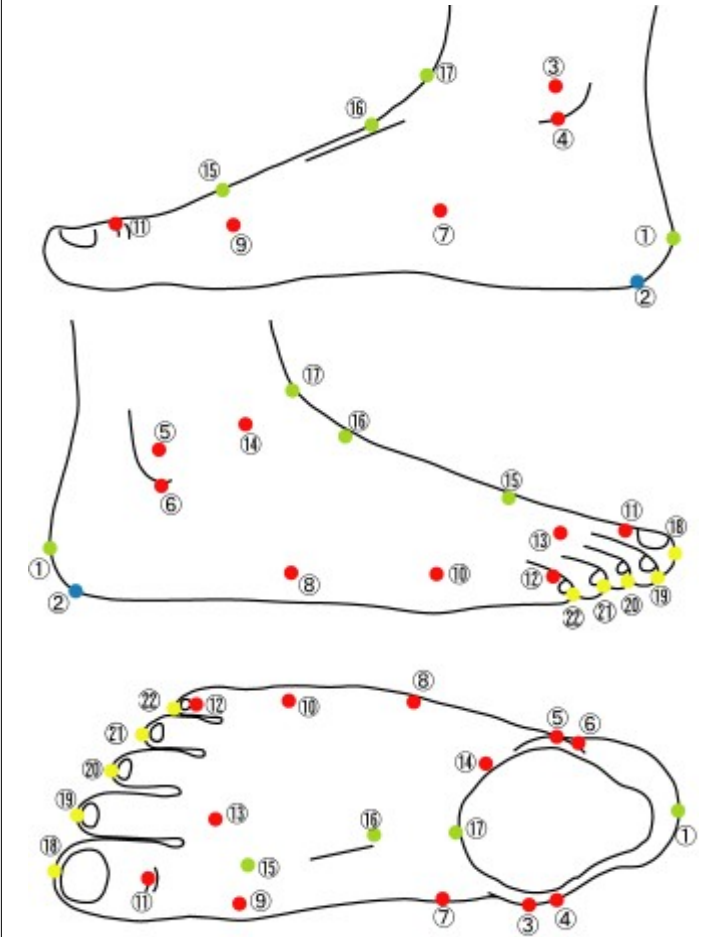
\*The specifications are subject to change without notice.

| PC Requirements                                                                                                                                                  |                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OS                                                                                                                                                               | Microsoft Windows 11 (32 bit, 64 bit)                                                                                                                                                                                                                                    |
| CPU                                                                                                                                                              | Intel CPU, 10 logical processors or more                                                                                                                                                                                                                                 |
| Memory                                                                                                                                                           | 8GB or more                                                                                                                                                                                                                                                              |
| Interface                                                                                                                                                        | USB3.0 x1, USB2.0 x1 (USB3.0 for Scanner, USB2.0 for Dongle)                                                                                                                                                                                                             |
| Screen Resolution                                                                                                                                                | 1024x768 pixels or more (1280×800 ore more recommended)                                                                                                                                                                                                                  |
| Storage                                                                                                                                                          | 20 MB free space for INFOOT 2 software installation required.<br>(Approximately 1MB is used when saving foot data)                                                                                                                                                       |
| Connecting Conditions                                                                                                                                            | An active repeater cable (3m) must be used in conjunction with a USB 3.0 (1m) to connect the PC to the INFOOT2.<br>Continuous operation is not guarenteed if a hub,cable or repeater not specified by I-Ware is used.<br>※A host machine PC must be prepared seperately. |
| Accessories                                                                                                                                                      |                                                                                                                                                                                                                                                                          |
| AC adapter, AC code(1.8m), USB3.0 Active repeater cable (3m), USB3.0 cable (1m), Calibration kit, Foot stages, USB license key, Landmarks (10sheets), Model foot |                                                                                                                                                                                                                                                                          |
| Attached Software                                                                                                                                                |                                                                                                                                                                                                                                                                          |
| Measure                                                                                                                                                          | Core software application for 3D foot shape measurement                                                                                                                                                                                                                  |
| Tester                                                                                                                                                           | Testing and diagnostic application for INFOOT 2 calibration maintenance.                                                                                                                                                                                                 |
| DB Controller                                                                                                                                                    | 3D Foot Scan Database Managment Application                                                                                                                                                                                                                              |
| Option Software                                                                                                                                                  |                                                                                                                                                                                                                                                                          |
| File Converter                                                                                                                                                   | Application for converting INFOOT 2's proprietary foot binary data format to commonly used CAD formats.                                                                                                                                                                  |
| Real Size Print                                                                                                                                                  | Software for printing the parting line, ground plane, foot circumference, cross section, etc of the foot shape data measured by INFOOT 2 in A4 or A3 full size paper.                                                                                                    |
| Foot Reformer                                                                                                                                                    | Application for deforming the 3D foot shape along the sole by bending or ad-hoc height alterations desired by the user.                                                                                                                                                  |

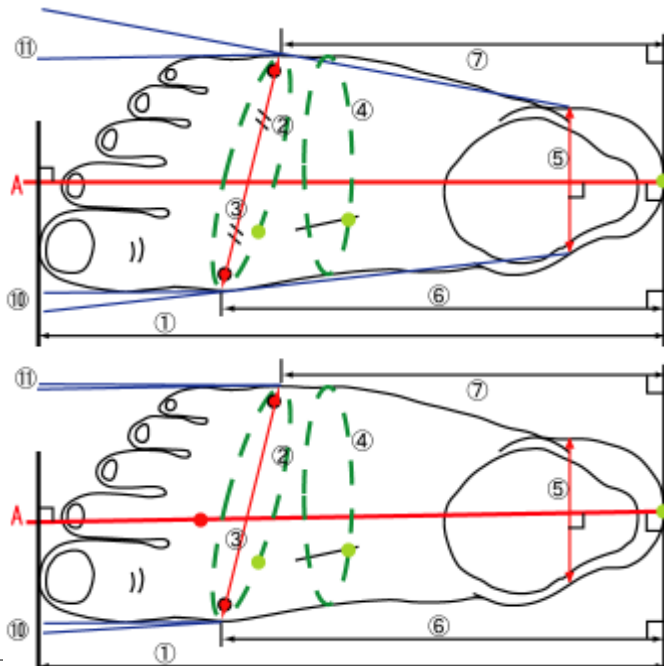
\*The specifications are subject to change without notice.

# Details of Measurements

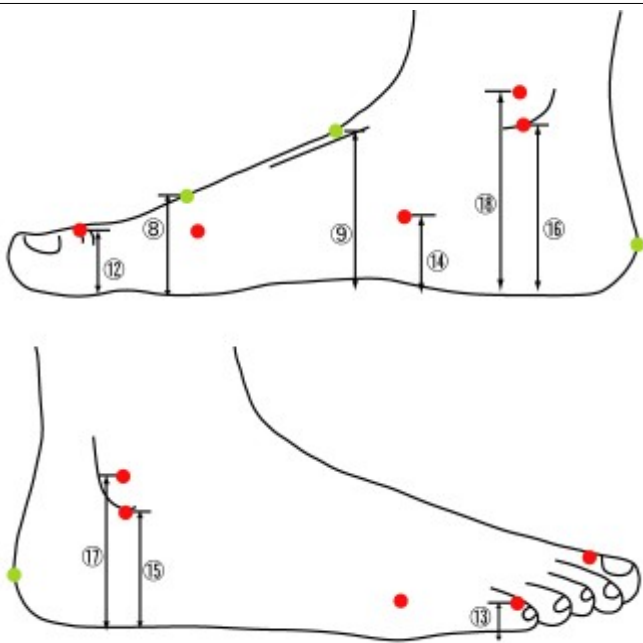
By attaching a special marker (5mm diameter) to the foot, it can be recognized as a feature point (landmark) of the foot. For some feature points it is also possible to automatically recognize their locations from the foot shape. Using these together foot measurments can be made accurately.

| Marker Positions                                                                                                                                 |    |                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------|----|---------------------------------------------|
|                                                                | 1  | Pternion                                    |
|                                                                                                                                                  | 2  | Landing point                               |
|                                                                                                                                                  | 3  | The most medial point of medial malleolus   |
|                                                                                                                                                  | 4  | Sphyrion                                    |
|                                                                                                                                                  | 5  | The most lateral point of lateral malleolus |
|                                                                                                                                                  | 6  | Sphyrion fibulare                           |
|                                                                                                                                                  | 7  | Navicular                                   |
|                                                                                                                                                  | 8  | Tuberosity of 5th metatarsalis              |
|                                                                                                                                                  | 9  | Metatarsale tibiale                         |
|                                                                                                                                                  | 10 | Metatarsale fibulare                        |
|                                                                                                                                                  | 11 | Toe #1 joint                                |
|                                                                                                                                                  | 12 | Toe #5 joint                                |
|                                                                                                                                                  | 13 | Head of 2nd metatarsal bone                 |
|                                                                                                                                                  | 14 | Tentative junction point                    |
|                                                                                                                                                  | 15 | Highest point of Ball Girth circumference   |
|                                                                                                                                                  | 16 | Highest point of Instep circumference       |
|                                                                                                                                                  | 17 | Junction point                              |
|                                                                                                                                                  | 18 | Tip of #1 toe                               |
|                                                                                                                                                  | 19 | Tip of #2 toe                               |
|                                                                                                                                                  | 20 | Tip of #3 toe                               |
|                                                                                                                                                  | 21 | Tip of #4 toe                               |
|                                                                                                                                                  | 22 | Tip of #5 toe                               |
| <p>Red points are marker position</p> <p>Blue points or Green points are calculated point</p> <p>Yellow points are manual placement position</p> |    |                                             |

# Measuring Items

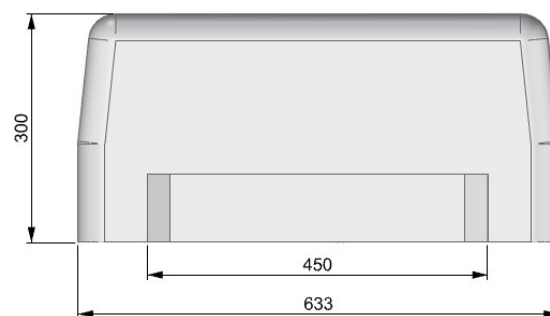
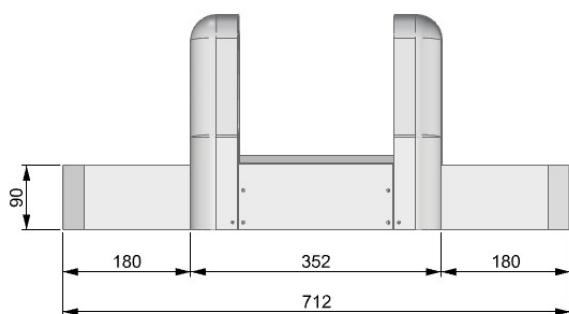
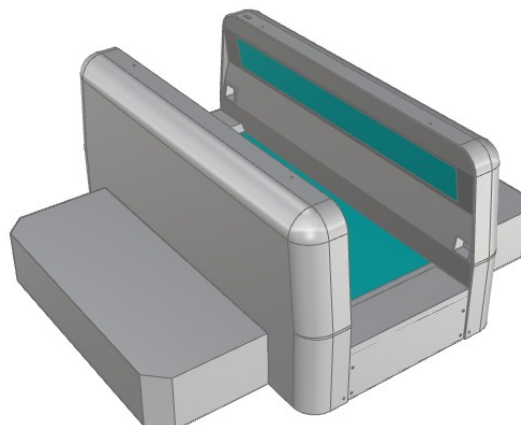
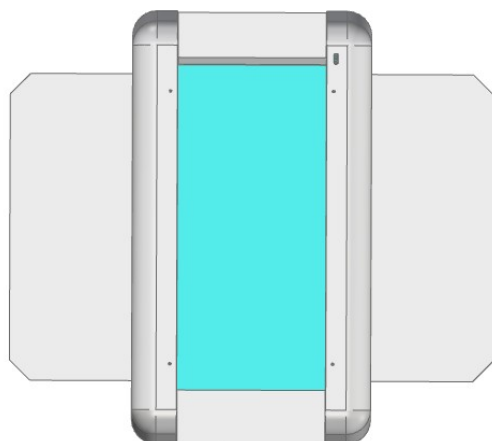


- |    |                          |
|----|--------------------------|
| 1  | Foot length              |
| 2  | Ball Girth circumference |
| 3  | Foot breadth             |
| 4  | Instep circumference     |
| 5  | Heel breadth             |
| 6  | Instep length            |
| 7  | Fibulare Instep length   |
| 10 | Toe #1 angle             |
| 11 | Toe #5 angle             |
|    |                          |
|    |                          |



- |    |                                                       |
|----|-------------------------------------------------------|
| 8  | Height of Top of Ball Girth                           |
| 9  | Height of Instep                                      |
| 12 | Toe #1 height                                         |
| 13 | Toe #5 height                                         |
| 14 | Height of Navicular                                   |
| 15 | Height of Sphyrion fibulare                           |
| 16 | Height of Sphyrion                                    |
| 17 | Height of the most lateral point of lateral malleolus |
| 18 | Height of the most medial point of medial malleolus   |
|    | Angle of heel born                                    |
|    |                                                       |

## Dimensions (Unit:mm)



## Contact

I-Ware Laboratory Co.,Ltd.

MINOH Fureres Bldg. 5F  
1-10-9, Senba-Higashi, MINOH-City, OSAKA  
562-0035 JAPAN

TEL : +81-72-726-2231 / FAX : +81-72-726-2232  
URL : <https://www.iwl.jp>  
e-mail : e-info@iwl.jp

April 2025