



INDOOR CYCLE

MATRIX

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reddot award 2014
winner



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MATRIX IC7 INDOOR CYCLE
FEATURING COACH BY COLOR®

We designed the ultimate power-based indoor cycle and program to re-establish how instructors could perform and participants could experience indoor cycling in the studio and on the cardio floor. The final achievement was something much greater - making fitness more **Colorful, Powerful and Original.**



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MAKING FITNESS MORE COLORFUL, POWERFUL & ORIGINAL

The IC7 Indoor Cycle and its Coach By Color® power program brings optimal performance and opportunity to group exercise, team coaching, personal training and even individual use. World-class technology and member-centric coaching will make your program more colorful, more powerful and definitely more original. That means better experiences and better results for your customers to keep them coming back.

Colorful

The IC7's Coach By Color® training console uses one of the world's most simple, universal and powerful forms of communication to maximize instruction, motivation and reward during your members' workouts. The console's display lights up in one of five colored zones that matches the user's WattRate® (power) reading or heart rate output so they know immediately whether they need to ratchet up or dial back their effort. Plus, the integrated front LED display on each console tells instructors when certain students are working too hard or not hard enough.

Powerful

The IC7's WattRate® (power) meter provides your members with immediate and precise feedback on the direct effort they're putting in, to ensure they have absolute control of the results they get out. Power-based training with WattRate® - the market's most accurate power meter - provides the ultimate way for your members to see results and reach goals faster.

Original

The IC7's advanced ergonomics, superior biomechanics and precision engineering provide your members with maximum comfort and performance by being fully and correctly connected to the bike and their body. It's when users are connected to their workouts that we witness more positive psychological and physiological experiences, which promotes faster results and happier members who aspire to train more at your facility.





THE SCIENCE BEHIND COACH BY COLOR®

Color

Life is not black and white. We live in color - every minute of every day. Color is powerful. It can spur action and compel reaction. Color is evocative. It can influence thoughts, feelings and emotions. Color is universal. Red means “hot” and blue means “cool” in just about every culture.

To Coach By Color® is to use one of the world’s most intuitive and effective forms of communication to help members receive a greater experience and achieve better fitness results in less time. The Coach By Color® power program relies on color’s natural and stimulating properties to accurately coach a member’s effort during a workout. Coach by Color® elicits the right psychological and physiological response at the right time to encourage greater maximal effort and reward recovery effort. It fosters connections among members and enhances instructor communication. Thus, Coach By Color® increases social interaction while it maximizes training results. More simply, that means members find camaraderie more easily, enjoy the process more and reach their goals more quickly. Those are the kinds of benefits that boost new-member acquisition and retention.

Training Zones

Coach By Color® has five colored training zones: white, blue, green, yellow and red. These zones can be linked to WattRate® (power) and Functional Threshold WattRate® (FTW), or heart rate and percentage of Heart Rate Max (HRM). FTW represents the workload above which an individual cannot sustain prolonged exercise. Similar to HRM, once an individual’s FTW is known, users are assigned the five colored zones to accurately coach their effort for the best customized results.

Training Zone	%FTW	% Max HR	RPE	Time in Zone
Neuromuscular Power	>150%	>100%	Maximal	5 - 10 sec
Anaerobic Capacity	106 - 150%	90 - 100%	Maximal	1 - 10 min
VO2 Max	91 - 105%	80 - 90%	Hard	10 - 60 min
Lactate Threshold	91 - 105%	80 - 90%	Hard	10 - 60 min
Tempo	76 - 90%	70 - 80%	Moderate	3 - 8 hrs
Endurance	56 - 75%	60 - 70%	Light	3 hrs - wks
Active Recovery	< 55%	<60%	Very Light	Infinity



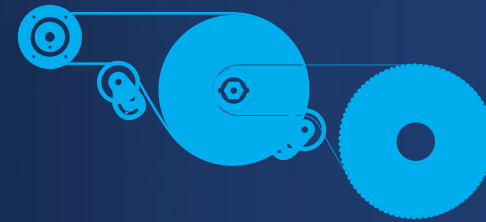
COLORFUL POWERFUL ORIGINAL

IC7 Indoor Cycle

The IC7 is the most advanced indoor cycle ever designed. Its pioneering design and functionality are due largely to Indoor Cycling's innovative two-stage drivetrain. Freed of the large center pulley characteristic of traditional bike design, the IC7 brings a lower, sleeker profile to the studio or cardio floor. The improvements, though, are not limited to aesthetics. The two-stage drivetrain also enables the market's most accurate (+/-1%) direct WattRate® (power) meter, 100-level precision magnetic resistance, 1:11 ratio high-speed flywheel, and an unrivalled connection to the ride thanks to the tactile and responsive hybrid Poly-V and tooth belt technology. The bike's performance metrics are delivered to the rider via the patent-pending Coach By Color® training console – a fully self-powered console that vividly displays the user's WattRate or heart rate to them and their coach in five colored zones. Designing a bike that improves an athlete's performance while capturing an artistry to communicate with the fitness user is our greatest achievement. Indeed, the IC7 makes fitness more colorful, powerful and original.



FIRST OF ITS KIND TWO-STAGE DRIVETRAIN



Two-stage drivetrain uses one left and one right-sided pulley system to drive the flywheel

TWO-STAGE DRIVETRAIN

Technical Requirement

To completely redesign indoor cycling's traditional single-stage drivetrain in order to:

1. maximize a club's opportunity to help members reach their goals faster by training with power;
2. deliver a robust power meter that's precise and repeatable on all bikes;
3. provide users an authentic, highly-accurate magnetic resistance system that also fully eliminates a facility's need for regular service and maintenance; and
4. advance a rider's connection to the bike via greater comfort and performance that keeps them coming back.

Solution

The two-stage drivetrain uses one left and one right-sided pulley system to optimize pedaling and power meter performance. The design — the first of its kind — minimizes component size to create space for sensors and other electronics necessary for the bike's power meter and training console. The design enables a 1:11 gear ratio that turns the aluminum flywheel at very high speeds. This is essential for an accurate and authentic-feeling magnetic resistance system. The front drive (right side pulley system) is driven by a tooth belt that deepens the rider's connection to the pedals with tactile feedback.

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THE MARKET'S NEW LEADING DIRECT POWER METER

WATTRATE® (POWER) METER

Technical Requirement

To develop a precision Watt (power) meter that makes power-based training the most reliable and effective tool to measure performance and maintain member results by: **1.** measuring power (Power = Force x Velocity) directly and as close to the pedal as possible (where the force is applied) while ensuring a placement that offers maximum future opportunity; and **2.** providing the market a new gold standard for accurate, reliable and durable power measurement.

Solution

The launch of WattRate® — the market's new leading direct power meter that offers a measuring tolerance of +/- 1%. Such accuracy is groundbreaking in indoor cycles. The WattRate® (power) meter is located at the intermediate transmission and uses photocells to directly measure the torsion (twisting force) of the spindle. The design never requires recalibration and is fully resistant to external factors such as temperature, humidity and transportation.

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Uses photocells to directly measure the torsion (twisting force) of the spindle

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DELIVERING REAL-TIME, COLOR-CODED BIOFEEDBACK

COACH BY COLOR® TRAINING CONSOLE - FOR PARTICIPANTS

Technical Requirement

To develop and design a computer console smart enough to deliver the IC7's Coach By Color® power program. The console must: **1.** vividly display full colors in highly lit environments; and **2.** dynamically change screen color based on a participants' WattRate® (power) or heart rate and the training parameters set by the Coach By Color® training system.

Solution

A bright, full-color, self-powered, fully integrated LCD screen. This, paired with advanced electronics and a proprietary Coach By Color® training system, delivers real-time, color-coded biofeedback to all participants.

Four workout display options provide real-time biofeedback

Display 1

W1	FTW% 91-105
RPM	LEVEL %
95	50
WATT	FTW %
314	101
♥ BPM	158
CAL	500
KM	30
KM/H	46,0
⌚	0:60:02

Display 2

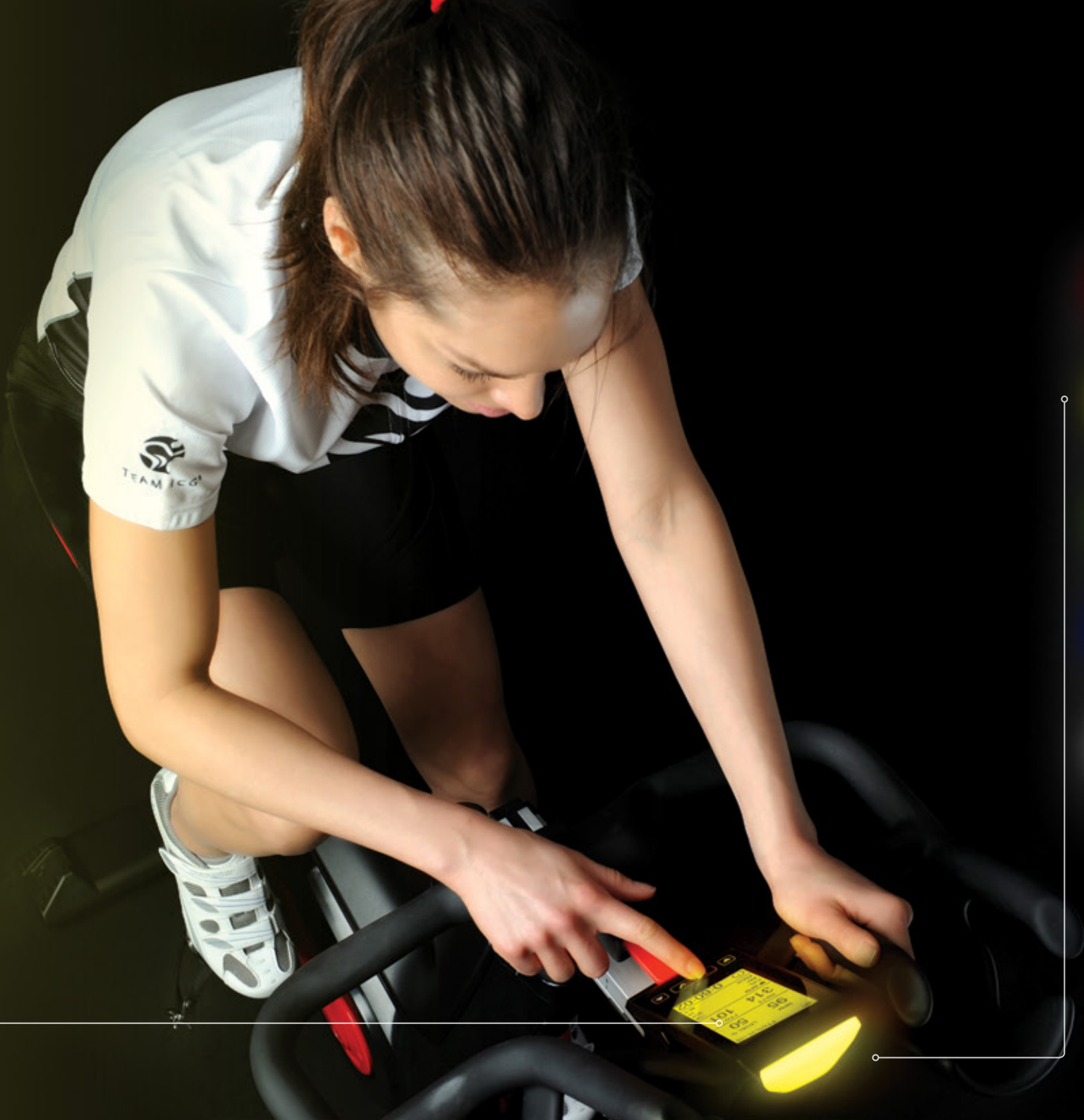
W2	FTW% 106-155
WATT MAX	WATT AVG
450	250
♥ MAX	♥ AVG
165	145
RPM MAX	RPM AVG
120	90
MPH MAX	MPH AVG
30	20

Display 3

W3	FTW% 106-155
< 55% WHITE	10%
⌚ 00:10:00	
56-75% BLUE	20%
⌚ 00:15:00	
76-90% GREEN	40%
⌚ 00:25:00	
91-105% YELLOW	15%
⌚ 00:12:00	
106-150% RED	15%
⌚ 00:12:00	

Display 4

W4	FTW% 106-155
WATT / ♥ BPM	
1.7	
WATT / KG	
5.95	



Maximum

Hard

Moderate

Light

Very Light

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The high-powered LED and cleverly designed casing
flood the front panel with bright, rich color.



PATENT-PENDING FRONT LED DISPLAY

COACH BY COLOR® TRAINING CONSOLE - FOR COACHES

Technical Requirement

To enable the facility's coaches to clearly view the colored training zones on participant bikes without limiting coaching formats or adding equipment requirements that increase the cost of ownership.

Solution

The Coach By Color® training console features a patent-pending front LED display. The high-powered LEDs and cleverly designed casing flood the front panel with bright, rich color that can be seen over great distances and wide angles. It is an incredibly effective and versatile option that works in a wide range of studio and cardio floor spaces.

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100 LEVELS OF RESISTANCE WITH TACTILE FEEDBACK

300-DEGREE MAGNETIC RESISTANCE

Technical Requirement

To provide members and owners with: **1.** greater resistance accuracy; **2.** greater resistance range; **3.** faster adjustments; **4.** a more intuitive control method that's ergonomically superior in all riding positions; **5.** consistency between bikes; and **6.** a robust, service-free system that reduces operational down time and cost.

Solution

A 300-degree resistance dial features 100 levels with tactile feedback and a push-down emergency stop. The system uses two high-grade Teflon coated steel cables. One activates resistance and the other activates the emergency stop. Where it gets more technical — and clever — is at the flywheel where a contactless positioning sensor measures the magnet position. This first-ever application in indoor cycling means that every bike in a facility will accurately display resistance levels on the training console, and the resistance curve will be identical on all bikes.

Display 1

W1	FTW% <55%
RPM	LEVEL %
100	5
WATT	FTW %
75	24
♥ BPM	102
CAL	500
KM	30
KM/H	27.0
🕒	0:60:02

A contactless positioning sensor to measure the magnet position for optimum resistance adjustment.

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VIVID COLORS NO, BATTERIES REQUIRED

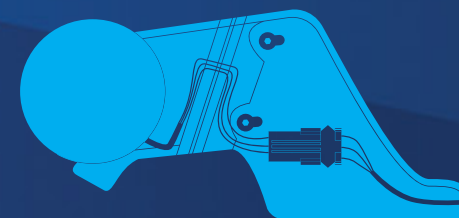
SELF-POWERED GENERATOR

Technical Requirement

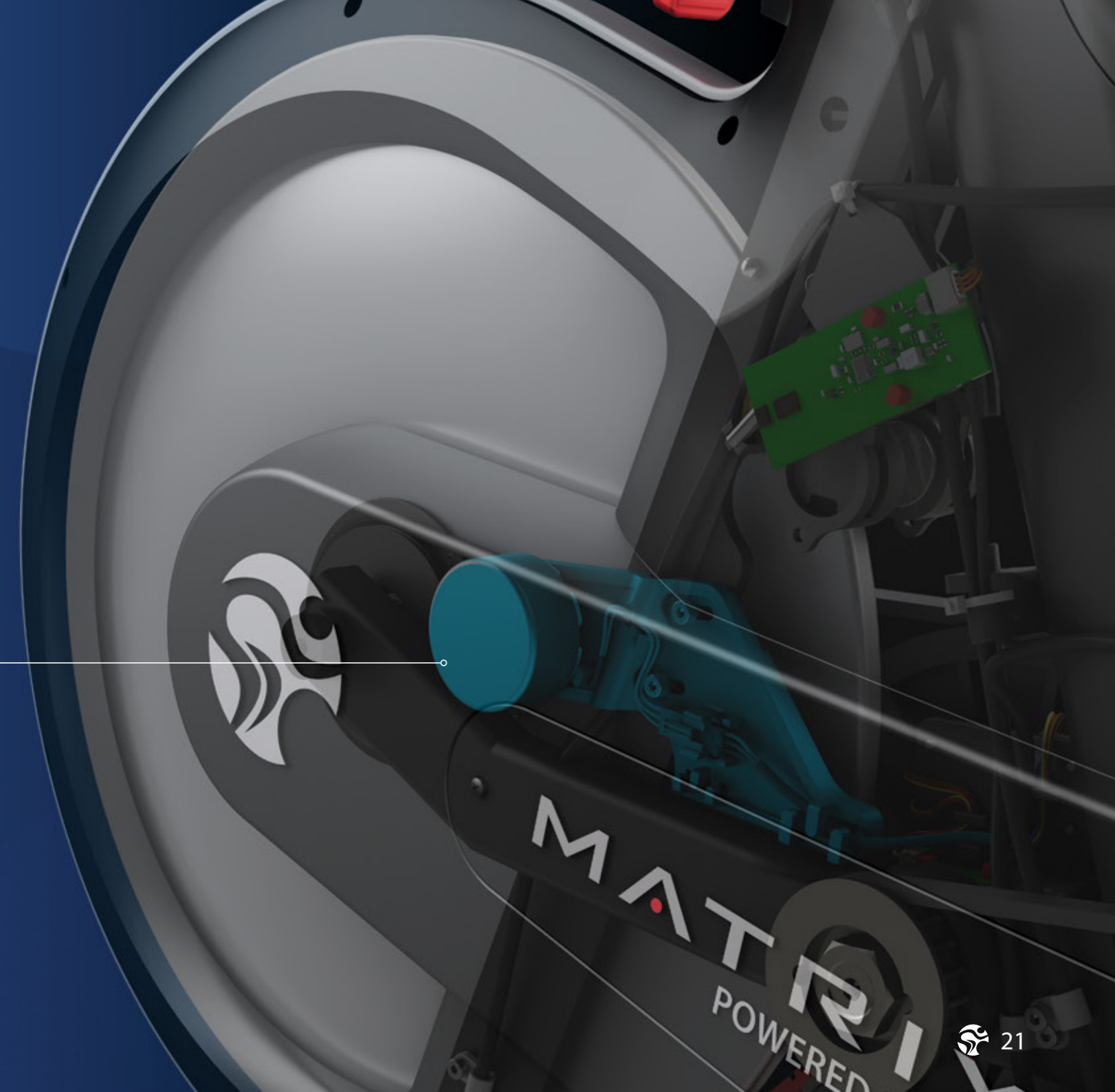
A self-powered training console to eliminate battery expense.

Solution

Capturing the rider's energy, the compact generator at the flywheel recharges the bike's integrated lithium polymer battery that powers the training console and its vivid colors.



A compact generator at the flywheel recharges the bike's integrated lithium polymer battery.



INFINITE AND SMOOTH BIKE SET- UP

USER ASSIST POSTS AND ADJUSTMENTS

Technical Requirement

To engineer a better way to enable riders to properly set up their bikes for improved comfort and performance by: **1.** improving adjustment precision; **2.** reducing handlebar weight to minimize setup challenges; **3.** promoting proper use; and **4.** improving ergonomics.

Solution

A gas-assist adjustment and over-cam flip levers are incorporated into the offset frame. The gas-assist system offers infinite and smooth positioning while the over-cam flip levers lock securely for a solid, reassuring ride.

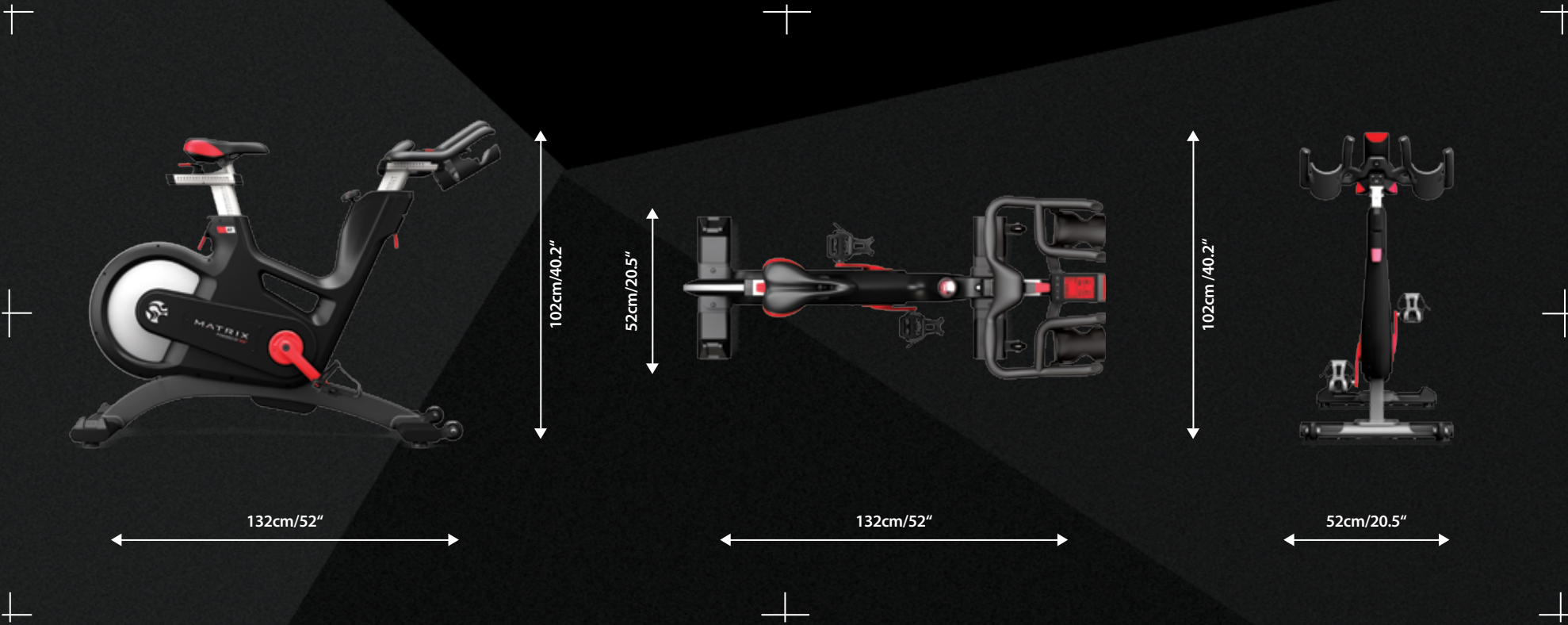
A gas-assist adjustment and over-cam flip levers are incorporated into the offset frame.



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DIMENSIONS



SPECIFICATIONS

IC7

WattRate® (Power) Meter	Yes, +/-1% tolerance, direct at spindle
Console	Coach By Color® training console
Power Supply	Self-powered generator
Resistance System	Magnetic
Emergency Stop	Push
Flywheel	Rear, aluminum , evenly weighted
Drivetrain	2-Stage hybrid Poly-V & tooth belt
Drivetrain Gear Ratio	1:11
Frame Color	Matte slate
Frame Material	Steel
Shrouds & Guards	Full frame
Frame Design	Off-set
Adjustment Type	Over-cam low pressure flip levers
Posts & Sliders	Aluminum, stepless, Gas-assist adjustment
Q-Factor	155 mm / 6.1"
Crank Type	CrMo 172,5 mm / 6.79"
Pedal Type	Dual-sided SPD & toe cage
Handlebar	Superior ergo-formed, multi-position, soft PVC
Handlebar Adjustments	Vertical & horizontal
Saddle	Unisex ultra-padded sport saddle
Saddle Adjustments	Vertical & horizontal
Water Bottle Holder	Dual, integrated on handlebar
Frame Stabilizer Bars	Oversized, hidden bolts & fixings
Protection And Stretch Plates	Molded form-fit with stretch plate
Max User Weight	150 kg / 330 lbs
Assembled Weight	54 kg / 119 lbs
Assembled Dimensions	132 x 52 x 102 cm / 52" x 20.5" x 40.2"
Leveling Feet	4
Transport Wheels	2

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2 EXPLOSIVE POWER-BASED COACHING PROGRAMS

Optimize returns from group cycling in the studio, personal and team training on the cardio floor. Plus, provide a new colorful era for your members' individual training.

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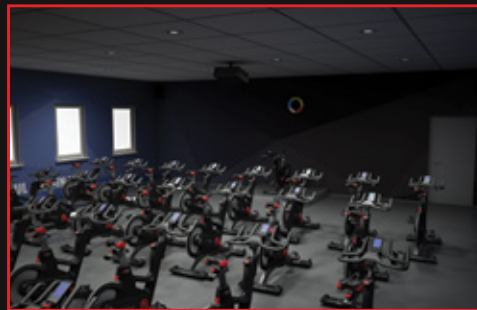


MAKING IT SIMPLE AND FUN TO ADD POWER TO CLASSES

POWER:PLAY

For Group Cycling

Group cycling classes using Coach By Color® are enhanced, not changed. The Power:Play program makes it simple and fun to add power-based coaching to all instructor styles, freestyle classes and choreographed third-party programs with explosive results that improve revenue through retention and new-member acquisition. Members will experience how Power:Play connects them to their workout, their instructor and their friends to maximize the training experience and reach their goals faster.



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EXPLOSIVE RESULTS - ORIENTED POWER BASED COACHING

POWER:DRILLS

For Personal and Team Training

On the cardio floor or in the studio, the Power:Drills program puts the power-based training in the hands of coaches, personal trainers and gym instructors in a practical, colorful way. As the ultimate tool to train and test teams (small groups) or individuals for sports and fitness goals, Power:Drills will add a new dimension to coaching and member experience. Plus, it increases revenue through personal training as well as member acquisition and retention. The foundation behind Power:Drills is High Intensity Interval Training (HIIT) incorporating strength, speed and endurance athletic protocols. HIIT's advanced form of interval training is results-orientated and reduces session time to maximize a facility's opportunity to train more members, more of the time with optimal success.



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MORE ENGAGING, EFFICIENT WORKOUTS FOR MEMBERS

INDIVIDUAL TRAINING

For Your Members

There is simply no other product on the market like the IC7 and the Coach By Color® training console. Simple and intuitive, the IC7 and Coach By Color® console are easy to introduce to new members and to integrate into ongoing workout programs. There are no prerequisites or pretests required to use this power program. No other power bike uses color to communicate. There is nothing more Colorful, Powerful and Original to engage members and reduce workout time through greater training efficiency on the cardio floor today.



The logo features the text "IC7" in a bold, black, sans-serif font. It is positioned on a light gray rectangular background with rounded corners. To the left of this background is a red and orange diagonal striped graphic element.

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