

4 p.d. Bekontaktis tonometras akispūdžiui matuoti su pachimetru.

CT-1P

Computerized Tonometer



Function & aesthetics combined in the CT-1P

4.3 Bekontaktis tonometras

The next generation of tonometry

The CT-1P is more stylish and more compact than ever before. The flexible control panel enables the CT-1P to be installed in many different positions in the examination room. The CT-1P provides an innovative operation experience and eliminates the need for a control lever. By combining it with the Topcon Kerato-Refractometer CT-1P built with the same concept, you will save space in your examination room. The air-puff mechanism ensures a soft air-puff and requires less maintenance and cleaning.

The CT-1P is an innovative and high quality non-contact tonometer.

Features

Simple and quick operation

- R/L fully automated measurement
- Easy-to-use touch screen control panel eliminates the need for control lever
- Additional measurement mode

Flexible and space saving layout

- The adjustable control panel can be positioned in any direction
- Compact body

Reliable measurements

- New ergonomic optical head and headrest design
- Stable IOP measurement with soft air-puff
- Corneal thickness measurement for IOP compensation

4 p.d. Bekontaktis tonometras akispūdžiui matuoti su pachimetru

4 p.d. Kokybės kriterijus Nr. 2. Reguliuojamas monitoriaus pasvirimo ir pasukimo kampas apie vertikalią ir horizontalią ašis

4.10 p. Pasmakrio laikiklis



4 p.d. Kokybės kriterijus Nr. 2. Reguliuojamas monitoriaus pasvirimo ir pasukimo kampas apie vertikalią ir horizontalią ašis



Unique features of the CT-1P



4 p.d. Kokybės kriterijus Nr. 3. Automatinis matavimas aktyvuojamas vienu mygtuko paspaudimu: surandantis dešinę/kairę akį, fokusuojantis, išmatuojantis akispūdį ir ragenos storį tiek kartų kiek yra nustatyta, atspausdinantis rezultatus.

4.7 p. Kairės/Dešinės akies automatinis atpažinimas ir rodymas

CT-1P Fully automated with touch screen

The CT-1P takes automated operation to a new level. Simply touch the center of the pupil on the touch screen control panel and the CT-1P automatically obtains right and left eye information immediately. The CT-1P provides an innovative operation experience and eliminates the need for a control lever.



Fully automated! Just touch the center of the pupil

Start

Right eye Automatic R > L Movement Left eye Data printout



4 p.d. Kokybės kriterijus Nr. 3. išmatuojantis akispūdjį ir ragenos storį tiek kartų kiek yra nustatyta

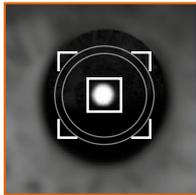
CT-1P features

Additional measurement mode

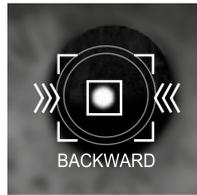
The additional measurement mode will save time and prevent extra work and inconvenience. The CT-1P will continue to measure until the required preset IOP measurement count is obtained.

Manual mode

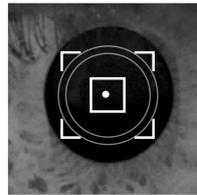
If required, the CT-1P can be set in a manual mode as well. Once the CT detects the pupil position, the movement will retain automated alignment and you simply press the Start button to begin the measurement.



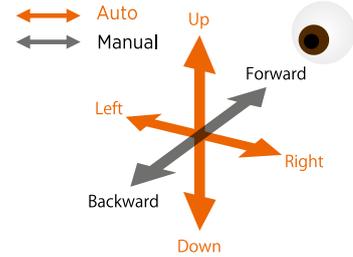
Automatic alignment at corneal apex (Up/Down/Right/Left)



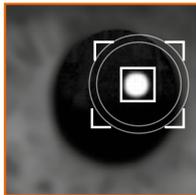
Manual alignment for focus



Start



The difference between the pupil center and the corneal apex allows the CT-1P to easily take measurements.



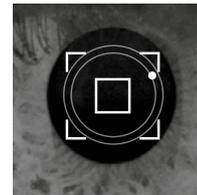
Automatic alignment at corneal apex



Move alignment mark to touch central area of pupil



Manual alignment for focus



Start

Easy-to-use color touch screen control panel

All operating procedures can be performed with the touch screen control panel. The sophisticated

buttons provide an intuitive operator experience.

The CT-1P automatically takes measurement of the right and left eyes quickly and easily.

4.14 p. Galimybė įvesti ir atspausdinti paciento inicialus ekrane

4.7 p. Kairės/Dešinės akies automatinis atpažinimas ir rodymas



4.8 p. Matavimo būdas Automatinis / rankinis

4 p.d. Kokybės kriterijus Nr. 2. Reguliuojamas monitoriaus pasvirimo ir pasukimo kampas apie vertikalią ir horizontalią ašis

CT-1P features



wall set up / behind patient



classic / conventional set up

Flexible and space saving lay out

The adjustable touch screen control panel enables the operator to be positioned anywhere around the patient because the control panel can be faced in a number of different directions. The CT-1P can be positioned in a conventional set up, against a wall, or even in a corner of a room.

The compact body enables the operator to support the patient easily from many different positions during measurement, even when the patient's eye lid needs to be opened. These unique aspects will contribute to space saving and flexible layout in your eye examination room.



corner set up

Conventional position (seated)



Front position (seated)

NEW Style (standing)



Ergonomic operation in standing position

NEW Style corner position



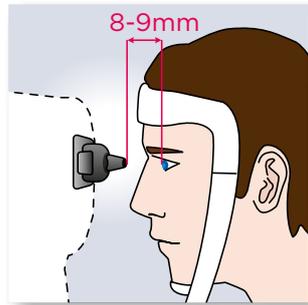
Side position

NEW Style wall position



Rear position

CT-1P features



Safety functions

The CT-1P incorporates new safety functions which have been designed in a fully automated style. The instrument features an innovative safety function to keep the preset distance (ex. 8 - 9 mm) manually between the cornea and the nozzle, in addition to the "TOO CLOSE" notification on the screen and a buzzer alert if the cornea and the instrument are too close.

The safety distance can manually be adjusted very quick and easy. Each patient and each eye need to be adjusted before measurement.

Reduced nozzle maintenance

The nozzle design of the CT-1P helps to prevent dust and debris from entering the chamber. This significantly reduces the need for cleaning and maintenance.

(Ex.)

4.14 p. Galimybė įvesti ir atspausdinti paciento inicialus ekrane

4.13 p. Integruotas spausdintuvas

Barcode: -CT 010017-

OID: JOHN SMITH 1

NAME

2012_01_01 AM 11:00

NO: Patient ID

SN: 0000001

2 TONO. DATA

< R >	ADJ.	< L >	ADJ.
mmHg	mmHg	mmHg	mmHg
12	12	12	12
13	13	10	10
13	13	11	11
AVG		AVG	
12.5	12.5	11.0	11.0

4.3 p. Ragenos storio matavimas bekontaktyje, matuojamas kartu su akispūdžiu

3 Measured value of central corneal thickness

< R >	ADJ.	< L >	ADJ.
hPa	hPa	hPa	hPa
16	16	16	16
17	17	13	13
17	17	14	14
AVG		AVG	
16.5	16.5	14.3	14.3

5 Measured value displayed in "hPa" units

3 PACH.DATA

< R >	< L >
mm	mm
0.511	0.510
0.510	0.509
0.510	0.508
AVG	
0.510	0.509

6 TOPCON Clinic

Built in printer

The CT-1P is equipped with a built in thermal printer that can be easily loaded with a roll of paper.

The CT-1P cuts the paper automatically at the end of printing.

1 Operator ID

2 Measured value of intraocular pressure

3 Measured value of central corneal thickness

4 Measured value displayed in "mmHg" units

5 Measured value displayed in "hPa" units

6 Message column

CT-1P features

4.9 p. Matavimui atlikti būtinas oro kiekis kontroliuojamas ir valdomas kiekvieno matavimo metu.

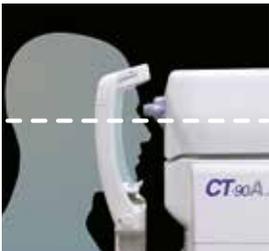


Soft air puff

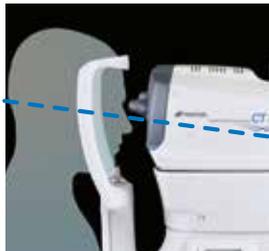
The soft air puff used for measurement leads to less stress and more comfort for a patient and better compliance during the measurement procedure.

The improved software controls the amount of air required for each individual eye.

Ergonomic optical head and headrest design



Topcon conventional model



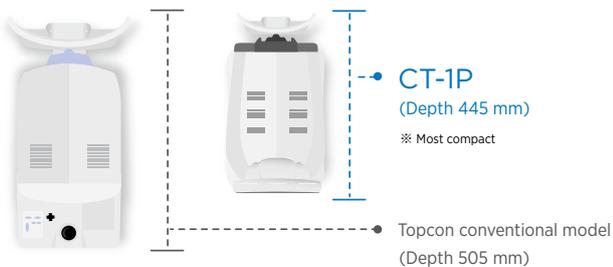
CT-1P

Compact ergonomic design

The CT-1P provides a more comfortable position for the patient due to the fixation target on a 5° downwards angle and the improved chinrest design.

The compact body enables the operator easier access to the patient and therefore better interaction with the patient.

Compact Body



Topcon Imaging and database software.

Connectivity

The CT-1P can be integrated into the Topcon Imaging and database software.

This software enables easy and fast access to patient data and is a useful tool to maintain customer contacts.

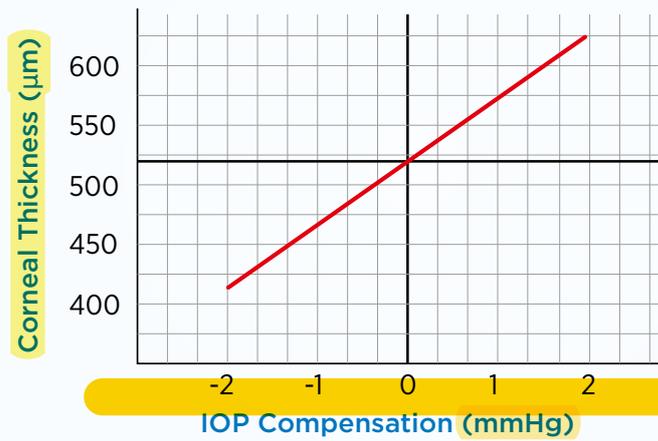
4 p.d. Kokybės kriterijus Nr. 4. Pagal ragenos storį kompensuoto akispūdzio paskaičiavimas



Corneal thickness measurements

The CT-1P provides compensated IOP values with central corneal thickness (CCT). Studies show that the CCT could affect IOP measurements, for exam-

ple IOP values measured using a conventional tonometer are higher in eyes with a thicker cornea, and the diagnosis of normal tension glaucoma can also be affected by thin CCT.



Corneal thickness / IOP compensation

* The formula can be individually adjusted.

Reference: Suzuki S, et. al. "Corneal thickness in an ophthalmologically normal population." *Ophthalmology*. 2005, Aug;112(8):1327-36.



Specifications

Ocular pressure measurement Measuring range	1 to 30 mmHg / 1 to 60 mmHg (1 mmHg step) Average indication: 1 mmHg / 0.1 mmHg steps changeable
Corneal thickness measurement Measuring range	0.4 to 0.75 mm (0.001 mm step)
Monitor	8.5 inch WVGA color LCD monitor, touch panel
Data transport terminal	USB (Import), RS232C (Export), LAN (Export)
Dimensions	286 - 326 mm (W) x 445 - 526 mm (D) x 466 - 615 mm (H)
Weight	19.5 kg
Power supply	100 - 240V AC, 50 - 60Hz, 75VA

4.1 p. Akispūdzio matavimo ribos 1,0+60,0 mmHg, pasirinktinai.

4.2 p. Akispūdzio matavimo žingsnis 1,0 mmHg.

4.4 p. Ragenos storio matavimo diapazonas 0,4+0,75 mm

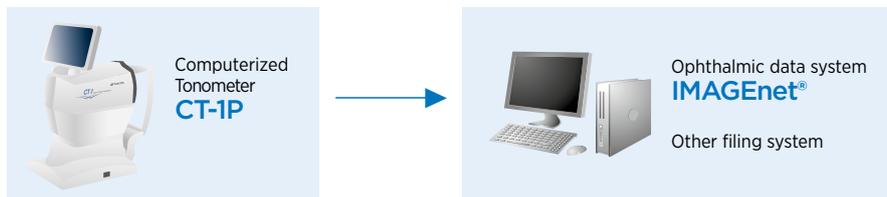
4.5 p. Ragenos storio matavimo žingsnis 0,001 mm

4.6 p. Matavimų monitorius liečiamas, 8,5 colių (inch) įstrižainės, spalvotas monitorius

4.11 p. Duomenų perdavimas RS-232C jungtis, USB, LAN

4 p.d Kokybės kriterijus Nr. 1. Liečiamas, 8,5 colių įstrižainės, WVGA raiškos, spalvotas monitorius

System chart



* Contact Topcon subsidiaries or dealers for system configurations.

IMPORTANT

Subject to change in design and/or specifications without advanced notice. In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation. Medical device Class IIa. Manufacturer: Topcon Corporation.



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SPECIFICATIONS & PERFORMANCE

SPECIFICATIONS

CT-1P

<p>Ocular pressure measurement</p> <p>4.1 p. Akispūdžio matavimo ribos 1,0÷60,0 mmHg, pasirinktinai.</p>	<p>Measuring range: 1 to 60mmHg (Display unit: 1mmg step display, Average value:1mmHg/0.1mmHg step display)</p> <p>Measuring range: 1 to 30mmHg step display (switchable to 1 to 60mmHg step display)</p>
<p>Cornea thickness measurement</p>	<p>Measuring range: 0.4 to 0.75mm(Display unit: 0.001mm step display)</p>
<p>External I/O terminal</p>	<p>USB(for Import), RS232C(for Export), LAN(for Export)</p>

CT-1

<p>Ocular pressure measurement</p>	<p>Measuring range: 1 to 60mmHg (Display unit: 1mmg step display, Average value:1mmHg/0.1mmHg step display)</p> <p>Measuring range: 1 to 30mmHg step display (switchable to 1 to 60mmHg step display)</p>
<p>External I/O terminal</p>	<p>USB(for Import), RS232C(for Export), LAN(for Export)</p>

RECOVERY FROM POWER SAVE STATUS

This instrument adopts the power save system for saving electric power. When the machine is not operated for a set time, the control panel becomes a screensaver.

1 Tap the control panel. 4.12 p. Automatinis išsijungimo režimas (Energijos taupymo režimas (ang. „Sleep mode“))

In a few seconds, the measurement screen is displayed and measurement is enabled.

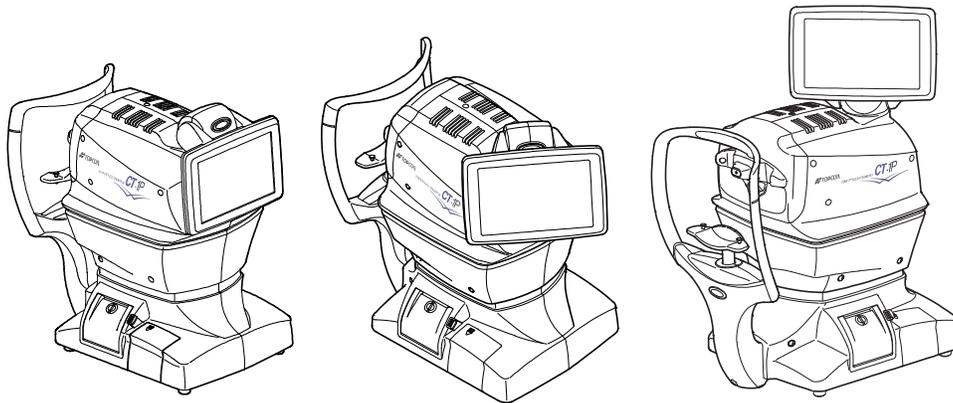


NOTES

The time to start the power save status can be changed in the initial setting "SETTING THE AUTO POWER SAVE" (see page 75).

ADJUSTING THE CONTROL PANEL POSITION

The control panel may be positioned by swinging and tilting the monitor to your desired position. Touching the control panel controls operations including chinrest movements, alignment and measurement.

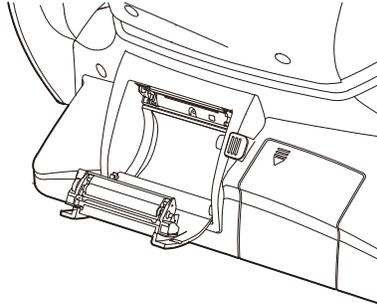


NOTES

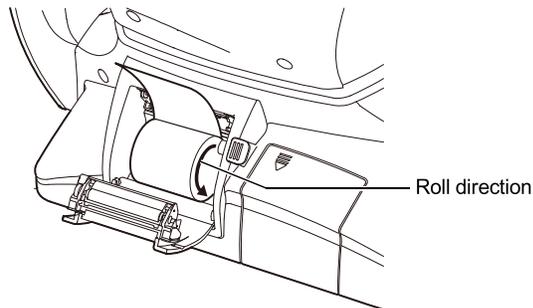
- The layout of **R** button/**L** button is reversed according to the position of the control panel.
- The moving direction by tapping is changed according to the position of the control panel.
- Regardless of the position on the control panel, it moves toward the direction of the panel part tapped continuously.



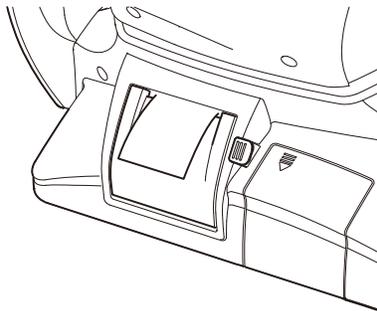
2 Open the printer cover to the limit.



3 Insert the printer paper in the direction shown below and pull out the paper end to your side by 7 to 8cm.



4 Bring the paper into the center, then close the printer cover.



4.13 p. popieriaus plotis 58 mm

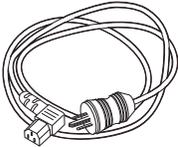
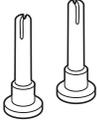
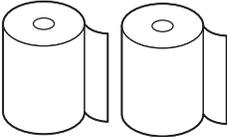
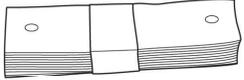
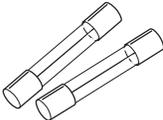
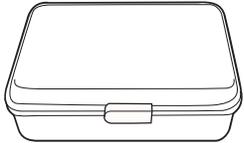
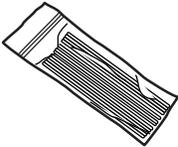


NOTES

- In case the printer cover is not firmly closed, printing will not start, and "Close printer cover." will be displayed on the monitor screen.
- A 58mm wide paper roll (example: TP-50KJ-R [Nippon Paper Co.]) is recommended. Other paper rolls may cause an abnormal printing noise or an unclear print.

STANDARD ACCESSORIES

The following are standard accessories. Make sure that all these items are included (the quantity is indicated in parenthesis).

<p>Power cable (1)</p> 	<p>Chinrest pin (2)</p> 
<p>Printer paper (2)</p> 	<p>Monitor cleaner (1)</p> 
<p>Chinrest tissue (1)</p> 	<p>Dust cover (1)</p>  <div data-bbox="1031 724 1388 787" style="border: 1px solid red; padding: 2px;"> <p>4.15 p. Gaubtas nuo dulkių</p> </div>
<p>Fuse (2)</p> 	<p>User Manual, Instruction Manual, Unpacking and Assembling, Cleaning Procedure (1 each)</p> 
<p>Accessory case (1)</p> 	<p>Measuring window cap (1)</p> 
<p>Applicator (1)</p> 	<p>Blower (1)</p> 
<p>Plastic container (1)</p> 	

Electrical table

4.16 p. Elektrinis staliukas



4.16 p. Reguliuojamo aukščio

Technical information

Height

Min 630 mm
Max 810 mm

Table top size

560 mm x 480 mm

Elevating speed on full load

15 mm/s

Lifting capacity

55 kg

Weight

21 kg

Height adjustment mechanism

Electrical

Height adjustment control

UP/Down switches

Castors with lock

4 unit

Power supply

AC 200 V - 240 V ~50 Hz

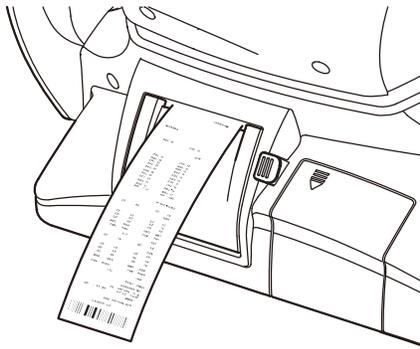
4.16 p. Su 4 ratukais ir stabdžiais

PRINTOUT OF MEASUREMENT VALUES

 NOTES	<ul style="list-style-type: none">• To avoid a paper jam in the printer, do not feed the paper if it is partly cut or wrinkled.• To avoid discoloring of the printer paper (particularly the recording area) during storage, use a polypropylene bag and not one containing plasticizer (PVC, etc.).• To avoid discoloring of the printer paper (particularly the recording area) after pasting, use water-soluble glue and not one containing solvent.• Since the printer paper is thermosensitive, it is not suitable for keeping records for a long period. If necessary, prepare copies separately.
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This instrument can print out measurement values with a printer.

- 1** Check that the Measurement screen is on.
- 2** Tap the **PRINT OUT** button on the control panel.
Measurement values on the monitor are printed out.



 NOTES	<ul style="list-style-type: none">• When a red line is printed at the edge of the printer paper, replace it with a new one. For details about the replacement of the printer paper, see "PRINTER PAPER SETTING" on page 30. 58mm wide printer paper (example: TP-50KJ-R, Nippon Paper) is recommended.• "Close printer cover." indicates that the printer cover is left opened, ensure that the printer cover is completely closed.• When the auto print setting is "ON" in the initial setting, measurement is performed under Auto mode, and measurement results are printed out automatically. (See page 69.)
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4 p.d. Kokybės kriterijus Nr. 3. automatiškai atspausdinantis rezultatus.