



LIVE COACHING MANUAL



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PREFACE

Indoor cycling has evolved dramatically since its launch into the fitness market nearly 20 years ago and has gone on to become one of the leading group exercise disciplines and is seen as a 'must have' on any successful clubs studio timetable. It now has different class methodologies and teaching philosophies from differing brands linked to the bike manufacturers and suppliers.

Indoor Cycling developed from the 'road' discipline and still has many commonalities with that sporting discipline and the cross over in training principles is invaluable. In the last 20 years outdoor cycling as a leisure activity has grown quite dramatically, primarily due to the introduction and incredible growth in mountain biking and its derivatives such as sport and hybrid bikes that are now used in many homes for commuting, family and individual recreation.

This has led to the need to both understand and offer a greater range of not only teaching methodologies but also the needs of the elite and enthusiast in training for their sport. These disciplines have a range of specialisms that traditional 'road riding' methods do not address including riding positions and rpm ranges.

Alongside the growth in the outdoor cycling market, whether road, trail or commuting, the greatest growth and applied use of indoor cycling discipline is now the 'fitness athlete' who may never transfer the skills or fitness developed from an indoor class to the outdoors.

This is the essence of Myride and Myride®+ the most advanced offering as it brings the outside imagery to the indoor rider with all the physical benefits of indoor cycling combined with those essential factors that are the key to creating adherence in a fitness user; mental well being, stress release, fun, self paced activity, fully guided for safety and efficacy and the ergogenic impact of music and world leading visual imagery.

The Myride®+ education 'The Ergogenic Effect of Combining Music and Visual Imagery in Exercise' will have given you a greater understanding of these scientifically proven concepts and why Myride®+ is so unique and effective in delivering the ultimate indoor cycling experience for all users. Indoor cycling has developed as has outdoor cycling and keeping pace with those changes is what ICG pride ourselves on, teaching and delivering the rationale behind 'best practice' with the latest and most scientifically proven techniques and products.



SECTION 1

SAFETY GUIDELINES

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DELIVERY – THE 10 POINT CHECK

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THE BORG SCALE

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TECHNIQUES AND POSITIONS

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I.C.E RIDING POSITIONS

10 POINT CHECK

INTRODUCE YOURSELF AND THE SESSION YOU ARE ABOUT TO TEACH FOLLOWED BY:

- 1. PARTICIPANT HEALTH CHECK**
 - Are they beginners to indoor cycling?
 - Ask if the participants have any illnesses or injuries
 - Are there any expectant or new mothers?
 - Is anyone just returning back to exercise?
- 2. SENSIBLE CYCLING**
 - Participants should be advised to work at their own level and ability using either heart rate or perceived exertion as a guide to effort
 - Alternative levels will be given and demonstrated throughout the class
- 3. EQUIPMENT** (safety & clothing checks)
 - Laces tucked away
 - Cycles shoes safely clicked or strapped in
 - Hard soled shoes
 - Appropriate and comfortable shorts
 - Appropriate and comfortable underwear
 - Water bottle and fluids
 - Sweat towel
 - Gel seat
- 4. MECHANICAL FEATURES OF THE BIKE**
 - Fixed fly wheel
 - Resistance dial
 - Breaking system
 - Adjustment dials are hand tight
- 5. BIKE SET UP**
 - seat, relative to hip
- 6. BIKE SET UP**
 - handlebars, relative to saddle height
- 7. BIKE SET UP**
 - fore and aft, relative to forearm
- 8. FINE TUNING**
 - 12-6 o'clock position for hips and knee
- 9. FINE TUNING**
 - 3-9 o'clock knee alignment over pedal spindle
- 10. CONFIDENCE TEST ON BIKE**
 - Breaking system
 - Appropriate resistance used



PARTICIPANT'S HEALTH CHECK

It is of utmost importance that the Instructor carries out a safety/health check of all participants before the session starts. If an Instructor feels a participant should not attend a session they should not be afraid to advise them to consult their medical practitioner before joining the class.

IMPORTANT: Please be aware that although a scientifically based formula, this is still only an approximate guide to maximum heart rate and safe training ranges. It is necessary to remember that each individual person is different. If a participant particularly would like to train with individually accurate heart rate limits and the corresponding training schedules, a reliable measurement in the form of a lactate tolerance or maximal heart rate test will have to be considered.

If they are de-conditioned or severely overweight the instructor should encourage the participant to work at or below 75% of their maximum heart rate for the majority of the class.

TRAINING ZONES

Perceived exertion describes a personal response to the effort involved in exercise and the level of discomfort experienced by the individual as exercise intensity increases

THE BORG SCALE

THIS WAS DEVELOPED BY BORG AND HAS BEEN ADAPTED INTO A 1-10 SCALE RATING EFFORT.

RPE	BORG'S DESCRIPTION	ABC	RIDING POSITION	VISUAL DESCRIPTION
1 - 2	No effort		-	-
2 - 3	Very light, low level of exertion	ABC	Seated Road	Biting point
4	Fairly light, some exertion experienced	ABC	Seated Road	Biting point
5 - 6	Somewhat hard, some discomfort	B	Seated Road, Seated and Standing Climb, Jumps	Walking through mud
7 - 8	Hard discomfort /difficulty	B	Seated Road, Seated and Standing Climb, Jumps	Running through thigh high water
9	Very hard	Relative to fitness experience	Seated Road at max bpm, Climbs with high resistance	Running up a sand hill or mountain climb
10	Very, very hard, maximal	Not appropriate for level 1 or 2	-	-

For those experienced in training using a heart rate monitor often find a high correlation between their respective heart rate percentages and the intensity described using the adapted Borg Scale rating effort between 1 and 10.



SENSIBLE CYCLING

HEART RATE TRAINING AND 'ZONES'

<60% (GREEN)

This is warm up and or total recovery zone if used in an intense interval session.

60 - 70% - THE ENERGY EFFICIENT OR RECOVERY ZONE (LOW END OF YELLOW)

Training within these zones develops basic endurance, aerobic capacity and has associated health benefits.

70 - 80% - THE AEROBIC ZONE (YELLOW)

Training within this zone will develop the cardiovascular system. It will improve the body's ability to transport oxygen to and carbon dioxide from the working muscles.

80 - 90% - THE ANAEROBIC ZONE (LOW END OF RED)

Training within this zone will develop your lactic acid system. In this zone your individual anaerobic threshold is found.

The amount of fat being utilized as the main source of energy is greatly reduced and glycogen stored in the muscle is predominantly used. One of the byproducts of burning this glycogen is lactic acid; there is a point at which the body is unable to re-metabolize the lactic acid quickly enough leading to fatigue and eventually failure. This happens at a different heart rate for us all and is accompanied by a rapid rise in heart rate, breathing rate and eventual slowing of the rate of work. This is your anaerobic threshold but with the correct training it is possible to delay this happening by increasing the body's ability to deal with the lactic acid for a longer period of time.

90 - 100% THE RED LINE ZONE (RED!)

Training in this zone is only possible for short periods of time. It effectively trains your fast twitch muscle fibers and helps to develop muscular speed and power.

EQUIPMENT

SWEAT TOWEL

This should be placed on the back of the cycle so it will not get caught in the fly wheel.

WATER BOTTLE

Please make participants aware of fluid requirements throughout the I.C.E session.

They should ideally drink 0.75 liters of liquid per 60 minute class. Energy levels - Make sure participants have eaten regularly throughout the day and at least 1 - 2 hours prior to the session. As we are becoming more and more aware of peoples eating habits in the quest to become thin sometimes participants think more about the calories they can lose rather than how many they need to be healthy. An intense 1 hour cycle session can burn up to 800 calories!

CLOTHING

SHOES

It is recommended that stiff soled shoes are used if an instructor or participant is going to cycle regularly, it is a good idea to purchase basic cycling shoes.

CYCLE SHORTS/UNDERWEAR

There are a variety of styles of padded shorts in either 'baggy' or the classic road cycling tight lycra version. Ordinary shorts can now be 'converted' by wearing cycle specific padded underwear.

GEL SEAT

If padded shorts are not used then the gel seat is recommended to minimize the impact of soreness on those new to indoor cycling. All of the above can make a big difference to the level of comfort and performance of individuals in the I.C.E session.



MECHANICAL FEATURES OF THE BIKE



**ALL OF THE FOLLOWING INFORMATION IS PROVIDED IN THE MYRIDE
AND MYRIDE®+ CONSOLE VIDEO FOOTAGE.**

FIXED FLY WHEEL

Make participants aware that even though they may not want to keep pedaling the wheel and the pedals will continue to turn unless the brake is used.



THE BRAKE

Whichever make of bike is being used Instructors should always demonstrate how to use the brake efficiently.



THE RESISTANCE DIAL

A demonstration of how turning the resistance dials to the right will increase the resistance being applied and turning it to the left will decrease the resistance.



ADJUSTING THE BIKE TO SUIT INDIVIDUAL BODY TYPES

Prior to the class it is essential to adjust the bike to suit the individual. Correct seat and handlebar adjustment ensures maximum power transfer, whilst taking into consideration correct posture, alignment and cycling comfort.

CYCLE ADJUSTMENT USING THE "3 POINT CHECK"

Successful indoor cycling either 'stands or falls' with the initial adjustment of the seating and riding positions.

A poor cycling position may result in discomfort in the foot, knee, pelvic and hip regions. It is important to demonstrate how to adjust the various pull/screw adjustments and check that they are firmly in place. Students should be reminded to hand tighten the screw/pull adjustments without over tightening the adjustments.

ADJUSTING THE SADDLE

A correct cycling position is crucial in order to achieve optimum 'pedal power', as the entire body is involved in a dynamic movement whilst cycling. It is vital that the individual gets both the height and length of the cycling position accurate and comfortable.

The first adjustment is made to the vertical position of the saddle. The subsequent two adjustments are based on saddle height, so it is important to make this initial adjustment as accurate as possible.



3 POINT CHECK



1. VERTICAL ADJUSTMENT - SADDLE HEIGHT

Stand next to the saddle. Adjust the saddle height so there are about 3-4 finger widths between the upper edge of the saddle and the hip-bone.

2. HORIZONTAL ADJUSTMENT - SADDLE TO HANDLEBAR HEIGHT

It is vital to ensure that both the handlebars and the saddle are adjusted to the correct height in relation to the participant and to each other.

After the saddle height has been set, adjust the height of the handlebar until its lowest point and the saddle is the same height as the saddle or set slightly above.

See image on the left page.

N.B: An experienced cyclist may wish to set the handlebars lower than the saddle to make use of the LX7 drop handlebar position. As a beginner to indoor cycling they may not be used to other positions that will be used in the class for instance 'Jumps'.

If handlebars are set too low this will hinder use of the jump position so it is important to encourage the handlebars to be set at least level with the saddle. Use of the LX7 hand position should only be used in the Seated Road for an experienced cyclist who is new to indoor cycling.

3. HORIZONTAL ADJUSTMENT - SADDLE TO HANDLEBAR DISTANCE

Next adjust the distance between the tip of the saddle and middle of the base of the handlebar using the saddle adjustment located under the saddle bar.

Position the elbow so that it is touching the tip of the saddle and the fingertip of your middle finger is touching the handlebar at the mid-point.

These initial adjustments, using the 3-point check, performed standing by the bike using the body as a guide, will suit most participants. The following adjustments are designed to 'fine tune' the bike for increased comfort and optimum performance. Participants who are unfamiliar with indoor cycling may need help in fine tuning the bike, especially if they experience any discomfort once they have started cycling and need to change their cycling position.

FINE TUNING THE BIKE PRIOR TO CYCLING

FINE TUNING THE BIKE

Fine-tuning the bike to accommodate different lever lengths and individual cycling positions is performed sitting on the bike, but without actually cycling.



SADDLE HEIGHT

Turn one of the pedals until it reaches its lowest point (6 o'clock). From a seated position with the hips squared to the handlebars, you should be able to extend the leg with the heel resting on the pedal.

You should be able to extend the leg without the hip slanting down towards the pedal or being pushed up away from the saddle. If you find that the hip slants downwards towards the extended leg, lower the saddle by one notch. If the hip lifts away from the saddle when you fully extend the leg, raise the saddle by a notch.

HORIZONTAL ALIGNMENT

For the horizontal fine adjustments (distance between the point of the saddle and the handlebars) turn the pedals to a horizontal position (front pedal at 3 o'clock, rear pedal at 9 o'clock). Check the front leg to ensure that the kneecap is vertically above the pedal axle. If required, adjust the position of the saddle by moving the horizontal saddle bar adjuster. See image on left page.

These fine adjustments are particularly recommended to ensure a safe riding position. Please be aware that beginners particularly will be unaccustomed to what is a 'correct cycling position' at the early stages and the fine-tuning adjustments will ensure their comfort and safety.

HANDLEBAR HEIGHT ADJUSTMENT

Fine-tune handlebar height taking into consideration individual skill levels and/or specific problems.

1. For the well-trained and serious cyclists without back problems, the lowest point of the handlebar should be located at the same height as the saddle
2. Beginners and pre/post natal participants should be encouraged to lift the handlebar higher to reduce the angle at the hip
3. Participants with back problems should be advised to lift the handlebars yet another notch higher to shift the strain from their back

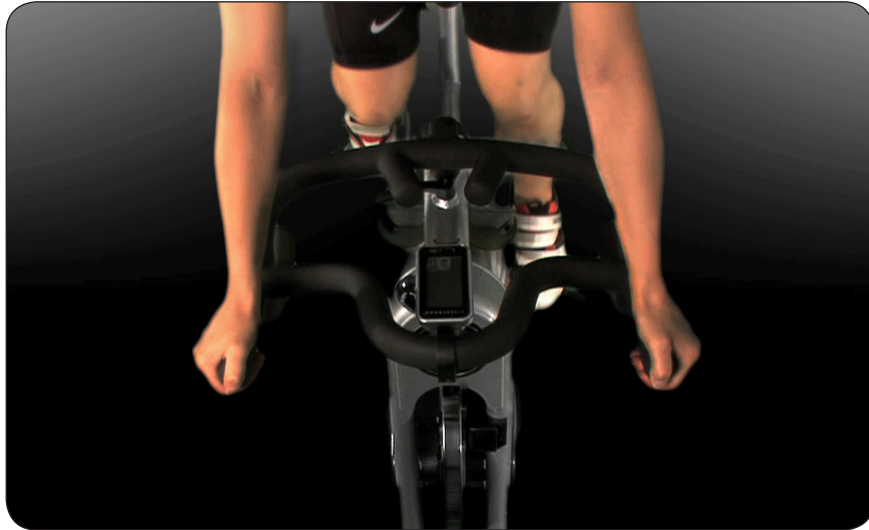
TOE STRAP ADJUSTMENT

Choosing a stiff-soled shoe will provide participants with the greatest comfort and safety:

1. Ensure that the foot is securely into the cage prior to cycling
2. Tuck shoelaces away
3. Participants wearing clip in shoes should be reminded to check the cleat tension and alignment prior to cycling

HAND POSITIONS

ADOPTING A CORRECT CYCLING POSITION



HANDLEBAR GRIP

A light but firm grip should be maintained at all times.

Participants should be encouraged to avoid putting their weight on their hands (especially in a standing position) and be reminded of the importance of keeping correct alignment from hand to wrist to forearm. Grasping the handlebars too tightly may cause a rise in blood pressure, local muscular fatigue and therefore discomfort in the arms and shoulders.

ARMS & SHOULDERS

Fine-tune handlebar height taking into consideration individual skill levels and/or specific problems:

1. Maintain a slight bend at the elbow at all times
2. Avoid 'locking out' the elbows
3. Shoulders should be down and relaxed, with the chest slightly lifted
4. In position 1, hands are shoulder width apart to avoid constricting the chest

LEG / KNEE POSITION

Sit firmly on the saddle with the hips well balanced in a horizontal line, keeping the knees in a parallel position or at a slight angle inwards, according to which best suits your natural leg position:

1. Knees remain parallel to the bike and in line with the hips
2. Hips remain square to the handlebars

ADOPTING A CORRECT CYCLING

Correct pedaling technique is one of the primary factors that lead to cycling efficiency, and participants should be encouraged to adopt a circular pedaling style right from the start.

This means that while one leg is pushing down, the other is simultaneously pulling up, creating a smooth movement through 360°. The pulling phase of the movement is felt when the heel is slightly lifted.

Developing a circular pedaling style, involves concentrating effort on both the pushing and pulling phases at the same time, a concept that may be new to many participants.

MUSCLES USED IN CYCLING

THE MAIN MUSCLE GROUPS USED IN CYCLING ARE:

LOWER BODY

Tibialis Anterior, Gastrocnemius, Soleus, Quadriceps group, Hamstring group, and Gluteal group.

UPPER BODY

Erector Spinaeus and associated muscles, Abdominal group, Pectoral group, Trapezius, Rhomboids, Deltoids and the muscles associated with the arm primarily the Triceps. These muscles are used less as they are primarily used during the class to maintain correct posture and stabilize the upper body.

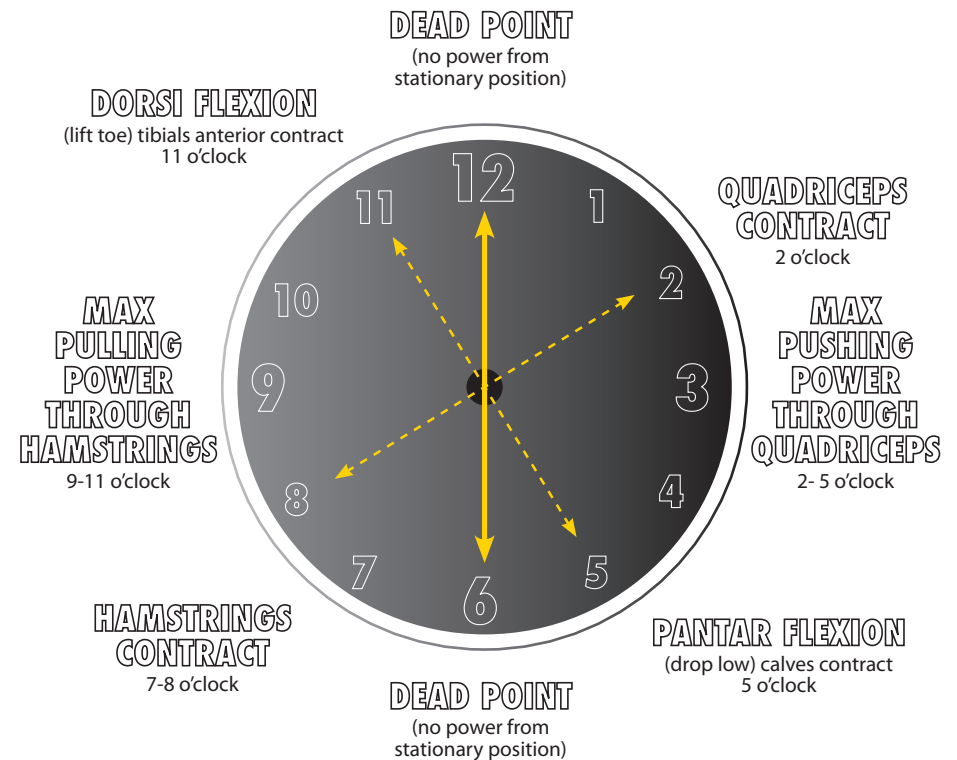
MUSCLES ACTIONS

Pushing phase: Quadriceps, Gluteal group, (hip extensors), Tibialis Anterior
 Pulling phase: Hamstrings, Gluteal group, Hip flexors, Calves

CYCLING ACTION

1. With equal force exerted at the top of the circle (12 o'clock) and the bottom of the circle (6 o'clock), no movement is possible: the dead point.
2. Pushing phase begins at 2 o'clock; quadriceps and hip extensors contract to extend leg, Tibialis anterior contracts to plantar flex the foot (lift toes).
3. Pulling phase begins at 7 o'clock; hamstrings and hip flexors contract to bend the leg, Gastrocnemius contracts to contract the knee and plantar flex the foot.
4. Hips remain parallel throughout the movement, avoid slanting the hips up or down.

CIRCLE OF POWER



SECTION 2

SESSION STRUCTURE

Preparation is the key to successful indoor cycling I.C.E offers the instructor a structured format within which to develop an unlimited variety of workout profiles.

A workout is composed of three individual parts, with a definite beginning, middle and end. This simple formula can be applied and adapted to suit the 3 essential components of an exercise class.

A - THE INTRODUCTION = WARM UP

B - THE MAIN BODY = MAIN BODY

C - THE CONCLUSION = COOL DOWN

A - DURING THE WARM UP

1. Increase heart rate and respiratory rate
2. Warm up and prepare the muscles (exercise specific)
 3. Increase core temperature
4. Increase flow of synovial fluid to bathe and prepare joints
5. Mental preparation for the student and coach
6. Education; about the workout delivered by the coach for the students

B - DURING THE MAIN BODY

1. Improve cardio-vascular fitness through specific exercise
2. Improve lower body muscular strength & endurance
3. Challenge postural muscles and increase core strength
 4. Improve balance and stability
 5. Challenge co-ordination and motor skills

C - DURING THE COOL DOWN

1. Reduce heart and respiratory rate to a pre-exercise level
2. Stretch major muscles used during the exercise session
 3. Relax the mind and body
4. Offer praise and encouragement where appropriate

N.B: Even the most advanced cycling should still contain the above components.

THE I.C.E RIDING POSITIONS ARE THE FOUNDATION AROUND WHICH TO BUILD THE WORKOUT.

WHEN PLANNING A SESSION THE FACTORS THAT NEED CONSIDERATION ARE:

1. THE PRINCIPLES OF FITNESS

- a. Cardio-respiratory Fitness
- b. Muscular Strength
- c. Muscular Endurance
- d. Flexibility
- e. Balance and Co-ordination (motor skills)

2. FITT: THE VARIABLES OF FITNESS

- a. Frequency
- b. Intensity
- c. Time
- d. Type

ELEMENTS OF VARIATION IN INDOOR CYCLING

THE I.C.E RIDING POSITIONS

- a. The I.C.E Riding Positions
- b. Hand position changes
- c. Resistance (intensity)
- d. Speed (cadence)
- e. Repetition of exercises
- f. The level (complexity and intensity)
- g. The total time (45/60/75 minutes etc.)
- h. The duration of individual components / exercise patterns
 - i. Holds
 - j. Breathing exercises

It is the combination of any of the above factors that creates variety within the session, e.g. adding more/less resistance to a specific riding position performed at a faster/ slower speed, with a different number of repetitions for more/less time.

SESSION PROFILES

The 'profile' of a class is a visual representation of the type of terrain covered in an indoor cycling class (relative to cycling outdoors). The profile describes the riding positions and the journey in terms of its direction and intensity.

The profile should represent the whole journey; showing inclines and declines, length of exercise duration, periods of work, rest periods.

Always consider the basic fitness principles of frequency, intensity, time, type and adherence these should be your guides not only as a macro concept in health and fitness programming but also in a micro cycle within the session you are delivering. The 'why' you are doing what you're going to be doing added to that is the 'who' you're going to be doing it to should be your guide as to how you plan, deliver and execute the class.

The use of time, rpm and intensity can easily, in the hands of a skilled coach, deliver a motivating, effective and fun session – the key to success is 'know your client' your success depends on this as without an understanding of the relationship with them you won't know what they expect and prefer from your sessions.

The ability to mix your teaching methods will ensure successful sessions and increase your client base.

RIDE POSITION	TERRAIN APPLICATION
1. Seated Road/LX7	Flat Road – Decline - Sprint
2. Seated Climb	Incline/Steep Hill
3. Standing Climb	Steep incline in a standing position
4. Jumps	Peaks, troughs, rough terrain
5. Rocking Tread	Steep incline at a slower pace
6. Wave Riding	Uneven terrain
6a. Speed Bumps	Rocky or uneven terrain
8. Standing Jog	Climb or uneven terrain
9. Seated Hill Speed	Seated incline, with accelerations to overtake or get through a rough section of ground
10. Standing Hill Speed Standing incline,	with accelerations to overtake or get through a rough section of ground

The table above shows the range of recommended cycling speeds for each of the I.C.E Riding Positions. The range of rpm allows for the athlete to get a different 'feel' for each of the positions at a faster or slower speed. Seated climb performed at the maximum speed 80rpm will feel very different to the same riding position performed at a slow cadence of 50 rpm.

SECTION 3

I.C.E RIDING POSITIONS

THE I.C.E PROGRAM COMPRISES OF 4 BASE RIDING POSITIONS THAT WHEN ADAPTED TO VARIOUS LEVELS TOTAL 10 DISTINCT RIDING POSITIONS.

Pedal speed (rpm) guidelines are given for each of the positions suitable for Beginners and Intermediate/Advanced. These guidelines are for participant safety and take into consideration optimum cycling position, participant skill level and the biomechanics of safe indoor cycling, and therefore must not be exceeded.

SEATED ROAD



This cycling position is used throughout the class during the warm-up and cool-down phases and throughout the main body of a workout during both 'active rest' sections and downhill phases between climbs.

Seated Road is performed at a range of 80 - 100 / 120 rpm according to the specific aims of the workout. Seated Road includes all cycling performed in a seated position without constant increases of resistance.

**ALWAYS CYCLE WITH SOME RESISTANCE ON THE WHEEL;
AVOID 'FREE-WHEELING' (CYCLING WITHOUT RESISTANCE)**

When adopting the Seated Road position, participants can be prepared for the cycling positions to follow. Seated Road precedes all other cycling positions and provides a base from which to develop more intense periods of exercise. Seated Road can be used between climbing phases to simulate cycling downhill and is a good position from which to practice breathing exercises and hand positions to improve balance, stability and co-ordination.

SEATED ROAD POSITION

1. During the warm-up, Seated Road is performed up to a maximum of 100rpm or at a slower speed - Rolling Road/ Personal Speed
2. During periods of active rest/water breaks participants can cycle at personal leg speed
3. Pedal speed range should be between 80 - 100 rpm for Beginners and 80 - 120 rpm for Intermediate
4. Maintain a slight forward angle through the upper area of the back and keep shoulders down and relaxed
5. Keep the hands in hand position 1 or 2
6. Avoid bouncing on the seat - this would indicate that there is not enough resistance being used in relation to the cadence. Increase the resistance slightly until a smooth cycling technique is achieved

SEATED CLIMB



Seated Climb is based on the Seated Road position.

This movement is designed to simulate riding uphill in a seated position and uses gradually increased resistance to increase exercise intensity.

1. Cycling speed ranges from 50-80rpm
2. To modify the intensity, the resistance can be varied in the course of the exercise, whilst maintaining the same cadence (pedal speed)
3. To achieve the correct cycling position for Seated Climb, tilt the upper half of the body forward from the hip, to an angle of roughly 45 degrees
4. Place the hands on the back part of the handlebars (hand position 1) or on the outer edge of the handlebars (hand position 2)
5. The power for the movement should come from the legs, using a 'circular' pedaling technique.
6. Avoid cycling in a cramped, 'hunchback' position

STANDING CLIMB



Always begin with a Seated Climb and then progress to the standing position, starting with short standing intervals with longer breaks in the saddle that slowly increases to longer periods out of the saddle.

1. Trained participants are able to cycle in the standing position for several minutes, but less experienced and less fit participants will require more seated breaks between climbs
2. Correct hip position is vital in this exercise. Don't allow the hip-line to slant to the left or the right, and remember to keep the hips poised above the saddle with a minimum of movement
3. During the climbing phase, come to standing with hands in position 2 and move the hands forward to hand position 3
4. Avoid leaning forward and taking the body-weight onto the hands
5. Cycling speed ranges from between 50 - 80 rpm
6. Begin from a Seated Climb with hands in position 2, come to a standing position and move the hands forward to position 3 (one at a time). Hands remain in position 3 during the climbing phase and move back to position 2 prior to returning to a seated position.

JUMPS



'Jumping' involves moving rhythmically and repeatedly between a seated position and a standing position. Based on a Seated Climb, with hands in either position 1 or 2

Begin with a Seated Climb with hands in position 1, ensuring enough resistance is added before coming to a standing position. To get into the rhythm of the movement, start off with long intervals of 8 revolutions standing (16 counts) and 8 seated; reduce to 4 revolutions and finally to 2 revolutions.

1. Jumps are performed in 8, 4 or 2 revolution count repetitions with hands in position 1 only, to avoid the likelihood of participants pulling on the handlebars during the lifting phase
2. Cycling speed ranges from between 50 - 80 rpm
3. Avoid leaning forward and taking the body-weight onto the hands

When introducing Jumps ensure that active recovery breaks are given between the Jumping patterns and that adequate water breaks are included. Recovery can be performed as a Seated Climb.

Jumps patterns are intense and can be combined with a Standing Climb to add variety. Hand position can be varied between positions 1 and 2 with the elbows close to the body or held slightly away. Ensure that hands are in position 2 before moving into a Standing climb.

WHILST PERFORMING THIS MOVEMENT SEQUENCE ENSURE THAT:

1. Lifting and lowering movements are performed smoothly, and that the lowering phase of the movement is controlled
2. Lifting phase of the movement comes from the legs, not from pulling the handlebars with the arms
3. Pedal and knee alignment is maintained during the forward movement and that the hip does not move forward of the pedal
4. Hips remain over the saddle, avoid leaning too far forward
5. Participants return fully into the saddle at each Jump

HAND POSITION CHANGES

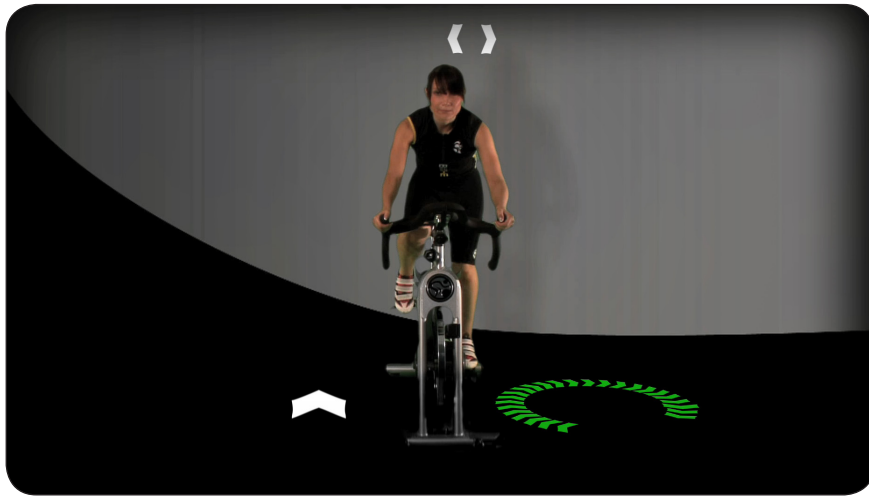
For safety, change hand positions one hand at a time. Maintain a sure grip on the handlebars with one hand at all times.

Change hands from position 1 - 2 - 1 or from 2 - 3 - 2

I.C.E ADVANCED RIDING POSITIONS

Rocking Tread
Standing Jog
Wave Riding
Speed Bumps
Seated Hill Speed
Standing Hill Speed

ROCKING TREAD



Rocking tread is based on a standing climb with the addition of a lateral movement from the torso keeping the hips neutral and with minimum movement. This movement simulates the lateral movement necessary to achieve a steep climb (on the open road).

Cycling technique for this riding position is as follow when the right leg pushes the left leg pulls up and the torso moves slightly to the right adding weight to the movement.

1. Right leg down, body weight to right
2. Centre position, legs at 3 o'clock and 9 o'clock
3. Left leg down, body weight to left

TEACHING CUES

By adding this supportive torso movement, greater resistance can be used in the climb. Correct hip position is VITAL avoiding the hips slanting side to side hips must stay fixed over the saddle.

Hand positions must remain in 3 or 5
Main body BPM 80 - 144 / Main body RPM 50 - 72
Or
Main body RPM 20 - 36 (half of standing climb revolution)

STANDING JOG



Standing jog is the same riding position to standing climb but at a slightly faster cadence.

It is important to maintain correct riding position whilst performing this movement to ensure that the body weight is supported by the legs rather than through the hands. Correct technique requires a high level of skill, core strength and fitness. It is only suitable for advanced participants.

1. Moderate resistance is needed to support the body weight when standing
2. Avoid any lateral motion from the hip
3. Body weight is kept over the legs
4. Hand position 3 only

STAGE 2 ADVANCED ONLY

Main body BPM 80 - 120
Main body RPM 80 - 120
Main body RPM 160 - 200
Main body RPM 80 - 120



WAVE RIDING



Wave riding is performed in the standing climb position with the principle of transferring body weight forward and back from the centre of the saddle to the back.

1. Begin in a standing climb
2. Keep the weight over the legs
3. Body weight is shifted from the centre of the saddle to the rear of the saddle
4. Avoid any lateral motion from the hips
5. Hand positions 3 and 4

STAGE 2 INTERMEDIATE & ADVANCED ONLY

Main body RPM 50 - 80
Revolutions - 16s, 8s, 4s and 2s

SPEED BUMPS



Speed bumps are based on the wave riding movement but with a slightly smaller range of motion and quicker repetition.

Speed bumps are based on an 8 count move

1. move body weight to the rear of the saddle
2. bring body weight back to centre
3. 3,4,5,6,7,8 hold a standing climb position

Hand position 4 or 1, 2

STAGE 2 INTERMEDIATE AND ADVANCED ONLY

Main body RPM 50 - 80

SEATED HILL SPEED (BREAK AWAY)



Seated hill speed is a variation of seated climb.

The aim is to increase the 'pace' whilst the resistance remains the same throughout the work phase and active rest. This exercise should be performed in intervals (bursts of overtaking) and only with advanced groups

Seated hill speed starts 50rpm and returns to this level, the acceleration intervals can go up to a maximum of 90rpm

1. Start of climb set pace at 50 RPM and add enough resistance so climb feels like a steep hill
2. 1st Interval leg speed can increase up to a maximum of 90rpm
3. Recovery leg speed reduces back down to 50rpm
4. 2nd interval increase leg speed up to a max of 90rpm
5. Back to recovery leg speed or take resistance off and break
6. Hand positions 1 and 2

STANDING HILL SPEED (BREAK AWAY)

Standing hill speed is an advanced version of a standing climb. The aim is to increase the pace; this is increased whilst the resistance remains the same throughout the work phase and active rest. This exercise should be performed in intervals (bursts of overtaking) and only with advanced riders.

OUTDOOR RIDING APPLICATION OF THE WAVES AND SPEED BUMPS TECHNIQUE



This video shows how the waves and speed bumps techniques above are applied in real outdoor cycling.

I.C.E. ADVANCED RIDING POSITIONS REVIEW

RIDING POSITION	LEVEL OF SESSION	RPM RANGE	ABC	HAND POSITION
Seated road warm-up	Beg/Int	80 - 100	A,B,C	1 & 2
Seated road main body	Beg/Int	100 - 110	B	1 & 2 & LX7
Seated road warm-up	Int/Adv	80 - 100	A,B,C	1 & 2
Seated road main body	Int/Adv	100 - 120	B	1/2 & LX7
Seated climb	Beg/Int	50 - 80	B	1/2 & LX7
Standing climb	All	50 - 80	B	2 & 3
Jumps	All	50 - 80	B	2 & 3
Jumps revolutions	Beg/Int	16, 8, 4	B	1 & 2

I.C.E. ADVANCED RIDING POSITIONS REVIEW

RIDING POSITION	LEVEL OF SESSION	RPM RANGE	ABC	HAND POSITION
Jumps revolutions	Int/Adv	16, 8, 4, 2	B	1 & 2
Jumps revolutions	Int/Adv	16, 8, 4, 2, 1	B	1 & 2
Rocking tread	Int/Adv	50-80	B	3
Wave riding	Int/Adv	50 - 80	B	4
Standing jog	Advanced	100 - 120	B	4
Speed bumps	Advanced	50 - 80	B	3/4
Seated hill speed	Advanced	50 - 80	B	1/2 & LX7
Standing hill speed	Advanced	50 - 80	B	1/2/3 & LX7

SECTION 4

DELIVERING THE CLASS

CLASS DELIVERY

MANAGING THE SESSION

STRETCHING

COMMUNICATION & TEACHING METHODS

SETTING & MONITORING LEVELS

CLASS DEVELOPMENT & COMPARISON

TEACHING TOOLS

CYCLE ORGANIZATION

CORRECT BREATHING TECHNIQUE

Due to the high oxygen demands of intense aerobic exercise, correct breathing technique is vital during indoor cycling.

You should inhale deep breaths from the abdomen. Deep, steady breathing facilitates maximum transfer of oxygen to the muscular system and all of the body's vital organs that provide the body with the oxygen it needs to produce optimum performance.

WARM UP BREATHING EXERCISE

Once the bike is properly set up and fine tuned then it's time to get on the bike and start pedaling slowly using only a light resistance (approx. 60 - 80 rpm).

During breathing exercises, encourage participants to breathe in through the nose and out through the mouth, until breathing is steady and controlled. Perform the breathing exercises whilst cycling in an upright position, to help focus concentration before the class. Stretch the arms out in front of you, drawing them in until they touch your chest while you inhale deeply through your nose. Stretch your arms out in front of you whilst exhaling through the mouth. Perform at least 8 repetitions at the start of the session.

RECOVERY BREATHING

In contrast to warm-up breathing exercises, which are only used at the beginning of each class, recovery - breathing techniques can be performed between workout phases to regenerate the body and provide a natural recovery and fluid break during the class. For this exercise reduce pedal speed to 60-80 rpm and continue to cycle using light resistance.

Adopt a more upright posture, release the grip from the handlebars and allow the arms to drop to the sides, letting them swing next to the body. Take the opportunity to drink some liquid.

COOL DOWN PHASE BREATHING EXERCISES

This is a similar breathing technique to recovery breathing, but with deeper, slower breaths. Decrease the rpm, and gradually reduce the resistance to a minimum, until a slow, easy pace and comfortable breathing rate is achieved prior to stretching

The aim is to reduce the heart rate to approximately 100 bpm during this section in preparation for stretching and closure of the session.

MANAGING THE SESSION

BEING A ROLE MODEL

Remember that as the instructor, you are the athlete's role model, and it is your responsibility to ensure that all of the exercises performed during the class are done in a way that promotes their health and safety.

Before the session starts, briefly explain the objectives to allow the athlete to pace themselves and mentally prepare for the forthcoming exercise session and give the following type of information:

- The session level
- The session duration
- The exercise plan, e.g. a 5 minute 'Standing Hill Climb' that will get gradually harder, including 4 changes of resistance.

BEFORE THE WORKOUT

Greet participants as they arrive and welcome them. Before the session begins always perform a verbal screening. Make sure that participants are aware of their fluid requirements and have access to water and have a sweat towel available.

Set clear goals based on their fitness level and experience, and never allow the level you have determined for them to be exceeded. A Beginners Level for example is not a time to execute a class with long periods of standing climbs or a jumps pattern. Outline the objectives and spend some time explaining the plan, using the A.B.C format so participants know what to expect.

DURING THE SESSION:

Be aware that during the exercise session you communicate by using eye contact and smiling and by giving constant verbal feedback, praise and reassurance. Encourage participants to take regular fluid breaks.

TEACHING POINTS

During the session continually reaffirm and vary the following teaching points;

- Shoulders down and relaxed
- Chest lifted and open
- Elbows relaxed, arms slightly bent throughout
- Maintain a light grip on the handlebars
- Knees and hips in line with the bike
- Maintain a neutral spine position, bending forward from the hip
- Avoid cycling in a 'hunched' position
- Take regular water breaks
- Adjust the resistance to work at your own level
- Stabilize through the abdominals
- Come to a standing position over the middle of the saddle and remember the following:
 - Body weight is balanced over the hips, not forward of the mid line
 - Weight off the hands
 - Knees in line vertically with the pedal axle
 - Avoid leaning forward over the handlebars
 - Stay close to the saddle
- During Seated Road, avoid bouncing in the saddle
- During Jumps lift and lower the body in a smooth movement
- Try to maintain the same leg speed during transitions between a seated and standing position
- Reduce the resistance if legs are traveling slower than the music
- Increase the resistance if legs are traveling faster than the music
- deep breaths in through the nose and out through the mouth

AFTER THE MAIN BODY OF THE SESSION:

- Stretch thoroughly at the end of the cool down phase
- Finish with relaxation and breathing exercises
- Invite any questions regarding individual set-up or queries about the workout
- Ensure participants clean their cycles, preferably using a disinfectant fluid and paper towel to remove any residue of sweat
- After dismounting, turn the resistance dial anti-clockwise until the resistance is off (Never leave the bike with resistance on)

STRETCHING

The following stretches should be performed at the close of every workout, after the cool down and relaxation section. Upper body stretches can either be performed from a seated position on the bike or adjacent to the bike, however it is preferable that lower body stretches are performed beside the bike.

Stretching is an important feature of any balanced fitness program, particular benefits of stretching include:

1. Reduced muscle soreness and muscle tension after exercise
2. Reduced risk of injury
3. Increased mental response to exercise due to time spent concentrating the mind on the body

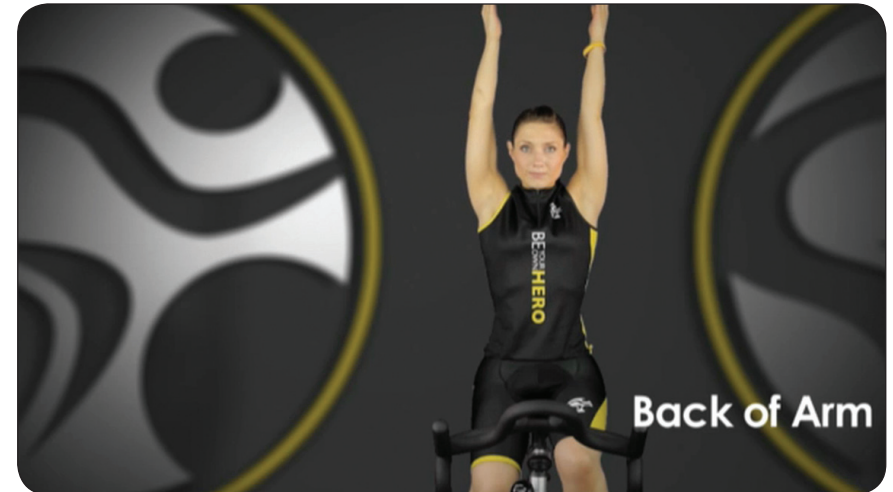
RECOMMENDED UPPER BODY STRETCHES

Upper body stretches are performed from a seated position, space and ceiling height permitting or beside the bike. Stretches are combined with deep breathing exercises to relax the group and wind down the class.

1. Shoulder Stretch
2. Neck Release to the sides and to the front
3. Upper Back Stretch - with arms stretched out in front
4. Chest - to open chest, and encourage deep breathing from diaphragm
5. Triceps - encourages participants to sit tall and open the rib cage
6. Forearm through fingers - to release any tension built up in the hands/forearms caused by gripping the handlebars too tightly

LOWER BODY STRETCHES

Following the upper body stretches, dismount and stretch the lower body standing next to the bike; using the bike for balance. The following stretches should ideally be performed after every class:



1. Hamstrings, using either the crossbar, the handlebars or the floor
2. Quadriceps, gently grasping the ankle
3. Calves, using the bike to stretch or for balance on the floor
4. Hip Flexors - performed standing by the bike (not shown)

CLOSING THE SESSION

Praise the participants for their hard work and use this opportunity to make any general technique/postural observations that you may have notice during the session.

SECTION 5

SETTING AND MONITORING LEVELS

VARIETY LINKED TO THE TYPES OF CYCLING SESSIONS

Your clients will be made up of those who never ever ride a 'real' bike but also those who ride either a variety of bikes or specialize in one cycling discipline.

The use of the indoor bike in training for these events is broad and it should never be underestimated the breadth of population that take part at amateur, though very serious, level in terms of the effort and dedication these everyday athletes put into their sport. They will attend your sessions and experience the bike you teach on and methodology you use to deliver the training as very new and in some instances quite un-related to what they do.

Other athletes will use the opportunity to cross train during their own sports 'off season', they will be fit but the change of training modality will bring an increase in R.P.E completely unrelated to their c.v. fitness but due to changes in muscle use caused by the riding position itself, let alone the seat and its affect on the rear end! It is important to recognize individual participants 'range of ability' and encourage them to operate within their own limits. This is to ensure that they stay in control of their workout, rather than being pushed along (and out of control).

There are various ways to offer intensity options to without pushing individuals beyond their limits:

1. By establishing effort levels based on resistance - light, medium or hard resistance
2. Giving resistance options: 'add a quarter, a half or a full turn'
3. By offering alternatives to exercise instructions: 'Continue in a standing position or take a seat and reduce the resistance until you are able to climb again'
4. Using personal speed

THE DIFFERENCES IN WORKOUTS FOR DIFFERING ABILITIES OF STUDENTS

1. Participants ability / skill level
2. Lower intensity at beginner
3. Less complexity at beginner
4. Shorter main body at beginner
5. Less emphasis on high resistance at beginner
6. More emphasis on teaching at beginner
7. More emphasis on motivation
8. Less time out of the saddle/shorter climbs at beginner
9. Shorter Jumps (4 count/2 revolutions) for Intermediate/Advanced
10. Participants expect 'harder' workouts at Intermediate/Advanced

SETTING AND MONITORING LEVELS

WORKING WITH DIFFERENT LEVELS OF FITNESS AND ABILITY

There is a profound difference between a participant who has attended 2 or 3 sessions and an absolute beginner. Apart from fitness, the most obvious factors are familiarity with the following:

1. The mechanical features of the bike
2. The set-up and fine-tuning procedure
3. The riding and hand positions
4. The terminology
5. The amount of resistance required to achieve each exercise
6. The effort required

After only 1 or 2 sessions, the various elements will be more familiar and participants will soon stop feeling like 'absolute beginners'.

OFFERING OPTIONS:

Options should always be offered in every session for all levels of ability. No one should leave a session feeling intimidated or that they have failed to reach their own personal goals.

RIDING POSITION	ABSOLUTE BEG LEVEL	INTERMEDIATE	ADVANCED
Seated Road	Personal speed Or basic hand changes	Faster bpm small resistance increases	Faster bpm with holds & higher resistance
Seated Climb	3 increases up & then resistance straight off rest and repeat	3 increases up 3 decreases rest & repeat	Longer 4 increases 4 decreases repeat
Standing Climb	32bpm standing climb Or stay seated if needed	Stay standing longer & add resistance or add holds and presses	Stay standing throughout the section add resistance
Jumps combinations jumps	Only 2 to 3 sets of jumps Or stay seated if you wish & add presses/holds	Shorter jumps more repetition & add resistance	Jumps add resistance add hovers to

Regular or advanced participants will have more experience and therefore more confidence and knowledge to choose the right option so they can obtain the best results for their individual needs.

SECTION 6

TEACHING TOOLS - COMMUNICATION

AS AN INSTRUCTOR YOU HAVE A VARIETY OF 'TEACHING TOOLS' AT YOUR DISPOSAL TO ENSURE THAT THE GROUP UNDERSTANDS WHAT YOU WANT THEM TO DO:

COMMUNICATION AND TEACHING METHODS - ADVICE AND CORRECTIONS

If you need to touch someone to help them find the correct position, ask them first if they are comfortable with this. Generally people will be fine, as long as they are pre-warned.

Participants can only gain maximum fitness benefits and enjoy indoor cycling if they adopt a good cycling position from the start. As an I.C.E instructor, it is your responsibility to monitor the participants, regardless of fitness and experience and ensure that everything from their initial cycle adjustments to their cycling posture and technique during the workout is in line with I.C.E guidelines.

VERBAL COMMUNICATION TECHNIQUES = USING YOUR VOICE

Most of your teaching and instruction will be communicated through what you say and by how you say it. Verbal instruction includes:

1. Counting down the revolutions or beats until a change of exercise
2. Instructions: to stand up, sit down or change resistance
3. Praise and encouragement for participant's efforts
4. Corrections: technique, posture, leg speed
5. Exercise alternatives, more of less resistance, taking a break
6. Remember that the tone of your voice is a vital factor in participants' response to what you say
7. Vary your vocal intonation and what you say

NON VERBAL COMMUNICATION TECHNIQUES = SIGNS AND GESTURES

Non-verbal communication includes the range of signs, gestures and facial expressions that form the visual language of the instructor. You can use visual cues to support what you say or as a method of communicating without speaking.

NON-VERBAL COMMUNICATION INCLUDES:

1. Cueing - counting down the number of beats or repetitions of an exercise with your fingers to indicate a change of position or exercise
2. Hand Signals - indicate a change of resistance by making a twisting movement with the hand, twisting the thumb up for increased resistance and turning it down to indicate less resistance
3. Arm Signals - indicate a change of riding position
4. Stand Up - Stretch out the arm and turn the hand palm up
5. Sit Down - With the palm down, lower the hand to indicate sitting
6. Demonstration: performing an exercise whilst the athlete continues cycling and watches the new move
7. Using your body to demonstrate correct posture and technique
8. Try to be consistent in both your verbal and non-verbal vocabulary so that participants always know what you want them to do. In time you will develop a non-verbal language that is effective as a visual communication technique and supports what you say

SECTION 7

MUSIC AND INDOOR CYCLING

MUSIC STRUCTURE
MUSIC AND EMOTION
MUSIC SPEED
ADVANCED ANALYSIS

Music is created from a combination of rhythms, instruments and vocal arrangements and is made up of the following basic components:

BEAT

'The beat' refers to the individual units that make up the musical time we count. Several beats make up a bar and depending on the cycling speed, 1 beat = 1 rotation of the pedal or 2 beats = 1 rotation. Each time a beat is counted one leg pushes down, whilst the other pulls up.

OFF-BEAT

The offbeat is the beat in between counts. To find the offbeat you count: 1 and 2 and 3 and ..., the 'and' will fall between the actual counts. 1 beat is counted, a quick 'and' is interposed.

In cycling to the offbeat, a rotation is made on the beat and quickly followed on the opposite leg by a rotation on the offbeat. Effectively this is a single time movement, therefore when cycling in time with the music, each beat of the music is 1 complete rotation. The beat will always appear on the same leg, while the offbeat will always appear on the opposite leg.

N.B. The term 'tempo' indicates cycling up to speed with the music.

MEASURE (TIME)

Measure is the pre-determined element in music that sets the rhythm and the time, and refers to the number of beats to the bar, e.g. 4/4 measure (i.e. 4 beats per bar).

MUSICAL PHRASE

A musical phrase, is made up of 2 bars, and generally contains 8 beats (4 beats per bar). Depending on the pedal speed, the phrase can contain 8 (tempo) or 4 (half-time or slow) revolutions.

MUSIC BLOCK

A music block is made up of 4 combined musical phrases, that is 4 x 8 phrases (in 4/4 time).

To recognize the patterns (phrases and blocks) in music you have to listen to the structure of the music and develop a sense for it. It is important to be able to recognize the beginning and end of a block of music (32 counts) and use it to cue participants and format your classes.

THE BIG 1

The Big 1 is the FIRST beat of any block and is distinctive in that it signals a change in the music. The Big 1 is the first beat at the beginning of a verse, a chorus or an instrumental break in the music. It is used when cueing in changes of exercise within the natural structure of the music.

The command occurs at the end of the phrase/ block, but the ACTION (stand up, sit down etc.) occurs on the 1st beat of the new block. We will discuss this further in the Cueing section later.

MUSIC AND INDOOR CYCLING

VARIATIONS IN RHYTHM

There are many different rhythm variations to be found in music; generally we use either 'March' or 'swing'. Whatever style of music you choose, it is important to recognize the rhythm and understand how to work with it.

MARCH RHYTHMS

March rhythms are the most familiar rhythm types that we come across and are the basis of most forms of popular music. The phrase always contains 8 counts. March rhythms are found in pop, dance and rock music and are recognizable by their constant, even beat.

SWING RHYTHMS

Swing rhythms differ due to the fact that they are not even number rhythms and contain different accents within the music.

Swing rhythms contain a different number of beats to the bar. Music such as waltzes, Celtic music etc, which contain 3 beats to the bar (count 1, 2, 3), are typical of swing rhythms.

In indoor cycling this would mean that the emphasis would move from left to right, rather than always being on the same leg. It is an advance skill but worth practicing as it offers a greater range of music to use in your classes.

CUEING (COUNTING) WITH MUSIC

Once you are able to recognize and count the beat, you can start using the beat as a cueing tool. Cueing is the announcement by the coach of the remaining counts and the forthcoming changes which are usually:

What = movement / exercise type

When = at what time

How = which cycling position to adopt

How often = no. of repetitions

WHEN CUEING, PERFORM A COUNTDOWN FOR THE LENGTH OF ONE PHRASE, E.G.:

Option 1: REVOLUTION count cue, where 4 revolutions is counted in 8 beats

1. The first count of the phrase is 1
2. Count 1 is accompanied by the announcement '4'
3. Count 3 is accompanied by the announcement '3'
4. Count 5 is accompanied by the announcement '2'
5. Count 7 is accompanied by the announcement '1'
6. Then quickly add (on the off-beat) the Command / action
7. e.g.: on count 1 say: 4 more, 3, 2, 1, Stand up

IF YOU ARE COUNTING EACH BEAT, THE CUE WOULD BE AS FOLLOWS:

Option 2: BEAT count cue, where 4 revolutions is counted in 4 beats

1. The first count of the phrase is 1, when the command is given
2. Count 4 is accompanied by the announcement '4'
3. Count 3 is accompanied by the announcement '3'
4. Count 2 is accompanied by the announcement '2'
5. Count 1 is replaced by the announcement of the command / action
6. e.g.: on count 4 say: 4, 3, 2, Stand up



MUSIC AND EMOTION

SELECTING THE RIGHT MUSIC

RIDING POSITION	BPM	RPM	ABC
Seated Road Level 1	80 - 100	80 - 100	A/C
Seated Road Level 2	80 - 100	80 - 100	A/C
Seated Road Level 1 (main body)	80 - 110	80 - 110	B
Seated Road Level 2 (main body)	80 - 120	80 - 120	B
Seated Climb	100 - 160	50 - 80	B
Standing Climb	100 - 144	50 - 72	B
Jumps	100 - 144	50 - 72	B

TRACK SELECTION

1. Choose your favorite songs!! Work with music that you enjoy and feel comfortable with
2. Work out the BPM range and length of the song
3. The BPM and time will determine what riding positions are relevant for the level of class being taught as well as determining leg speed/ resistance used and riding position

HOW THE TRACK MAKES YOU FEEL

All tracks lend themselves to one or more emotions for example;

1. Happy tracks lend themselves to either seated road or jumps.
2. Chill out tracks are good for warm up, cool downs and active rests.
3. Uplifting tracks are great for standing climbs and jumps.
4. High energy tracks lend themselves to higher use of resistance standing or seating.

OTHER CONSIDERATIONS WHEN CHOOSING MUSIC

Music selection is individual to the Instructor. However an Instructor should be aware of the following when selecting music for a class.

1. Check music style is relative to the class being taught and the participant's aims?
2. How long is the track? Does it allow for rest breaks throughout?
3. Instrumental tracks are easier to talk over
4. Is it motivating?
5. Are the beats and rhythms clear for the Instructor and participants to follow?
6. Is the track appropriate for the section of the workout being taught?
7. Is the BPM style of music suitable for the riding position being used?

MUSIC SPEED

Music speed is counted in beats per minute (bpm), and the number of bpm indicates the speed of a piece of music. High bpm indicate a fast piece of music (120 - 160 bpm), lower bpm indicate a slower piece (80 - 100 bpm).

COUNTING THE BPM

When selecting music and planning classes, it is important to first count the bpm to ascertain the music speed and its suitability for a particular exercise.

Take a 15-second count, and start counting the beats from the start of the count. Count 1 is on the first second of the count. Stop counting after 15 seconds. Multiply the number of counts x 4.
E.g.: 15 seconds x 4 = one minute, 28 counts x 4 = 112 bpm

SELECTING THE APPROPRIATE MUSIC SPEED FOR INDIVIDUAL CYCLING POSITIONS AND TECHNIQUES

I.C.E offers guidelines to the most appropriate music speeds for individual exercises. However, instructors should select music based on the following criteria:

- The class level – beginner, intermediate, advanced, mixed
- The participants' fitness level and familiarity with indoor cycling
- The appropriate speed for individual riding positions
- The section of the class - A. B. C.

DETERMINING MUSIC SPEED FOR CLASS LEVEL

- Beginner - Seated Road: personal speed / 80 - 100rpm max - so music can either be 80 - 100bpm or for personal speed 80 - 200bpm
- Intermediate - Seated Road: personal speed / 80 - 120bpm - so music can either be 80-120bpm or for personal speed 80-120bpm plus

DETERMINING MUSIC SPEED FOR SPECIFIC RIDING POSITION

- Seated Road - rpm = bpm: max speed of 120 rpm/bpm
- Seated Climb - 1 revolution = 2 beats: max speed of 160 bpm
- Standing Climb - 1 revolution = 2 beats: max speed of 144 bpm
- Jumps - 1 revolution = 2 beats: max speed of 144bpm

DETERMINING MUSIC SPEED FOR INDIVIDUAL SECTION OF THE CLASS

- A: Warm up - personal speed / 80 - 100rpm/bpm
- B: Main body - to max speed of individual riding positions
- C: Cool down - personal speed / below 100bpm

CLASS "CHOREOGRAPHY"

Once a thorough understanding of the structure and format of music is achieved, it is possible to use the features of the music itself to plan the class in detail. This is known as rhythm riding supporting the riding positions with the music. Classes can be 'choreographed' to the feel of the music, or to fit into the actual structure of the music, block by block. The advantage of using music in this way is that the riding positions are supported by the music, rather than simply performed to the music.

To choreograph the music with the riding position, the tracks are broken down into verse and chorus / instrumental blocks, which are counted, and corresponding riding positions and techniques are adapted to the musical framework. This process of counting the blocks is 'music mapping'.

The choreographed sections do not have to be complex, but the advantage of this method is that the music, the moves and the teaching become synchronized and the music becomes a teaching tool as valuable as the instructor's voice or body language.

Movements are supported by the accent in the music so a harmony uniting movement and music is created. When you are listening to music to 'map' its progress, remember that each block (verse, chorus or instrumental section) is made up of 32 counts (16 revolutions when rpm = bpm x 2).



SECTION 8

MYRIDE® & MYRIDE®+ LIVE COACHING

MYRIDE® ITSELF OFFERS A NUMBER OF TWO DIFFERENT COACH BASED FORMATS OF DELIVERY;

1. Myride the studio experience; this option is the perfect choice for those that prefer a coach working out with them in the classic format of an indoor cycling session.
2. Mysportif; is the choice for those that want all the great coaching offered during Myride but find outdoor footage a more motivational.

BOTH OF THESE OFFER THE OPTION OF CHOOSING DIFFERENT PRE-PROGRAMMED WORKOUTS OR CREATING YOUR OWN WORKOUT BY CHOOSING;

Destination
Road/trail or mixed
Length of the workout
Coach
Music genre
Intensity of the workout

THE COACHED FORMATS USE A VARIETY OF INSTRUCTION DURING THE WORKOUT THAT INCLUDE;

Profile
Energy level/RPE
Ride and hand position
Time in each section
Gradient
Overall time

These are referenced throughout to ensure a thorough, safe and effective workout.

MYRIDE®+ LIVE COACHING

Having covered all the principles of technical riding, session planning and safety in terms of the bike and monitoring; we are ready to discuss how all that information is delivered in a MR+ live coaching workout. The application of all of the previous information is delivered for you the coach through a range of practical visual and auditory aids on the MR+ screen.

We will now be discussing this in greater depth and the manner in which to maximize their use during a live session. Indoor cycling is the most successful group exercise format in the world for a reason and MR+ is built around those key successful factors and seeks to enhance them further not to wholly replace the coach based format.

It is good to remember that the combination of a visual and auditory experience can lead to an overload stimulus for some students so it can take a little while for all the information being presented to be assimilated.

It is the primary role of the coach to be the lead in using this information to educate their students and ensure they understand why and how they are doing what they are doing and understand aspects being delivered visually.

SO WHAT DO THE INFORMATION TABLETS REPRESENTED ON SCREEN OFFER AND EXPLAIN FOR YOU THE COACH AND TO THE STUDENT?

The differing hierarchy of importance for the information is inbuilt on the screen. Information that is essential is always on screen and that which is either a 'nice to know' or has a specific but short time span reference is either shown at the beginning of each section or appears as a command throughout the sections; for instance the command to 'Freeze' and then 'Relax' will be a key teaching point and will appear when required however the song title, artist, name of stage and country are nice to know but not essential coaching points.



INFORMATION SHOWN

- | | | |
|----------------------|-----------------------|--|
| 1. Ride position | 6. Time | 11. Name of stage |
| 2. Hand position | 7. Beat/phrase/blocks | 12. Options & adaptation coaching points |
| 3. Rpm guide | 8. Tempo button | |
| 4. Incline indicator | 9. Cueing | |
| 5. Ride Profile | 10. Song title/artist | |



MYRIDE®+ LIVE COACHING

WHAT IS THE DIFFERENCE BETWEEN WORLD EXPEDITION, WORLD CHALLENGE AND DESTINATION ON DEMAND?

1. DESTINATION ON DEMAND;

Over 140 on-demand world destinations that enables you to take your students on an expedition of your making. Real life road or trail stages enhanced by your own choreography and music selection.

2. CHALLENGES;

There are many World Tour Challenges that you can lead your students through. Each 30-minute workout is specially designed to give an accurate simulated experience of the real event by following the true gradient pattern of the terrain.

3. EXPEDITION;

These 30 minute workouts visit many beautiful worldwide locations offering your students the chance to visually escape the indoor arena through mountain passes, forest trails, desert roads and urban sidewalks.

1. RIDE POSITION

This along with the Hand Position and RPM are the leading points of reference for the coach and student they dictate throughout the entire workout which position is being used in relation to the profile and imagery on screen. It is the interplay of the range of riding positions that creates the outcomes of the workout for the student as well as relating to them in terms of interest and any 'real' riders training specifically for their riding discipline.

2. HAND POSITION

A key coaching point for the student to understand in terms of their;

- A. Body awareness
- B. Efficiency of performing a ride position to achieve greater physical outcomes
- C. Safety on the bike in certain ride positions

3. RPM

This is the guide to the number of pedal revolutions required in each ride position and is used in relationship to the; music, tempo information and ride position.

4. INCLINE INDICATOR

Shown at the top right hand side of the screen this is a simple representation of the incline showing it developing from flat to a steep hill.

The color changes to represent the level of incline and also associated level intensity using the colors Green, Yellow to Red alongside a scale of 1-4 in the incline window being filled accordingly.

MYRIDE®+ LIVE COACHING

5. RIDE PROFILE

There are two of these shown and they both graphically represent the ride in terms of flats, hills, downhill's and are also mirrored by the incline button. The first is shown at the very beginning of the workout showing the Total Ride Profile and the second shows two facts;

- A. The section profile
- B. The use of the ride guide line moving through the profile showing exactly where you are currently in the profile

This allows the coach to reference how far has been ridden and also what intensity level will be required for the remaining section the second. At the top left corner a number indicates the current section in relation to the overall ride e.g. a 4 would indicate it is the fourth section in a 10 section ride.

6. TIME

This is the Total Time having been currently ridden and is shown at the top left of the screen. This can be used to motivate students as it enables them to pace themselves for each section of the ride. It is good practice to reference this alongside the total profile shown at the bottom of the screen.

7. BEAT/PHRASE/BLOCKS

This information displays the breakdown respectively of each aspect of the music/track/song being used to guide the structure of the profile and dictates the spacing in music form of the changes and coaching points given throughout the workout.

8. MUSIC TEMPO SHOWN AS 🎵

This button 'pulses' to the beat of the track being played and is used in combination with the RPM information to dictate riding either as rhythm riding/ beat match or RPM matching on half time to the music.

9. CUEING

This is a countdown shown as 4,3,2,1 to indicate a change to either riding position, hand position or an adaptation/alternative within the master ride position.

10. SONG TITLE/ARTIST

A 'nice to know' aspect for the student and coach as music is such a key factor in the overall experience it is always best to represent all aspects of information being used.

11. NAME OF STAGE

As in point 10 the information performs the completion of all aspects of information related to the ride. It also serves to stimulate students in the sense that they are viewing areas of the world they may never get to visit or conversely have visited which builds an even greater emotional response and sense of accomplishment from having had that key real experience of the location.

12. OPTIONS AND ADAPTATION COACHING POINTS

'Freeze' is a coaching point offered as an adaptation offered within a master ride position to increase the intensity. After a given time the command 'Relax' will appear to bring all riders back to together in the class section.



MUSIC AND MYRIDE®+

MUSIC CHOICE SHOULD BE LINKED TO THE OVERALL GOALS OF THE CLASS, THE TARGET AUDIENCE AND OF COURSE ENJOYMENT!

MYRIDE®+ CHOICE OF MUSIC IS LINKED TO THESE OF FACTORS;

A. The type of riding being coached

B. The emotional and physical output of a track matching the ride is it hard, aggressive riding? Or a more consistent rhythm to match a climb or an exciting fast paced track for a downhill sprint etc?

Music can impede the enjoyment of the visual image if it does not match the coaching; one does not override the other but must work in harmony for an overall symbiotic effect. It is best to take time to view your visual selection and match your chosen track with it, if in doubt as to its compatibility then it may be best to not reference them as synced in terms of imagery and ride positions.

1. HOW TO BUILD A MYRIDE®+ WORKOUT BASED AROUND MUSIC

A. Choose a song that matches the speed and mood of a Training Zone.

ZONE	RPM/BPM	MOOD
Green + / -	80-100	Happy, Light, easy going, steady
Yellow	80-160	Strong energy, Progressive, Steady and in control
Red/interval	80-160	Aggressive or highly motivating. Strong energy, motivating combined with steady/calm

B. Designate the 'master ride position' for each track.

Make sure the track meets the RPM needs of the riding positions:

SEATED ROAD
SEATED CLIMB
STANDING CLIMB
STANDING JOG
SEATED HILL SPEED

STANDING HILL SPEED
JUMPS
SPEED BUMPS
***WAVES**
SEATED SPRINT/LX7

* (Please Note; try and ensure a strong rhythmic beat for viii and ix and they should be counted in and performed in intervals, a good rule of thumb is counts of 8 maximum and a minimum of 4 with an RPE of 7 up to 8 during execution)



MUSIC AND MYRIDE®+

C. Now you have the right energy of track for the zone, have assigned the right master ride position, you now need to start planning the RPE intensity change.

THINGS TO CONSIDER:

- Do you want every 4-minute section to have a different intensity change? This offers the session lots of variety but does it match the desired outcome for the student?
 - Do you need to create workouts that have RPE intensity changes scaling up or down through the whole track, remain fairly constant or up and down intermittently? This offers you the chance to pick profiles that will fit any type of workout you want to create for your students.

AN EXAMPLE USING A YELLOW ZONE AND SCALING UP WOULD BE:

0 - 0.45 = RPE 4

0.45 - 2.16 = RPE 7

2.16 - 4.00 = RPE 8

D. How to create the right RPE intensity scale using the music.

Simply have in mind that you have 4 different styles of intensity profiles to build around and your music choice to apply them to.

Listen to the track and make a judgment on what style does it fit best?

- Is the song progressive and build to a crescendo? If yes then it's great for scaling energy up
 - Does the track have lots of breaks of beat or musical tempo changes? If yes then it's good for ups and downs
- Does the song have a steady even tempo? Then it's great for a constant energy scale or even scaling energy down

When you have decided on the style listen to the track again and choose the right time to change the ride position and/or RPE; do this by time marker.

Remember you are using changes in the music, like the intro or removal of an instrument or a tempo change to make your change. If a track is very steady then this is perfect for making no changes e.g. your steady profile - start on 7 and stay on 7.

If your track is progressive but there isn't much change then just choose times in the coaching to increase or decrease the energy scale.

When plotting your RPE profile for each track - there is no right or wrong way to do it as long as you stay in the parameters of the zone you are building in i.e. yellow = 6-8.

Once you have plotted the RPE changes you are almost done. At this point you have chosen the master ride position, the intensity changes and in the process have selected the right speed and mood for the training zone.

MUSIC AND MYRIDE®+

2. BUILDING THE WORKOUT USING THE IMAGERY AS A GUIDE

MR+ offers a differing array of scenes and riding terrain to build the workout. It is tempting to combine as much referencing to the images as possible to provide a concept of variety to your students. A more conservative approach in utilizing the possible variety will bring a greater response from the students by allowing them to absorb the image and become immersed in the workout along with the consistency of what is being coached.

To deliver a MR+ workout the following questions need to be understood and answered:

A. What type of class is it? Full hill-climb; road, trail or a mix of both?

What ride positions are best to provide in the warm-up, active rest/cool-down; main section of the workout and the relationship with incline/decline?

The Myride®+ footage has the added flexibility in the hands of an experienced coach to use any of the sections of the workout for a w/up, cool down/active rest or main workout.

The key is to deliver coaching points around intensity and RPE along with cadence to ensure best practice is followed in delivering a safe and effective workout for your students. It is just as possible to use an ascent or descent to create an effective warm up/cool down or main workout based on the coaching given. It is in this instance essential to have a thorough knowledge of the sections available and what they offer you the coach in building a workout.

B. Who is it for? Mainly advanced riders at peak time, off peak riders with less experience?

The more experienced indoor cyclists will have a greater tolerance and skill set for the full range of coaching tools that come built in to Myride®+.

Introducing and explaining the forthcoming workout during the warm up is proven to create a greater sense of achievement in your students as they mentally and physically pre-empt the workout. The students then have a greater sense of achievement as they can pace themselves accordingly. The beauty of MYRIDE®+ is it shows the students what they will be riding in a section by section structure and the total ride profile. This is a unique feature and allows true mental preparation allowing the physiological 'girding of the loins'.

C. How much visual referencing to use and the type of terrain for the workout?

It is possible to use every change in the footage to create a highly complex profile especially if you use the Trail footage which takes riders off road in the truest sense as opposed to the rough off road sections that have a lot of similar coaching to road riding and reduced need for the more complex ride positions

After this you have completed the above make sure that you listen to the songs back through; cross reference them with the terrain chosen; then act it out in your head or even better ride it before delivering it; the job is done!

GRAHAM'S NOTE:

I WOULD LIKE YOUR THOUGHTS AND RECOMMENDATIONS ON WHETHER THE FOLLOWING HAS ANY PERTINENCE TO THE EDUCATION AND HOW BEST TO ILLUSTRATE IT?

CYCLE ORGANIZATION AND LAYOUT

ALTHOUGH CYCLE LAY-OUT WILL TO SOME EXTENT BE DICTATED BY THE SPACE AVAILABLE AND THE POSITIONING OF THE AUDIO VISUAL EQUIPMENT BEING USED FOR DELIVERING THE MYRIDE®+ SESSIONS.



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