

# PLAYBALL KIT

Smart Rehab Therapy Ball

User Manual 2.30

SW version 1.1.4.0

HW version 3

## **READ CAREFULLY BEFORE EACH USE OF THE BALL**

### ***DIRECTIONS AND WARNINGS***

This document is the **essential guide** for a proper and safe usage of PLAYBALL; it contains the **necessary information** in order to use the product with **full satisfaction** and in the respect of the **safety rules** during the life of the product itself and/or its parts.

### **PROVIDED USAGES - LIMITS AND EXCLUSIONS**

1. This ball has been designed and arranged to be used in various fields, such as medical, rehabilitation, sport, fitness, gymnastics and educational ones. It must not be used for different purposes.
2. **IT IS NOT A TOY** and, in any case, it's not suitable for children under 36 months: small parts included. Choking hazard.

### **PACKAGE CONTENT**

1. 1 exercise ball (16-20 cm).
2. 1 SSI (smart sensor integrator, recharging battery): mounted within the ball.
3. 1 control panel (Screen, case, USB to Micro USB cable, "Europlug" + cable (Type C)).
4. 1 Inflating needle.
5. 1 magnetic USB charging cable.
6. 1 User Manual (PLAYBALL).
7. 1 User manual (Control Panel).

### **INFLATION**

To inflate the ball, use a hand-pump with a needle. DO NOT inflate by mouth.

### **DIRECTIONS AND WARNINGS FOR THE FOLLOWING INFLATIONS**

**For the following inflations, never exceed the prescribed and indicated maximum diameter.**

### **PRECAUTIONS TO ADOPT BEFORE EACH USAGE**

Before each use, check the surface of the ball and don't use it if it shows cuts, abrasions, holes or any other kind of damage.

## **USAGE TEMPERATURE**

The recommended operating temperature is room temperature, for more information see Spec Table on page 9.

## **USED SURFACES**

Never use the ball in presence of sharp objects or close to heating elements; when not in use, never leave the ball directly exposed to the sun.

## **CHARGING and BATTERY**

1. Use only the specified charger product. Using incorrect charger may result in overheating, fire and explosion of the battery.
2. Do not insert or place the device in to or next to a microwave, oven or any appliance that generates heat, due to the risk of overheating of the battery.

## **REPAIR WARNINGS**

1. Do not disassemble.
  2. In case of unusual behavior of the ball or Control Panel discontinue, use and contact PLAYWORK's local rep
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3. If the product begins to swell or expand, distribute a smell or heats up to the stage you cannot touch it, stop using the product immediately and contact PLAYWORK customer support.

## **TRACEABILITY**

A traceability code of 4 digits is marked on the ball; it indicates the month and year of production for this item. Please keep this code in the case of a claim, in order to identify the production time and the batch materials.

## **DISCLAIMER**

PLAYWORK Ltd. and LEDRAGOMMA S.R.L. decline any liability for damages to persons, animals or objects or to the environment arising from a non-consistent use or maintenance to the precautions and directions indicated in this leaflet accompanying the product.

## **NOTE**

1. Colours and decorations may vary according to manufacturer.
2. Specifications are subject to change and improvement without notice.

## About PLAYBALL

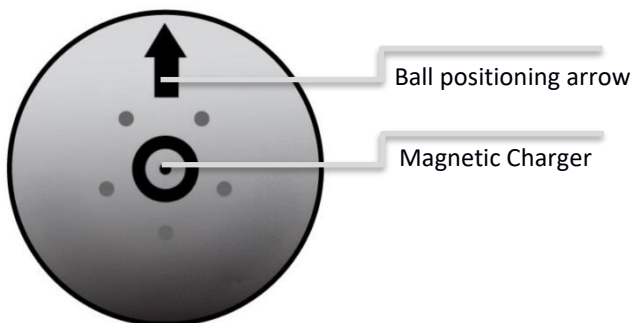
1. PLAYBALL is serving as a common fitness ball used for various rehabilitative exercises while using technological advantages in order to generate engaging sessions and objective performance measurements.
2. PLAYBALL'S easy-to-use operation and seamless integration within rehabilitation facilities is posed to generate extensive value to patients and clinics.

## PLAYWORK'S SSI

The product consists of a 16-20 cm inflatable ball mounted with PLAYWORK'S "SSI" (smart sensor integrator) and the PLAYWORK software.



1. PLAYWORK'S SSI - PLAYWORK'S SSI consists of various sensors that monitor movement and pressure applied on the ball while conducting various ball exercises. The SSI component enables to interact remotely (using Bluetooth communication) with the PLAYWORK Software, whilst controlling fun video games and monitoring personal performance measurements on a Control Panel interface.



PLAYWORK'S SSI

2. PLAYWORK'S control panel - a Control Panel-based console that runs and monitors all the PLAYWORK'S games and training programs.
3. Recharging battery: Use magnetic <> USB cable for recharging the SSI. It is recommended to full charge the SSI overnight.

**Important!** When not connected to power, the SSI is discharging over time. It is recommended to connect the ball to the power while it is not used.

## Before start

1. To inflate the ball, use the included needle. **DO NOT** inflate by mouth.
2. Inflate the ball to the recommended size and pressure that best suits the clinical needs. Use a hand-pump with a needle to inflate the ball through the inflated hole usually located in opposite side of the SSI.
3. Charge the ball for at least 1 hour using the magnetic charger (connect to the SSI).

## Getting started

Make sure the Control Panel's Bluetooth is turned on.

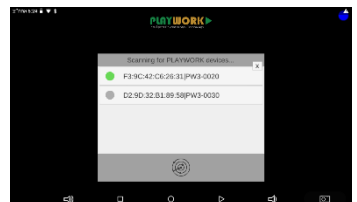
Launch the Software by pressing on the PLAYWORK SW icon on your Control Panel desktop or Software's folder.

## Pairing

\* This step is optional. The ball will be paired to the provided Control Panel.

Choose your device from the PLAYWORK devices scan screen.

Wait until the automatic pairing is completed – pairing indication on the upper right of the screen will turn green to indicate successful pairing.

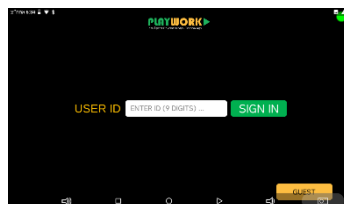


## Sign in

Sign in using any 9-digit password (only numbers) or sign in as GUEST by pressing the GUEST button on the lower right of the screen.

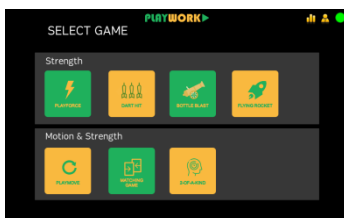
Define an Admin User: the first 9-digit password used for login will be automatically assigned as administrator (for further information about User Admin role check below).

You're now ready to choose your game and start enjoy with PLAYBALL!



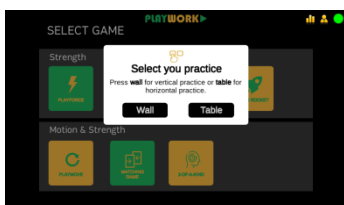
## Select Game

SELECT GAME screen includes games you can choose for your practice. The upper row includes games that practice strength and the lower row includes games that practice motion and strength, combined.



## Select exercise posture (only for motion games)

When choosing a motion games, you will be asked to choose your exercise posture. Choose table for exercises done on any horizontal surface, or wall for exercises done against a vertical surface.



## Ball positioning instructions (only for motion games)

After choosing wall or table, you will notice instruction for positioning the ball during the practice.

Ball-Position in horizontal practice: place the SSI (the plug-sensor, see page 4) directed towards the user and the ball positioning arrow pointing upwards.



Ball-position in vertical practice: place the SSI directed towards 90 degrees to the left and the ball positioning arrow pointing upwards.



**Remember!** Always place the ball in the right position before starting a game.

### Additional Games' features



**Game Settings icon** - on the upper left corner (game screens only)



**Performance Test** – Available in 'Game Settings' screen. allows you to measure the user's strength. The game will adjust automatically.



**Pause** – Available in all games. The button is at the bottom right of the screen. Allows you to pause or stop the game before the session time ends.

### General features (upper right screen corner)



**Pairing indication icon** - Select this icon to start the pairing process.

\* Pairing process is available from the sign in screen only



**General setting icon** – Sign out and general information. Manage users, licenses and download data (only for administrator).



**Dashboard screen icon** - Display the personal data from all workouts

\* Personal data is saved only to users who sign in as a USER and not as GUEST (see Sign in section p.5)

### Change Language

Change software language through "Game Settings" (currently English\Chinese).

## User Administrator

The application consists of one system administrator (User Admin). The first user that logs in to the system using a 9 digit password is automatically appointed as administrator. If the user admin ID password is forgotten, you can always use the password 9-1 (987654321) to login as an administrator.

The roles of the administrator are to:

1. Manage accounts: edit users ID, remove users and change User Admin.
2. Export data: download all users' data to a spreadsheet. See section 'how to export your data' below.
3. Upgrade license; System comes ready with the license that was purchased by the customer. When purchasing a new upgraded license, User admin's role is to set the new license key for the system.

**Note:** Access these features through **General Settings** when logged in to the system with the administrators ID.

## How to export your data?

Export data to excel feature is enabled only for the system administrator.

**Note:** Before exporting your data for the first time, download 'google sheets' or excel apps to your control panels from the google Play-Store (find the 'Play Store' icon on the control panel desktop screen)

To export your data to the spreadsheet, follow the steps below:

1. Login to the system as user admin.
2. Go to 'general settings'.
3. Press Export Data. A new PLAYWORK.DATA.DATE file be saved on the control panels download folder.
4. Run the google-sheets application and open the PLAYWORK.DATA file located in the device storage>>download folder.

**Note:** The PLAYWORK app is an offline software and all data generated by the system is stored locally and solely owned by the customer \ users. The generated data does



not include any personal information regarding users identity and can't be referred to any individual person.

## Guidance and instructions

The PlayBall kit is very intuitive but as a service, you are entitled to schedule an online 30 min. training session with one of our customer support representatives.

1. For scheduling the session please contact your PLAYWORK's local rep.

## Troubleshooting

### The ball does not connect to the Control Panel?

In some cases, communication between the control panel and PLAYBALL cannot be established and therefore they cannot be connected. Please follow these steps in the same order: \_\_\_\_\_

1. Charge the PLAYBALL's battery for at least 15 minutes.
2. Restart the Control Panel.
3. Verify that "location services" are turned on.
4. Verify that Bluetooth is enabled.
5. If still not connecting, follow these steps carefully:
  - A. Go to Control Panel's Bluetooth window and make sure the ball is **not** paired.
  - B. Delete temporary data from "PLAYWORK" SW: Go to Settings -> SW -> select "Playwork" SW -> Storage -> press "Clear Data".
  - C. Load "PLAYWORK" Software.
  - D. Allow access to "Location" services when asked during the SW loading process.
  - E. Wait until pairing process is completed.
  - F. Pair the ball according to Pairing process described in GETTING STARTED section (p.5).

## INFORMATION AND DIRECTION FOR USE

Please observe the following precautions before using your PLAYBALL:

1. During practice, make sure that you have a support such as a wall or a stable table within an arm's reach.
2. Do not engage in exercises that require bouncing or jumping while using PLAYBALL.
3. No more than one person should use PLAYBALL KIT at a time.
4. Avoid stepping or standing with full body weight on the ball.
5. Do not use tape, nails or similar devices to attach the ball to other devices or surface.
6. Do not expose PLAYBALL to liquids or to extremes of heat or cold.
7. Do not use the ball if you are under the influence of alcohol or any other substance that could affect your sense of balance or perception and cause you to slip or fall.
8. The life expectancy of this product depends on how much it is used. As a precaution, PLAYBALL should be inspected frequently and replaced as necessary.
9. An adult must explain all Safety Information and usage guidelines and instructions to all children or people with mental or cognitive problem who are going to use the ball. Failure to do so may result in injuries or damage to the system or other property. Observe children during gameplay for proper and safe use of the ball.
10. An adult should initially assist young children to make sure they understand correct usage.
11. Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.
12. Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the equipment, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result
13. ATTENTION: Any change to this device is not allowed.
14. Before each use of the ball, wash the surface with a damp cloth using soap and water and remove stubborn stains with diluted alcohol. ATTENTION: Don't dip
15. Medical Device and all its components must be considered as special waste at the time of their dismantling and must be disposed of as electric and electronic

equipment waste. Therefore, the user will have to commit the waste (or let it commit) to a separated collection centre set up by the local administration, or deliver it to a distributor before purchasing a similar new equipment.

16. In case of serious accident please inform the competent authorities and the manufacturer.
17. The device is not designed to work with high frequency surgical equipment.
18. **WARNING:** Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

### Guide and manufacturer declaration – electromagnetic emissions

PlayBall is expected to work in the electromagnetic environment defined below. The patient or PlayBall's user should guarantee the device is used in such an environment.

Emission test	Conformity	Electromagnetic environment
CISPR 11 RF emissions	Group 1	PlayBall exploits radio-frequency energy for its internal functioning only. Consequently, its RF emissions are very low and most likely do not have any interference on electromagnetic devices close to it.
CISPR 11 RF emissions	Class B	PlayBall is suitable to be used in all environments different than domestic ones and those directly connected to public and low-tension net providing energy to building designated to domestic use.
IEC 61000-3-2 harmonic emissions	Not applicable	
IEC 61000-3-3 tension fluctuations' emissions/flicker	Not applicable	

### Guide and manufacturer declaration – electromagnetic immunity

PlayBall is expected to work in the electromagnetic environment defined below. The patient or PlayBall's user should guarantee the device is used in such an environment.

Immunity test	IEC 60601 test degree	Conformity degree	Electromagnetic environment
Electrostatic shock (ESD) IEC 61000-4-2	in contact to $\pm 8\text{kV}$	in contact to $\pm 8\text{kV}$	Floors needs to be made in wood, concrete or ceramic tiles. If floor is covered by synthetic material, relative humidity should be at least equal to 30%.
	on air $\pm 2; 4; 8; 15\text{ kV}$	on air $\pm 2; 4; 8; 15\text{ kV}$	

Note  $U_T$  is net tension measured in alternating current before test level application.

### Guide and manufacturer declaration – electromagnetic immunity

PlayBall is expected to work in the electromagnetic environment defined below. The patient or PlayBall's user should guarantee the device is used in such an environment.  
 RF portable and mobile communication devices should not be used closer to any part of PlayBall, cables included, than the recommended distance resulting from the equation applicable to the transmitter's frequency.

Immunity test	IEC 60601 test		Conformity degree	Recommended separation distance d:
Radiated RF IEC 61000-4-3	3 V/m from 80 MHz to 2,7 GHz		3 V/m	d= 30 cm
Immunity to proximity fields coming from RF wireless communication devices IEC 61000-4-3	TETRA 400 380 – 390 MHz	27 V/m	27 V/m	d= 30 cm
	GMRS 460 FRS 460 430 – 170 MHz	28 V/m	28 V/m	
	LTE Band 13, 17 704 – 787 MHz	9 V/m	9 V/m	
	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5 800 960 MHz	28 V/m	28 V/m	
	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 5 1700 – 1990 MHz	28 V/m	28 V/m	
	Bluetooth, WLAN, 802.11 b/g/n, RIFD 2450, LTE Band 70 2400 – 2570 MHz	28 V/m	28 V/m	
	WLAN 802.11 a/n 5100 – 5800 MHz	9 V/m	9 V/m	

PLAYWORK LTD. AND LEDRAGOMMA S.R.L. ASSUME NO LIABILITY FOR INJURY OR DAMAGES THAT MAY OCCUR WITH A USE OF THE PRODUCT NON-CONSISTENT WITH THE INCLUDED WARNINGS. IN SUCH CASE, THE CONSUMER ASSUMES ALL LIABILITY AND USES THIS PRODUCT AT THEIR OWN RISK IMPORTANT SAFETY INSTRUCTIONS

## Specs

### PLAYBALL

Ball diameter	16-20 cm
Ball weight	~420 gr'
Working time without recharging	8 hours
Sensors	3-axis accelerometer, pressure sensor
Operating Temperature	5°C to 45°C (41°F to 113°F)
Battery Type	Lipo Battery - 70-100mAH micro-USB rechargeable.
Charging time	1h
Communication Modules	Bluetooth low energy (BLE)

### Control Panel – 10"

Item	Dragon-Touch K10
Processor	MTK8163 (Quad core ARM Cortex - A53 64-bit up to 1.3GHz)
Ram	2GB DDR3
Storage	16 GB flash built-in; Micro SD card slot (max.128GB supported)
Display	10.1" 800*1280, Capacitive touchscreen
Wi-Fi Networking	IEEE 802.11 a/b/g/n
Audio Output	3.5mm headphone
PC Interface	USB 2.0 high speed
Additional Features	Built-in microphone 2X1W speaker Front facing camera 2.0MP Rear camera 2.0MP
Bluetooth	4.0
Operating System	8.1
Power	Rechargeable Li-poly battery Power adaptor (USB 5V,sA)
Playback Time (Hours)	Up to 6 hours music, 4 hours video, 4 hours web browsing
Temperature	-20° C to 60° C

### Control Panel – 7"

item	SL-729 Quad core 1.3 GHz processor
Display	1024x600
Touch panel	7" Capacitive touch screen

OS	Android 7.0
Input method	Soft keypad
Capacity	16GB
External capacity	TF card, up to 32 GB
Audio	MP3, WMA, OGG.... (support all audio formats)
Video	1080P WMV,MKV,FLV,AVI etc.
Bluetooth	4.0
Wireless network	Support WIFI
Language	Multi-language
OTG	Support
Temperature	-20° C to 60° C
Power supply	AC 100~240V 50/60 Hz; DC 5V/2A, "Europlug" (Type C)
Battery	Lithium ion battery

### Control Panel – 8"

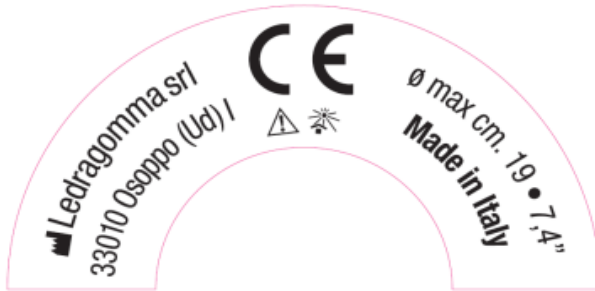
item	SL868G Quad core 1.3 GHz processor
Display	1280x800
Touch panel	8" Capacitive touch screen
OS	Android 8.1
Input method	Soft keypad
Capacity	16GB
Ram	2 GB
Port	Micro USB
Design	Ultra Slim Design 8mm
Bluetooth	4.2
Wireless network	Support Wi-Fi 2.4GHz, 5GHz Wi-Fi 2.4GHz, 5GHz
Language	Multi-language
OTG	Support
Temperature	-20° C to 60° C
Power supply	AC 100~240V 50/60 Hz; DC 5V/2A, "Europlug" (Type C)
Battery	Lithium-ion battery, Battery 3.7V/3500mAh

**Storage and transport conditions:**

Temperature: -20°C/+40°C









Humidity: 10- 75% (without condensation)

Pressure: 70÷160 kPa



**Tonkey®** ***PlayBall*** **www.tonkey.it**  
PLAYWORK TECHNOLOGY



<b>SYMBOL LEGEND</b>	
	Manufacturer
	Keep away from light and heat sources
	CE marked Medical Device MDR 745/2017
	Pay attention
	BF type applied part
	Follow user manual
	Lot number
	Waste of electric and electronic equipment