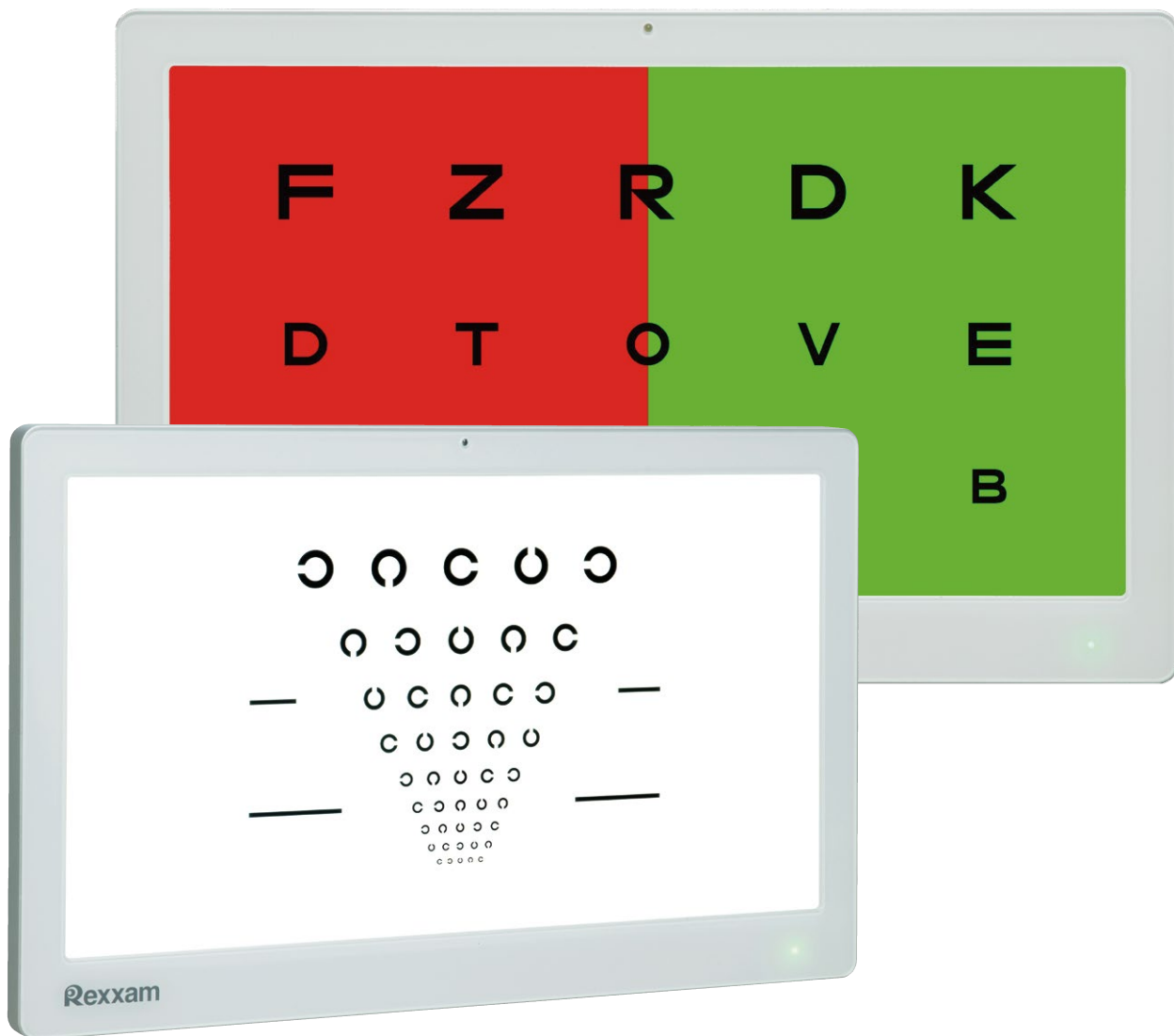


# LCD-1000/1000P

# Chart System



## About Us

### Rex + Max = Rexxam

Rexxam, which means 'the king of the kings', is a respected and reliable brand.

Rexxam is a Japanese company with a celebrated 60 year history. With over 3,000 employees worldwide, Rexxam manufacture a wide range of products for various industries; from factory automation, automobiles and air conditioning systems, to beer and ski boots.

Since 1986, Rexxam has manufactured various high quality products for leading brands in the eye care industry, including SHIN-NIPPON. Rexxam had developed and manufactured products for SHIN-NIPPON since 1993 and in 2014 the company took over the SHIN-NIPPON brand.

We will be bringing high quality ophthalmic equipment to a global market. By combining precision engineering with industry leading innovation and experience in mass production, Rexxam produce unique products to support eye care specialists across the world.

### Quality in vision care, we are Rexxam.



1960  
Foundation of Rexxam

1986  
Rexxam started the development and manufacturing of ophthalmic devices as an OEM supplier

1993  
Rexxam became the main OEM partner for SHIN-NIPPON  
**SHIN-NIPPON**

2014  
Rexxam acquired the SHIN-NIPPON brand  
**SHIN-NIPPON** by **Rexxam**

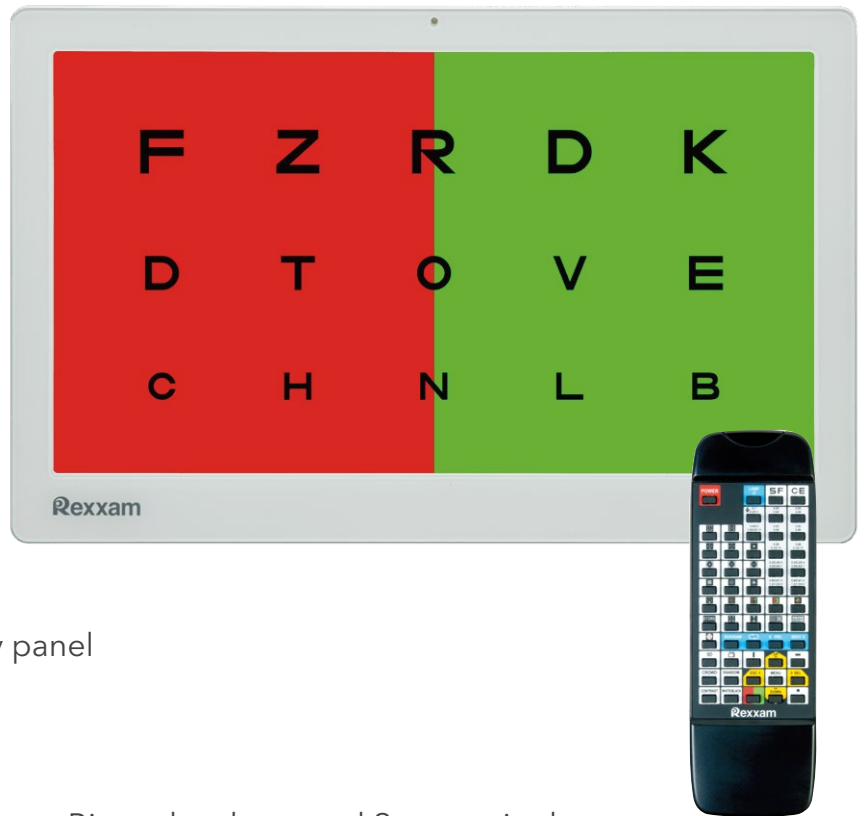
2018  
The manufacturer brand Rexxam was inaugurated  
**Rexxam**

**Rexxam**  
Quality in vision care

Proudly  Made in Japan



# LCD-1000 and LCD-1000P



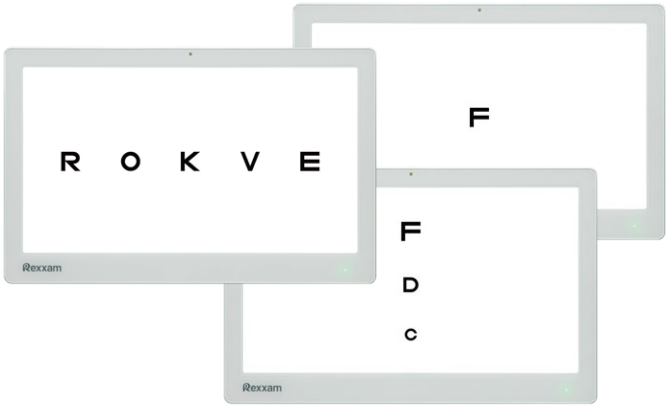
- High resolution 24 inch LCD display panel
- Circular polarisation\*
- Various Optotype charts, ETDRS charts, Binocular charts and Stereopsis charts.
- Spatial Frequency Contrast Sensitivity test
- Contrast test and Pseudoisochromatic Colour test
- Bright white LED for Maddox test / fixation point
- Randomization of optotype charts
- Line masking (H/V), single optotype masking
- Program mode up to 40 steps
- Supports VA Decimal, Snellen Feet, Snellen Metre and LogMAR
- Test distance up to 8 metres
- Display of movies and pictures
- Fully integrated in DR-900 Digital Refractor GUI
- Windows embedded operating system

# Circular Polarisation

Depending on customer’s preference, LCD-1000P uses Circular Polarisation as image separation for binocular testing; whereas LCD-1000 uses Red/Green image separation method. Circular Polarisation provides 100% image separation that prevents ‘ghost-image’, enhances readability, improves display contrast and reduces glare. Both LCD-1000P and LCD-1000 offer the same features.

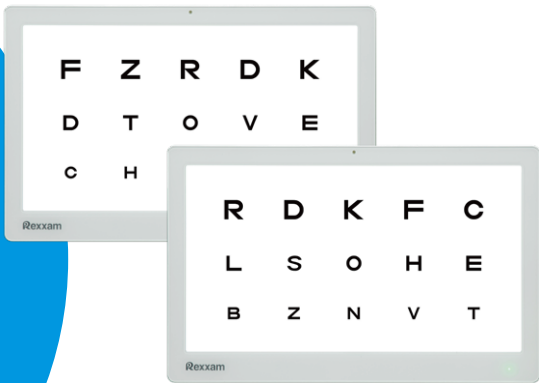
## Masking

It is possible to mask all Optotypes in horizontal row or vertical column or single character. The masked Optotype can either be displayed in its default position or in the screen middle position. Masking will be maintained when selecting the next Optotype chart.



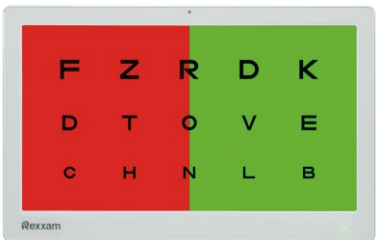
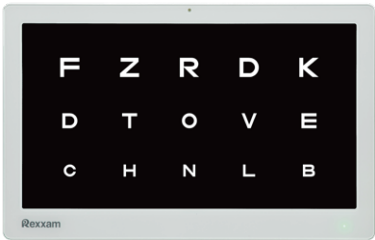
## Randomisation

All Optotype charts can be randomised when the chart is in full screen, masked (horizontal / vertical) or single character.



## Reversed-Contrast - White on Black\*

The LCD-1000(P) Optotype can be set to reversed-contrast where the screen background is black, as some practitioners may prefer to use this option on patients with specific needs. When using a white background, the brightness can be set to accommodate the room light condition.



## Red / Green Filter

The Red/Green filter can be overlay on all Visual Acuity Optotype charts for quick assessment of monocular or binocular balance

\* Only available in combination with RC

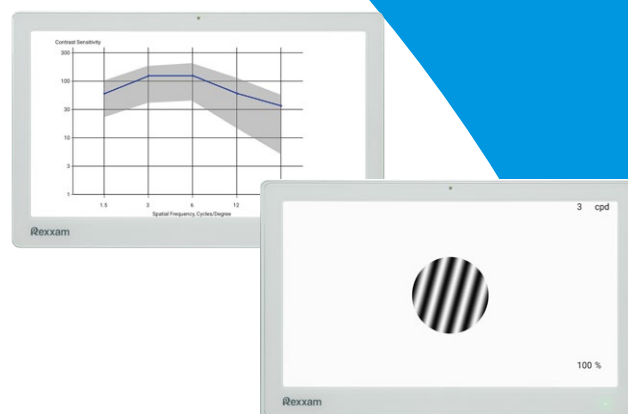


## Spatial Frequency Contrast Sensitivity test

The Spatial Frequency Contrast Sensitivity test is available in:

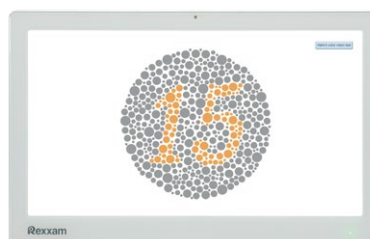
- 4 Frequency (cycle per degree) and 5 Contrast levels (%)
- 5 Frequency (cycle per degree) and 10 Contrast levels (%)

The test results are graphically displayed and can be exported for further analysis.



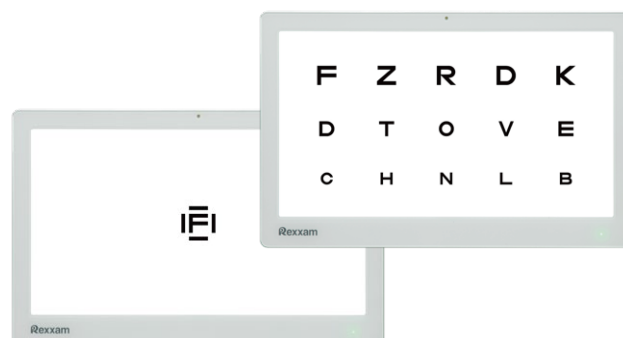
## Pseudoisochromatic colour vision test\*

The LCD-1000(P) Pseudoisochromatic colour test charts provide colour perception examination to patients suffering from colour deficiency.



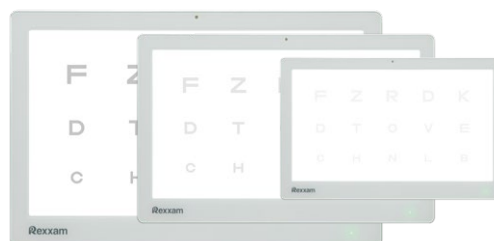
## Crowded Optotype\*

Optotype can be displayed in normal 'grid' format or 'overcrowded' format. You can isolate Single Optotype by using the 4 isolating bars.



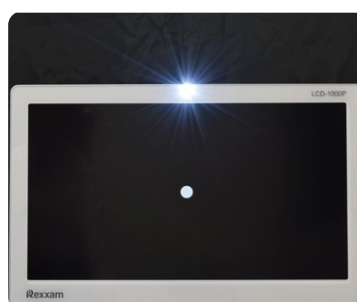
## Contrast test

Contrast Sensitivity test helps to determine what level of contrast a patient could detect for a given Optotype size. The LCD-1000(P) contrast level can vary from 100% ~ 6%.



## Maddox White LED

The LCD-1000(P) uses an integrated white LED light for the Maddox test. The intensity of this LED light is adjustable up to 10 levels to suit customer's preference. You can also use this LED light as patient's fixation point.



\* Only available in combination with RC

LCD-1000 / 1000P Chart overview

Both LCD-1000P and LCD-1000 shared the same set of Optotype charts. The main difference is that LCD-1000P uses Circular polarisation image separation method, whereas LCD-1000 uses the Red/Green method. LCD-1000 supports also the Hiragana Optotype Chart (Japanese customers).

Optotype charts

<div><div>P H C</div><div>E R T</div></div>	<div><div>2 8 5</div><div>4 7 9</div></div>	<div><div>0 0 0</div><div>0 0 0</div></div>	<div><div>Ξ E M</div><div>М E W</div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div>つ く け</div><div>と こ に</div></div>
Sloan Letters	Numbers	Landolt Rings	Tumbling E	Illiterate charts	Pigassou charts	Hiragana charts(*)

Maddox / fixation chart



Astigmatism charts



ETDRS charts



Refraction Balance charts



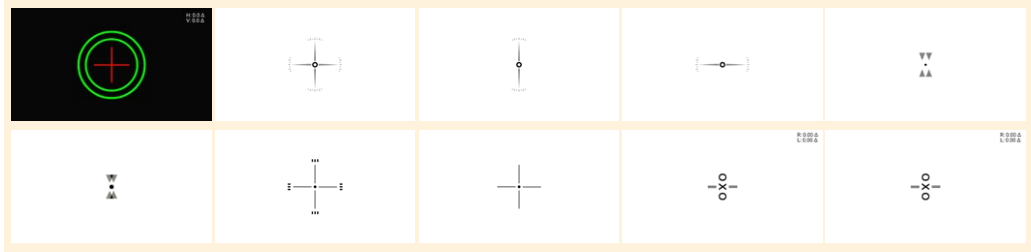
Stereopsis charts



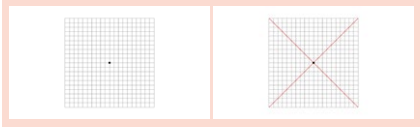
Aniseikonia charts



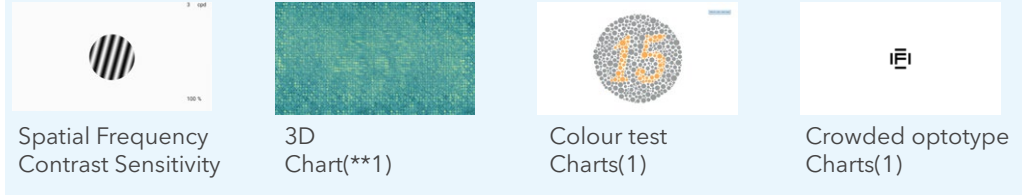
Binocular (strabismus) charts



Amsler Grid charts



Special charts



\*) LCD-1000 only  
\*\*) LCD-1000P only  
1)Only available in combination with RC  
All chart representations are based on LCD-1000P

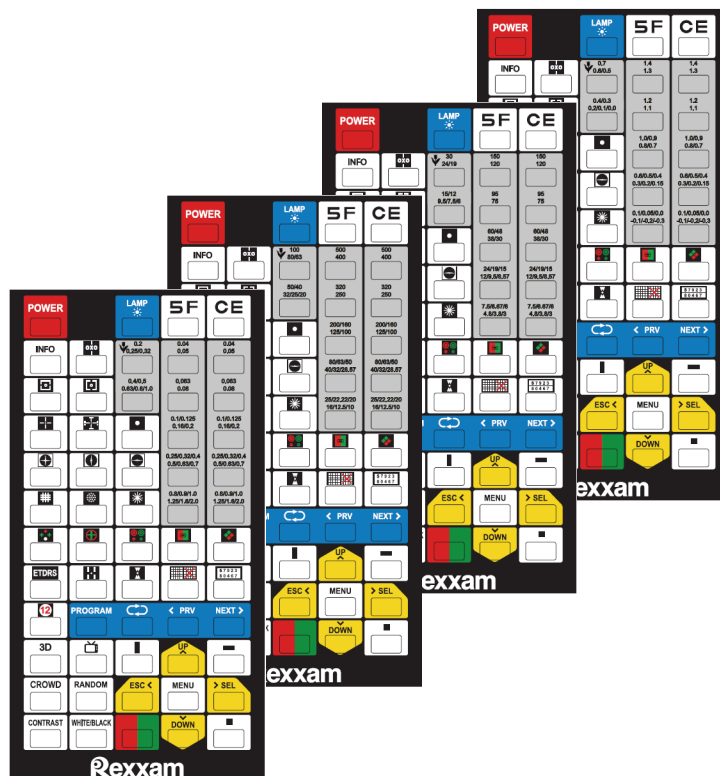
## LCD-1000 / 1000P Control

The LCD-1000(P) offers Visual Acuity charts in Decimal, Snellen (Ft), Snellen (M) and LogMAR for clinical practices. VA can be displayed up to 20\* different levels on the LCD-1000(P). 4 types of matching VA display overlay can easily be adapted on the remote control. Up to 4 different channels can be set on the remote control to prevent interference with another LCD-1000(P) within close proximity.

\*) depending on the test distance

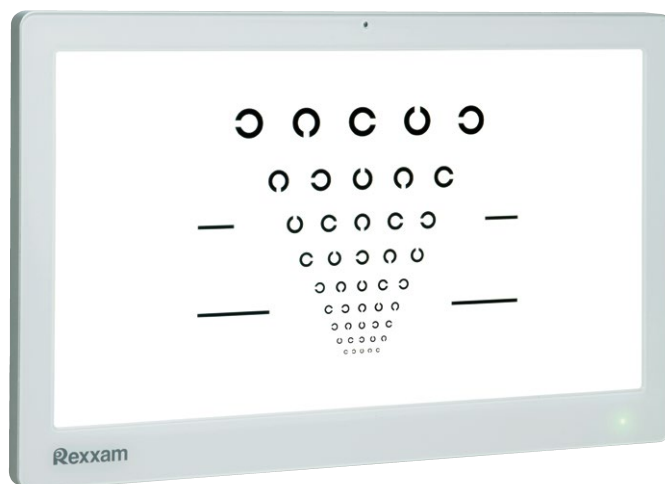
### Visual Acuity progression/notation overview

Letters, Numbers, Tumbling E, Landolt C			
Decimal	Snellen Ft	Snellen M	LogMAR
0.04	500/20	150/6	1.4
0.05	400/20	120/6	1.3
0.063	320/20	95/6	1.2
0.08	250/20	75/6	1.1
0.1	200/20	60/6	1.0
0.125	160/20	48/6	0.9
0.16	125/20	38/6	0.8
0.2	100/20	30/6	0.7
0.25	80/20	25/6	0.6
0.32	63/20	19/6	0.5
0.4	50/20	15/6	0.4
0.5	40/20	12/6	0.3
0.63	32/20	9,5/6	0.2
0.7	28,5/20	8,6/6	0.15
0.8	25/20	7,5/6	0.1
0.9	22,2/20	6,7/6	0.05
1.0	20/20	6/6	0.0
1.25	16/20	4,8/6	-0.1
1.6	12,5/20	3,8/6	-0.2
2.0	10/20	3/6	-0.3



### LCD-1000(P) integration with DR-900 Digital Refractor

The LCD-1000(P) functions as a standalone system, using the designated remote control. LCD-1000(P) can also be used with Rexxam Digital Refractor DR-900 (via infrared connection) to function as an integrated refraction system.





		LCD-1000	LCD-1000P
Monitor	Type	24 Inch TFT LED Backlight	
	Resolution	1920(H) x 1080(V) Pixels	
Functions	Chart	1.Landolt 2.Thumbling E 3.Numbers 4.Letters 5.Child / Pigassou 6.Special	
	Masking	Single / Horizontal Line / Vertical Line	
	Filter	Red and Green	Red and Green Circular Polarized Filter
	Special Function	Mirror mode / Contrast / White and Black reverse / Random / Crowd	
	Working Distance	1.0 ~ 8.0m (Step 0.25m) Some charts will appear incomplete due to difference between screen resolution and image size.	
	Control Device	Wireless IR remote control Digital refractor DR-900	
	Screen Saver Function	Screen off / Chart show (OFF, 5second, 10second, 30second)	
	Screen Saver Wating Time	5min / 10min / 30min	
Power	Power Voltage	Main Unit AC Adaptor	DC 12V 3.4A AC 100 - 240 V , 50/60Hz
	Power Consumption	70 VA	
Size	Body	Weight	5 kg
		Dimensions	572mm(W) x 46mm(D) x 361mm(H)      573mm(W) x 46mm(D) x 363mm(H)
	Remote Controller	Weight	140 g
		Dimensions	64mm(W) x 20mm(D) x 195mm(H)

## Included Items

- Wall Mount VESA
- Red and Green Glass
- Circular Polarisation Glass\*
- Remote Controller
- Remote Controller overlay's

\*LCD-1000P only



Wall Mount VESA



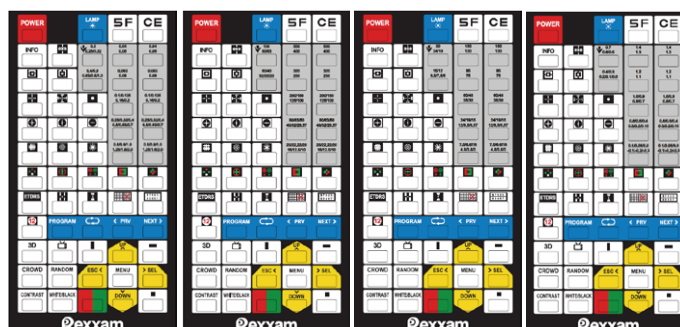
Red and Green Glass



Circular Polarisation Glass\*



Remote Controller



Remote Controller overlay's - Decimal, Snellen Feet, Snellen Meter and LogMAR

Design and specifications are subject to change without notice.

## Manufacturer



Quality in vision care

**Rexxam Co.,Ltd.**  
**Kagawa factory**

958 Ikeuchi, Konan-cho,  
Takamatsu-shi, Kagawa-ken,  
761-1494 Japan

## Contact

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**Eye-care Instruments Sales Dept. Tokyo Office**

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Website:https://www.rexxam.co.jp

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