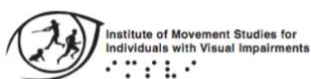


# BLIND TENNIS MANUAL

For Athletes Who Are Blind or Visually Impaired



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<https://www.campabilities.org/>  
<https://www.brockport.edu/academics/imsvi/>

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## SECTION 1.1 BACKGROUND

### VISUAL IMPAIRMENT BARRIERS AND QUALITY OF LIFE

Visual impairment is a low-incidence disability in the United States, there are approximately 63,657 students with a visual impairment (American Printing House for the Blind, 2019a). Multiple studies have indicated that individuals with visual impairments physical activity and fitness levels are consistently lower than their sighted peers (Augestad & Jiang, 2015; Haegele & Porretta, 2015; Houwen, et al., 2009; Hopkins et al., 1987). For example, less than 20 percent of the children with visual impairments passed at least four items on the Fitnessgram (Lieberman, & McHugh, 2001). Youth with visual impairment and blindness also have significantly lower motor competence and perceived motor competence than their sighted peers (Brian, Haegele, & Bostick, 2016; Haegele, Brian, & Goodway, 2015; Houwen et al., 2007; Wagner, Haibach, & Lieberman, 2013). Specifically, significantly lower scores are often found in object control, not locomotor skill compared to their sighted peers (Houwen et al., 2007).

There are many important factors that lead to a high quality of life for individuals with visual impairments including independent travel, socialization, relaxation, a sense of independence, and recreational physical activity (Ball, & Nicolle, 2015; Columna, Fernandez-Vivo, Lieberman, & Arnt, 2015). Motor competence and perceived motor competence is associated with levels of physical activity, which in turn is associated with weight status (Stodden et al., 2008; Robinson et al., 2015). As mentioned above children with visual impairments are more likely to have lower levels of motor competence, perceived motor competence, and physical activity putting them at risk for a lower perceived quality of life. With this said, how do we get these children to increase their motor competence and socialization so that they are more likely to be physically active and hopefully have a positive influence their quality of life? Blind tennis could be a potential outlet for blind and visually impaired athletes and work on object control skills where literature shows a significant gap.

### CLASSIFICATION SYSTEM

Per the International Federation (IBSA; 2019a), visual classifications are “based upon the eye with better visual acuity, whilst wearing best optical correction using spectacles or contact lenses, and/or visual fields which include central and peripheral zones.” Below is a table which describes each visual classification ranging from B1 (lowest vision) to B4 (highest vision).

TABLE 1. IBSA VISUAL CLASSIFICATIONS

B1	No light perception in either eye up to light perception, and an inability to recognize the shape of a hand at any distance or in any direction.
B2	From ability to recognize the shape of a hand up to visual acuity of 20/600 and/or a visual field of less than 5 degrees in the best eye with the best practical eye correction.
B3	From visual acuity above 20/600 and up to visual acuity of 20/200 and/or a visual field of less than 20 degrees and more than 5 degrees in the best eye with the best practical eye correction.
*B4	USABA Recognized Low Vision Classification: From visual acuity above 20/200 and up to visual acuity of 20/70 and a visual field larger than 20 degrees in the best eye with the best practical eye correction.

\*Currently, individuals with a B4 visual classification are not permitted to participate in officially sanctioned international blind and partially sighted soccer competitions.

For additional blind and low vision tennis information visit:

<https://playtennis.usta.com/usbta>

<https://www.campabilities.org/instructional-materials.html>

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#### SHOWCASE: INSTRUCTIONAL VIDEOS ON TENNIS FOR BLIND AND LOW VISION PLAYERS

Below are links to two instructional videos to help teachers, coaches, parents, and guardians help make tennis accessible for blind and low vision players.

1. [Blind Tennis Instructional Video August 2025](#)
2. [Inclusion Video Tennis 2019](#)

#### SECTION 1.2 HOW DO YOU TREAT SOMEONE WHO IS VISUALLY IMPAIRED?

This section will briefly discuss how to treat someone with a visual impairment. For more information on how to treat someone with a visual impairment see the following resources:

- [www.campabilities.org](http://www.campabilities.org)
- *Physical education and sports for people with visual impairments and deafblindness: Foundations of instruction* (Lieberman, Ponchilla, & Ponchilla, 2013)

Be sure to do the following as suggested by Lieberman and colleagues (2013):

- Always state your name when speaking
- Ask if they would like assistance first before assuming
- Say who is in the room
- Be sure to inform them of when you are leaving the room

- Explain events or situations that are occurring around the room (laughing, loud noise, etc.)
- Encourage independence

### SECTION 1.3 WHAT IS BLIND AND LOW VISION TENNIS?

#### HISTORY

Adapted sports play an essential role in promoting physical health, confidence, and social connection for individuals who are blind or have low vision (BLV) (Kozub & Oh, 2004; Stuart, Lieberman, & Hand, 2006). For BLV athletes, participation goes beyond fitness; it provides a path toward independence, belonging, and empowerment. Yet many encounter barriers such as stigma, limited access, and ableist assumptions (Oldörp, Giese, & Grenier, 2024). Blind tennis as an adapted sport can create spaces for physical activity and social interaction for BLV players.

Tennis is one of the world's most popular sports, requiring quick reactions, precise timing, and strong visual tracking. While research has long supported effective coaching strategies for sighted players, traditional methods often fail to meet the needs of BLV athletes (Lieberman, Schedlin, & Pierce, 2009; Mowling, Fittipaldi-Wert, & Favoretto, 2017). Blind tennis makes the game accessible through simple but powerful adaptations, including an audible ball, tactile court lines, and sometimes a lowered net (Matsui, 2014). Created in Japan in 1984 by Miyoshi Takei, blind tennis has since gained global recognition. The International Blind Tennis Association (IBTA) was established in 2014, followed by the U.S. Blind Tennis Association (USBTA) in 2022, which now collaborates with the USA to expand opportunities in the United States (United States Blind Tennis Association, 2022).

#### BLIND TENNIS RULES

Anyone can play blind Tennis—just grab an eyeshade! However, for official competitions, certain rules and regulations must be followed. Some general rules/regulations include (IBTA, 2023):

- Reduced court size: B1 Court Dimensions (12.8m X 6.1Mm; service line to baseline 1.8m).
- There are also tactile lines on all lines except (Raised sideline and base line) for the service boxes.
- The racket cannot be longer than 23 inches.
- Use a standard blind tennis ball for auditory cueing, see equipment list for ordering.
- Based on visual classification B1 players have 3 bounces before the ball is considered dead.

- B1 Players must wear eyeshades in official gameplay, see equipment list for ordering.
- Spectators must remain silent until the point is finished.

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#### LOW VISION TENNIS RULES

Although more similar to traditional tennis, low vision tennis is an option for players who have a B2 or B4 visual classification. Low vision tennis is governed by the IBTA technical manual (IBTA, 2023) for approved adaptations. However, it is important to know that blind and low vision tennis have a significant rule difference. For blind tennis, eyeshades must be worn by all players. However, in low vision tennis, eyeshades are not worn by any players.

- Reduced court size: B1 Court Dimensions (18.28m X 8.23m).
- There are no tactile lines however high contrast lines are recommended.
- The racket cannot be longer than 25 inches (B2 – B3) and 27 inches (B4).
- Use a standard blind tennis ball for auditory cueing, see equipment list for ordering.
- Based on visual classification B2 players have 3 bounces, B3 players have 2 bounces, and B4 players have 1 bounce, before the ball is considered dead.
- Spectators must remain silent until the point is finished.

Detailed rule/regulation information for blind and low vision tennis can be found at International Blind Tennis Association website in the *International Blind Tennis Association: Technical Manual 2023 - 2024 (IBTA, 2023)*.

#### SECTION 1.4 EQUIPMENT AND WHERE TO GET IT

This section will list the total amount of equipment needed for all blind and low vision tennis lessons and the places to find the equipment.

Equipment needed:

- Blind Tennis balls, estimated cost \$23 for package of 2
- EZ Tennis net System, estimated cost \$249 for set
- Midsized Jr. Tennis Racquets, estimated cost \$135 for set of 6
- Eyeshades (Blindfolds), estimated cost \$35 Per eyeshade
  - Option 1: Handilife Sports
  - Option 2: Goalfix Sports
- Stop watches, estimated cost \$18 to 53 Per stopwatch
- Dome cones, estimated cost \$55 Per set of 36

## SECTION 2.1 INSTRUCTIONAL STRATEGIES FOR COACHING BLIND AND LOW VISION TENNIS PLAYERS

Pre-teaching: This needs to occur before the lesson or practice including but not limited to the following information: dimensions of the pitch, equipment, terminology, scoring, strategies, and positions (Lieberman et al., 2013). For BLV tennis pre-teaching should include orienting the athlete to the lines on the court, equipment, rules, and adaptations available.



*Photo 1.1: Displays a teacher assisting two students to feel the popup tennis net before playing. This is an example of pre-teaching.*

Tactile Modeling: This is a instructional strategy used as a demonstration, accessible by touch to BLV players (Lieberman et al., 2013). For example, the athlete will feel the coach demonstrate the skill of a forehand strike.



*Photo 3.1: Displays a teacher assisting a student in feeling the instructor's stance for a forehand stroke, this is an example of tactile modeling.*

Physical Guidance: This is an instructional strategy where the instructor helps guide the athlete through the movement being taught, such as a forehand in *Photo 2.1* (Lieberman et al., 2013). In BLV tennis the instructor should assist the athlete move through a motion and supplement with verbal instruction (e.g., teaching cues).



*Photo 3.1: Displays a teacher assisting a student in feeling the swing path for a forehand strike, this is an example of physical guidance.*

For more information on instructional strategies for coaching/teaching the blind and visually impaired see *Physical Education and Sports for People with Visual Impairments and Deafblindness: Foundations of Instruction* (Lieberman et al., 2013).

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#### TEACHING THE FOLLOWING TENNIS SKILLS:

A structured, multisensory approach supports BLV students in developing safe and confident tennis skills. As outlined in **Table 2**, early instruction emphasizes auditory tracking and spatial awareness through stationery and movement-based listening activities. These foundational skills prepare students to safely locate and respond to sound cues before introducing equipment use or full swings.

Building on this foundation, students' progress to groundstrokes using tactile feedback and rhythmic auditory cues. The progression of forehand and backhand instruction shown in **Table 3** moves from grip and stance development to controlled partner rallying, reinforcing timing, body positioning, and consistent contact.



*Photo 4.1: Displays a student in ready position for forehand strike.*

*Photo 4.2: Displays a student hitting the auditory tennis ball with a forehand strike.*

*Photo 4.3: Displays a student following through with the racket after contact with the auditory tennis ball.*

Serving instruction follows a similar progression. The lesson structure in **Table 4** highlights how underhand and overhand serves can be taught through auditory targets, motor sequencing, and verbal timing cues. These adaptations support skill development by reducing visual dependence and increasing reliance on sound and body awareness.

Finally, cooperative rallying activities in **Table 5** focus on reaction time, control, and communication between partners. These lessons emphasize auditory responsiveness and spatial decision-making while maintaining safety and engagement. Across all lesson stages, instruction incorporates consistent verbal cues, tactile modeling, and gradual increases in movement complexity to support both independence and confidence.

## SECTION 2.2 SAFETY CONSIDERATIONS

### HEALTH AND SAFETY

- Be sure to take the time to complete a warmup before beginning, and a cool down at the end
- "(Player Name), Ready, Swing" – Verbal cadence player must continually listen for during practice skills to know that it is safe to swing and no one is in their space
- All players must wear tennis shoes, a tennis water bottle, hat, and sunscreen are recommended when on outdoor courts.
- The teacher/guide/coach must observe carefully the surrounding environment to provide correct safety cues to the players.
- For beginners, try starting with a safety word such as 'freeze' if an unsafe action is about to occur.

## SECTION 3.1 INTRODUCTORY PRACTICE/LESSON PLANS

TABLE 2. AUDITORY TRACKING & SPATIAL AWARENESS

Time	Category / Task	Activity Description	Equipment & Modifications	Learning Goals / Assessment
10 min	Warm-Up: Sound Orientation	Students walk around the court following sound cues (claps or bell). Practice stopping when sound stops.	Bells, clapping cues, tactile boundaries.	Students demonstrate accurate directional movement based on sound.
15 min	Tracking Drill 1: Find the Bounce	Instructor rolls audible ball from random positions. Students locate and catch before second bounce.	Audible tennis balls.	Students correctly locate 4/5 balls.
10 min	Tracking Drill 2: Direction Change	"Left-Right Pivot" drill — instructor calls direction as ball is rolled. Students turn, orient, and respond.	Audible balls, verbal cues.	Students pivot correctly and react within 2 seconds of cue.
10 min	Tracking Game: Sound Rally	Instructor or peer bounces audible ball rhythmically; student responds with clap or verbal "hit" in rhythm.	Audible balls, metronome or rhythmic sound.	Students synchronize movement to auditory rhythm consistently.
5 min	Cool Down & Reflection	Group relaxation with quiet tones. Discuss: "How did listening guide your movement today?"	Student verbal feedback on what went well and what didn't.	Verbal self-assessment on tracking confidence and accuracy.

**Table 2.** This table outlines a lesson sequence designed to enhance spatial awareness and auditory tracking for students who are blind or have low vision using structured listening and movement activities.

**TABLE 3. GROUNDSTROKES (FOREHAND & BACKHAND)**

Time	Category / Task	Activity Description	Equipment & Modifications	Learning Goals / Assessment
10 min	Warm-Up & Orientation	Students explore tactile court boundaries and practice identifying left/right orientation through auditory cues. Light dynamic stretching.	Tactile court lines, audible balls, verbal direction.	Students accurately identify court zones and demonstrate safe movement.
15 min	Skill Introduction: Grip & Stance	Instructor demonstrates Eastern grip and open stance using hand-over-hand guidance. Students practice "shadow swings" to rhythm cues.	Rackets with tactile grip tape; auditory metronome or clap rhythm.	Students hold racket correctly and complete shadow swing sequence with consistent rhythm.
15 min	Practice Drills: Contact & Consistency	Partner tosses or rolls audible ball; student practices forehand/backhand contact. Focus on consistent timing and follow-through.	Audible foam balls; tactile markers for foot placement.	Checklist: correct grip, swing path, and consistent contact in 4/5 trials.
10 min	Application Game: Rally Challenge	Short-distance rally using audible balls. Coach gives verbal cues ("hit now") to maintain rhythm.	Rackets, audible balls, quiet space.	Peer feedback and observation for consistency and control.
5 min	Cool Down & Reflection	Gentle stretching and verbal reflection: "What helped you find the ball today?"	Soft background music.	Students verbalize one successful strategy for tracking or swing control.

**Table 3.** This table presents progressive instruction for blind and low vision students learning forehand and backhand groundstrokes through auditory and tactile strategies.

**TABLE 4. SERVING (UNDERHAND & OVERHAND)**

Time	Category / Task	Activity Description	Equipment & Modifications	Learning Goals / Assessment
10 min	Warm-Up: Toss & Catch	Students practice tossing and catching audible balls to build timing and auditory tracking.	Audible balls; tactile court lines.	Students demonstrate correct timing and catching form.
10 min	Skill Demonstration	Instructor explains serving cues: "ready-toss-hit." Students perform motion with tactile feedback.	Low net or rope barrier; tactile floor markers for stance.	Students can correctly sequence serve components.
15 min	Serving Drill 1: Target Practice	Serve toward beeping cone or auditory target. Focus on contact consistency and direction.	Beeping target, audible balls.	Accuracy rubric: hit target zone 3/5 times.
10 min	Serving Drill 2: Game Simulation	Serve into designated service box with verbal countdown ("3, 2, 1, serve"). Peer calls "in" or "out."	Audible balls; tactile court markers.	Students complete 5 accurate serves into service area.
5 min	Cool Down & Reflection	Breathing and shoulder rolls; discussion on how auditory targets helped aim.	Soft background music.	Verbal reflection on performance and next goal.

**Table 4.** This table details a progression for developing serving skills with an emphasis on auditory timing, motor sequencing, and spatial targeting.

**TABLE 5. RALLYING (REACTION & CONTROL)**

Time	Category / Task	Activity Description	Equipment & Modifications	Learning Goals / Assessment
10 min	Warm-Up: Reaction Games	"Clap and Catch" — students respond to clap cues by catching sound ball mid-bounce.	Audible balls, open space.	Students respond to auditory cues within 2 seconds.
10 min	Skill Demonstration	Instructor models volley position and short punch motion using tactile guidance.	Short-handled rackets, tactile net boundary.	Students demonstrate correct ready stance and contact form.
15 min	Partner Volley Drill	Partners rally short volleys, using verbal countdown ("ready hit") for timing.	Audible balls, quiet gym area.	Students complete 3–5 controlled volleys per rally.
10 min	Reaction Progression Drill	Instructor increases ball speed or adds direction changes (left/right calls).	Audible balls, tactile cones for spacing.	Students adjust positioning and maintain control 4/5 trials.
5 min	Cool Down & Reflection	Group verbal reflection: "How did you know when to hit?" Gentle arm stretches.	Calm background music.	Students articulate how auditory tracking supported their timing.

**Table 5.** This table describes cooperative rally lessons emphasizing reaction time, control, and communication using auditory cues.

## SECTION 4.1 RESOURCES

### RESOURCES AND VIDEOS FOR FURTHER GUIDANCE

United States Blind Tennis Association (USBTA)  
International Blind Sports Federation (IBSF)  
United States Association of Blind Athletes (USABA)  
[www.campabilities.org](http://www.campabilities.org)

### EQUIPMENT

- <https://handilifesport.com>
- American printing house for the blind

### USEFUL CONTACTS

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