NIDEK

Non Contact Tono/Pachymeter NT-1p
Non Contact Tonometer NT-1/1e

THE ART OF EYE CARE

Design Innovations that Incorporate Operator and Patient Comfort with Gentle Measurements

The NT-1 series includes an innovative line of devices that provide reliable non-contact tonometry and pachymetry.
The NT-1p and NT-1 perform fully-automatic measurement and include an air-nozzle contact sensor to ensure patient safety.
Monitor tilt/swivel and tablet operation allow greater flexibility in various situations, suiting patient and clinical needs.
The innovative design of the NT-1 series provides unparalleled usability while ensuring patient comfort and maintaining clinic efficiency.

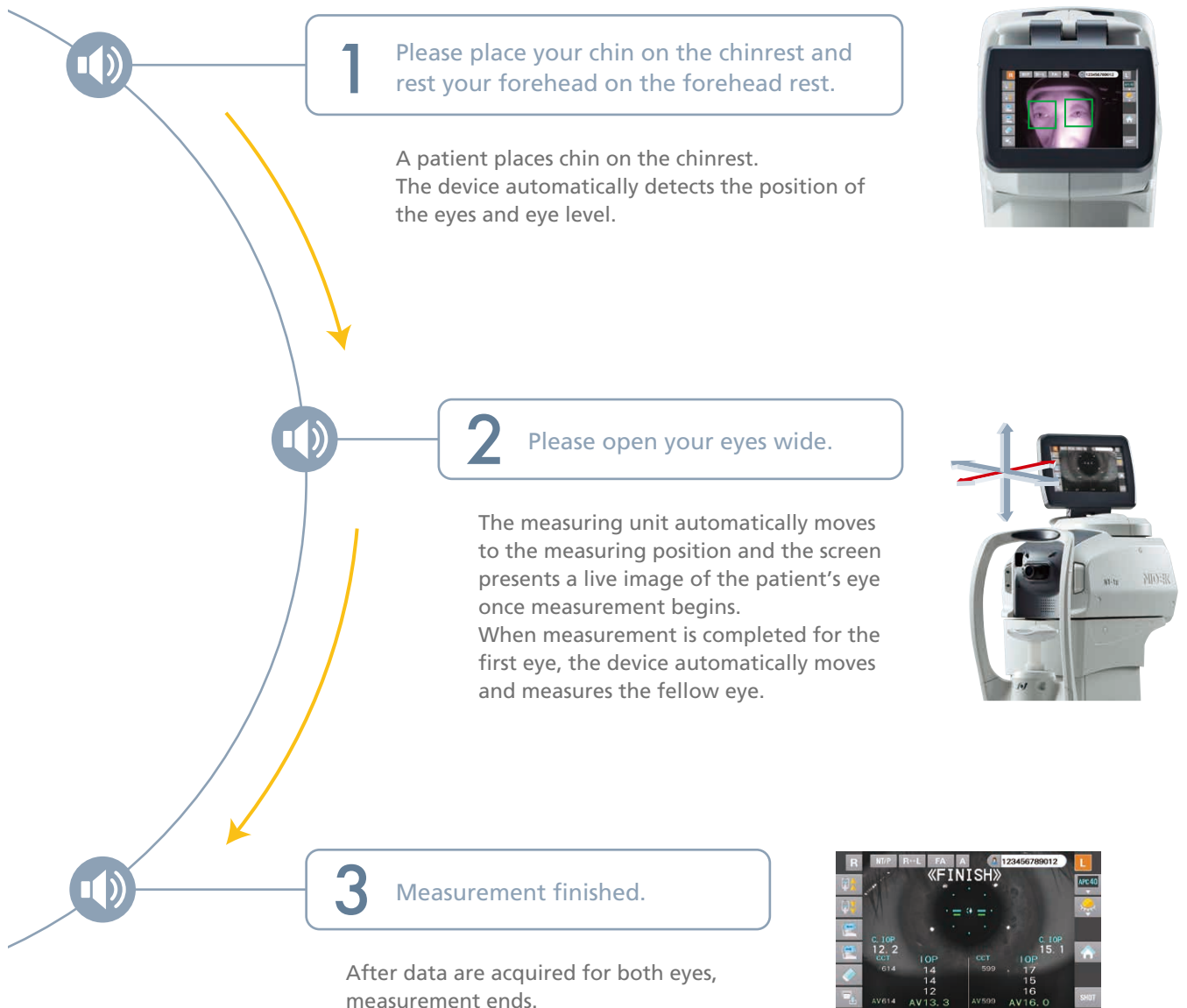| Model	Fully-automatic measurement	Voice guidance*1	Pachymetry	3D auto tracking
NT-1p	✓	✓	✓	✓
NT-1	✓	✓	*2	✓
NT-1e				✓

✓ : Available
*1 English, German, French, Spanish, Italian, Portuguese, Chinese, Korean, and Japanese
*2 The corrected IOP is displayed by entering the patient's central corneal thickness.

Fully-automatic measurement (available for the NT-1p and NT-1)

Simply by placing the chin on the chinrest, NIDEK eye detection camera automatically detects the position of the eyes and measurement starts without pressing any button. Gentle voice guidance (available in 9 languages) facilitates smooth measurement for any operator.

1 Please place your chin on the chinrest and rest your forehead on the forehead rest.

A patient places chin on the chinrest.
The device automatically detects the position of the eyes and eye level.

2 Please open your eyes wide.

The measuring unit automatically moves to the measuring position and the screen presents a live image of the patient's eye once measurement begins.
When measurement is completed for the first eye, the device automatically moves and measures the fellow eye.

3 Measurement finished.

After data are acquired for both eyes, measurement ends.

Air-nozzle contact sensor

A message appears to alert the user if there is eyelid/corneal contact with the air nozzle during measurement. The measuring unit automatically backs away from the patient's eye, and the measurement stops for patient safety.

Reliable tono/pachymeter

Pachymetry (available for the NT-1p)

Non-contact optical pachymetry is used to measure corneal thickness.
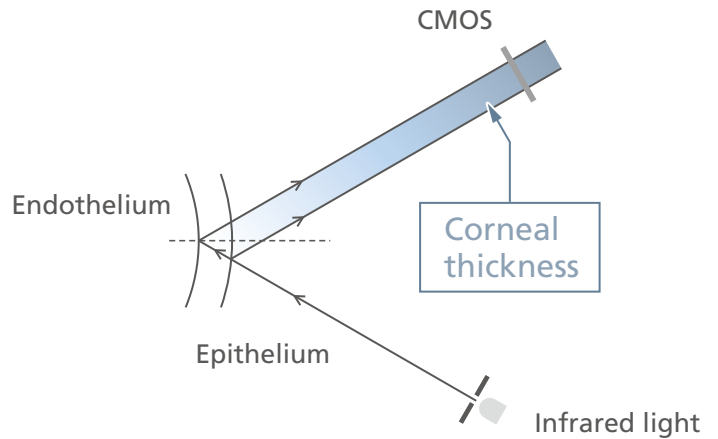
Incorporating the principle of specular reflection for pachymetry allows a more compact NT-1p design.

CMOS

Endothelium

Corneal thickness

Epithelium

Infrared light

Patient-friendly air puff

› Automatic Puff Control (APC)

In subsequent measurements, the APC function performs the measurement with the minimum air pressure based on previous measurement data.

Pressure level mmHg

Patient IOP

Time

1st　　2nd　　3rd
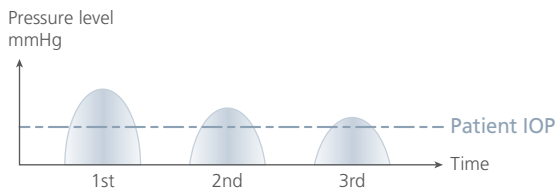
› Softer and quieter air puff

The mechanical design of the NT-1 series reduces noise and air intensity, resulting in a gentle air puff.

› Gentle nozzle design

A gentle nozzle design reduces patient's perception of physical pressure.

IOP correction based on central corneal thickness

IOP values are automatically calculated by compensating for the patient's central corneal thickness.*

*Available for the NT-1p. For the NT-1, the corrected IOP is displayed by entering the patient's central corneal thickness.
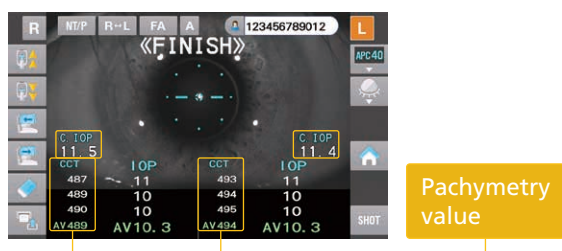
Pachymetry value

The pachymetry data are used to calculate the corrected IOP value.

3D auto tracking and auto shot

Once alignment is completed, the measurement starts automatically. The 3D auto tracking and auto shot functions provide quick, simple, and accurate measurements.
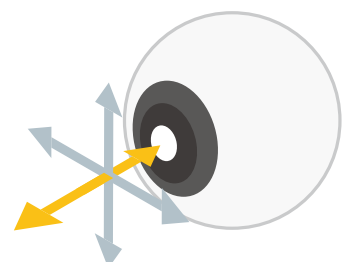
Flexible and space-saving design

The continuous range of tilt/swivel of the screen allows the device to be placed anywhere in an examination room; installation against a wall or in a corner is now possible. The conventional face-to-face position is available, and is designed to provide excellent patient comfort. Freedom of operator mobility allows supporting the patient's eyelids during measurement, if needed. The flexible layout and space-saving design contribute to improved productivity and efficiency.

A variety of options to meet your needs

Joystick

Models are available with or without a joystick. The 4-direction button of the newly-designed joystick allows smooth movement of the measuring unit forward, backward, right, or left.
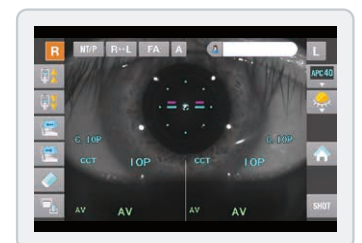
Hand-held control (wired/wireless)

An ergonomically designed palm-fit controller offers a unique handling experience. The simple and intuitive button layout provides excellent single-handed operation. For convenience, the controller is stored in a dedicated holder that attaches to either side of the device.

Wireless hand-held control

Tablet control software

If a tablet is used as a controller, screen mirroring allows any of the devices in the NT-1 series to be operated remotely with the same accuracy and comfort.

NT-1 Series Specifications

Non contact tonometer	
Measurement range	1 to 60 mmHg
Measurement range setting	APC40, APC60 (APC = Automatic Puff Control), 40, 60
Working distance	11 mm
Eye fixation	Inner fixation light
Non contact pachymeter[*1]	
Measurement range	300 to 800 μm
Light source	Infrared light
IOP correction by corneal thickness	Automatic calculation[*1], Manually entering corneal thickness[*2]
Auto tracking	X-Y-Z directions
Auto shot	Available
Auto complete	Available
Display	7.0-inch touch color LCD with tilt/swivel functions
Printer	Thermal line printer with easy loading and auto cutter
Interface	RS-232C: 1 port
	USB: 2 ports
	LAN: 1 port
	Wireless LAN (WLAN)[*3]: 1 ch
Power supply	100 to 240 V AC, 50/60 Hz
Power consumption	100 VA
Dimensions/mass	305 (W) x 492 (D) x 493 (H) mm / 20 kg
	12.0 (W) x 19.4 (D) x 19.4 (H)" / 44 lbs.
Standard accessories	Printer paper, Chinrest paper, Dust cover, Fixing pins for chinrest paper, Ferrite core, Power cord, Quick reference guide
Optional accessories	Magnetic card reader, Barcode scanner, Communication cable (RS-232C), Hand-held control (wired or wireless type), Joystick[*4], Tablet control software[*4], Wireless LAN[*4]

*1 Available for the NT-1p

*2 Available for the NT-1

*3 Only applicable for models that include the wireless LAN module

   Only for the countries (regions) certified by the Radio Law

*4 Only available as a factory setting that cannot be added later

Eye & Health Care
NIDEK CO., LTD.