Smart VRA Options

IntelligentVRA

Manual VRA

VideoVRA

INTELLIGENT HEARING SYSTEMS

many options, one **smart** system
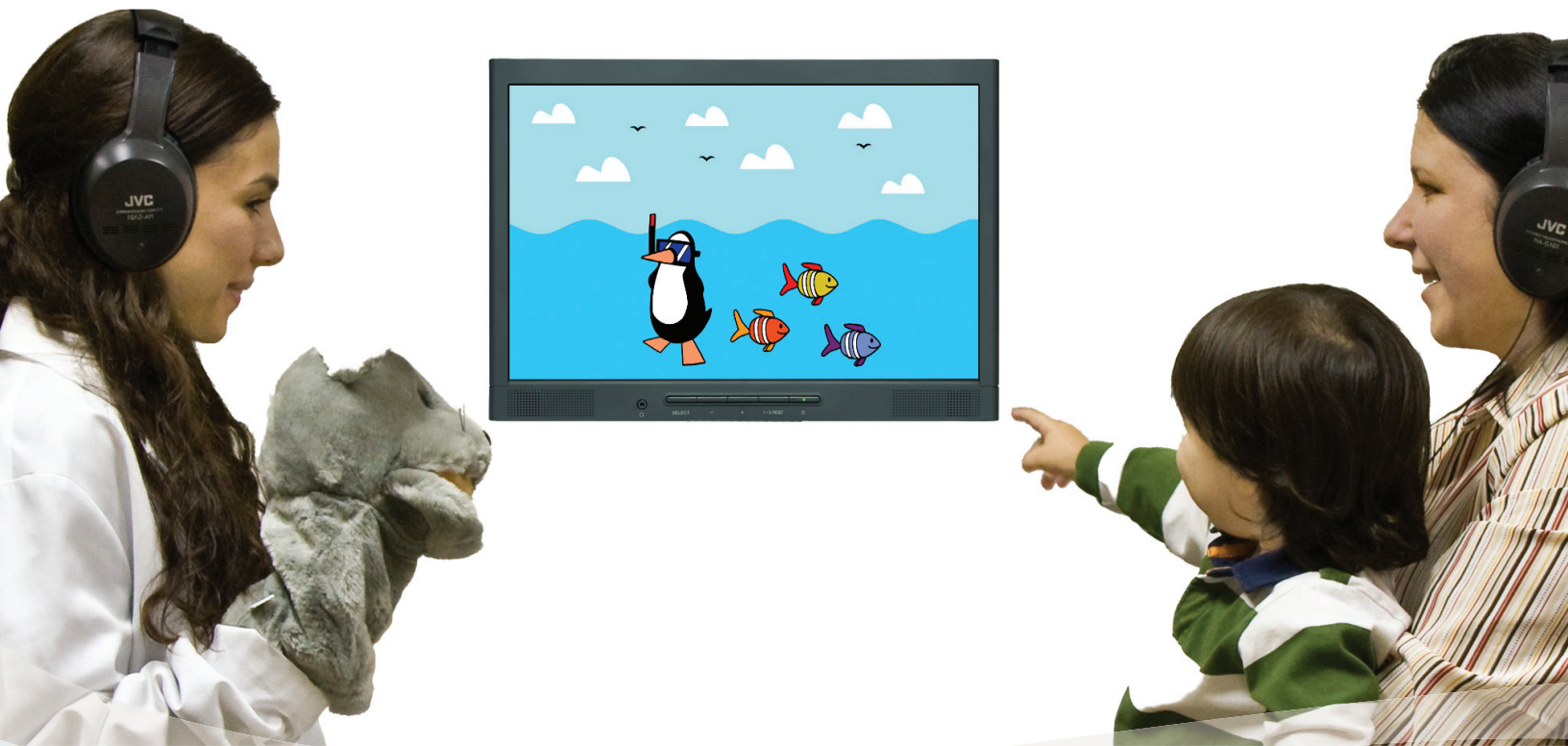
the smart choice for VRA testing

We offer both automated and manual VRA solutions, with both video and traditional toy cabinet options.

Intelligent Visual Reinforcement Audiometry (IVRA) is an advanced computerized tool for automated hearing screening and testing of infants, children, and the developmentally disabled. IVRA takes the speculation out of VRA analysis by providing three automated test routines. IVRA has been extensively tested and clinically proven to be highly successful in its evaluation accuracy and efficiency.

Why switch to automated VRA?

· Tests can be administered by a single examiner who is free to focus on patient behavioral control

· The system automatically selects the frequency and intensity of trials

· Automated VRA testing is faster than manual testing

· The IVRA software automatically generates patient audiograms and trial-by-trial data

IntelligentVRA is available on our Universal Smart Box (USB) and Duet (video reinforcer option) platforms.

In addition to the automated IVRA system, we are pleased to offer two types of stand-alone manual VRA systems that can be used with a user-supplied audiometer: Manual VRA (toy cabinet) and Video VRA.

Intelligent VRA

Automated visual reinforcement audiometry.

- Increased reliability & accuracy by a single examiner
- Choose from our variety of 4 and 10 second colorful, animated wide-screen video clips, or use your own video clips
- Use one of our three automated test routines, administer a speech discrimination paradigm (IVRISD), or run a VRA test manually
- Probe Trials maintain patient attention while testing near threshold
- Control Trials allow you to determine the reliability of a test
- Trial-by-trial reports include detailed information for each test sequence
- Final report includes audiogram and threshold for each frequency tested

CAST™
Classification of Audiograms by Sequential Testing selects the best-fitting audiogram from 9 patterns, for fast and efficient screening.

OHTA™
Optimized Hearing Test Algorithm is designed to test four frequencies, non-sequentially in an intensity staircase fashion.

5-up/5-down
Automated 'step-up, step-down' intensity staircase procedure for testing thresholds at up to four selected frequencies.

Video VRA

Unlimited video reinforcement variety for VRA testing.

- Use with the audiometer of your choice
- Choose from our variety of 4 and 10 second colorful, animated wide-screen videos, or use your own clips
- Design multiple, customized video playlists to keep the child's attention longer
- Easy-to-use controls: activate video reinforcement by simply pushing a button on our response box or innovative wireless response box
- Activate videos using your mouse or keyboard
- Up to two reinforcement monitors and one centering monitor
- Visual Reinforcement Infant Speech Discrimination (VRISD) option to assess infant speech perception
- Windows PC Required
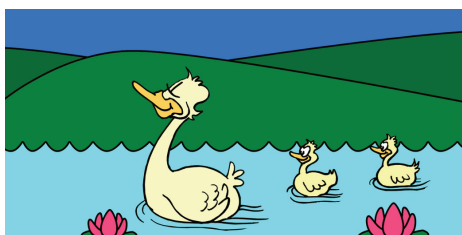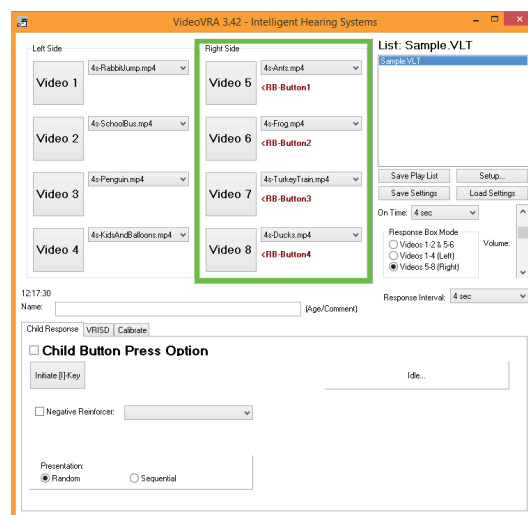
Wireless Response Box

USB Response Box

Manual VRA

traditional toy cabinet reinforcement for VRA testing.

- Use with the audiometer of your choice
- Choose from a large variety of fun, animated toys
- Large, ultra-dark, sturdy acrylic cabinets.
- Select the configuration that meets your needs from 1, 2, 3, 4, or 5 cabinets
- Small, ergonomic and easy to handle response box controls all toys
- Select between toy animation with lights or lights-only reinforcement
- Bright and energy-efficient LED lights

Specifications

IntelligentVRA

Available on the Universal Smart Box (USB) & Duet platforms

Reinforcement Options

Up to 4 acrylic toy cabinets (Universal Smart Box only)

Animated toys and LED lights

Activate lights only or lights and animation

Variety of video clips for video option

Transducers

ER-3C Insert Earphones:

Intensity: 0 - 130 dB SPL

Frequency Range: 125 Hz - 10 kHz

TDH Headphones:

Intensity: 0- 120 dB SPL

Frequency Range: 125 Hz - 12 kHz

Bone Conductor:

Intensity: 0 - 98 dB SPL

Frequency Range: 250 Hz - 8 kHz

Sound field amplifier and speakers

Power Requirements

Universal Smart Box (USB):

100- 240 VAC, 50/60 Hz

1.3 A, 45W

Master Control Box:

100-240 VAC 50/60Hz, 5.5A 65 W

Duet:

115-230 VAC, 50/60Hz

560-350 mA, 30W

Operating Environment

Portable Equipment, Indoor use

Operating temperature: 15 - 35 °C

Relative humidity: 15% to 90% at 40 °C non-condensing

Storage

Temperature: 0 °C - 50 °C

Standards Compliance

Safety: IEC 60601-1 Class II, Type BF

EMC: IEC 60601-1-2

Medical Device Directive: 93/42/EEC

Computer Requirements

Windows 7, 8, or 10 operating system

Minimum 4 GB RAM

Minimum 5 GB hard drive space

Minimum XGA display (1024x768 screen resolution)

Mouse or other pointing device

One free USB Port

Removable media, network drive, or secure Internet storage site for data backup (recommended)

Printer (optional)

Manual VRA

Traditional toy cabinet reinforcers to be used with a user supplied audiometer, PC not required.

Toy Cabinet

Up to 5 acrylic toy cabinets

Variety of animated toys

LED lights

Activate lights only or lights and animation

Power Requirements

100 - 240 VAC, 50/60 Hz, 5.5 A 65 W

Operating Environment

Portable Equipment

Indoor use

Operating temperature: 15-40 °C

Relative humidity: 5% to 90% at 40 °C non-condensing

Storage

Temperature: 0-50°C

VideoVRA

Unilateral and bilateral reinforcers to be used with a user-supplied audiometer

Video format

Includes 24 widescren animated videos

User-supplied MP4, AVI, or MPG

Power Requirements

USB Response Box:

+5V C, 500mA

Powered using USB port

Wireless Response Box:

1.5 V AA alkaline battery

Operating Environment

15 - 35 °C

Storage

Temperature: 0 °C - 50 °C

Computer Requirements

Windows 10 operating system

Minimum 4 GB RAM

Minimum 5 GB hard drive space

Minimum XGA display (1024x768 screen resolution)

Mouse or other pointing device

One free USB Port

Desktop PC with on board video capability; three VGA, DVI, or HDMI display ports (one for main control window, and two for video reinforcers (for bilateral video reinforcement)