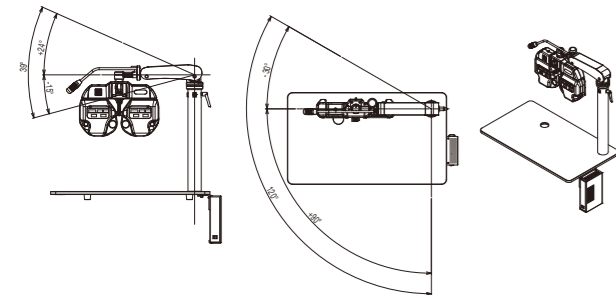


For over-fence communication, etc.

Dimensions of special table top for refractor



Specifications

- Dimensions: 780 mm (W) x 450 mm (D) x 751 mm (H) (with maximum arm angle)
- Weight: approx. 15 kg
- Operation: arm movable angle -15° to +24° arm rotation angle -30° to +90°
- Can be fixed by screws

Dimensions and Standards

	LCD chart POLA	LCD chart R/G	Auto Lensmeter
Model	L40P24	RG24 RT	ALM ZERO
Dimensions (W x H x D)	695 x 465 x 70 mm	621 x 428 x 76 mm	205 x 455 x 249 mm
Weight	8 kg	12 kg	6 kg (13.2 lbs)
Power consumption	60W	60W	35-55VA
Standard	CE	CE	CE

**WARNING:** To ensure correct usage, read all manuals carefully before using equipment

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. The information in this brochure is correct as of August 2014.

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**RIGHT MFG. CO., LTD.**

Ophthalmic Sales  
1-47-3, Maeno-cho, Itabashi-ku, Tokyo 174-8633, Japan  
Tel: +81-3-3960-2275 Fax: +81-3-3960-2285  
e-mail: eigyousitsu@rightmfg.co.jp

**TOHOKU RIGHT MFG. CO., LTD.**

Ophthalmic Service  
45-1, Aza yashikimae, Nakamura Osato-cho, Kurokawa-gun, Miyagi 981-3521, Japan  
Tel: +81-22-359-3113 Fax: +81-22-359-3213



Associated products for the Refractor  
**Remote Vision RV-II**



Can be operated by RV-II-combined remote control or the Table Operation (Table Pad).

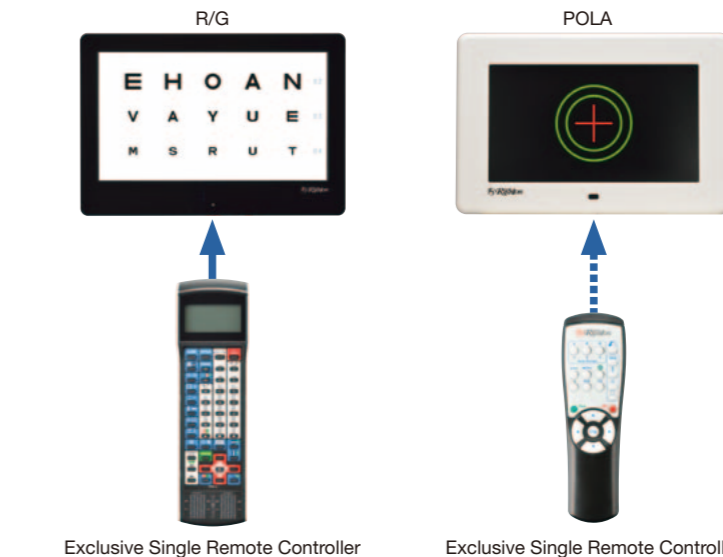
Righton's LCD R/G chart 24 inch (model RG24 RT)

	TYPE A		TYPE B		TYPE C		TYPE D	
	Table Pad	Controller	Table Pad	Controller	Table Pad	Controller	Table Pad	Controller
VA chart	0.04	0.05	0.032	0.04	400	400	120	120
	0.05	0.05	0.04	0.05	300	300	90	90
	0.06	0.05	0.05	0.05	200	200	60	60
	0.08	0.08	0.063	0.08	150/100	150/100	45/30	45/30
	0.1	0.1	0.08	0.1	80/70/60	80/70/60	24/21/18	24/21/18
	0.15	0.15	0.1	0.1	50/40/30	50/40/30	15/12/9	15/12/9
	0.2/0.3/0.4	0.2/0.3/0.4	0.125/0.16	0.125/0.16	25/20/15	25/20/15	7.5/6/4.5	7.5/6/4.5
	0.5/0.6/0.7	0.5/0.6/0.7	0.2/0.25	0.2/0.25	20/15/10	20/15/10	6/4.5/3	6/4.5/3
	0.8/0.9/1.0	0.8/0.9/1.0	0.32/0.4/0.5	0.32/0.4/0.5	Standard	Standard	Standard	Standard
	1.2/1.5/2.0	1.2/1.5/2.0	0.63/0.8/1.0	0.63/0.8/1.0	Standard	Standard	Standard	Standard
	1.25/1.6/2.0	1.25/1.6/2.0	1.25/1.6/2.0	1.25/1.6/2.0	Standard	Standard	Standard	Standard
	0.1	0.1	0.1	0.1	200	200	60	60
	0.2	0.2	0.125	0.125	100	100	30	30
	0.3/0.4/0.5	0.3/0.4/0.5	0.2	0.2	80/60	80/60	24/18	24/18
	0.6/0.7/0.8	0.6/0.7/0.8	0.25/0.32/0.4	0.25/0.32/0.4	50/40/30	50/40/30	15/12/9	15/12/9
0.9/1.0/1.0	0.9/1.0/1.0	0.5/0.63/0.8	0.5/0.63/0.8	25/20/20	25/20/20	7.5/6/6	7.5/6/6	

Righton's LCD POLA Chart 24 inch (model L40P24)

	TYPE A		TYPE B		TYPE C	
	Table Pad	Controller	Table Pad	Controller	Table Pad	Controller
VA chart	0.04	0.05	0.032	0.04	400	400
	0.05	0.05	0.04	0.05	300	300
	0.06	0.05	0.05	0.05	200	200
	0.08	0.08	0.063	0.08	150/100	150/100
	0.1	0.1	0.08	0.1	80/70/60	80/70/60
	0.15	0.15	0.1	0.1	50/40/30	50/40/30
	0.2/0.3/0.4	0.2/0.3/0.4	0.125/0.16	0.125/0.16	25/20/15	25/20/15
	0.5/0.6/0.7	0.5/0.6/0.7	0.2/0.25	0.2/0.25	20/15/10	20/15/10
	0.8/0.9/1.0	0.8/0.9/1.0	0.32/0.4/0.5	0.32/0.4/0.5	20/15/10	20/15/10
	1.0/1.0/1.2	1.0/1.0/1.2	0.63/0.8/1.0	0.63/0.8/1.0	20/15/10	20/15/10
	1.2/1.5/2.0	1.2/1.5/2.0	1.0/1.0/1.25	1.0/1.0/1.25	20/15/10	20/15/10
	1.2/1.5/2.0	1.2/1.5/2.0	1.25/1.6/2.0	1.25/1.6/2.0	20/15/10	20/15/10
	0.1	0.1	0.1	0.1	200	200
	0.2	0.2	0.125	0.125	100	100
	0.3/0.4/0.5	0.3/0.4/0.5	0.2	0.2	80/60	80/60
0.6/0.7/0.8	0.6/0.7/0.8	0.32/0.4	0.32/0.4	50/40/30	50/40/30	
0.9/1.0/1.0	0.9/1.0/1.0	0.5/0.63/0.8	0.5/0.63/0.8	25/20/20	25/20/20	

Righton LCD charts are also available as stand-alone units. Exclusive remote control always comes with the main body.



Specifications

RG24 RT

Model	RG24 RT
LCD type	24-inch IVO TFT LCD / optical polarizing glass type
Resolution	1920 x 1080 pixels
Chart window size	(H) 293.2 x (W) 521.3 mm
Brightness	Max. 250 cd/m <sup>2</sup> (Volume buttons to adjust brightness)
View distance	1.5 - 8 m (0.25 steps)
Memory type	IDE type Flash Disk Module 4G
Power source	DC 12V = 5.0A (Power Adapter)
Power consumption	Less than 60W
Communication	Wireless: IRDE communication Wired: RS232 communication
Dimensions / Weight	621 (W) x 428 (H) x 76 (D) mm / 12 kg
Dimensions / Weight (Remote control)	69.5 (W) x 235.5 (H) x 26 (D) mm / 200g
Data interface	USB, RS232

A regular 24-inch TV stand can be used. Please purchase from a local dealer.

L40P24

Model	L40P24
Screen type	LCD 1920 x 1080 pixels
Size	24"
Maximum contrast	1000:1
Typical luminosity	300 cd/m <sup>2</sup>
Reading distance	2 to 8 meters
L40P 24 power supply	100/240 V - 50/60 Hz
Screen power supply	12 V DC
Consumption	60 W
Protection against electric shocks	Class I
Size	70 (W) x 465 (H) x 695 (L) mm
Weight	8 kg
Connections with phor optors	RS232-C (L90) or IR (Remote Vision)
Sound output	Embedded speakers

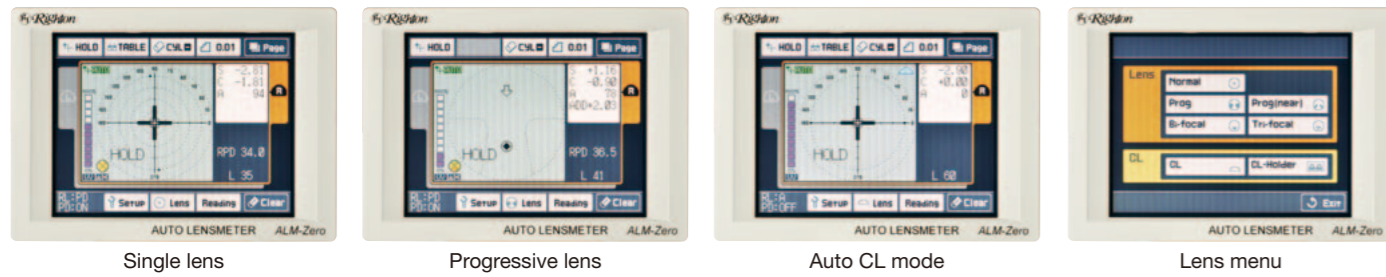
Remote control

Power supply	LR6 AA 1.5V batteries (x2)
Dimensions	55 (W) x 35 (H) x 175 (L) mm
Weight	80 g (without batteries)



# Auto Lensmeter ALM-ZERO

- Best suited for systems with RV-II wired communications
- Easy-to-use 5.7-inch color monitor and touch panel operation
- Convenient automatic detection of UV transmittance (up to 385 nm) while measuring lens power.
- Auto CL mode enables switching the mode to "contact lens" by setting the nose piece of the contact lens measurement



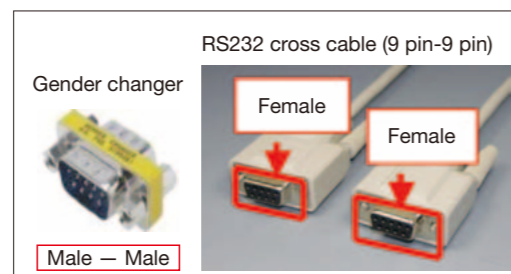
## AML-ZERO specification

Measurement range	Spherical power (SPH)	±25D
	Cylindrical Power (CYL)	±10D
	Axial angle (AXIS)	0 to 180°
	Additional power (ADD)	-2 to 10D
	Prism power	0 to 10Δ
Increment	Diopter	0.01/0.12/0.25D
	Prism	0.01/0.12/0.25Δ
Mode	Cylinder	+ / ± / -
	Prism	Rectangular coordinates / Polar coordinates / Displacement
Measurement time	0.035 seconds (sampling time)	
Wavelength	660 nm	
Diameter of the beam	φ 2.5 mm, φ 5 mm (3000C)	
Diameter of the lens	φ 20 to 120 mm (more than φ 5 mm for CL)	
Interpupillary distance	50 to 86 mm (step: 0.5 mm)	
Measurement object	Spectacle lens / Contact lens / Optical lens	
Abbe numbers	20, 25, 30, 35, 40, 45, 50, 55, 60, 65	
Transmittance of UV	The peak of the wavelength is 385 nm	
Display	5.7 inch TFT LCD (320 x 240 dot) with touch panel	
Alignment	Cross cursor	
Printer	Thermal printer (384 dots/line)	
External communication port	RS232C, USB (USB1.1)	
Dimensions and power source	Dimensions	205 (W) x 445 (H) x 249 (D) mm
	Weight	Approx. 6 kg (13.2 lbs.)
	Voltage	AC 100-240V
	Frequency	50/60 Hz
	Power consumption	35-55VA

Note: May not be available in your country. Please contact your local Righton distributor.



Wire connection to RV-II



Interface cable (currently on the market). Required for communication with the RV-II.

# Righton's LCD R/G chart 24 inch (model RG24 RT)

(Select the chart according to your test.)

	TYPE A	TYPE B	TYPE C	TYPE D	Selective chart by key
Indication	Decimal	Decimal/LogMar	20 / 20	6 / 6	
Area	Europe	Universal	USA	UK	
X.C. Line	+	+	+	+	
Dots	••••	••••	••••	••••	
Red/Green	5 0 5 4 8 5 4 2 6 2 6 2	5 0 5 4 8 5 4 2 6 2 6 2	5 0 5 4 8 5 4 2 6 2 6 2	5 0 5 4 8 5 4 2 6 2 6 2	
Astigmatic dial	☼	☼	☼	☼	☼
Binocular balance	28367	28367	28367	28367	
Binocular RG	9 0 9	9 0 9	9 0 9	9 0 9	
Shober	+	+	+	+	
Muscle balance	+	+	+	+	+
Cross	+	+	+	+	+
Aniseiconia (V)	○	○	○	○	○
Aniseiconia (H)	○	○	○	○	○
Vertical line					
Horizontal line	62548	62548	62548	62548	
Cyclotropia	+	+	+	+	+
Fixation point	•	•	•	•	
Worth's Dots	+	+	+	+	
Differentiated st	••••	••••	••••	••••	••••
Stereoscopic	•	•	•	•	•
ETDRS	D K S N V Z B O K N X U B F R	D K S N V Z B O K N X U B F R	D K S N V Z B O K N X U B F R	D K S N V Z B O K N X U B F R	
ISHIHARA*	12	12	12	12	

\* ISHIHARA can be selected only by Table Pad.

# Righton's LCD POLA Chart 24 inch (model L40P24)

## Regular grade



R/G

## High grade



POLA



RV-II Table Operation (Table Pad)



RV-II-combined Remote Controller

## How to order the VA chart

1. Select your VA indication from Decimal, LogMAR, 20/20 or 6/6.
2. Check your favorite picture chart (see left).
3. Check indication table on the back of the page.
4. Place an order by type and either R/G or POLA chart.

## Features

- 24-inch large monitor
- The charts on the left can be operated and synchronized with the RV-II-combined Remote Controller and Table Pad.
- Selectable test distance (1.5 – 8 m).
- There are two children's charts to choose from: The Allen chart and the standard children's chart.



- Over R/G is possible.
- Regular TV stand can be used.

## VA chart

VA	Type A	Type B	Type C	Type D
	Decimal	Decimal/LogMAR	20/20	6/6
	Europe	Universal	USA	UK
Letter	S D H E C T P V K N X U B F R			
Number	5 2 9 0 4 8 0 6 3 5 3 9 5 8 2			
Tumbling E	E W E M E M E M W E M M			
Landolt	O O O O O O O O O O O O			
Children (standard)	☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼			
Children (Allen)	☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼			

The table on the back page shows available VA types (from A to D). All types have the same VA charts as above.

Unique selective control with either Table Pad and/or Remote Controller

## Features

- 24-inch large monitor
- The charts on the right can be operated and synchronized with the RV-II-combined Remote Controller and Table Pad.
- Selectable test distance (2 – 8 m)
- Over R/G is possible
- There are three children's charts to choose from: PIGASSOU, Zanlonghi Sander and Osterberg.



- Regular TV stand can be used for installation.

## VA chart

VA	Type A	Type B	Type C	Type D	Type E	Type F
	Decimal	Decimal/LogMar	20/20	6/6	Decimal	Decimal/LogMar
	Europe	MKH/Germany	USA	UK	Number (universal)	Letter (universal)
Letter	N R K C D S Z N H V O C H S R					
Number	9 0 5 4 8 2 8 7 3 6 7 4 9 2 5					
Tumbling E	E W E M E M E M W E M M					
Landolt	O O O O O O O O O O O O					
Children 1	☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼					
Children 2	☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼					
Children 3	☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼ ☼					

The table on the back page shows available VA types (from A to F). All types have the same VA charts as above.

	TYPE A	TYPE B	TYPE C	TYPE D	TYPE E	TYPE F	Selective chart by key
Indication	Decimal	Decimal/LogMar	20 / 20	6 / 6	Decimal	Decimal/LogMar	
Area	Europe	MKH/Germany	USA	UK	Number (universal)	Letter (universal)	
Dots	••••	••••	••••	••••	••••	••••	
X.C. Line	+	+	+	+	+	+	
Binocular balance 2	2 9 3 3 4 8 5 5	2 9 3 3 4 8 5 5	2 9 3 3 4 8 5 5	2 9 3 3 4 8 5 5	2 9 3 3 4 8 5 5	2 9 3 3 4 8 5 5	
Binocular RG1	+	+	+	+	+	+	
Red/Green	5 0 5 4 8 5 4 2 6 2 6 2	5 0 5 4 8 5 4 2 6 2 6 2	5 0 5 4 8 5 4 2 6 2 6 2	5 0 5 4 8 5 4 2 6 2 6 2	5 0 5 4 8 5 4 2 6 2 6 2	5 0 5 4 8 5 4 2 6 2 6 2	
Shober	+	+	+	+	+	+	
Worth's Dots	+	+	+	+	+	+	
Fixation point	•	•	•	•	•	•	
Aniseiconia (V)	○	○	○	○	○	○	
Astigmatic dial	☼	☼	☼	☼	☼	☼	
Double pointer	+	+	+	+	+	+	
Muscle balance	+	+	+	+	+	+	
Cross	+	+	+	+	+	+	
Stereoscopic	•	•	•	•	•	•	
Differentiated st	••••	••••	••••	••••	••••	••••	
other	Pointer	Vertical line	Mallet(V)	Mallet(H)	Mallet(V)	Mallet(H)	
ETDRS	D K S N V Z B O K N X U B F R	D K S N V Z B O K N X U B F R	D K S N V Z B O K N X U B F R	D K S N V Z B O K N X U B F R	D K S N V Z B O K N X U B F R	D K S N V Z B O K N X U B F R	
ISHIHARA*	12	12	12	12	12	12	

\* ISHIHARA can be selected only by Table Pad.