# Visual Training System

ntegration of games and digital treatment, transforming traditional treatments for strabismus & amblyopia



## **BOKE MEDICAL**

BOKE Medical originated from BOKE Game + Strategy. It aims to explore the infinite possibility of applying games in medical treatment. It is committed to solving the pain points such as poor patient compliance.

BOKE Medical now has a team of nearly 100 members. Its business covers medical industry, game, digital treatment, etc. At present, BOKE has acquired a number of achievements in the intervention treatment of strabismus, amblyopia and other diseases.

## BOKE Technology Co., Ltd.

BOKE was incorporated in April 2010.

It has ranked among the top 100 internet companies in China for the 5th year, with

more

than 500 million registered users.

Among its 40 million daily active users, 70% are from the overseas market. Its total tax contribution has exceeded 4 billion RMB.



Do you often see young kids wearing eye patches? This is probably because they have

## Amblyopia



Amblyopia is a condition in which the best-corrected visual acuity in one or both eyes during visual development is lower than that of a normal child of the corresponding age while there is no organic lesion on eye examination.

- It is a **serious** eye disease that endangers the visual function of children, and it can cause amblyopia to worsen and even blindness without timely treatment.
- The overall prevalence rate of amblyopia is around **3.3%**. At present, the total number of children with amblyopia at the **age of 13** and younger in China is as high as about 10 million.
- Amblyopia is a **reversible** childhood eye disease, and the earlier the intervention, the easier for it to be cured.

Sources:

٠

٠

- Analysis of Refractive Screening Results for Newly Admitted Children from 2017 to 2019 in Dongcheng District of Beijing, Chinese Primary Health Care, 2021,35(01)
- Investigation and Analysis of Amblyopia in Preschool Children in Shanghai Yangpu District, Chinese Journal
   of Optometry Ophthalmology and Visual Science, 2013(05)
- A study on the Current Status of Refractive Development in Preschool Children in Ma'anshan City and the Affecting Factors, Anhui Medical University, 2014(01)



# Why are traditional treatment options difficult to implement?

## Patient's Unwillingness

"Kids don't have the patience to do threading of a whole thread."

## Patient's Refusal to Cooperate

"After 3 months of training, my kid's vision did not improve at all after review. It turns out that he often took off the eye patch or shut his eyes in training."

## 🛞 High Cost

"The doctor's plan is to come to the hospital to train 20 times, however, we can't take that much time off, so we begin to worry about treatment be delayed."

## Jack of Sense of Achievement

"My child always asks me when he can stop training, because repeating the same thing every day, it's not working at all, and I can only give him comfort and encouragement."



# Our Product Vision Planet - Visual Training System

## 📕 Valid effectiveness

The gamified AI medical software certified by the National Medical Products Administration.

Using multiple testing environments to collect authentic data and verify product effectiveness.

## 8 High patient compliance

We have exclusive stories written by acclaimed playwrights in children's play.

In a six-month clinical trial, we recorded a 0 shedding rate, and 90% of patients completed training on their own.

## 💙 Parents Assured

Exclusive parental-end app, control dual ends with one button. Real-time training progress notification, summary and report



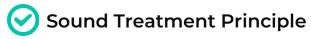
Parental end



# Valid Effectiveness

More than a game, an officially certified medical equipment





The product adopts the industry's widely recognized principles in strabismus and amblyopia treatment and realizes the treatment functions through specialized scenario design, character models and interactions.

<b>Domestic Medical Applia</b>	nce (Registered) — "Zhe Xie Zhu Zhun No. 20212210397" basic info				
Registration Certificate No.	Zhe Xie Zhu Zhun No. 20212210397				
Name of Registrant	BOKE Shukang Visual Technology (Hangzhou) Company Limited				
Registrant Address	Room 708 Building 5 No.1818 - 2 Wenyi West Road Yuhang Street, Yuhang District of Hangzhou City, Zhejiang province				
Production Address	Room 708 Building 5 No.1818 - 2 Wenyi West Road Yuhang Street, Yuhang District of Hangzhou City, Zhejiang province				
Product Name	Visual Training System				
Management Category	Class II				
Model Specification	VSMR-S				
Structure & Composition/Main Components	This product is a visual training system application downloaded from network (or installed using a USB drive). Its functions include amblyo training (visual stimulation training, fine vision training), binocular visi training (Eye-ball training, contrast sensitivity training, simultaneous training, tusion training, stereo vision training).				
Scope of	Used for strabismus and amblyopia treatment for children as well as				
Application/Intended Use	binocular vision dysfunction.				
Product Storage & Expiration Date	7				
Appendix					
Other Content	This file is used together with "Zhe Xie Zhu Zhun No. 20212210379".				
Remarks	This file is used together with "Zhe Xie Zhu Zhun No. 20212210379"				
Approval Department	Drug Supervision and Administration of Zhejlang Province				
Approval Date	April 11 2022				
Valid Until	26-Aug-16				
Changes	The enterprise name was changed from Hangzhou Weishimin Visual Technology Company Limited to BOKE Shukang Visual Technology (Hangzhou) Company Limited. The Registrant changed the product manual and label ** based on the changed content approved, accordindy.				
Note	Details				

#### Officially Certified Program

The product has obtained the Registration Certificate of Class II Medical Device, which means that the product has a "legal ID" as a medical device.

 $\bullet$   $\bullet$   $\bullet$ 





In clinical trials, patients have improved their vision to the standard vision acuity for their age after 1 month of training with the product, and have fully recovered in 4 months.

 $\bullet$   $\bullet$   $\bullet$ 



• • •

## Three Major Therapeutic Effects

The training process is based on multiple therapeutic principles





#### Monocular vision improvement (improve vision of the lazy eye)

The training process combines grating stimulation, red light stimulation, fine vision training, special effects stimulation and other internationally certified visual training methods to improve the visual acuity of the lazy eye. The corresponding area of the gaze receives electrical stimulus, and the rapidly changing dynamic effects bring about changes in eye accommodation.

#### **Binocular vision training** (exercise stereoscopic perception)

- Based on the principle of red-blue vision separation, the patient is forced to look at the picture with both eyes at the same time, thus gradually establishing normal simultaneous vision.
- Using the principle of light filtering, the patient is able to train integrated and stereoscopic vision by allowing the different images seen by the two eyes to overlap in the brain while gazing at the same time.

#### **Eye-brain-hand coordination** (promote neurological development)

- During training, the patient forms cognition based on the information acquired by the brain to control eyes and body, which can improve the patient's hand-eyebrain coordination.
- Content-specific design, the patient's eye tracking ability and eye movement ability are exercised simultaneously.



# **Visible Progress**

Every effort counts and is fully recorded

Question 1 What numb foll	er can you tell from the wing picture?					
	Α 0					
	<b>B</b> 8 <b>C</b> 9					
	D Cann't tell					
Next						

No hospital visit required Vision acuity assessment at home\*

\*Specifically, near vision assessment and binocular visual function testing

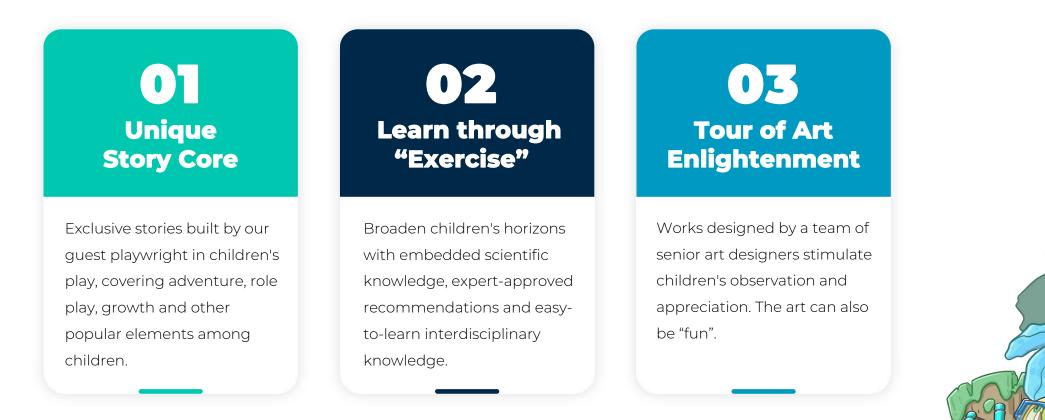


Daily training reports generated automatically Clear chart illustration



# High patient compliance

Say no to dullness and choose a more interesting plan for amblyopia treatment





# **Clinical Feedback**

Positive User Feedback

In clinical practice, a **higher percentage** of children who are able to **adhere to daily training** are using this product compared to those following traditional treatment plans.

The majority of the parents reported that their children were able to complete the entire rehabilitation process in a **positive** state of mind. 01

02

Mr. Zhou, whose kid is 7 years old. After 4 months of training, his kid's single eye vision was improved from 0.5 to 1.0

"My child asked me today when he could start training?"

Mr. Liu, whose kid is 4 years old. After 1 month of training, the adaption was good.

"My kid loves it and adapts well."

## 03

Mrs. Wang, whose kid is 6 years old. After 3 months of training, her kid's left eye vision changed from  $0.5 \rightarrow 0.8$ , right eye vision changed from  $0.4 \rightarrow 0.8$ .

"My child's vision is currently back to 0.8 with glasses, which the doctor said is a very good result."

## 04

Mrs. Ai, whose kid is 6 years old. After 2 weeks of training, the feedback was quite good.

"His interest in the second week was even higher than in the first, and the tablet arrived today, which may offer better experience."



# **Parents Assured**

Think what you think & solve all your worries



Customized training hours

- Effective dose control
- More efficient training

- Timed push messages
  - Personalized push notification
  - No parents' accompany required



Parental end ensures "dose control"



- Check progress at any time on app
- Accessible anytime

anywhere



- Check at any time from the cloud
- Precise control of the process



- Statistics of different stimulation types
- Daily training reports generated automatically



# Have Everything Under Control

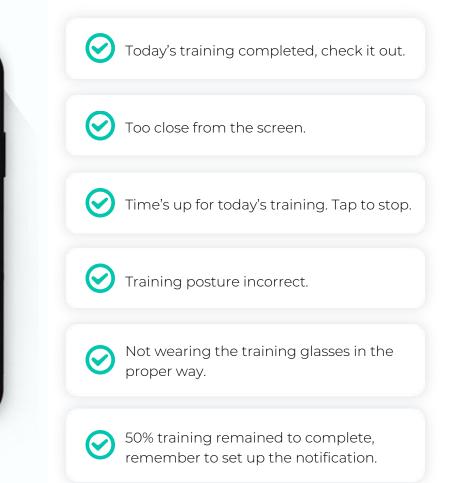
Push of report and status, receive all first-hand information



**Training End** 

		Ê		A
Profile	Today	History	Report	Manag
	/lanager	nent	ith that of the	device
	days of eac			2d 💙
Daily hours			40m 💙	
Training	period		20:00-2	20:45 >
Training under 50% Reminder			Tue 1	14:00 >
Training	under 100%	Reminder	Sun 1	L4:00 >
Trainir	ng Push	Message	)	
When s	starting			
When p	pausing			
When completed				0

**Parental end** 





# **Real-time AI Visual Engine**

Whole-process tracking helps parents monitor at ease

Customization by the R&D team

**Proprietary real-time Al Visual Engine** Using Al algorithm to accurately locate the pupil center coordinates

Quick extract of facial features and specific items

Automatic recognition and judgment in a short time

Feedback on the training process in "seconds" Recognition efficiency up to 98%

Ensure accurate and effective training



Real-time AI monitoring with front camera on the tablet

Automatic Pause



#### Proper wearing

- With or without wearing
- Is wearing proper?

#### Training posture

- Angle monitoring
- Too close/too far

#### Degree of concentration

- Distraction
- Is the sight-line focused?

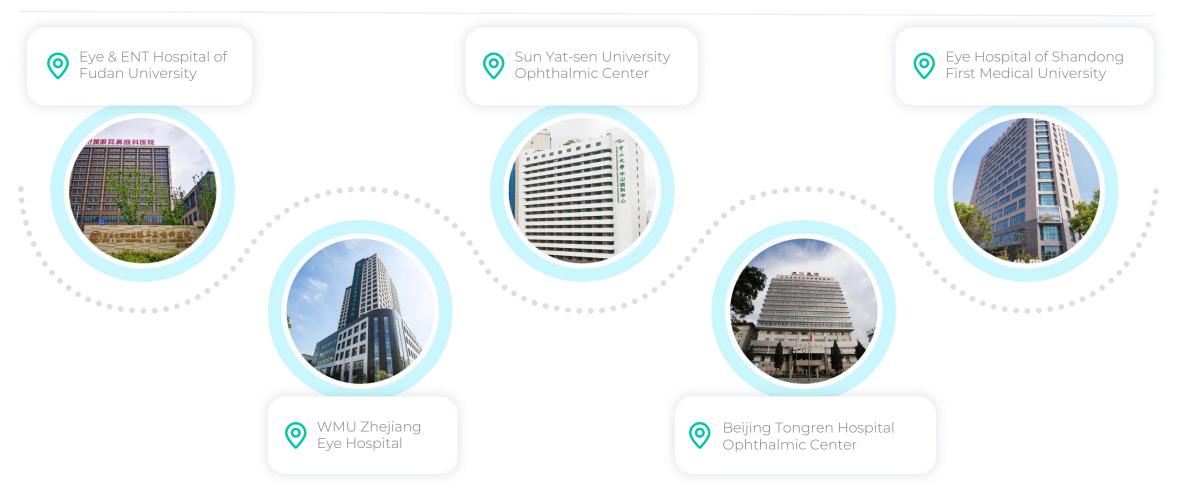


	Traditional Treatment	Other Visual Training Software	Vision Planet
Functional Principle	Single principle	One principle for one module	Multiple-principles-integrated
Training Content	Boring, dull, merely by looking at gratings	Clumsy combination and stack of content	Novel design, immersive experience
Used on	Hardware, fixed place	Computer, fixed place	Mobile devices, anywhere anytime
Therapeutic Dose Control	Depending on patient themselves	Depending on patient themselves	Real-time control from cloud
Near Vision Assessment	None	None	Yes
Treatment Outcome Tracking	None	Partially presented	Yes, with all-round records
Treatment Cost	Moderate	High	Moderate
Patient Compliance	Low	Moderate	High (6 months of clinical treatment, 0% churn rate)
Parents Participation	Parental accompany required	Parental accompany required	Automatic full-process AI monitoring
Data Accumulation	Manual statistics required	Average	Automatic collection, high digitization
Rehabilitation Results Feedback	Regular hospital revisit	Regular hospital revisit	Online consultation available anytime
Training Quality Monitoring	None	None	Real-time AI monitoring and reminder



# **Cooperation with authorities**

Efficient communication with leading eye hospitals in China is underway to jointly establish a clinical research center





# **Thank You for Your Interest!**



Scan the QR code to follow our Wechat official account and get detailed demo video.



**B**・ K
を
酸売
医
方

Market sales: wangshiqing@boke.com