FLUID POWER ZONE

FDF Console with Bluetooth
User Guide Version 1.0

ADJUSTABLE
FLUID RESISTANCE
MACHINES

› CONTENTS

FLUIDPOWERZONE

CLIMB CONTRALATERAL CLIMBER

Multiple hand grip positions for comfort and different recruitment patterns

Natural contralateral climb action

Bluetooth monitor

Long angled hand rails for comfortable step action support

Generous foot plates with large toe caps

Super smooth belt drive technology

Robust Steel

Variable step / reach distance, auto adjust

Rear transport wheels

10x FLUID RESISTANCE

ERG SKI ERGOMETER

Ergonomic handles for comfortable and secure grip

Swivel pulley for more complex movement patterns

Bluetooth monitor

Positive instant resistance throughout the entire range at any speed

Wide foot plates provide stability and foot placement range

Transport wheels

Robust Steel frame

10x FLUID RESISTANCE

CUBE TRAINING PLATFORM

Bluetooth monitor

Ergonomic support bar

Accessories rack

Robust rear transport wheels

Includes accessory pack: Squat belt, single handle, ankle strap, straight bar with swivel

Wide foot plates provide stability and foot placement range

10x FLUID RESISTANCE

3 Separate Resistance Attachment Options

50%	100%	200%
Functional & Sport	Power & Speed	Strength & Power

PRESS SQUAT TO OVERHEAD

Bluetooth monitor

Tapered shoulder pads for secure comfort

Long hand rails for multi-grip positions

Wide foot plates provide stability and foot placement range

Counter balance minimises press arm weight

Robust rear transport wheels

Steel frame

10x FLUID RESISTANCE

ROW TOTAL BODY ROWER

Bluetooth monitor

Industrial nylon belt for smooth and quiet rowing

Premium ergonomic contoured handle

Heavy duty concealed transport wheels

Secure adjustable foot straps and heel cups

Contoured, non-slip seat

Office chair seat height for easy entry and exit

Concealed air glide seat rollers

Robust Steel / Aluminum frame

10x FLUID RESISTANCE

UBE STANDING ARM CYCLE

Bi-directional rotation for complete muscle engagement

Solid crank arm for robust durability

Crank height fixed – nothing to adjust

Wide footplates provide stability and foot placement range

Bluetooth monitor

Ergonomic neutral hand grips

Patented Twin Tank

Robust rear transport wheels

Robust Steel

10x FLUID RESISTANCE

* FDF reserves the right to modify any product design, manufacture or aesthetic without notice or consultation. Product specifications and warranties may vary from country to country.

BROWSE THE RANGE AT FLUIDPOWERZONE.COM

CONSOLE OVERVIEW

+ First Degree Fitness Fluid Rower Models
+ Bluetooth® FTMS Rower Data Compatibility
+ Bluetooth® Heart Rate Monitor Compatibility - Including Polar Bluetooth® Monitors
+ Automatic Resistance Level Detection
+ Numeric Display of Workout Data and Heart Rate
+ Real-Time Speed and Watts History Scrolling Charts
+ WORK/REST Interval Workouts
+ Simple 3 Button User Interface
+ Auto power down after 5 minutes of no activity (ONLY if Bluetooth® is not connected)
+ 2 x D Cells for Extended Battery Life

WORKOUT OPERATION

A user will exercise during active **WORK** Intervals and is expected to rest the during active **REST** Intervals.

START UP SCREEN

Press any button or begin exercising to power on the console. The startup screen displays firmware version information, selected equipment model, and battery level.

Firmware Version:
August 11, 2020 @ 7:40pm
Model: 2301 (FluidPowerZone CUBE)
Battery Level: 93%

❯ USING THE CONSOLE

❯ WORKOUT DISPLAY

❯ DISPLAY READINGS

TIME: Workout elapsed time in minutes and seconds.

WATTS: While exercising, this shows the Power for the previous repetition. When a workout is paused or stopped, this shows average power based on average split time.

CALS: While exercising this shows kCals/hr burned. When a workout is paused or stopped this shows total kCals burned.

WORK: Shows active Work Time remaining.

REST Shows active Rest Time remaining,
DIST: Accumulated Distance (FluidPower - ROW & UBE)
REPS Number of repetitions while Work is ongoing.

PULSE: Heart Rate from a Bluetooth® connected heart rate monitor.

LEVEL: Current resistance level which automatically updates when adjusted on the FluidPower - ROW, UBE, CLIMB, ERG, PRESS & CUBE

SPM: Current cadence as Reps Per Minute, crank RPM (Power UBE), or Strokes per Minute (Power Row)

CHART: Shows real time Speed/Effort or Watts history.

❯ BATTERY WARNING

Remove Batteries from the console when the equipment will not be used for 30 days or more.

› USING CONSOLE BUTTONS

› CONSOLE BUTTONS

PRESS ANY BUTTON TO TURN ON CONSOLE

RESET BUTTON: Press and hold RESET to reset console readings to zero.
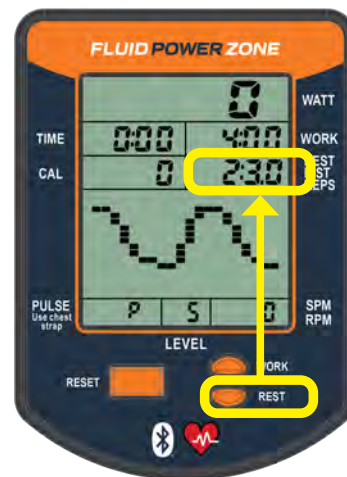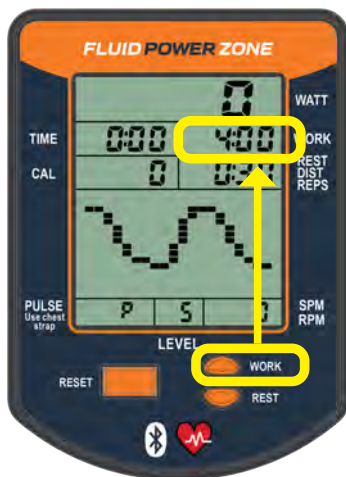Click RESET to toggle between the two chart types, Watts or Speed.

WORK BUTTON: Press WORK to change the WORK interval.

REST BUTTON: Press REST to change the REST interval.

+ WORK; Cycle Work interval through 0:15, 0:30, 1:00, 1:30, 2:00, 2:30, 3:00, 3:30, 4:00, 0:15, etc.

+ REST: Cycle Rest interval through 0:15, 0:30, 1:00, 1:30, 2:00, 2:30, 3:00, 3:30, 4:00, 0:15, etc..

› CHANGING WORK REST INTERVALS

+ Turn on console.

+ Press and hold **RESET** to clear console data.

+ Use the **WORK** button to set WORK interval.

+ Use the **REST** button to set REST interval.

+ When exercise begins the Work Interval will start counting down and REST/DIST will display accumulated distance.

+ When the Work Interval reaches 0, the console will beep, and the Rest Interval will start to count down and will be shown in REST/DIST/REPS. When this reaches 0 the console will beep and will wait for exercise to resume before starting the Work Interval count down.

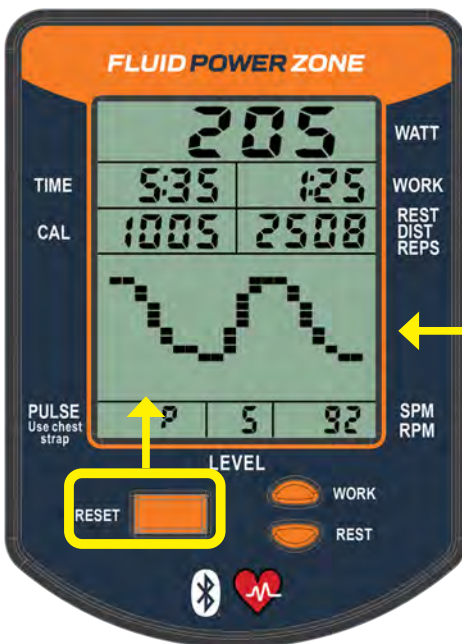6

› CHANGING CHART TYPE
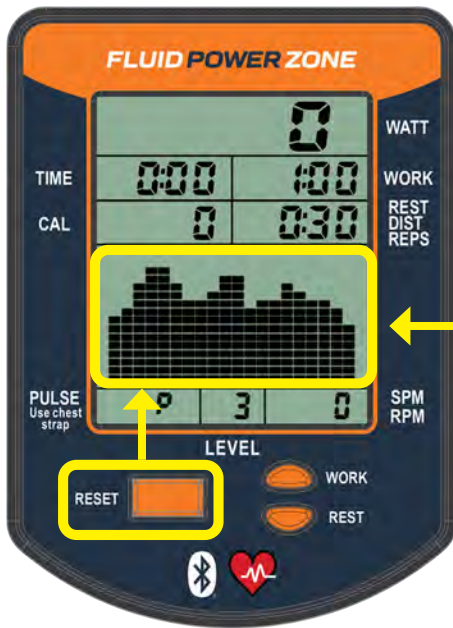
WATTS HISTORY
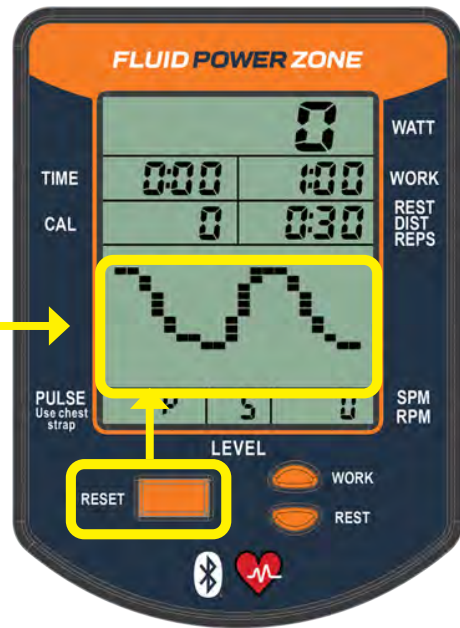
REAL-TIME SPEED

Click **RESET** to toggle between chart types

› CONSOLE RESET

To clear workout data press and hold **RESET for 3+ seconds**.

Note – Bluetooth® will be disconnected.

> **SPECIAL FUNCTIONS**

> ## EQUIPMENT SELECTION

The correct equipment type is set at the factory as part of the manufacturing process so this procedure should not be required by an end user under normal circumstances.

If required, follow these steps

1. Remove the batteries from the console.

2. While reinserting the batteries **press and hold the RESET and WORK buttons for 3+ seconds.**

3. The console will beep twice and the select equipment screen will be displayed.

4. The **CAL field shows the currently selected equipment**.

EQUIPMENT ID IN CAL WINDOW	EQUIPMENT ID
2301	FluidPowerZone **CUBE**
2302	FluidPowerZone **ERG**
2303	FluidPowerZone **CLIMBER**
2304	FluidPowerZone **PRESS**
2305	FluidPowerZone **UBE**
2401	FluidPowerZone **ROW**

5. Use the WORK and REST buttons to select the required equipment.

6. Press RESET to confirm selection and the console will reboot with the selected configuration.
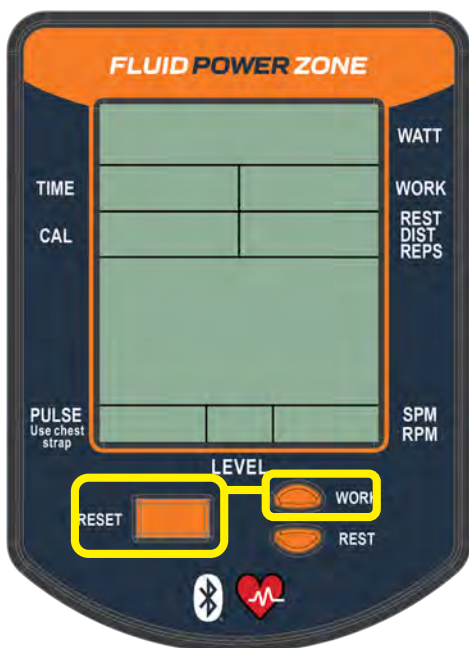
HOLD TO REST

SELECT EQUIPMENT

› BLUETOOTH CONNECTIVITY

› CONNECT TO BLUETOOTH HEART RATE MONITOR

Follow these steps to connect with a Bluetooth® Hear Rate monitor.

1. Power on the console.

2. Ensure the Heart Rate monitor is in close proximity with the console.

3. Press and hold WORK and REST buttons for 3+ seconds.

4. The console will beep once and display the BT connect screen.

5. Press the REST button to select Bluetooth® Heart Rate connection.

6. Follow the connect instructions of the Heart Rate Monitor.
   + Compatible monitors should automatically connect if within range.

POWER ON

BLUETOOTH CONNECT SCREEN

**WAITING FOR CONNECTION**

CONNECTED AND HEART RATE DISPLAYED

7. When a successful connection is made the console will return to the workout screen with the heart symbol displayed in the PULSE field

8. If no connection is made within 60s the console will return to the standard workout screen.

› FDF FLUIDPOWERZONE ROW FITTED WITH FDF HEART RATE HANDLE

1. If the **FDF FluidPowerZone ROW** is fitted with the **FDF Heart Rate Handle** this will also transmit battery level information

2. Standard Bluetooth Heart Rate protocol with encrypted BT communication

Inbuilt Heart Rate Sensors

Inbuilt Heart Rate Sensors
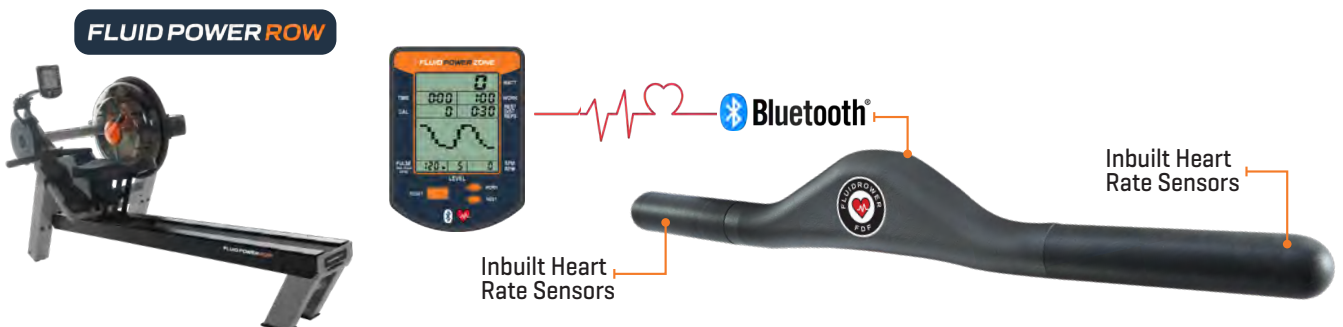
› CONSOLE SUPPORT

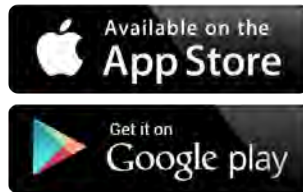## › CONSOLE FIRMWARE UPDATE

The Firmware for the FDF FluidPowerZone consoles can be updated, using the FDF Fluid Connect

App. FDF Fluid Connect App is available on Apple App Store and Google Play.

Apple - https://apps.apple.com/ke/app/fluid-connect/id1514909463

Google - https://play.google.com/store/apps/details?id=no.unichamp.android.fdf&hl=en_AU&gl=US

› FDF FLUID CONNECT APP

To update the Firmware simply follow the instructions provided by the App.
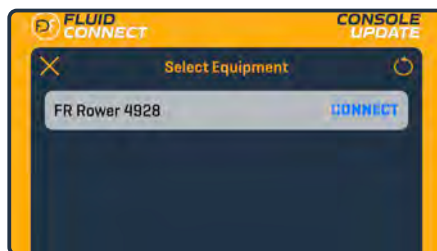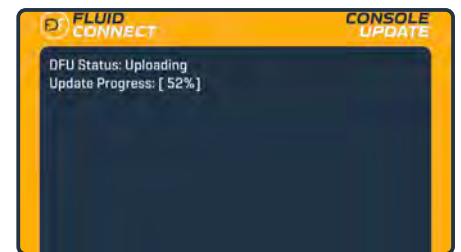

START

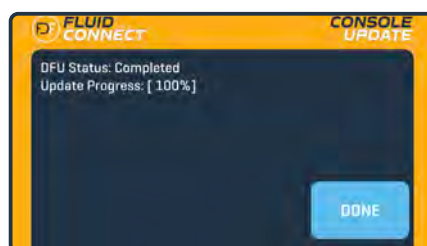**TURNING CONSOLE ON**

GETTING INTO OPTIONS

SELECT BT OPTION

SELECT EQUIPMENT

DFU/FIRMWARE UPLOADING

DFU/FIRMWARE COMPLETE

FLUID RESISTANCE LEVEL CALIBRATION PROCEDURE

Calibration of the resistance level sensor should not be required under normal circumstances.

TO DO THIS FOLLOW THESE STEPS.

1. Power on the console.

2. Press and hold WORK and REST for 3+ seconds.

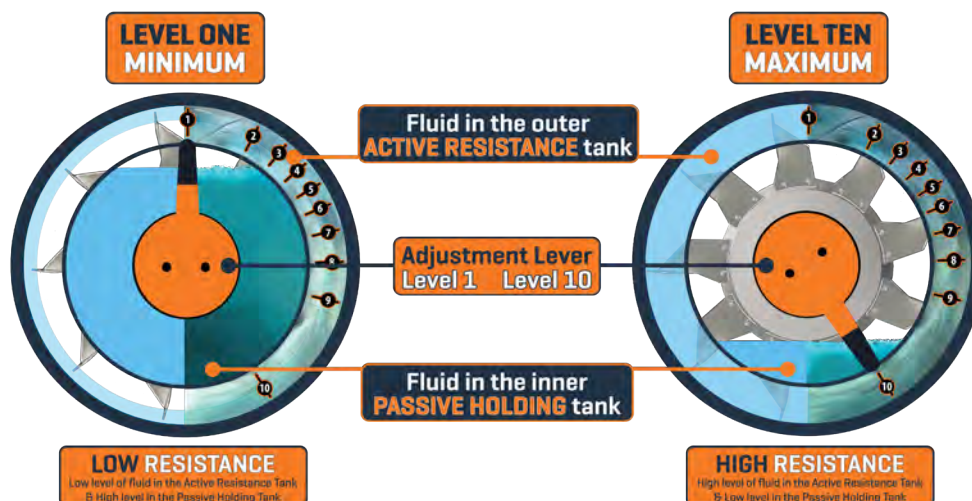**3.** The console will beep once and display the calibration screen.

*The numbers below is a non realistic example of calibration of a 10 level tank

2	26
3	39
4	52
10	205

4. Set the Fluid Resistance to level 1 and wait a few seconds before clicking RESET.

5. Set the Fluid Resistance to level 2 and wait a few seconds before clicking RESET.

6. Set the Fluid Resistance to the next level and wait a few seconds before clicking RESET.

7. Repeat #6 until all levels have been done [5 or 10 depending on Fluid Resistance Tank].

8. When all levels are done the console will reboot.

9. Check calibration by cycling through all resistance levels.

FDF - FLUID**POWER**ZONE - FLUID RESISTANCE TWIN TANKS

LEVEL ONE MINIMUM

LEVEL TEN MAXIMUM

Fluid in the outer **ACTIVE RESISTANCE** tank

Adjustment Lever
Level 1   Level 10

Fluid in the inner **PASSIVE HOLDING** tank

LOW RESISTANCE
Low level of fluid in the Active Resistance Tank
& High level in the Passive Holding Tank

HIGH RESISTANCE
High level of fluid in the Active Resistance Tank
& Low level in the Passive Holding Tank

> **HANDLING & MAINTENANCE**

> **GENERAL**

✚ Do not press or scratch the product with any sharp objects.

✚ Do not forcibly bend the product.

✚ When the product is stored, make sure it is packed in a packing box and stored within recommended temperature range.

✚ Do not use or store the product under conditions where the product will be exposed to water, organic solutions, or acid.

✚ Do not use the product under direct sunlight.

✚ Clean the product with a soft cloth and neutral detergent or alcohol.

✚ When contaminated with chemicals, wipe them off immediately with caution not to cause injury.

> **BATTERY REPLACEMENT**

1.   Slide up rear battery cover

2.   Remove old batteries

3.   Insert new batteries

4.   Reinsert battery cover

SLIDE UP

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❯ SPECIFICATIONS

ITEM	RATING	
Supply Voltage	~2.5V - 3.3V	2 x D Cell Batteries
Operating Voltage	3VDC ±5%	30mV peak to peak maximum ripple and noise
Current Consumption	8mA (typical operation) 3uA (sleep mode)	Bluetooth ON, LCD all ON, Sensor ON
Operating Temperature	0°C to +80°C	Avoid condensation
Storage Temperature	0°C to +80°C	Avoid condensation
Speed Sensor	< 100KHz	
Level Sensor	100K Potentiometer	
LCD	28½ x 7 Segment Digits 8 x Annunciators 20 x 16 Dots	
Chemical Resistance	Toluene, Trichloroethylene, Acetone, Alcohol, Gasoline, Machine Oil, Ammonia, Glass Cleaner, Mayonnaise, Ketchup, Wine, Salad Oil, Vinegar, Lipstick, etc.	
This product is lead-free and compliant with RoHS		