# Table of contents

table of contents	
FCC Caution	
Introduction	
KS-01	
Heart rate sensor device	
Device buttons and functions	
Smart Wear	6
5 device chargers	6
1 device chargers	7
KNOWS APP	7
Battery charging	7
How to start	
Device power ON / OFF	
2. account registration	
Account application screen	
Confirmation mail	
Approval Complete screen	1′
3 . Login	
Login screen	
4 . Team registration	
5. management	17
Add coach and player	18
Coach / Player registration screen	19
Coach addition screen	19
Player addition screen	19
6. Device pairing	22

Automatic	22
Manual	23
7. Sync	24
Restart the device power	25
Activation - Contents of each menu	26
Activity	27
Select date of recording	28
New session	29
statistics	47
player	50
Player record	51
Player information -1	53
Player information—2	54
management	55
managementConfiguration	
	56
Configuration	56 56
Configuration  Settings - Account	56 56 57
Configuration  Settings - Account  Settings - team name and photo	56 56 57
Configuration	
Configuration	
Configuration  Settings - Account  Settings - team name and photo  Settings - training items  Synchronize devices  Synchronize devices (By Manual)	
Configuration  Settings - Account  Settings - team name and photo  Settings - training items  Synchronize devices  Synchronize devices (By Manual)  Upload device log screen	
Configuration  Settings - Account  Settings - team name and photo  Settings - training items  Synchronize devices  Synchronize devices (By Manual)  Upload device log screen  Switch the team screen	
Configuration  Settings - Account  Settings - team name and photo  Settings - training items  Synchronize devices  Synchronize devices (By Manual)  Upload device log screen  Switch the team screen	

### 15.105(b)

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.

### **FCC RF Radiation Exposure Statement:**

- 1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- 2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

#### **Non-modification Statement:**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### **FCC Caution:**

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.

## Introduction

Thank you very much for purchasing KS-01 this time.

# **KS-01**

Heart rate sensor device

When installing the device in dedicated smartware, training sports and playing matches, you can check various information such as heart rate and speed of the user in real time.



Device buttons and functions

There is a power button on the back of the device



	Charging Display
	Battery level is below 10% Display  ** Device will notify you by warning sound that the battery level is too low, Please to charge it.
* 00	Normal State。 When the heart rate can be measured, the number is displayed.
02	Press the power button on the device once to display the player's number.



Press the power button on the device twice to display the device number.

# **Smart Wear**

It is an item effective for analyzing the situation of training. In order to obtain a more accurate heart rate, please wear smartwear that fits the user's body.

A01---- front

B01---- back

C01----The position where the device is to be mounted. Please fix with a hook

D01----sensor



# 5 device chargers

For team practice and multiplayer usage, 5 chargers can charge up to 5 devices at the same time.





When charging, please note the direction of inserting the device so that the position of the charging pin does not become opposite.

# 1 device charger

The dedicated USB cable is used for charging and data synchronization.





Be careful when inserting so that the position of the device charging pin does not become opposite when charging.

# **KNOWS App**

You can be download KNOWS App from the App Store.

# **Charging the battery**

After unpacking the KS-01 package, first charge the battery. Please fully charge before using KS-01 for the first time.

When the remaining battery power reaches 10%, we will inform you with a warning sound with insufficient battery power.

# How to start

### 1. Device power ON / OFF

Power ON ····· Power on will be turned on by pushing the red switch on the back of the main unit for about 1second.

Power off · · · · Main body reverse When you press and hold the red switch for about 3 seconds, the power turns OFF.



Back side of the KS-01

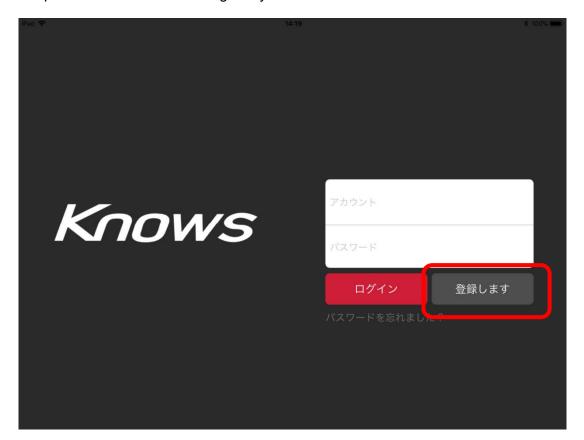


Device Top view(power ON state)

\* Battery level is below 10% Display, Device will notify you by warning sound that the battery level is too low, Please to charge it.

# 2. account registration

Please open a KNOWS APP and register your account



## **Account application screen**

후 /	14:19 <b>Knows</b>	<b>*</b> 100% <b></b>
登録		
パスワード		
パスワード再入力		
Eメール		
登録 Copyright © 2015-2016 Techtuit		

	explanation	Next screen	Error message
Α	Account (ID) New creation	Approval mail	

### **Certification mail**

Please click the link in the authentication mail according to the reply email.



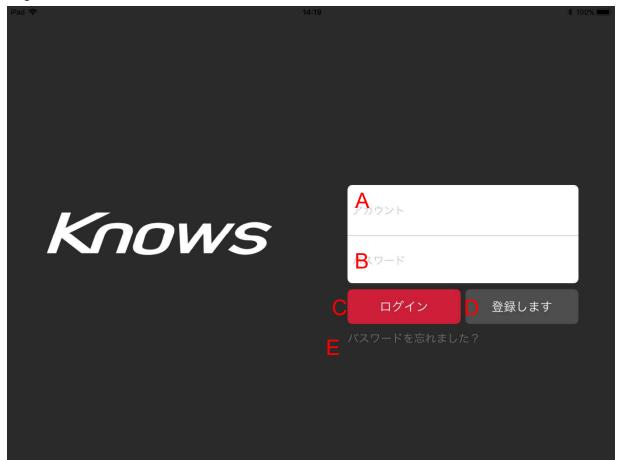
When you click the link, "Account application completed" is displayed, you can log in with Know APP.

### **Approval Complete screen**



# 3. Login

Login screen



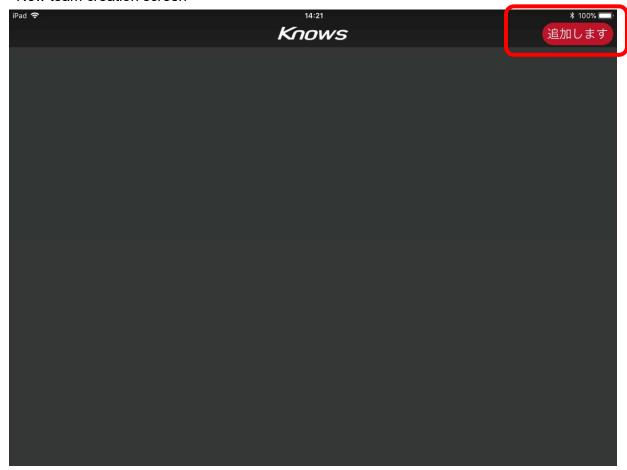
	explanation	Next screen	Error message
Α	Enter account (ID)	N/A	Please enter account (ID)
В	Enter password	N/A	Please enter the password
С	log in	Team list	Account (ID) or password is incorrect
D	Account (ID) New creation (Web function)	Create New	
E	If you have forgotten your password (here on the Web)	home page	

# 4. Team registration

If you can log in, please add a team first。

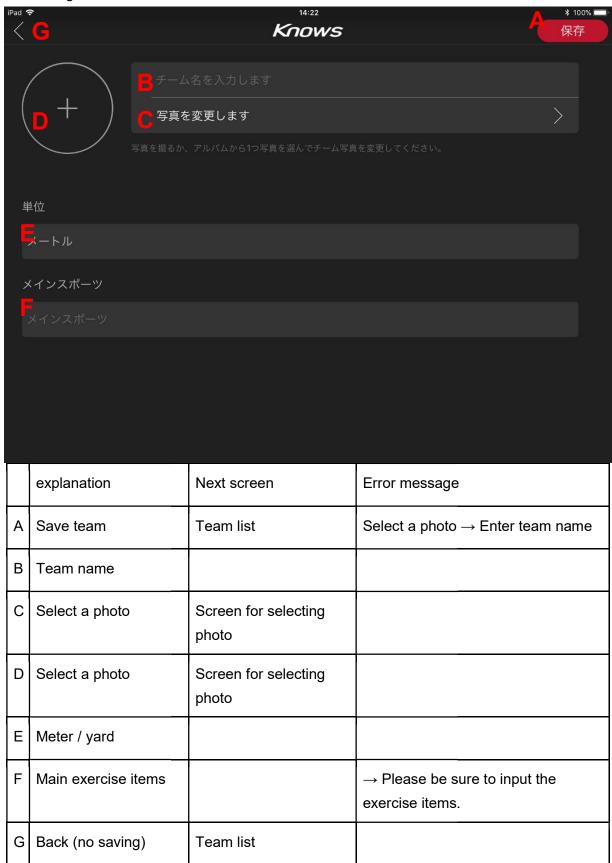
Please select "Add" at the top right. Once selected, it will go to the next team registration screen.

### New team creation screen



After entering each item and input is completed, please select "Save" in the upper right.

### Team registration screen

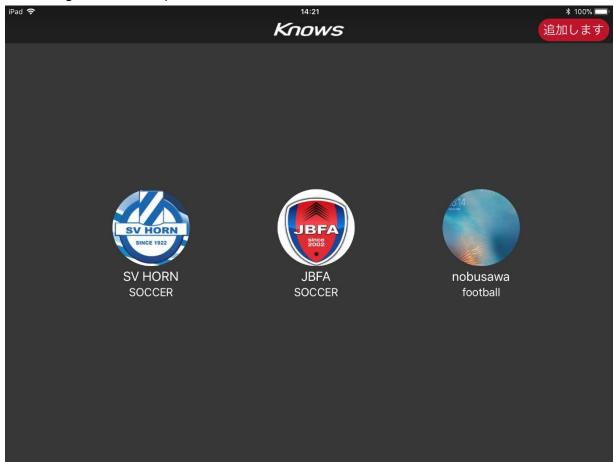


## C , D Screen for selecting photo



To add a team, select "Add", enter the difference team, and select "Save" after completing the input.

# Team registration complete screen



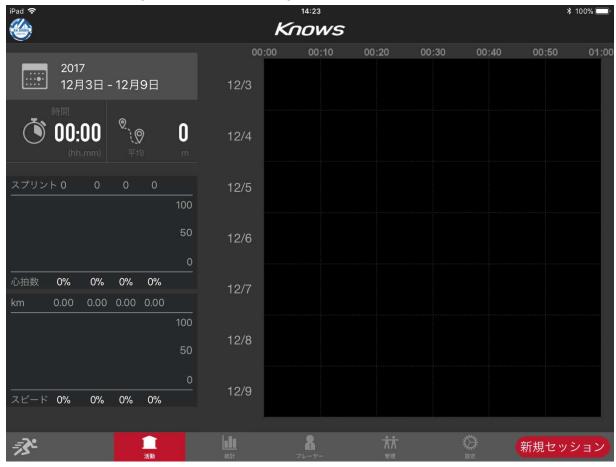
	explanation	Next screen	Error message
А	Create a new team	New team	
В	Choose a team	Activity	

### 5. Management

Add coach and player

When registration of the new team is completed, you will register coaches and players.

Please select "Management" in the lower right.



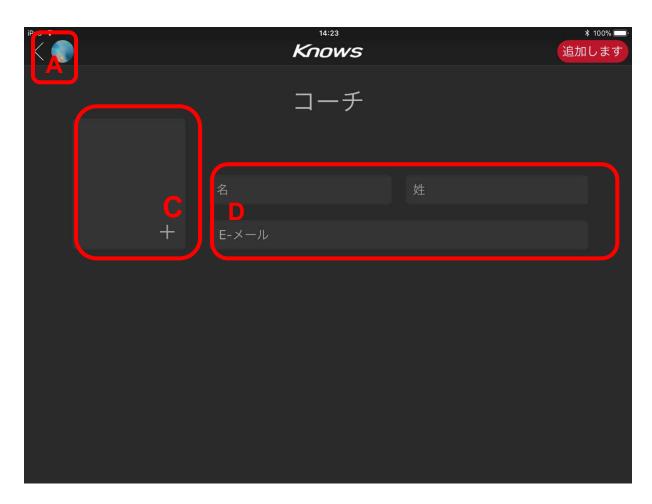
# Coach / Player registration screen



	explanation	Next screen	Error message
A	Create a new coach	Coach addition screen	
В	Add player	Add player	

### Coach addition screen

Please select "Add coach" and enter your first and last name and e-mail address. Please select a photo. Please select "Add" at the end.



	explanation	Next screen	Error message
Α	Add Cancel	management	
В	Save the coach	management	
С	Add photo		
D	Enter coach information		

Please select "Add Player" and enter player information.



	explanation	Next screen	Error message
А	Add more players	management	
В	Save players	management	
С	Select a photo		
D	Enter player information		Please enter maximum heart rate to "Max.HR" Please input maximum running speed to "Max SPEED". Please enter "recovery rate", "position" as well.

Е	Pair a device	Sensor pairing		
W	When adding or editing, you need to synchronize the devices in the settings			

## 6. Device pairing

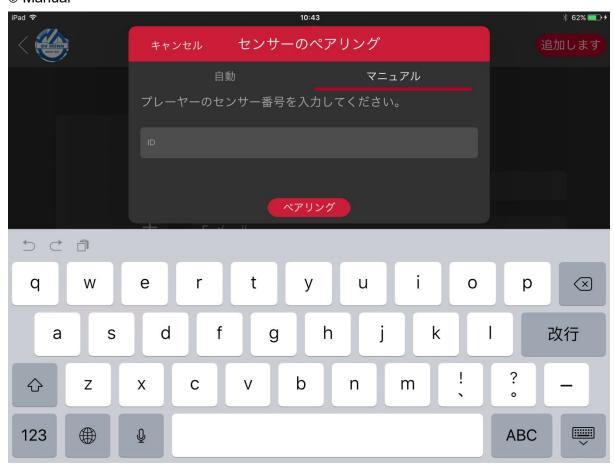
Automatic



elect the device number to be attached and pair it.

# **Device pairing**

② Manual



After turning on the power, please select the number of the first 4 digits of the 2nd screen for the device number.



When pairing is completed, select "D" "Synchronize devices" on the setting screen and synchronize.

### 7. Sync



	explanation	Next screen	Error message
Α	Edit account (ID)	Account (ID) edit screen	
В	Edit team information	Team information edit screen	
С	Edit training type	Training type edit screen	
D	Synchronize device settings	Synchronize device	
E	Upload device log	The screen to upload the logo	
F	Change other teams	Team selection screen	

Restart the device's power supply

\* Please reboot the device's power supply on the screen to synchronize setting / device.

### Synchronize the device after rebooting.





When you can synchronize, "Sync complete" is displayed.



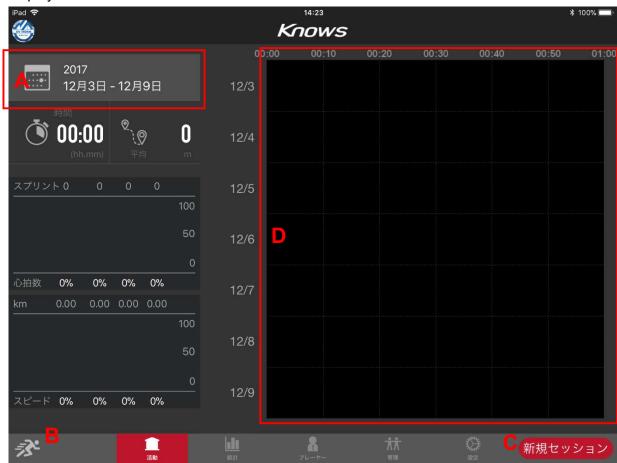
Also display the set jersey of the device body.

Please start training after synchronization is completed.

# **Activation - Contents of each menu**

## **Activity**

On the "Activities" screen, "New Session" is selected and the training data of the team is displayed.



	explanation	Next screen	Error message
Α	Choose the month and day	Select date	
В	Player measurement mode	Measurement	
С	Training item selection	Map screen	
D	Record / scroll	Activity	

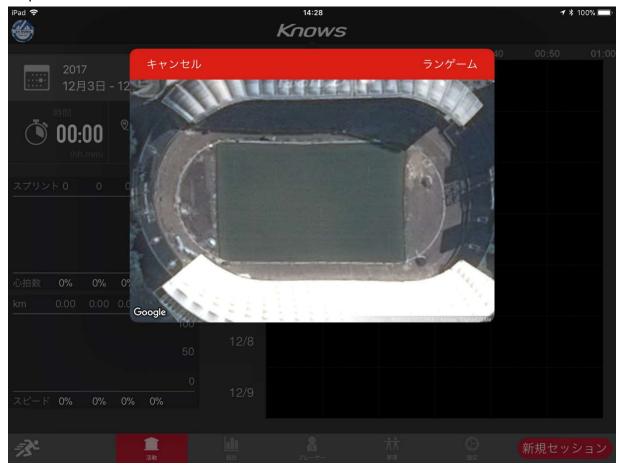
## Select date of recording

Selecting a date will indicate a match or training record.



### **New session**

When you select a new session, first select the range of the exercise location from the GPS map.



\* Please match your current location to the size on the screen map and display it.



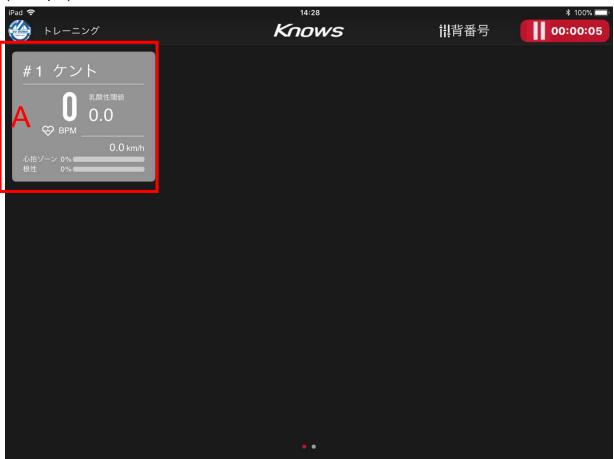
	explanation	Next screen	Error message
А	start	Training List	
В	Device number		
С	Remaining battery		
D	Real time heart rate		

## **New regulations**

Select "Start", select a new session type and select "GO".



## (Example) Match screen



	explanation	Next screen	Error message
А	Player information	Player information	
В	End	Confirm completion	
С	Player number	Bar to select sort order	

When "A, player information" is selected, it becomes the player's detailed information screen.

## **Heart rate state (color display)**



### Gray

The device will be gray if heartbeat is not sensed.

- \* Check the power supply of the device.
- \* Please check whether SmartWare is waving on your body.



### green

The number of heart beats perceptual heart rate is less than or equal to 60% of the maximum heart rate.



#### Green

Perceived heart rate, maximum heart rate, 60%~80%



## Orange

When the detected heart beat is 80% to 90% of the maximum heart rate, it is displayed in orange



#### Red

If the detected heart beat exceeds 90% of the maximum heart rate, the display turns red.

## Player information 1



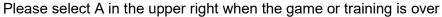
Scroll the upper gray strip to the right to switch display information

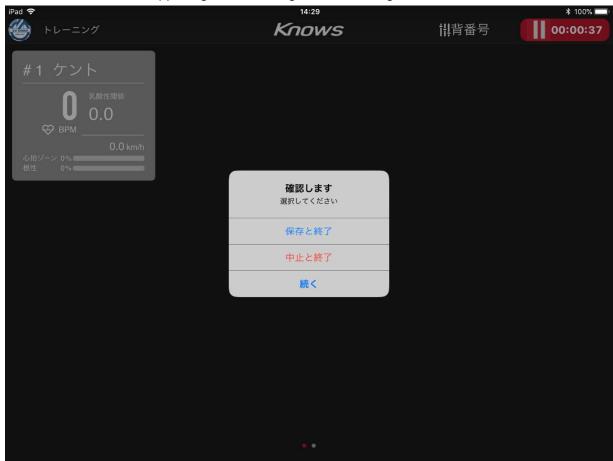
# Player information 2



	explanation	Next screen	Error message
A	End of session	Confirm completion	
В	Player position and trajectory moved		

## **Confirm completion**

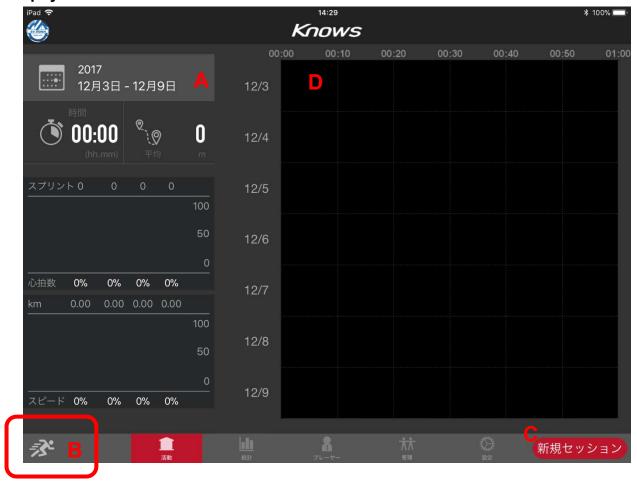




Please select the end button and select "Save and Exit", "Cancel and Exit", "Continue". If you select "Cancel and Terminate", the interruption confirmation screen will appear.

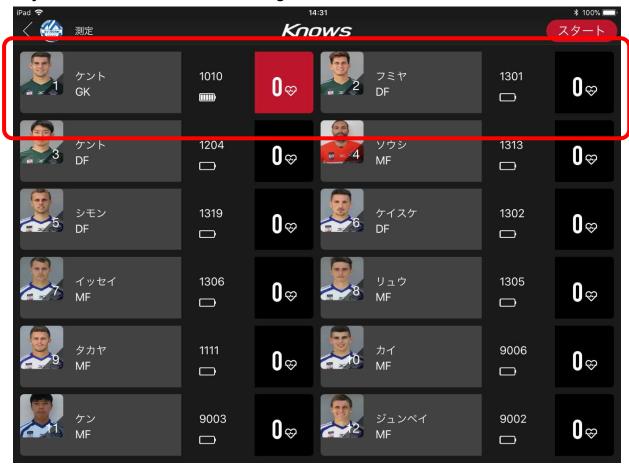


# physical measurement



The body measurement mode is the (B) button on the bottom left of each screen.

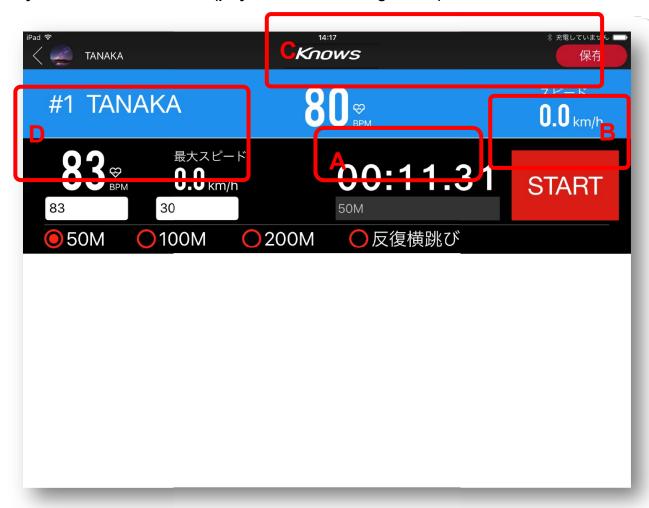
### Physical measurement screen - setting



In the body measurement mode, first set the maximum heart rate and the maximum speed of the athlete individual.

Please select and select the player you want to set up

# Physical measurement mode (player individual setting screen)



	explanation	Next screen	Error message
A	Please select the measurement item of the player	"50M"、"100M"、"200M"、 Selection screen of "Repetitive Landing Jump"	
Е	start	The timer is activated	

Select the start and the coach will choose "stop" when finishing the distance specified by the athlete.

С	Heart rate, speed (It will be reflected automatically when installed)		
D	When you finish and choose stop, your heart rate and speed will be reflected.	If the athlete actually runs and not measuring it, you can enter the number manually	
Е	Back (no saving)	Measurement mode screen	



	explanation	Next screen	Error message
A	"50 M", "100 M", "200 M", and " You can see the record of "Repetitive Landing Jump" on the graph	It is displayed as a graph in the column of (B)	
В	Graph	If there is no record, the graph will be blank.	

# Physical measurement mode (player individual setting screen - case of repetitive sideways jump)



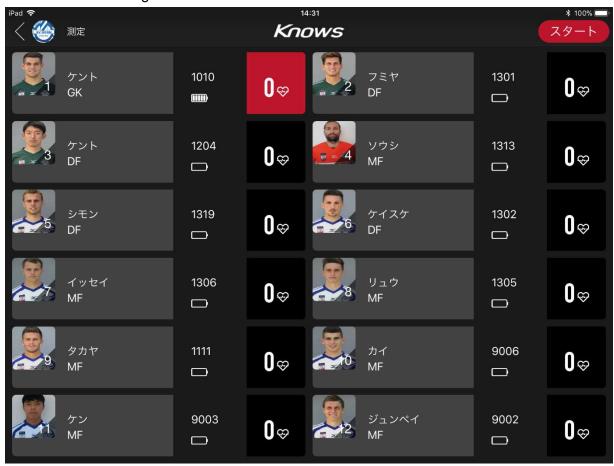
	explanation	Next screen	Error message
А	Please set the number of times the player jumps manually.	keyboard	
В	start	stop	
С	Save		

Set the number of jumps, select the start, the player starts to work, and when you reach the set number of times the coach will choose the stop, the measured number will be reflected.

### **Physical Measurement screen**

Please select "Start" on the upper right of the physical measurement screen.

When selected, the body measurement mode of everyone can be started. There are no restrictions on running distance and time.





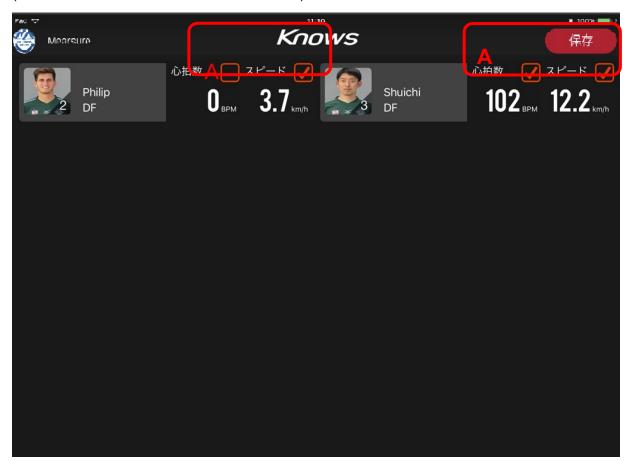
	explanation	Next screen	Error message
Α	Player test information	なし	
В	End	Save and Exit	

The maximum heart rate is displayed after approximately 30 seconds since GPS search is possible

#### Save and Exit

If you select "Save and Exit", first check the red square (A) of the heart rate or speed you want to save, then select "Save" in B.

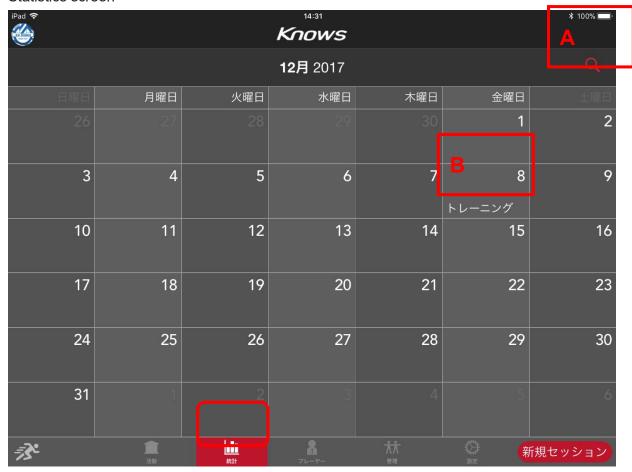
(It can not be checked without numeric data.)



	explanation	Next screen	Error message
Α	Results of physical measurements by athletes		
В	Save results	Activity	

### statistics

### Statistics screen



	explanation	Next screen	Error message
А	Check team training and game record for the selected day	Activity record of the day of the selected date	
В	Select year or month	Selection of the month	

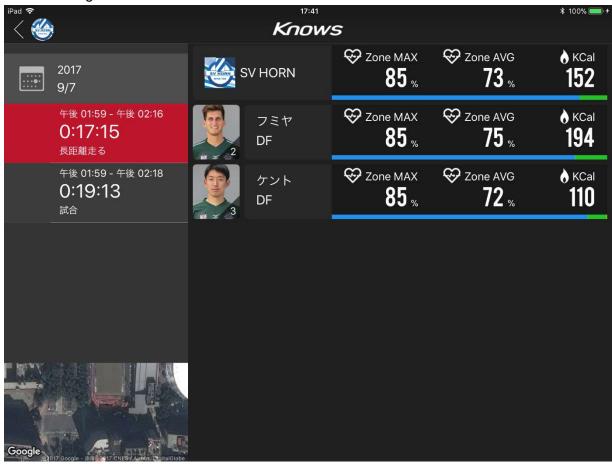
You can choose the information of the previous month / next month scroll left and right

When searching for dates, please choose "Select month".



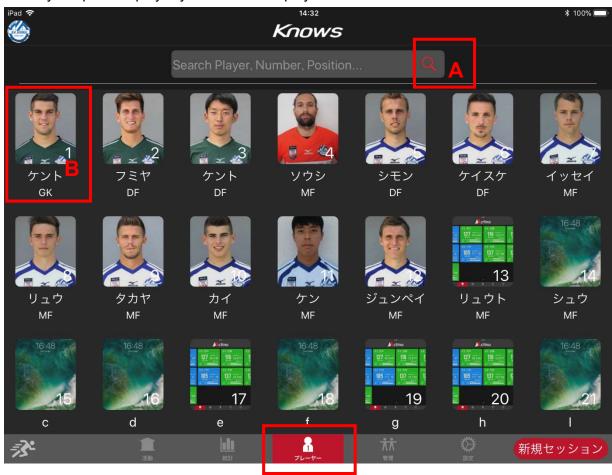
### **Team training list**

Team training date selection screen



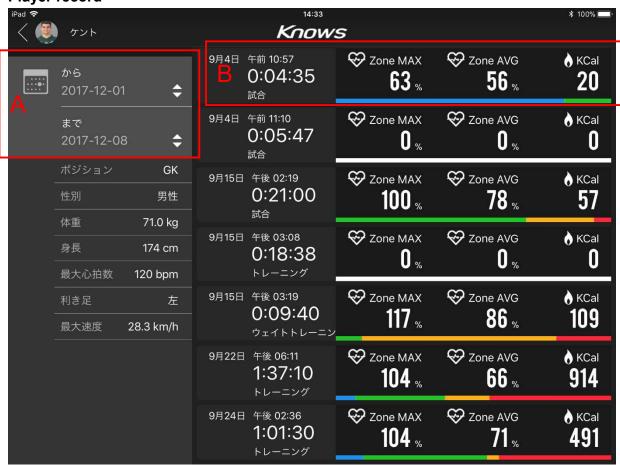
**Player** 

When you open the player you will see the player search screen.



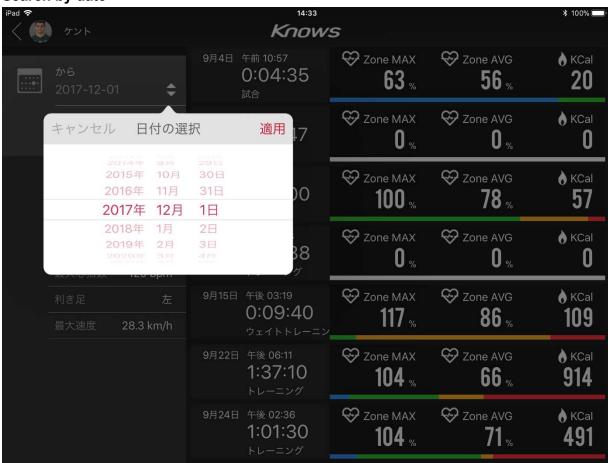
	explanation	Next screen	Error message
Α	Search by player's name		
В	Select a player	Player information	

### **Player record**



	explanation	Next screen	Error message
А	Select the date on which the athlete worked	Select date	
В	Record of the day the player was active	Record of the day the player was active	

### Search by date



### Player information -1



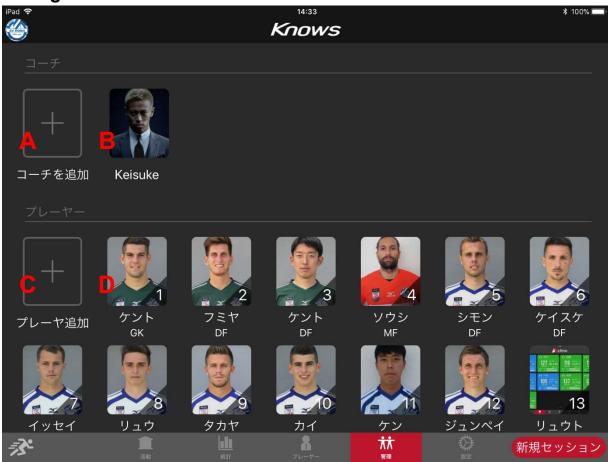
Scroll to the right to display the map.

# Player information -2



	explanation	Next screen	Error message	
A	map display (The map is created from the server.)	N/A		
В	Return	Screen of the player record		
lf y	If you select Back (B) again, you will return to the "Player" screen.			

# Management



	explanation	Next screen	Error message
A	Create a new coach	Coach addition screen	
В	Edit / delete a coach	Coach information editing	
С	Add a player	Add a player	
D	Edit / delete players	Edit player information	

### **Settings**



	explanation	Next screen	Error message
Α	Edit account (ID)	Account (ID) edit screen	
В	Edit team information	Team information edit screen	
С	Edit training type	Training type edit screen	
D	Synchronize device settings	Synchronize device	
Е	Upload device log	The screen to upload the logo	
F	Change to other teams	Team selection screen	



	explanation	Next screen	Error message
Α	Log out	Log in	

### Settings - team name and photo



	explanation	Next screen	Error message
Α	Team name and photo	Screen for editing team information	
В	You can edit it by choosing team name, photo, unit, main sports	input screen	

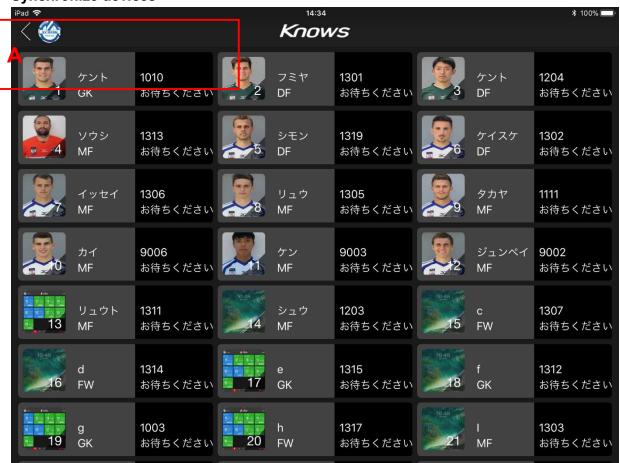
### **Settings - training items**

In the item of training you can add or delete items other than "training", "game", "weight training", "long distance running".



	explanation	Next screen	Error message
Α	Add a new training item		
В	Delete training items		

### Synchronize devices



	explanation	Next screen	Error message
Α	Pair the device	Pairing devices	

Once you can pair the device with "Automatic" or "Manual" on this screen, please restart the power supply of the device once.

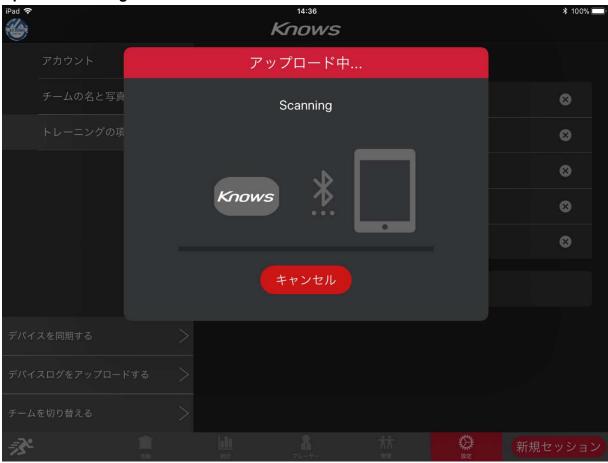
### Synchronize devices (manual)



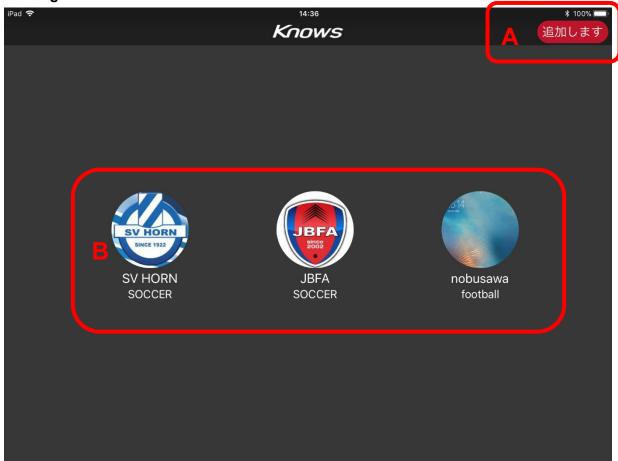
When you turn on the power, select the first 4 digit number of the screen that you pressed twice.



# Upload device log screen



# Channge the team screen



	explanation	Next screen	Error message
Α	Create a new team	new team	
В	Choose a team	Activity	

### **Precautions**

Please handle carefully KS-01 as well as general electric appliances. Be sure to observe the following procedure to receive product warranty and to use the product for a long time.

### How to care the Sensor device

- Keep the devices clean。
- Products may have higher product destruction and failure risk ratio due to falling and impact conditions.
- Keep the training device sensor in a cool, dry place. Please do not keep it in a humid place.
- We recommend that you keep your training device in a charged state. Battery consumes little by little during storage.
- Please wipe with a soft towel after use.
- Do not do unreasonable repair / disassembly / modification (including software).

### **Smartware care**

\* Handling precautions during washing :

84%Nylon 16%Spandex Machine wash cold Gentle cycle Line dry in the shade Do not tumble dry Wash with like colors









### **Disclaimer items**

- The contents of this manual are for the purpose of providing information only.
   Details of the products described in this manual may be changed without notice to the customer due to product development by the manufacturer.
- KS-01 does not constitute warranties or warranties regarding the contents of this manual or the contents and products described in this document.
- KS-01 does not guarantee losses or failures resulting from direct, indirect or accidental consequential or special actions according to the specifications of this manual or the products described in this document<sub>o</sub>