

SMARTfit™ High Intensity Cognitive Training for SMARTfit™ Trainer Single and Mini

Getting Started User Manual Rev 1.1



SMARTfit™
High Intensity Cognitive Training™

2015

Unlike other fitness equipment which may require additional insurance, SMARTfit™ Trainer Single and Mini have been approved by the Fitness Insurance Industry for use under general liability insurance. Please check with your insurer to confirm insurance laws in your state.

PARTICIPANTS SHOULD CONSULT A DOCTOR BEFORE STARTING ANY EXERCISE PROGRAM.
The content of this workout program is made available with the understanding that Multisensory Fitness, Inc. disclaims all responsibility for any injury incurred as a consequence of engaging in this program without first consulting a physician or otherwise qualified health care professional.

Thank You. Enjoy your new SMARTfit™ system!

Multisensory Fitness, Inc.
www.multisensoryfitness.com

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Chapter 1

Welcome to SMARTfit™ High Intensity Cognitive Training

Introduction

The fundamental goal of any fitness program is to help prepare individuals for the challenges of the twenty-first century by providing the core skills and knowledge for them to be physically active as part of a healthy lifestyle. SMARTfit™ High Intensity Cognitive Training™ merges cognitive and fitness training with gameplay providing a fun and engaging multifunctional workout for SGT, Group X and personal training.

SMARTfit™ works for all ages and abilities. Using sophisticated interactive computer technology, SMARTfit™ training sessions are based on games that naturally promote fun, social interaction, and exercise in a venue that requires active participation and develops successful team play.

SMARTfit's diverse programming is designed to make fitness and sports training more fun, engaging, challenging, and inclusive than traditional forms of training. Following are tips to assist you in understanding your SMARTfit™ and making it successful in your facility.

SMARTfit™ System Manual

This manual is designed for use by both trainers wishing to design their own workouts and those seeking single session classes or boot camps. To see drills in action, please view our web site on: <http://multisensoryfitness.com/customer-resources/>

If you come up with a drill that is NOT posted on the channel, please capture it via smart phone and send it to us so that we can post it. We are aiming to build a library of ideas to share with teachers and trainers from all sectors.

This manual addresses games available for the SMARTfit™ Trainer Single with 9 targets and the Trainer Mini with 5 targets:

The SMARTfit™ Trainer Single is a system incorporating one 92" X 64" station with 9 targets and a CPU that houses a scoreboard, time clock and sound system.

The SMARTfit™ Trainer Mini is a system incorporating one 46" X 64" station with 5 targets and a CPU that houses a scoreboard, time clock and sound system.

Combination Systems – The SMARTfit Single and Mini are both capable of operating in conjunction with either wired or wireless pods.



Each drill has a specific purpose and numerous skill benefits. We suggest each drill be repeated three times:

First, to **LEARN** the drill and get used to working together as a team.

Second, to **PRACTICE** to improve both individually and as a team.

Third, to **CHALLENGE** participants to achieve their best score, and to compare their scores with previous best scores or competitors.

Number of participants:

Drills are designed to engage up to 8 participants. Smaller groups may be advisable to make drills faster and more challenging for those with greater ability levels. Some of the drill variations may also be used to accomplish the same.

For larger groups, we suggest fast moving relays involving running or ball throwing and catching round-the-world style. For slower moving drills such as those that require a player to spend up to twenty seconds at the station, we recommend that players toward the back of the line be involved in a simple physical activity to keep them active while still rooting for their team. Examples include running in place, jumping in place, jumping jacks, push-ups, skipping, and sit-ups.



Assessment

<http://multisensoryfitness.com/wp-content/uploads/2013/08/SMART-Fit-Combine-Training-1.3.pdf>

Please refer to our SMARTfit™ Combine manual for doing assessments. It includes drills and assessment tracking sheets for each demographic group. Tracking scores over 4 weeks will supply the data to plot participants' progress over time.

This is an excellent tool to show participants that they *are* improving. More specific on-line performance tracking will become available when our on-line assessment tracking upgrade is released.

Using the scores from specific games for specific skills, instructors will be able to evaluate the progress of skill attainment within a group. For example, the group could use activities in any one of the Chase or Rally Wall games at 4 minutes to record a beginning level of cardio fitness. After a month of physical activity, the players can record a second score in the same game at 4 minutes to determine how much progress they have achieved. An increase in points scored within the 4 minute time limit will show how much a player's cardio fitness has improved.

For throwing and accuracy skills, the Lights Out and Play Tune Games could be played for 45 seconds, recording an initial score. After a period of time, the players would record a new score in the same game to determine how much their accuracy has improved. Be creative! People love to see their scores “up in lights” and will *want* to participate.

If competition is the goal, SMARTfit™ games encourage people to compete with themselves, other groups, and even other clubs. An effective idea to incentivize play is to post weekly high scores on Facebook or other social media, along with video clips of play. The players will get an excellent workout while having fun, and posting scores promotes retention of their skills. There is no limit to how your system can be used!

Setting Your SMARTfit™ Trainer System Game Times and Playing Distances for a Specific Concept or Skill Emphasis

Cardio Respiratory

Longer time periods of play: 60 seconds to 240 seconds depending on the size of the group

Move start line farther back: 10' or more up to 30.'

Have team relays for longer periods of time: 120 seconds to 240 seconds

Have players in line to perform exercises while waiting for their turn

Cognitive

Longer time periods of play: 60 seconds to 240 seconds depending on the size of the group

Use games that track numbers, letters, colors and pictures as well as memory, pairing and sequencing games

Chase the Target Challenge Games

Counting Games

Word Games

Math Games

Pairing Games

Tracking Games - Color Chase, Number Chase, etc.

Have team relays for longer periods of time: 120 seconds to 240 seconds

Have players in line assist team mates by helping them to find answers

Speed/Agility

Shorter time periods of play: 60 seconds or less

Include changes in speeds and directions when travelling to the stations/targets: fast to slow and forward to backward, lateral to the right one direction and to the left the other

Use bean bags and have players sprint up to retrieve the beanbag and sprint back to start line

Move start line closer to station for quick returns and reaction times with ball games

Establish multiple start lines; “suicide” drills

Use speed ladders, cones or poly spots in pathway to the stations

Skill/Accuracy

Chase games using one active target with a ball: Intermediate to Advanced level

All activities in Games: Knock the Lights Out
Ball games with or without a bounce on the return
Activities that deduct points for misses or hits below the line

Core Strength

Replace playground balls with a 2 lb. medicine ball
Have players stand on BOSU ball or balance board to throw balls or touch targets with hands
Have players perform sit-ups while tossing medicine ball to targets

How to Organize Your Group for a Class on SMARTfit™ System

The workouts in this manual are designed for both individual and group trainers. For group training, it is essential to plan and organize the group quickly in order to get players into action as soon as the lesson starts.

Additional Tips

The equipment list for each drill is per station. You can substitute as desired, using equipment on hand to complement the ball kit shipped with each SMARTfit™ Trainer system.

We strongly recommend reading the operating instructions in Chapter 2 of this manual to familiarize yourself with the system before you begin. We have provided both individual lesson plans to create your own workouts, and complete workout programs that include lesson plans grouped for specific outcomes. All activities can be adapted for any age and any skill level.

SMARTfit™ Conditioning for the Mind and Body: How It Works

SMARTfit™ Training is a functional training and fitness program appropriate for all ages and fitness levels. The brain and body connection is the key element that differentiates a functional training program from a general conditioning program, and SMARTfit™ programs are specifically designed to stimulate the body and the brain concurrently. This is accomplished by:

- Attracting participation and engaging sustained focus with short attention-grabbing computer games, played sequentially in the pursuit of score and mastery of skills
- Providing full body exercise by stimulating the hands, feet, eyes, ears and vestibular system in playing real games with real tactile equipment (NOT simulated)
- Requiring high levels of attention and focus for success (staying consciously in-the-now)
- Engaging in cognitive decision-making under pressure
- Delivering a cardiovascular workout in a game format

SMARTfit's programming improves functional abilities (flexibility, balance, power, strength) while concurrently developing high levels of cognitive and neuromuscular efficiency. This

process of engaging the hands, feet, ears, and eyes develops visual-perceptual motor skills. The added element of integration of the right and left brain hemispheres has been well-documented to enhance brain plasticity as well as whole brain thinking, cognition, attention and focus for learning.

Chapter 2

Getting To Know Your SMARTfit™ Trainer

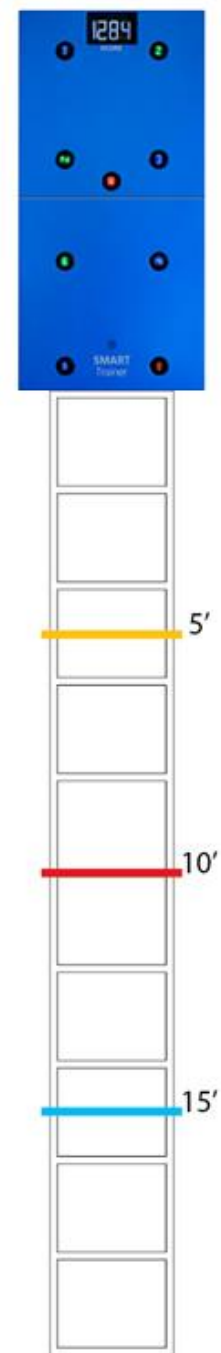
Groups who want teamwork and fun with as much movement and participation as possible will appreciate and enjoy the SMARTfit™ Trainer. Up to 8 people can play with minimum wait time. Each player will be “in action” for the majority of playing time. All targets can display colors, numbers, letters, symbols, shapes and more.

This is essential in games that are designed to require players to seek out individual images in order to increase cognitive demand during the game as well as to force decisions under pressure. SMARTfit™ Trainer also includes optional voice instruction, which announces each game while scrolling through the options.

Recommended Floor Markings: see video instruction

<http://multisensoryfitness.com/recommended-floor-markings/>

Use of the space in front of your SMARTfit™ panels can add options to your program. Many of our lesson plans include the use of speed/agility ladders, poly spots, cones, and pre-taped lines set at specific distances in front of the SMARTfit™ system. We recommend taping, painting or incorporating into the existing floor the following: Ladder a minimum of 16' long and 2' wide, divided into 2' squares. Center each ladder at the base of each Station. Place start lines at 5', 10', 15' and 20.'



Chapter 3

Combination of SMARTfit Single and wired or wireless pods

The CPU runs both the SMARTfit Single and stations in combination with SMARTfit Pods that can be paced on the floor, or mounted to walls or to pod stands using the Velcro supplied.

If you have wireless play pods that integrate with your system they need to be charged before use.

Charging system for wireless Pods

A special power charging cable is supplied for connecting the CPU to the back of the wireless play pods when they need recharging. Up to six pods can charge at a time which should provide up to 20 hours of play.

Note: Make sure that the connector is plugged in the correct way with the flat side to flat side and curved side to curved side.

1. Plug power cord into CPU and then to an electrical outlet.
2. Plug in to the left side of the CPU.
3. Plug the other end of charging cord into the back of a Play Pod.
4. The play pod may take up to 2 minutes (per pod) to completely charge.
5. Continue charging all pods prior to setting the system up.
6. Once all Pods are charged, unplug charging cord from Play Pods and CPU.



Use the system interface to find the setting for setting Pod sensitivity

There are 5 levels of sensitivity on the Pods that range from a light hit of a child to a heavier strike of an athlete or medicine ball. **It is important to note that unlike touch screens, SMARTfit systems are designed to be tapped or hit rather than touched.** For this reason, the sensors look for a short-sharp tap or hit rather than a push with a finger or hand.

System Initialization when Pods are part of the system

The initialization process is necessary when you have purchased pods to sometimes integrate with the station system. This will involve activating the pod systems so that they can be included in the games. There may also be times when you may wish to just activate the pods. This initialization process where you can choose which targets to activate gives the system tremendous flexibility when it comes to programming.

If you have any difficulties, here are some reasons that a Play Pod may not detect a target on startup.

The targets are not detected:

1. ***The Play Pod or Target was not turned on.*** If a pod is on, a blue light will blink every 5 seconds in the lower right hand corner. If there is no blinking blue to indicate the pod is active, try pressing the red button on the pod face.
2. ***The Play Pod or target turned itself off.*** Play Pods run on stored energy, so for maximum play time they have a few built in features to keep you playing longer between charges. A play pod will turn itself off after 5 minutes of inactivity. Even if you know you turned the pod on to begin with, try turning it on again.
3. ***The Play Pod ran out of stored power.*** If the Play Pod does not come on when you push the red button on the face, it might have run out of power. Hook the pod up to the charger. Let it charge for 10 -15 seconds and then press the red button on the pod face. If it turns on, fully charge the pod before play.
4. ***The Play Pod was out of range.*** Like any wireless devices, the play pods have a limited range. There is also a chance that the path the signal needs to take to reach a pod is blocked. Make sure the pod has a clear line of site to the Play Pod CPU and is within 100 feet of it.
5. If none of these options work, contact technical support.

Chapter 4

System Start-up, Settings and Operation

The System requires a 110 electrical outlet and can operate as a stand-alone unit or with the addition of wireless or wired play pods.

The system CPU



The system CPU contains the main electronic boards, the sound system and speakers, the time clock, the scoreboard, the touch key interface for making game and systems selections, the power supply and the recharging unit for the wireless play pods.

Power On/Off

The on/off switch is located on the right side of the CPU near the power connect cord. When powering on, the system will take 3 seconds to check that all components are working properly. Please DO NOT TOUCH it during this check or your system will display an error message. If this occurs, simply turn the system off, wait for 3 seconds, then restart.

The system 16 digit alpha numeric Interface

The system Interface provides a line of letters for communicating with the system to making choices that allows users to customize the system.

A short press leads to game selections, game time settings and volume, and a long press takes you to system selections which include setting target sensitivity; target addressing and customizing sound for background music, game tones, voice instructions and attract mode.

The systems voice is available in the options of male or female in the following languages: English, German, French and Spanish. This selection of language requires different audio cards which need to be ordered.

Take note that on some options there is a side arrow indicating additional sub-menu's in addition to the one being offered. This is of particular importance when selecting sound as the system has 4 different volume settings. These options are addressed later in this chapter but here is a brief overview:

Sound and Volume Options

There are 4 ways to use the sound in the system. Volume control is available for each type of sound and users have the option to deactivate any of the sound options:

1. Pre-programmed songs for use as attract mode or background music. There are 13 pre-programmed songs that can set the atmosphere for the age of the players.
 - These songs can be selected as the attract mode which kicks in when the system is dormant for 5 minutes (optional), or
 - As background music which plays while the games are playing.
2. Game tones. There are three sets of game tones that can be used to indicate the right/wrong hits and game fanfares.
3. Voice instructions: Voice instructions are optional and are available in English, French, Spanish and German. Systems are shipped with English unless specially requested when ordering your system.

System Start-up and Initialization

When the CPU is turned on, it will go through an initialization process where it will identify all of the active (turned on and addressed) targets. In most cases it will have been initialized before it shipped in which case the system start-up process will take you to the last game that was played.



Re-initializing is sometimes necessary when starting your system for the first time after it has been upgraded, or when you want to instruct the CPU to activate certain targets for the workout session.

In the event that the CPU finds no first target, it will ask if you would like to identify the targets with the prompt, "ID TARGETS NO?" To ID the targets press the "up" key so that "ID TARGETS YES?" is displayed.

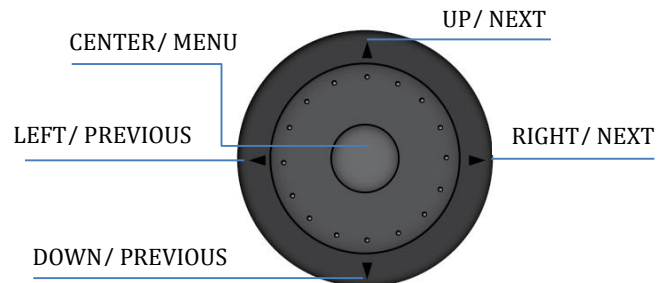
Press the menu button to continue. When all targets display the “?” symbol, tap them in sequence, starting with the targets closest to the CPU and work your way out tapping each target until you reach the furthest one. They should respond to the tap by reading out sequential letters of the alphabet. When all targets are displaying a letter, press the menu button again to commit these addresses to memory. Your system is now ready for play!



System Menu Structure

To get started press:

1. **CENTER** button– access and cycle through menus.
2. **UP** or **DOWN** button – cycle through options.
3. **LEFT** or **RIGHT** button - cycle through sub-menus
4. Wait 2 seconds after modifying a setting for your change to take effect.



Game Menus (Short Press of Menu Button):

To enter game menus, simply tap the menu button. Continuing to tap the menu button will scroll through menus sequentially as listed below.

Game Select: Tapping the menu button once will take you to the game select menu. Here, the up and down keys can be used to switch between games and the left and right arrows can be used to select between game groups. Tapping the menu button again accesses the time menu.

Time: Here the up and down keys can be used to select game duration. Tapping the menu button in the time menu accesses the volume menu.

Volume:

There are three volumes that can be adjusted:

- Game Volume (volume for game sounds, hits, misses, etc.),
- Voice Volume (volume of spoken instructions), and
- Music Volume (volume of in game and attract mode music).

To switch between these volume sub-menus, use the left and right buttons. To change the volume in any of these sub menus, use the up and down keys. Tapping the menu button in the Volume menu accesses the game level menu.

Level: Game level affects difficulty settings, such as how long the player has to hit targets in games where individual target hits are timed, or the duration of time characters are displayed in memory games before becoming “hidden” again.

Level can be adjusted from 1 to 5 using the up and down keys, with level 1 being the easiest and level 5 being the most challenging. Tapping menu here will take you back to the Game Select menu.

System Menus (Long Press of Menu Button):

To enter system menus, hold the menu button for about 2 seconds or until the menu text changes.

Game Music: Select the music that will play in the background during game play using the up and down keys, the selected song will be played when selected to help the user decide if the selected song is the desired song. Tapping the menu button here will access the Attract Music menu.

Attract Music: Select the music played while attract mode is active using the up and down keys, the selected song will be played when selected to help the user decide if the selected song is the desired song.

Sensitivity: Change how sensitive the pods are to being hit. The more sensitive, the softer one can hit the target and still register a hit. Select sensitivity using the up and down keys.

Auto Restart On/Off: Change how games behave once they have concluded. With auto restart on, the game will display scores and restart itself, ready for another game to start immediately. With Auto Restart off, the system will remain idle and only start a new game when the menu button is pressed. Turn Auto Restart on or off using the up and down keys. Tapping the menu button here will access the Voice On/Off menu.

Voice On/Off: Choose whether or not to have voice instructions enabled. Turn Voice Instruction on or off using the up and down keys. Tapping the menu button here will access the Game Tones menu.

Game Tones: Select which tones will be played to register hits and misses. Select from tones by pressing the up/down key, when a tone is selected, it will give a sample hit to help the user decide if it is the right tone. Tapping the menu button here will access the Address Prompt menu.

Address Prompt which is used to initialize the targets: Here, the user can select between three options using the up and down keys. Tapping the menu button here will access the Game Music menu.

- 1) NO ADDR PROMPT: This option does not display the address prompt when the PlayPod CPU is started up.
- 2) ADDR PROMPT ON: This option displays the address prompt every time the PlayPod CPU is rebooted.
- 3) ADDR NOW: If this option is selected and the user waits 3 seconds, the ID TARGETS NO? prompt comes up. Pressing the up key will display ID TARGETS YES? Pressing the menu button here will result in the target ID process becoming active. For more information on this, see the “System Startup and Initialization” section.



Chapter 5

Recommended Equipment for SMARTfit™ System

Your SMARTfit™ system is tough, durable and designed to take a beating. However, because it is a computer, the following equipment list will be helpful in preserving its longevity. Following is the recommended equipment list:

- Air-filled regulation athletic balls (tennis, basketball, football, volleyball, soccer, etc.)
- Rubber practice baseballs, softballs, lacrosse, cricket or T-Balls (need to bounce).
- PassBack Footballs
- Playground balls of all diameters
- Beanbags or dead balls for single directional play
- Swim Noodles or foam bats for striking the targets
- 2 lb. or 1 kilo medicine ball (maximum weight)
- BOSU balls or other balance devices for standing, sitting or lying
- Implements for striking the balls (hockey sticks, paddles, padded bats, rackets, etc.)
- Cones to provide barriers or direction
- Padded 2, 5, or ten pound hand weights (protect the panel from developing strike marks)



The following equipment is supplied with your system when it is purchased. See spec sheets for quantity details.

- 5" red playground balls
- 7" yellow playground balls
- 8.5" blue playground balls
- 2 lb. medicine ball
- Beanbag set
- Foam noodles
- Single handled 2lb weights



What Equipment **NOT** to use on your SMARTfit™ System

- Regulation baseball. It will NOT return properly because there is no bounce. Over time it will damage the electronic connectors.
- Regulation lacrosse balls. Over time they may scuff the stations and damage the electronics.
- Regulation cricket balls.
- 3 pounds and greater medicine balls for throwing at the system. (Okay to use a heavier medicine ball to *touch* the targets while holding the medicine ball with hands).
- Any hard solid plastic implement such as a stick or bat for hitting targets.

Chapter 6

Group Training Drills on Your SMARTfit™ System

Group Training Format

Group classes run 20 to 50 minutes in length depending on the number of repetitions applied to each exercise. Each station can accommodate up to 8 participants of all ages and skill levels.

Suggested Group Fitness Class Formats

Warm-up: The Warm-Up should run for 5 minutes within a 50 minute program. The main objective of the warm-up is to loosen the muscles and prepare the participants for some fast-paced movement. A good warm-up will prepare individuals for instruction, reduce the chance of injury, and set a *fun* mood for SMARTfit™ Training.

Skill: The Skill Development section should run for about 10 minutes within a 50 minute program. The main focus here is the connection between the brain and body. Categories include speed, agility, balance, hand-eye coordination, and reaction time. Skill development transfers into the successful completion of life's every day activities.

Cardio: The Cardio Respiratory Endurance section should run for about 15 minutes within a 50 minute program. The main focus is cardio endurance, stamina, and calorie expenditure.

Core: The Core section should run for about 5 minutes within a 50 minute program. The main focus is on strengthening the torso with sit-ups, overhead passes, etc.

Speed and Agility: The Speed and Agility section should run for about 10 minutes within a 50 minute program. The main focus is hand-eye speed and navigating agility using ladders or dots with hopping, side steps, and bending.

Cool-Down: The cool-down should last 5 to 10 minutes within a 50 minute program. This allows the participants to bring their heartbeat nearer to resting level. For this section use brain games such as Pairing, Math, or Word games which involve more thinking and less movement.

Modes of Play

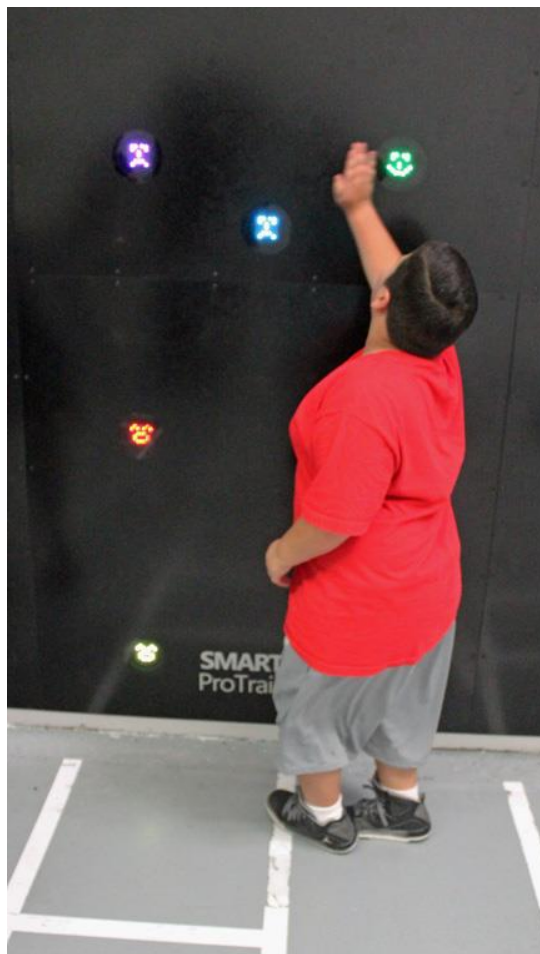
There are five ways to run drills on the SMARTfit™ system:

Individual: First player plays the entire game to time completion. Next player in line begins a new game with a new time.

Partners: Two players are partners and play the game together, to time completion. Next pair of players steps up to start new game with a new time.

Team: First player plays a turn, retrieves ball, returns to the start line and hands/passes the ball to the next player in line.

Around-the-World: First player takes a turn and peels off to the end of the line. The next player in line plays off of the first player's throw and peels off to the end of the line.



Chapter 7

Designing a Lesson Plan

The following menus will help you to design your own Training Program. Using an empty training template, fill in the blanks with activities from the menus. Choose your equipment and time based upon the objective for that training period. The possibilities are endless! Refer to the rest of this manual for examples of how to design lesson plans for your system.

TEMPLATE — DESIGN YOUR OWN CLASS

Date: _____ Time: _____

WARM-UP: Equipment _____ Game ____ Start Line ____ Mode _____ Seconds _____

•

•

•

SKILL: Equipment _____ Game ____ Start Line ____ Mode _____ Seconds _____

•

•

•

•

CARDIO: Equipment _____ Game ____ Start Line ____ Mode _____ Seconds _____

•

•

•

•

COOL-DOWN: Equipment _____ Game ____ Start Line ____ Mode _____ Seconds _____

•

Chapter 8

Chart Displaying Activated Games

#	RALLYWALL
1	Rallywall - All Targets are activated
	CHASE THE TARGETS
17	Chase the Single Target - Scoring (5-blue; 4-green; 3-orange; 2-yellow; 1-red)
18	Chase the Single Target - Counting by 1's (forward and back, same scoring as above).
19	Chase the Single Target - Counting by 2's (forward and back, same scoring as above).
20	Chase the Single Target - Alphabet (A to Z and back, same scoring as above).
21	Chase the Single Target - Emoticons (one target lit at a time, same scoring as above).
22	Chase the Single Target - Dice (one target lit at a time, same scoring as above).
23	Chase the Single Target - Shapes (one target lit at a time, same scoring as above).
	LIGHTS OUT and TRACKING
40	Lights Out - Timed (race).
41	Lights Out - Timed (sequential order).
42	Lights Out - Timed (keep 3 targets lit).
43	Lights Out - Counting by 1's (forward and back).
44	Lights Out - Counting by 2's (forward and back).
45	Seek the Letter - Alphabet (A to Z and back with all targets lit).
46	Seek the Color - Color (with all targets lit)
47	Seek out Smiley – Smiley (with all targets lit)
	MEMORY, PAIRING and SEQUENCING
60	Pairing - Color (timed game).
61	Memory - Color (race).
62	Pairing - Numbers (timed).
63	Memory - Numbers (race).
64	Memory – Numbers – Find the sequence (race)
65	Pairing - ABC (timed).
66	Memory - ABC (race).
67	Memory – Alphabet – Find the sequence (race)
68	Pairing - Shapes (timed).
69	Memory - Shapes (race).
70	Pairing - Dice (timed).
71	Memory - Dice (race).
72	Pairing - Symbols (timed).
73	Memory - Symbols (race).

Game Category 1: Rallywall

The Rallywall games focus on accepting any hit to any target for points.

1	Rallywall - All Targets
---	-------------------------

Game Number: 1

Name: Rallywall - All Targets

Game Rules:

- Each game starts with all targets turned on and displaying the same color.
- Objective is to hit any target as many times as possible until the clock runs out. When a target is hit all targets are activated and a positive tone is heard.
- When time expires all targets will light up and score will flash.
- Each good hit earns 5 points.



Game Category 17-23: Chase the Target

These games provide a specific target or set of targets that light up to reflect the target area that will earn points. All other targets are turned off and are non-active. Points are earned according to how long it takes to put them out. Targets point worth for blue earn 5 points; green earns 4 points; yellow earns 3 points; orange earns 2 points; and red earns 1 point.

17	Chase the Single Target - Scoring (5-blue; 4-green; 3-orange; 2-yellow; 1-red).
18	Chase the Single Target - Counting by 1's (forward and back, same scoring as above).
19	Chase the Single Target - Counting by 2's (forward and back, same scoring as above).
20	Chase the Single Target - Alphabet (A to Z and back, same scoring as above).
21	Chase the Single Target - Emoticons (one target lit at a time, same scoring as above).
22	Chase the Single Target - Dice (one target lit at a time, same scoring as above).
23	Chase the Single Target - Shapes (one target lit at a time, same scoring as above).

Game Number 17

Name: Chase the Single Target

Game Rules:

- Chase one target at a time; all other targets are off.
- The target starts out blue and changes colors with the duration of time taken to put it out.
- Score earned for each hit decreases with each color change.
- Target remains red until the player can hit that target out, or time runs out.
- Use yellow LEVEL button on the remote control to change the speed at which the targets change color. Level 1 is the fastest and Level 5 is the slowest.
- Use a level with longer times for running or ball games.
- Play until time runs out.

Game Number 18

Name: Chase the Single Target - Counting by 1's (forward and back)

Game Rules:

- Chase one target at a time counting in sequential numbers; all other targets are off. System turns on any 1 target at a time such that the player is to count from "0" to "19."
- Count starts at "0" and increases by one with each successful strike.
- When "19" is reached, start counting back to "1".
- The target starts out blue and changes colors with the duration of time taken to put it out.
- The target starts out blue and in the times listed below, changes to green to yellow to orange and then to red.
- Score earned for each hit reduces with each color change
- Target remains red until the player can hit that target out, or time runs out.

- Use Levels to change the speed at which the targets change color. The younger the players, the more time given to reach the targets.
- Use a level with longer times for running or ball games.
- Once the player reaches 19, they are to count backwards to zero and then back up again to 19 until time runs out.

Game Number 19

Name: Chase the Single Target - Counting by 2's (forward and back)

Game Rules:

- Chase one target at a time counting in 2's; all other targets are off.
- System starts at "0" or "1" and turns on any 1 target at a time such that the player is to count by 2's from "0" to "19."
- The target starts out blue and changes colors with the duration of time taken to put it out.
- The target starts out blue and in the times listed below, changes to green to yellow to orange and then to red.
- Score earned for each hit reduces with each color change
- Target remains red until the player can hit that target out, or time runs out.
- Use Levels to change the speed at which the targets change color. The younger the players, the more time given to reach the targets.
- Use a level with longer times for running or ball games.
- Once the player reaches "19", they are to count backwards to zero and then back up again to "19" until time runs out.

Game Number 20

Name: Chase the Single Target - Alphabet (A to Z and back)

Game Rules:

- System turns on one target at a time as a letter, in order from "A" to "Z." Player must hit that target for the next one to appear.
- Count increases by a letter of the alphabet with each successful strike.
- The target starts out blue and changes colors with the duration of time taken to put it out.
- The target starts out blue and in the times listed below, changes to green to yellow to orange and then to red.
- Score earned for each hit reduces with each color change
- Target remains red until the player can hit that target out, or time runs out.
- Use Levels to change the speed at which the targets change color.
- Use a level with longer times for running or ball games.
- Once the player reaches Z, they are to go backwards to A and then back to Z until time runs out.

Game Number 21

Name: Chase the Single Target - Emoticons

Game Rules:

- Target zones include any single target displaying an emoticon.
- Hits to this target is considered good and earn points.
- As the target is hit, a new one will light up displaying a new emoticon.
- The target starts out blue and in the times listed below, changes to green to yellow to orange and then to red.
- Targets remain red until the player can hit that target out, or time runs out.
- Use the Yellow Level button to change the speed at which the targets change color. The younger the players, the more time given to reach the targets.
- Use a level with longer times for running or ball games.

Game Number 22

Name: Chase the Single Target - Dice

Game Rules:

- Target zones include any single target displaying side of a dice.
- Hits to this target is considered good and earn points.
- As the target is hit, a new one will light up displaying a new side of a dice.
- The target starts out blue and in the times listed below, changes to green to yellow to orange and then to red.
- Targets remain red until the player can hit that target out, or time runs out.
- Use the Yellow Level button to change the speed at which the targets change color. The younger the players, the more time given to reach the targets.
- Use a level with longer times for running or ball games.
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Game Number 23

Name: Chase the Single Target - Shapes (square, triangle, circle, or rectangle)

Game Rules:

- Target zones include any single target displaying a shape.
- Hits to this target is considered good and earn points.
- As the target is hit, a new one will light up displaying a new shape.
- The target starts out blue and in the times listed below, changes to green to yellow to orange and then to red.
- Targets remain red until the player can hit that target out, or time runs out.
- Use the Yellow Level button to change the speed at which the targets change color. The younger the players, the more time given to reach the targets.
- Use a level with longer times for running or ball games.

Game Category 40-47: Lights Out and Tracking

This category of games turns on all of the lighted targets at once and points are earned by knocking them out. Some games are very specific about which lights can be tracked and in what order, so pay attention as these are the only ones that will earn points.

40	Lights Out - Race (timed).
41	Lights Out - Sequential Order (timed).
42	Lights Out - Keep 3 On
43	Track the numbers - Counting by 1's (forward and back).
44	Track the numbers - Counting by 2's (forward and back).
45	Track the Letter - Alphabet (A to Z and back with all targets lit).
46	Track the Color - Color (with all targets lit).
47	Track Smiley - Smiley (with all targets lit).

Game Number _____ 40 _____

Name: Lights Out – Race (timed)

Game Rules:

- Game begins with all targets turned on in a single randomly selected color.
- Race to see how quickly all targets can be put out.
- The scoreboard counts the seconds until the last target is out.
- Objective is to knock out all of the targets.
- First player or team to hit out all targets will end the game. Targets will flashing and score will flash to show that they were the winners.

Game Number _____ 41 _____

Name: Lights Out - Sequential Order (timed)

Game Rules:

- Game begins with all lights turned on and a number allocated to each target starting at "1".
- Objective is to knock out all of the targets in sequential order counting from one up and within the time set.
- If a target that was out is hit again, it comes on and a point is deducted.
- If the wrong target is hit then a point is deducted from the accumulated score.
- Game ends when all targets are knocked out and system will light up in a celebratory way and score will flash.
- 5 points are awarded for each correct hit and the game ends with all the lights are out.

Game Number _____ 42 _____

Name: Lights Out – Keep 3 On

Game Rules:

- The game begins with all lights turned on and all LED's fully illuminated in a randomly selected color for that game.
- Objective is to knock out all of the targets.
- Once all targets except the last three have been hit out, for all subsequent shots that hit out a target, the system will turn on another target to keep the game going.
- Keeping three targets on will continue until the last 1.5 seconds of the game when we give the player the opportunity to actually get all the lights out.
- When time expires all targets will flash.

Game Number 43

Name: Track the Number - Counting by 1's (forward and back)

Game Rules:

- The game begins with one target displaying the starting number
- After striking it, all targets will turn on displaying random numbers.
- Objective is to knock out all of the targets in sequential numeric order by seeking out the "0," then the "1," until "19" and then back again.
- When the right numbered target is hit all targets refresh with new numbers and the players must seek out the next number and knock it out.
- When "19" is reached start counting backwards.
- 5 Points are awarded for each correct hit.
- When time expires, the system will light up and score will flash.

Game Number 44

Name: Track the number - Counting by 2's (forward and back)

Game Rules:

- The game begins with one target displaying the starting number
- After striking it, all targets will turn on displaying random numbers.
- Objective is to knock out all of the targets in sequential numeric order by seeking out the "0," then the "2," until "18" , or, starting at "1", then the "3", until "19"
- When the right numbered target is hit all targets refresh with new numbers and the players must seek out the next number and knock it out.
- When "18" or "19" is reached start counting backwards.
- 5 Points are awarded for each correct hit.
- When time expires, the system will light up and score will flash.

Game Number 45

Name: Track the Letter - Alphabet (A to Z and back with all targets lit)

Game Rules:

- The game begins with one target displaying the starting letter "A".
- After striking it, all targets will turn on displaying random letters including the "B".
- Objective is to knock out all of the targets in sequential alphabetic order by seeking out the "A," then the "B," until "Z."
- When the right lettered target is hit all targets refresh with new letters and the player must strike the next letter in order of the alphabet.
- Adding more time can challenge players to reach "Z" and then attempt the alphabet backwards.
- 5 Points are awarded for each correct hit. 10 points for targets hit going backwards.
- When time expires, the system will light up and score will flash to show who the winner was.

Game Number 46

Name: Track the Color - Color (with all targets lit)

Game Rules:

- The game starts with a target displaying the color that must be tracked.
- After striking it, all targets will turn on displaying random colors.
- Objective is to knock out the identified colored target only.
- After each strike all targets will immediately refresh with new colors and the player must seek out the color in the next identified batch of colors.
- Continue play until time runs out.
- 5 Points are awarded for each correct hit.
- When time expires, the system will light up and score will flash.

Game Number 47

Name: Track Smiley – Smiley (with all targets lit)

Game Rules:

- The game starts with a target displaying SMILEY face that must be tracked.
- After striking it, all targets will turn on displaying SAD FACES and SURPRISED faces in random colors including the SMILEY identified at the start of the game.
- Objective is to track SMILEY after each refresh.
- All targets will immediately refresh with new SAD FACES and SURPRISED faces and the player must seek out SMILEY.
- Continue play until time runs out.
- 5 Points are awarded for each correct hit.
- When time expires, the system will light up and score will flash.

Game Category 60-73: Memory, Pairing, Sequencing and Pattern Recognition

This category of games test memory by revealing numbers, colors, shapes, or letters on certain targets and requiring players to find their match. Points are earned when two targets are paired up. All targets are used in these games. Pause after two targets are revealed.

	MEMORY, PAIRING and Sequencing
60	Pairing - Color (timed game).
61	Memory - Color (race).
62	Pairing - Numbers (timed).
63	Memory - Numbers (race).
64	Memory – Numbers – Find the sequence (race)
65	Pairing - ABC (timed).
66	Memory - ABC (race).
67	Memory – Alphabet – Find the sequence (race)
68	Pairing - Shapes (timed).
69	Memory - Shapes (race).
70	Pairing - Dice (timed).
71	Memory - Dice (race).
72	Pairing - Symbols (timed).
73	Memory - Symbols (race).

Game Number 60

Name: Pairing - Color (timed game)

Game Rules:

- The game starts with all targets loaded with a different color but turned off.
- Only two targets have the same color.
- Objective is to only knock out the targets that are a pair to earn 100 points.
- The system refreshes, a successful sound is heard and another pair must be found.
- If an incorrect pair is selected, "uh ooooh" is heard and the system refreshes and a point is deducted. Negative scores are possible.
- Continue play seeking out as many pairs as possible within the time set.
- Game ends when time runs out.
- Score reflects the number of pairs found less the points taken for mistakes.

Game Number 61

Name: Memory - Color (race)

Game Rules:

- The game starts with all targets loaded with a different color but turned off.

- There are enough pairs for an even number of targets and the odd target has no mate.
- Objective is to only knock out the targets that are a paired to earn 100 points for each pair found.
- When the three pairs are found, the system refreshes, a successful sound is heard and another set of three must be found.
- If an incorrect pair is selected, "uh ooooh" is heard and the system refreshes and a point is deducted. Negative scores are possible.
- Continue play seeking out as many pairs as possible within the time set.
- Game ends when time ends.
- Score reflects the number of pairs found.

Game Number 62

Name: Pairing - Numbers (timed)

Game Rules:

- The game starts with all targets loaded with a different number but turned off.
- Only two targets have the same number.
- Objective is to only knock out the targets that are a pair to earn 100 points.
- The system refreshes, a successful sound is heard and another pair must be found.
- If an incorrect pair is selected, "uh ooooh" is heard and the system refreshes and a point is deducted. Negative scores are possible.
- Continue play seeking out as many pairs as possible within the time set.
- Game ends when time runs out.
- Score reflects the number of pairs found less the points taken for mistakes.

Game Number 63

Name: Memory - Numbers (race)

Game Rules:

- The game starts with all targets loaded with a different number but turned off.
- There are enough pairs for an even number of targets and the odd target has no mate.
- Objective is to only knock out the targets that are a pair to earn 100 points for each pair found.
- When the three pairs are found, the system refreshes, a successful sound is heard and another set of three must be found.
- If an incorrect pair is selected, "uh ooooh" is heard and the system refreshes and a point is deducted. Negative scores are possible.
- Continue play seeking out as many pairs as possible within the time set.
- Game ends when time ends.
- Score reflects the time it takes to find all the pairs.

Game Number 64

Name: Memory – Numbers – Find the sequence (race)

Game Rules:

- The game starts with all targets loaded with a different set of sequential letters of numbers but turned off.
- Objective is to turn on targets to find their sequence.
- Hit any target, it will turn on and stay on revealing a number.
- Then seek the next sequential number by striking a target.
- If wrong it turns on for a second and turns off – remember what it is as you will need it as the game progresses.
- If the second target is the next sequential number, it is correct and will stay on.
- Repeat until all targets are turned on with the correct sequence of numbers.
- Game ends when all the sequential numbers have been found.
- Score reflects the time taken to find the sequence of numbers.

Game Number 65

Name: Pairing - ABC (timed)

Game Rules:

- The game starts with all targets loaded with different letters of the alphabet but turned off.
- Only two targets have the same letter.
- Objective is to only knock out the targets that are a pair to earn 100 points.
- The system refreshes, a successful sound is heard and another pair must be found.
- If an incorrect pair is selected, "uh ooooh" is heard and the system refreshes and a point is deducted. Negative scores are possible.
- Continue play seeking out as many pairs as possible within the time set.
- Game ends when time runs out.
- Score reflects the number of pairs found less the points taken for mistakes.

Game Number 66

Name: Memory - ABC (race)

Game Rules:

- The game starts with all targets loaded with a different letter but turned off.
- There are enough pairs for an even number of targets and the odd target has no mate.
- Objective is to only knock out the targets that are a pair to earn 100 points for each pair found.
- When the three pairs are found, the system refreshes, a successful sound is heard and another set of three must be found.
- If an incorrect pair is selected, "uh ooooh" is heard and the system refreshes and a point is deducted. Negative scores are possible.
- Continue play seeking out as many pairs as possible within the time set.
- Game ends when time ends.
- Score reflects the number of pairs found.

Game Number _____ 67 _____

Name: Memory – Alphabet – Find the sequence (race)

Game Rules:

- The game starts with all targets loaded with a different set of sequential letters of the alphabet but turned off.
- Objective is to turn on targets to find their sequence.
- Hit any target, it will turn on and stay on revealing a letter of the alphabet.
- Then seek the next sequential letter by striking a target.
- If wrong it turns on for a second and turns off – remember what it is as you will need it as the game progresses.
- If the second target is the next sequential letter, it is correct and will stay on.
- Repeat until all targets are turned on with the correct letter sequence of the alphabet.
- Game ends when all the sequential letters have been found.
- Score reflects the time taken to find the sequence of numbers.

Game Number _____ 68 _____

Name: Pairing - Shapes (timed)

Game Rules:

- The game starts with all targets loaded with different geometric shapes but turned off.
- Only two targets have the same shape.
- Objective is to only knock out the targets that are a pair to earn 100 points.
- The system refreshes, a successful sound is heard and another pair must be found.
- If an incorrect pair is selected, "uh ooooh" is heard and the system refreshes and a point is deducted. Negative scores are possible.
- Continue play seeking out as many pairs as possible within the time set.
- Game ends when time runs out.
- Score reflects the number of pairs found less the points taken for mistakes.

Game Number _____ 69 _____

Name: Memory - Shapes (race)

Game Rules:

- The game starts with all targets loaded with a different geometric shapes but turned off.
- There are enough pairs for an even number of targets and the odd target has no mate.
- Objective is to only knock out the targets that are a pair to earn 100 points for each pair found.
- When the three pairs are found, the system refreshes, a successful sound is heard and another set of three must be found.
- If an incorrect pair is selected, "uh ooooh" is heard and the system refreshes and a point is deducted. Negative scores are possible.
- Continue play seeking out as many pairs as possible within the time set.

- Game ends when time ends.
- Score reflects the number of pairs found.

Game Number 70

Name: Pairing - Dice (timed)

Game Rules:

- The game starts with all targets loaded with different sides of a dice but turned off.
- Only two targets have the same dice number.
- Objective is to only knock out the targets that are a pair to earn 100 points.
- The system refreshes, a successful sound is heard and another pair must be found.
- If an incorrect pair is selected, "uh ooooh" is heard and the system refreshes and a point is deducted. Negative scores are possible.
- Continue play seeking out as many pairs as possible within the time set.
- Game ends when time runs out.
- Score reflects the number of pairs found less the points taken for mistakes.

Game Number 71

Name: Memory - Dice (race)

Game Rules:

- The game starts with all targets loaded with a different sides of a dice but turned off.
- There are enough pairs for an even number of targets and the odd target is assigned to being a sad face emoticon that produces no result.
- Objective is to only knock out the targets that are a pair to earn 100 points for each pair found.
- When the three pairs are found, the system refreshes, a successful sound is heard and another set of three must be found.
- If an incorrect pair is selected, "uh ooooh" is heard and the system refreshes and a point is deducted. Negative scores are possible.
- Continue play seeking out as many pairs as possible within the time set.
- Game ends when time ends.
- Score reflects the number of pairs found.

Game Number 72

Name: Pairing - Symbols (timed)

Game Rules:

- The game starts with all targets loaded with different symbols but turned off.
- Only two targets have the same shape.
- Objective is to only knock out the targets that are a pair to earn 100 points.
- The system refreshes, a successful sound is heard and another pair must be found.

- If an incorrect pair is selected, "uh ooooh" is heard and the system refreshes and a point is deducted. Negative scores are possible.
- Continue play seeking out as many pairs as possible within the time set.
- Game ends when time runs out.
- Score reflects the number of pairs found less the points taken for mistakes.

Game Number 73

Name: Memory - Symbols (race)

Game Rules:

- The game starts with all targets loaded with a different symbol but turned off.
- There are enough pairs for an even number of targets and the odd target has no mate.
- Objective is to only knock out the targets that are a pair to earn 100 points for each pair found.
- When the three pairs are found, the system refreshes, a successful sound is heard and another set of three must be found.
- If an incorrect pair is selected, "uh ooooh" is heard and the system refreshes and a point is deducted. Negative scores are possible.
- Continue play seeking out as many pairs as possible within the time set.
- Game ends when time ends.
- Score reflects the time it takes to find all the pairs.

