

# Computerized Tonometer

## CT-800A



PERFORMANCE  
YOU CAN COUNT ON



# Workflow efficiency with the 3D auto alignment

## More efficient operation and workflow

Topcon has significant experience in designing and producing high quality tonometer and kerato refractometer. For a greater customer experience, we are proud to introduce our new CT-800A with 3D auto alignment function. CT-800A offers enhanced efficiency and easier operation to improve day to day examination of work flow in a practice.

### CT-800A

Computerized tonometer

- | 3D Auto alignment function allows quicker and easier measurement
- | Smooth operation
- | 8.5 inch wide touchscreen control panel
- | Soft air puff ← 5.6.P. Minkšto oro gūσιο padavimas
- | Higher measurement success rate for eyes with IOL, in the IOL measurement mode
- | Compensated IOP values with central corneal thickness values\* ← 5.8.P. Pagal ragenos storį kompensuoto akispūdzio paskaičiavimas
- | Compact designed body
- | Easy set-up with a LAN network



3. Ragenos storio rodmenis galima įvesti tiek prieš tyrimą, tiek ir jį atlikus



### Adjusted tono value\*

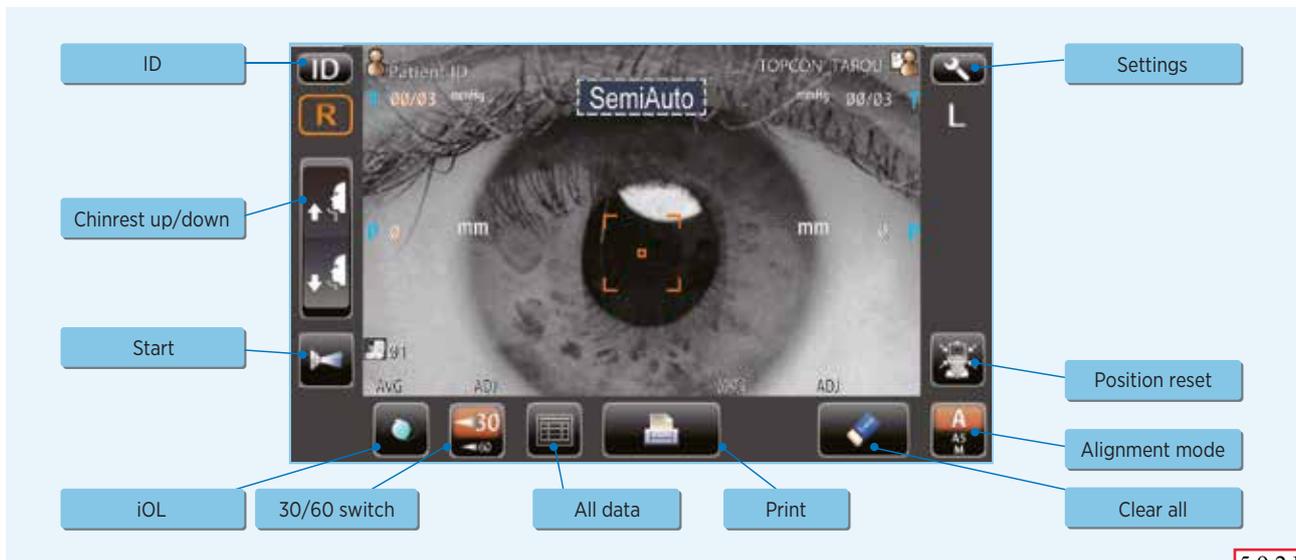
The CT-800A is able to calculate adjusted tono value from a measured IOP to manually inputting corneal thickness value measured by other devices, such as a pachymeter.

### Soft air puff

Software controls the optimal amount of air required for every measurement on each individual eye. A soft air puff means less stress on the eye, resulting in an improved patient experience

## Wide 8.5 inch touchscreen control panel

The new CT-800A is equipped with a wide 8.5 inch color touchscreen panel featuring clear, easy to read icons allowing the operator full control of the unit during the measuring process.



### Easy adjustment of touchscreen controlled chinrest

Up/down adjustment of chin-rest is easily operated with the icons on the touchscreen's control panel.

5.7.P. Su elektra valdomu pasmakrio atramos aukščio reguliavimu

### IOL mode

The IOL mode supports improved success rate to measure eyes with an intraocular lens.

2.p. Akies su IOL matavimo režimas

### Alignment mode

#### "A" (Semi auto mode)

Once pupil is roughly aligned, fine focus and measurement are performed automatically.

#### "AS" (Auto shoot mode)

Once the manual alignment is complete the measurement is taken automatically.

#### "M" (Manual mode)

All processes are performed manually.

5.9.2.P. Pusiau automatinis - norima išmatuoti akis surandama rankinio valdymo svirtimi, tolimesni matavimo žingsniai atliekami priemonės automatiškai

5.9.1.P. Rankinis - akies suradimas, tikslus fokusavimas ir akispūdžio matavimas aktyvuojami rankiniu būdu

\* Adjusted tono value is reference value

# CT-800A

## Efficient workflow



3. Saugumo sistema informuojanti apie pernelyg mažą atstumą tarp priemonės ir ragenos, su galimybe nustatyti norimą saugos atstumą

### One touch lock

The one touch lock supports a quick switch to lock the body. For a more safer examination, this stopper enables the operator to set the safety stopper which helps avoid the risk for the device to hit a patient's eye.

### Easy load printer

5.11.P. Integruotas spausdintuvas

The CT-800A is equipped with a built-in thermal printer that can be easily loaded with paper roll.

### Print data sample

2014_02_14	AM 10:37		
<b>TONO. DATA</b>			
<R>	<L>		
mmHg	ADJ.	mmHg	ADJ.
17	17	17	17
16	16	16	16
17	17	17	17
<b>AVG.</b>			
16.7	16.7	16.7	16.7
<b>PACH. DATA</b>			
<R>	mm	<L>	mm
	0.535		0.532
TOPCON			

- 1 IOP values
- 2 Compensated IOP values with central corneal thickness
- 3 Average value of IOP
- 4 Central corneal thickness value which the operator entered for compensation

5.9.1.P. Naudojant klasikinę rankinio valdymo svirtį



5.9.2.P. Pusiau automatinis - norima išmatuoti akis surandama rankinio valdymo svirtimi, tolimesni matavimo žingsniai (tikslus fokusavimas pagal XYZ koordinates ir pats akispūdzio matavimas) atliekami priemonės automatiškai

## Quicker measurement with 3D auto alignment function

### 3D auto alignment function maintains proper alignment with the patient

3D auto alignment feature maintains XYZ alignment even during small eye movements, providing consistent and repeatable measurements.\* An operator follows the alignment guidance on the monitor for initial alignment,

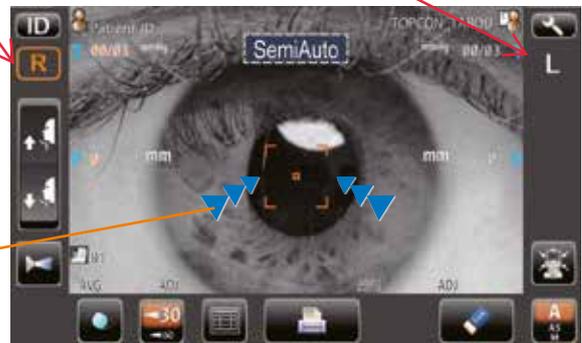
and then alignment and measurement will start automatically. 3D auto alignment function supports easy operation.

\* Manual alignment may be required for patients with poor fixation.

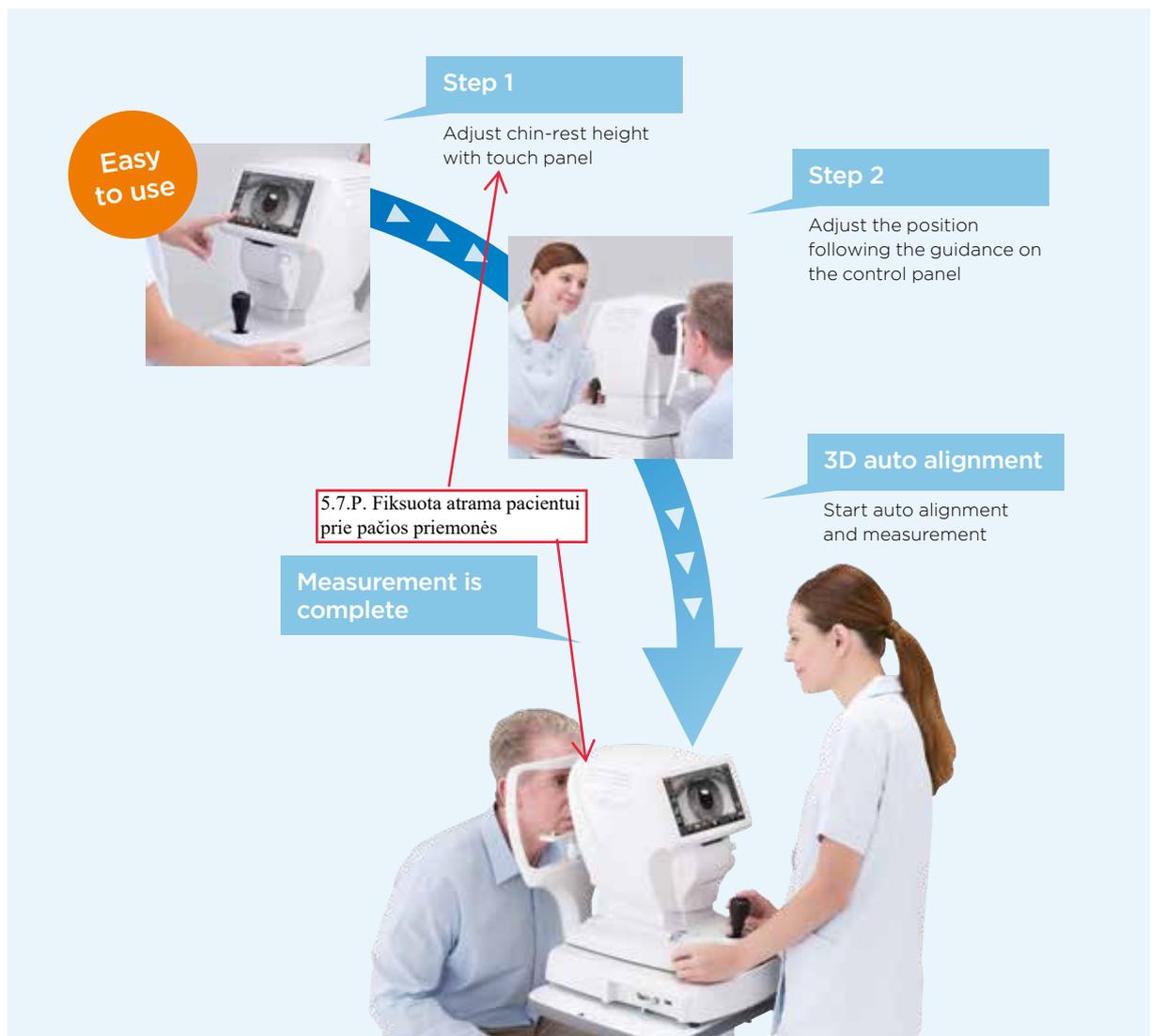
5.5.P. Kairės/dešinės akies automatinis atpažinimas ir rodymas

### Easy to follow guidance

Follow the initial alignment guidance to position the instrument, then the auto alignment and the measurement feature will take over.



Alignment marks

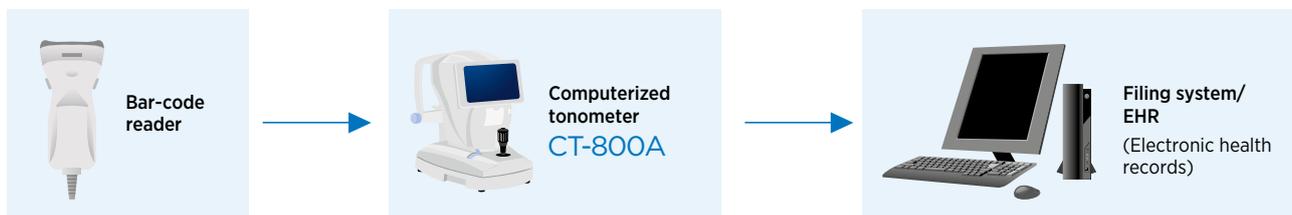


## Specifications

## CT-800A

<b>Ocular pressure measurement</b>	5.1.P. 1,0-60,0 mmHg pasirinktinai	1 to 60 mmHg ( 1 mm Hg step )	5.2.P. 1,0 mmHg
<b>Measuring range</b>	5.3.P. 1 mmHg ir 0,1 mmHg žingsniu, pasirinktinai	Average indication 1mmHg / 0.1mmHg steps changeable	
<b>Measuring mode</b>		1-30 mmHg / 1-60 mmHg	
<b>Monitor</b>	5.4.P. Liečiamas 8,5 colių įstrižainės, spalvotas monitorius	8.5" WVGA color LCD monitor, touch panel	
<b>Data transport ter</b>		USB ( Import ), RS232C ( Export ), LAN ( Export )	5.10.P. RS-232C jungtis, USB, LAN
<b>Dimensions</b>		317 ~ 341mm(W) × 521 ~ 538mm(D) × 437 ~ 467mm(H)	
<b>Weight</b>	1.Liečiamas 8,5 colių įstrižainės, spalvotas monitorius, WVGA raiška	17 kg	
<b>Power supply</b>		100-240V AC, 50-60Hz, 30-60VA	

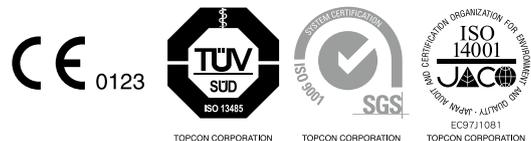
## System chart



\* Contact Topcon subsidiaries or dealers for system configurations.

\* Not available for sale in the United States.  
 \* Not available in all countries, please check with your distributor for availability in your country  
 \* Subject to change in design and/or specifications without advanced notice.

**IMPORTANT** 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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# OPERATION METHOD OF CONTROL PANEL

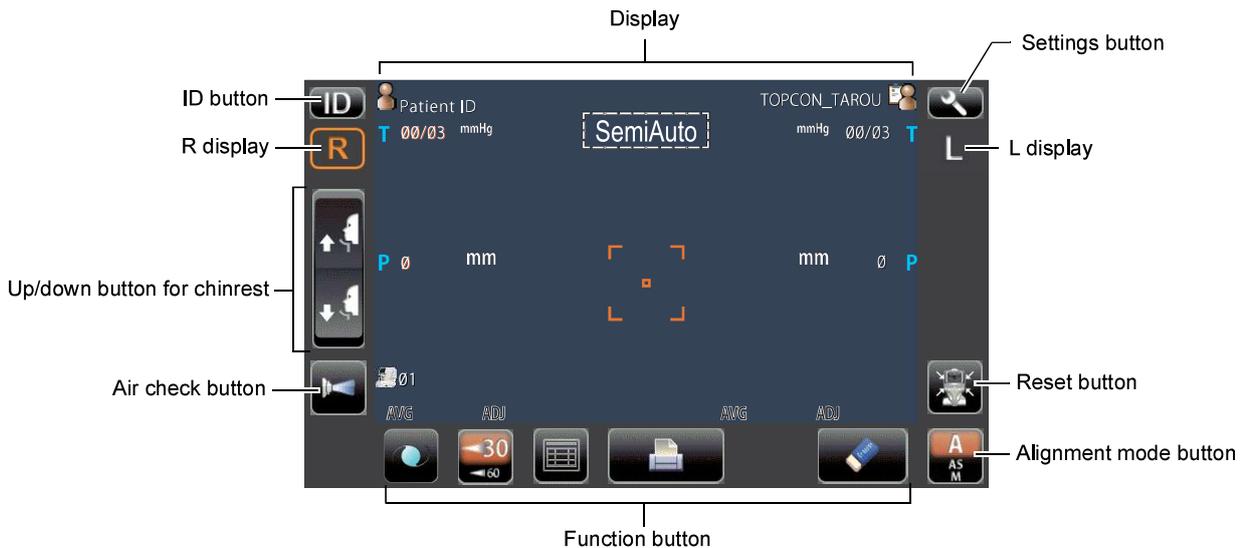
 <b>NOTE</b>	<ul style="list-style-type: none"> <li>• The control panel is a touch panel. Do not use any sharp tools; e.g. ball point pen.</li> <li>• Do not touch two points on a control panel simultaneously.</li> </ul>
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Tap → Touch the control panel softly with a finger.



## CONTROL PANEL COMPONENTS

The control panel is designed as a touch panel for performing various operations and settings. It displays images and shows information, including set conditions and measurement results.



-  ID button.....Input the patient ID (up to 13 characters) and operator ID (up to 13 characters). However, if no patient ID is input, the patient No. is allocated automatically.
  
-  R display/L display.....Shows the measured eye is R (Right eye) or L (Left eye). The measured eye is framed in orange.
  
-  Air check button .....Checks that the measurement system of the instrument operates properly.
  
-  Reset button.....Returns the measurement head (the side and the depth direction) to an initial position.

## MEASUREMENT IN MANUAL MODE

In manual mode all processes are performed manually from alignment to measurement.

### SETTING THE MANUAL MODE

- 1 If the large sign “M” is displayed in the Alignment mode button with orange background, it is in Manual mode.
- 2 If the large sign “M” is not displayed in the Alignment mode button with orange background, it is in other mode. Tap the button to change to Manual mode.



### SETTING THE MEASURING RANGE

- 1 Tap the 30/60 button to select the measuring range if the change is required.

### ALIGNMENT AND MEASUREMENT

In Manual mode the procedure for alignment is same as auto shoot mode (refer to page 39).

For measurement, align to make the cyan (blue) or magenta (red purple) Z alignment arrows short as same manner of the Item 7 at “Alignment” in auto shoot mode (refer to page 41). When “ALIGNMENT OK” is displayed, push the Measurement button on the control lever at the position, which Z alignment arrows disappear and the alignment mark turns green.

#### NOTE

- Even if the alignment is not correct, measurement can be performed by pushing the measurement button. To ensure correct measurement with high accuracy, try to get correct alignment.
- Even if you seem to get correct alignment, the alignment mark does not become green. In this case, please carry out a measurement after confirming surely that the alignment is performed correctly.
- The alignment mark may not become green according to patient's cornea condition.



# PRINTER PAPER SETTING

 <b>CAUTION</b>	<ul style="list-style-type: none"> <li>• When setting a printer paper, keep a patient's face away from the instrument. Some part of the instrument may touch the patient's lip or nose if the printer button is pressed.</li> <li>• To avoid potential injury in case of malfunction, including a paper jam, be sure to shut off the power before attempting to repair it.</li> <li>• To avoid potential injury, do not touch the printer body including metal parts or the paper cutter, while the printer is in operation or when replacing the printer paper.</li> </ul>
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 <b>NOTE</b>	<ul style="list-style-type: none"> <li>• Be sure to use the specified printer paper. If you use the paper other than the specified, the printer may be broken or the instrument may not be able to use.</li> <li>• If you insert the printer paper backwards, printing will not start.</li> <li>• Please push the printer cover OPEN button using your right thumb while placing your index and middle fingers on the projecting part which is in reverse side below the button. Unexpected movement is avoided when the printer cover OPEN button is pressed.</li> </ul>
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- For printing paper, use the following paper specified by TOPCON.

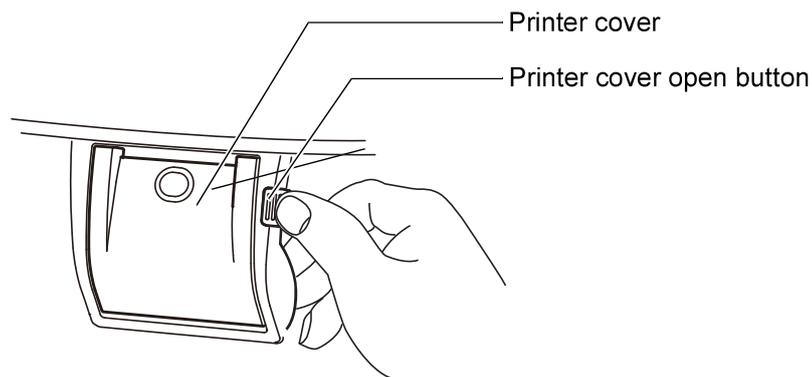
Item Name	Item Code
Printing Paper	44800 4001

Product No.: TP-50K-J-R (manufactured by Nippon Paper Industries Co., Ltd.)  
 (Paper Width: 58mm, Roll Outer Diameter:  $\phi$ 48mm or less)

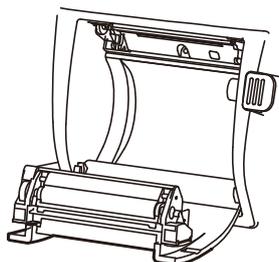
 5.11.P. Popieriaus plotis 58 mm

When ordering any consumable, contact our agent where you purchased the product, or our particular department as indicated in this Instruction Manual with the Item Name, Item Code and Quantity.

- 1** Press the printer cover open button to open the printer cover.



- 2** Open the printer cover to the limit.



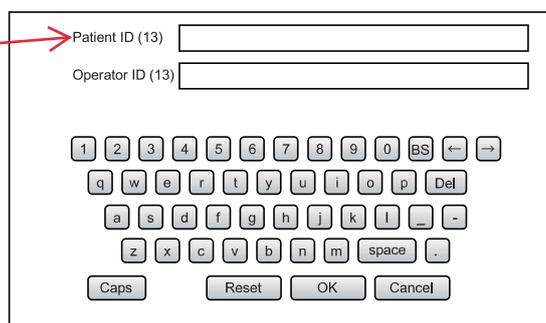
## SETTING THE PATIENT ID

- 1 Tap the **ID** button on the control panel.

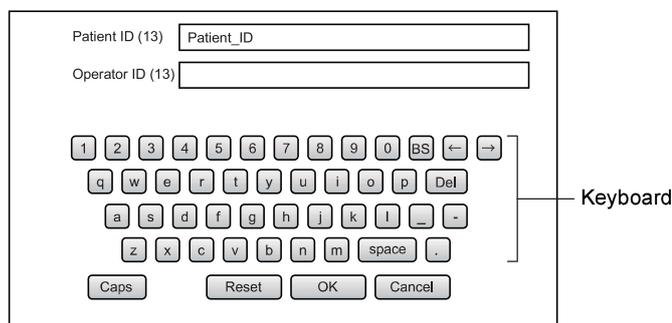


- 2 The Patient ID Input screen is called up.

5.12.P. Galima įvesti paciento inicialus



- 3 Enter the patient ID using the keyboard on the screen.



- 4 Return to the Measurement screen, and confirm that the patient ID is updated.

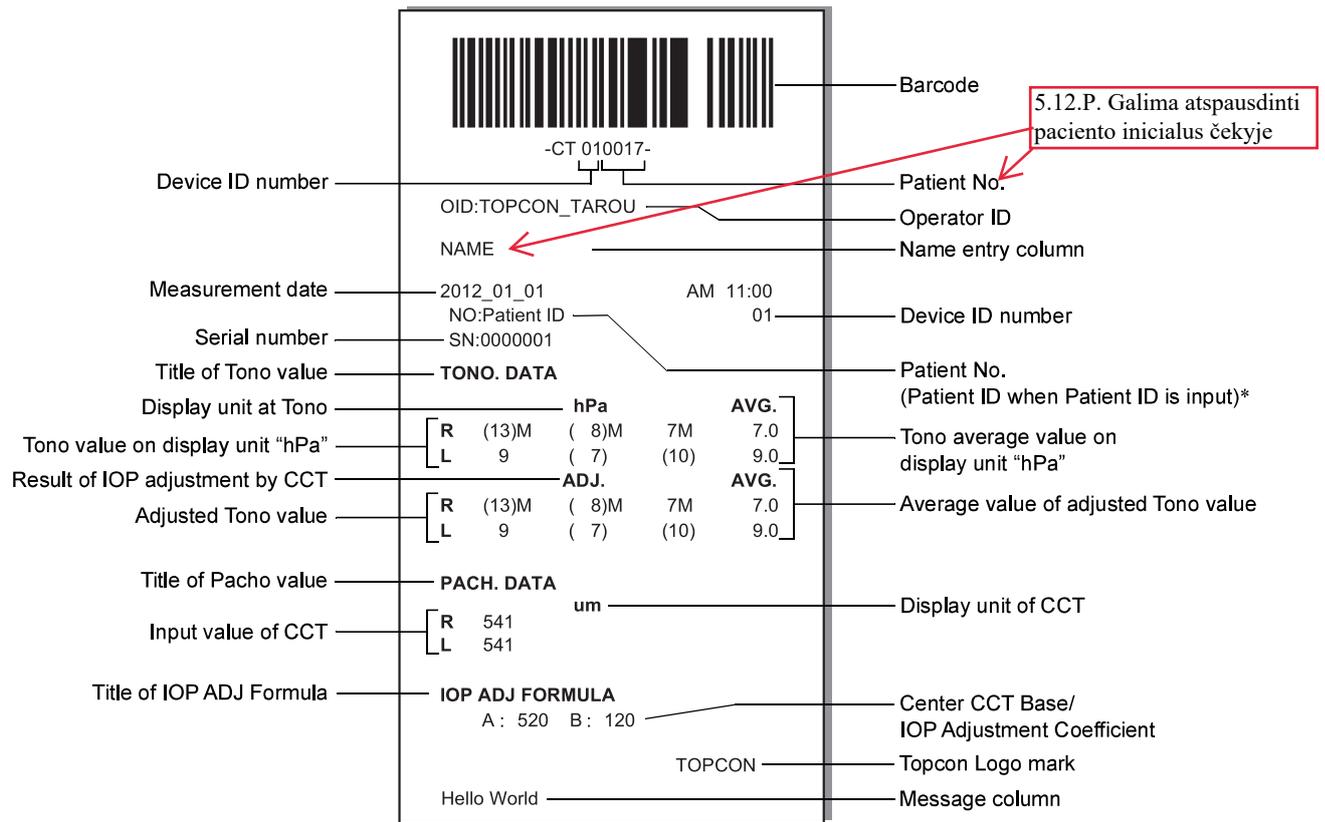


### NOTE

- If “Display of patient ID” is set to “OFF” in the initial setting, the patient No./patient ID is not displayed on the measurement screen.
- An enter window of Operator ID is displayed when the “Use Operator ID” of “Operator ID” is set to “ON” in the SETUP screen.

# PRINTER OUTPUT

Printed example when "Printer Layout" of "Print" is set to "SIMPLE"



\* As for the patient No., the result of the printing will differ depending on whether the patient ID is inputted or not inputted.

Input : Patient ID is printed.

Not input : Patient No. (starts from 0001, automatically added +1 upon completion of measurement) is printed.

 <b>NOTE</b>	<ul style="list-style-type: none"> <li>• The "M" mark is printed on the value measured by using the Measurement button. (In the error of ERR, OVER, etc., the "M" mark is not printed.)</li> <li>• The value with low reliability is outputted with the parenthesis notation.</li> </ul>
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# Electrical table



## 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

5.13.P. Staliukas elektrinis, reguliuojamo aukščio, su 4 ratukais ir stabdžiais