

# THE TALKING PEN

The **TALKING PEN** is a proven tool for developing perceptual skills from basic diagnostics to advance training. Although applications are almost unlimited, it is most often used to diagnose and develop gross and fine motor skills, hand-eye coordination, laterality, directionality, auditory perception, form perception, ocular pursuits and spatial relationships. The disabled, the visually impaired, the brain injured, the hyperactive and the dysgraphic individuals can learn successfully with the help of this pen.

The pen unit is compact, portable and easy to use. It is battery-operated with a rechargeable battery. A charger/adaptor is included.

The **TALKING PEN** makes repetitive manual tasks seem like a game, which encourages practice and improvement. Because the pen provides immediate auditory feedback it becomes self-correcting and can be used without direct supervision. The User can work at his own pace, and the immediate feedback helps both the diagnostician and the User to quickly pinpoint the problem area.

## HOW THE TALKING PEN WORKS

An infrared sensor located in the tip of the pen picks up reflected light and triggers a buzzer to let User know when performance is correct. It responds to any light/dark pattern; and different colors will produce different tones. Shadings of the same color will produce different tones. Segmented or broken lines are used to produce rhythmic tones. The pen helps improve auditory discrimination while developing motor skills.

The pen is silent when its tip is on a dark area,. If the tip is moved to a light area, the pen “squawks”. To silence the pen, move the tip back onto a dark area.

The **TALKING PEN** integrates visual, auditory, kinesthetic and tactile cues to improve performance. Instead of developing these skills separately, the pen enables User to advance in all areas simultaneously, thus reducing training time and effort. This integrated approach produces better carryover to the performance of everyday tasks.

## **USES OF THE TALKING PEN**

Because User needs vary, there is no single best way to use **THE TALKING PEN**. No need to buy special patterns. Sample tracing patterns are included in the manual. The beauty of the pen is that it can be used with any workbook pattern, newspaper, poster, or self-made pattern on any surface. It is also possible to work in space, i.e., following a flashlight with the pen at a distance.

While familiarizing User with the operation of the pen, do allow a greater latitude for correct performance. Adjust the Sensitivity Knob as described in the Operations section of this manual.

After mastering basic broad-lined patterns, gradually move to more difficult patterns. No additional equipment is needed, thereby eliminating any transference. Progress from gross to fine motor skills with smaller sized and narrower patterns.

## **MAKING A PERMANENT RECORD WITH THE TALKING PEN**

To make a permanent record of the tracing activity, place a sheet of carbon paper face down between the pattern and a blank sheet of paper. As pattern is being traced, every movement will be recorded through the carbon paper. Set a timer to determine how quickly and accurately task is performed. To keep a permanent record, write name and date on the carbon copy.

Any pattern in this book may be duplicated on a standard copy machine.

Place a clear sheet of plastic over the pattern being traced to protect it and at the same time provide another work surface.

# IDENTIFICATION OF CONTROLS

## ON-OFF SWITCH AND VOLUME CONTROL

Located on the top of the case. Pull knob UP to switch "ON" The tip will light up Rotate the knob for volume and a change of tone.

## SENSITIVITY CONTROL

Located on top of the case. This control adjusts sensitivity to contrast between line and background; adjust PEN'S sensitivity to different width lines; controls different tones produced by different color contrasts.

## MODE SELECTOR

Located on top of Models IV & VI for selection of auditory or visual response.

## VOLUME CONTROL

Located on top of the case for adjusting to comfortable sound level.

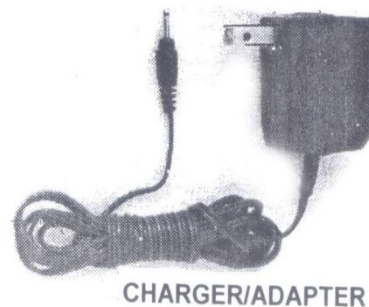
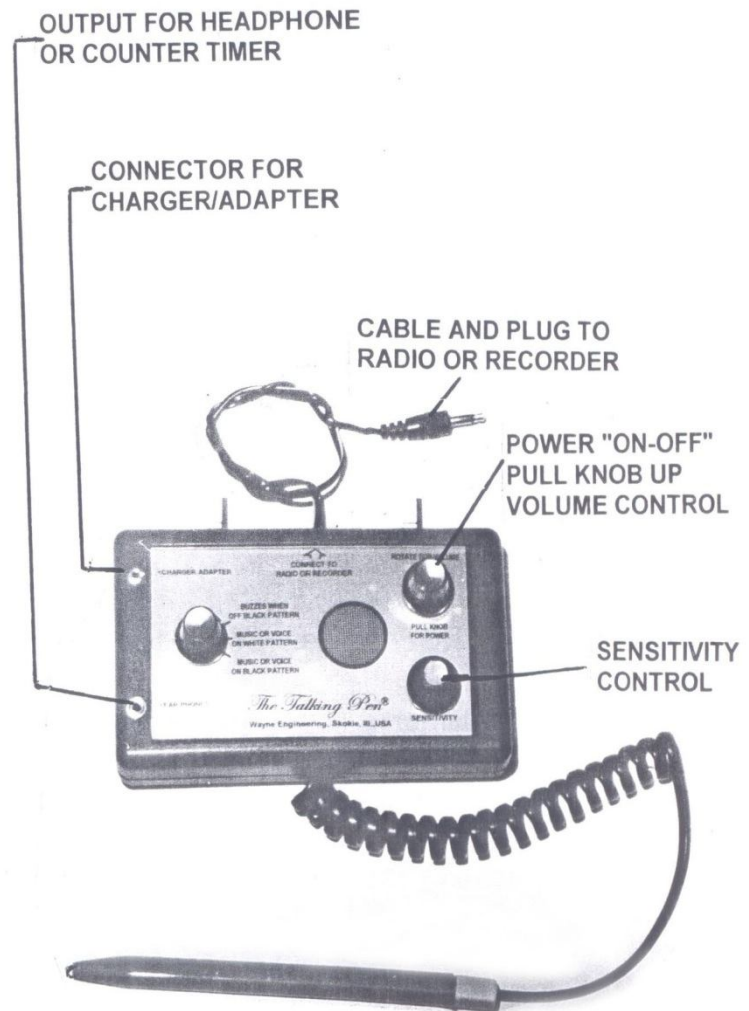
## RECHARGER JACK

Located on the top of the case Charger/adaptor plugs into the sealed-in-batteries

## EAR PHONE JACK

Located on top of the case for headphones or counter-recorder models.

# TALKING PEN MODEL IV



## **SUGGESTED EXERCISERS FOR THE TALKING PEN**

The pen is triangular shape and easy to hold and operate. Grasp the pen like writing tool with the thumb, index finger and middle finger. Hold the pen at no less than a 45 angle from the writing surface. If you wish, you can adjust the Sensitivity Control so that the pen does not produce a sound if not being held at the proper angle.

### **1. Basic tracking**

- a. Trace directly on the pattern. THE TALKING PEN is silent when on a dark pattern and “squawks” when it moves off the dark line. To silence the pen, just return it to the dark line.
- b. For continuous sound, use a white pattern on a dark background. THE TALKING PEN will signal when on the pattern and will be quiet when the tip moves off the pattern onto the dark area. Keep in mind that some students will be fascinated by the sound and will prefer to hear the auditory tone. For such students we suggest you start by using light patterns on a dark background until the novelty wears off and then switch to the dark pattern on a light background.
- c. To further increase motivation and increase accuracy and speed following the initial practice session, set a time limit for tracing the pattern.

### **2. Gross To Fine Motor Transition.**

Start with a large wide-lined pattern, and practice until accuracy is attained. Then trace the same pattern with smaller narrower-lines. Continue practice until goal is reached. Evaluate successful carry-over by removing pattern and having User trace the pattern free-hand.

### **3. Saccadic Fixation**

Use a pattern of black dots in a circle similar to numbers on a clock. Hold the pen above the paper and touch each dot in sequence, first clockwise and then counter-clockwise. Every time the pen misses the center of the dot, a sound is produced.

To develop hand / eye coordination, place the dots randomly on a white surface and repeat this exercise.

By placing white dots on a dark surface in a circle or random position, a sound will be emitted every time the pen touches the dot. Thus, making it easy to monitor performance.

### **3. Figure-Ground Relationship**

Use a pattern of interwoven paths. User must trace each path separately from start to end.

Include camouflages of numbers, letters and shapes on a background of interwoven lines. Identify and trace these objects with the pen.

### **4. Form Perception**

Draw geometric shapes of various widths and heights on a plain background. Ask the User to correctly trace certain objects on the page. By keeping a carbon paper record under the tracing, it is easy to determine how well the User perceives various shapes without direct supervision.

### **5. Handwriting**

The pen can be used :

With any handwriting program.

For tracing connection dots to form letters or words

To practice capital letters alongside its small-case letter

To develop association and discrimination of size and form.

To practice commonly reversed letters, i.e. b/d and p/q.

Assign sounds to different letters by making them in different colors. The letter “b” can be a lighter color (to simulate the sound of a buzzing bee.) and the letter “d” can be a darker color, make the letter “p” in a solid color, and the letter “q” in a striped color to simulate a quacking sound. Letters above the line can be made a different color or shade than the letters (or tails) below the line.

Practice directionality by using different color, shadings, or stripes at the junction where paths cross as in the cursive letters, b,f,k, and l.

To alert user where to start and where to finish, add stripes at the beginning or end of the letter which will cause a different sound to be emitted.

Make letters or numbers in stripes to emit a rhythmic sound beat.

Make the line thicker above or below the line to alert user when the pen crosses over the line.

