

Medtronic

Engineering the extraordinary

Percept™ PC with BrainSense™ technology

Engineered to adapt

The Percept™ PC neurostimulator delivers personalized, upgradable therapy, powered by BrainSense™ technology. BrainSense™ technology uses brain signals to provide a window into a patient's condition, in real time, over time.

BrainSense™ technology†:

- Uses local field potentials (LFPs) as a signal of interest that can be tracked with responses to deep brain stimulation (DBS) therapy and medications.
- Offers data-driven insights into the patient's condition, inside and outside the clinic, enabling clinicians to adapt DBS to a patient's evolving needs.
- Engineered for future software upgrades that allow existing and future patients to have access to additional features without a device exchange.



A vast majority of patients with Parkinson's disease have a detectable signal (LFP).¹

92%

have a detectable signal in an "off-medication" state.¹

87%

of brain hemispheres have a detectable signal in an "on-medication" state.¹

15+
years

of research has informed BrainSense™ technology.

¹The sensing feature of the Percept™ PC system is intended for use in patients receiving DBS where chronically-recorded bioelectric data may provide useful, objective information regarding patient clinical status. All images in this brochure are demo images unless labeled otherwise.

BrainSense™ technology helps support clinical decision making

Select programming configurations:

BrainSense™ survey

- Provides decision-making support to select therapeutic contact(s) or directionally shift stimulation during a monopolar review or follow-up programming sessions.

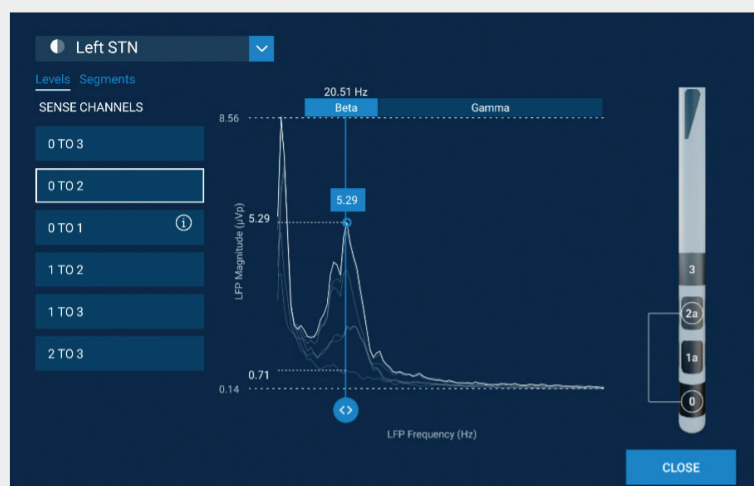
Optimize programming configurations

BrainSense™ streaming**

- Guides stimulation for LFP power reduction and can assist in finding stimulation-related therapeutic windows.
- Stimulation parameters can be adjusted to address potentially suboptimal therapy configurations using objective patient neurophysiologic data.

BrainSense™ thresholds

- Clinician-defined LFP thresholds may allow for rapid assessment of the time spent with or without symptoms outside of clinic.



BrainSense™ technology offers decision-making support to **select** and **optimize** programming configurations and **maximize** therapeutic results over time.

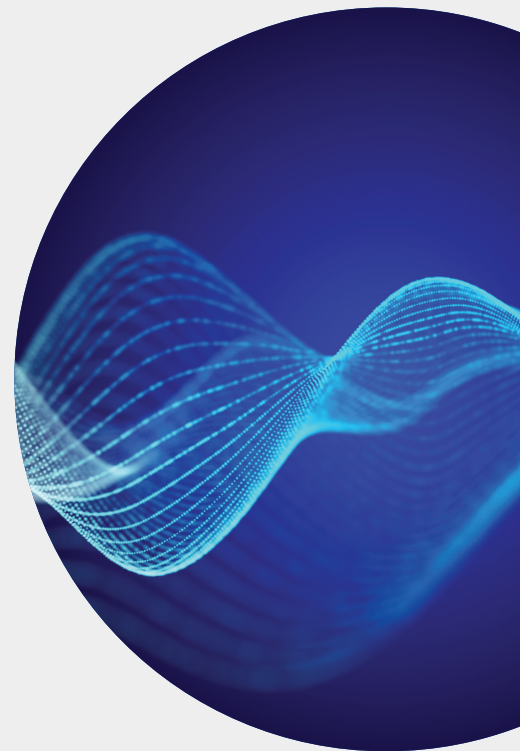
Maximize therapeutic results over time.

BrainSense™ timeline

- Objective and personalized information from outside the clinic.
- A patient's day-to-day in digital form.
- Observe effects of medications and stimulation changes on LFP power.

BrainSense™ events

- Assess and understand the frequency and magnitude of the signal of interest of events over time.





To learn more visit us at
[https://www.medtronicacademy.com/search-
results?q=db5](https://www.medtronicacademy.com/search-results?q=db5)

**Image in this BrainSense™ Streaming example is from an unpublished example from the feature running in a Parkinson's disease patient with leads in the subthalamic nucleus, courtesy of Dr. Okeanis E. Vaou, MD, UT Health San Antonio.

References

1. Darcy N, Lofredi R, Al-Fatly B, et al. Spectral and spatial distribution of subthalamic beta peak activity in Parkinson's disease patients. *Experimental Neurology*. 2022:114150.

See the device manual for detailed information regarding the instructions for use, the implant procedure, indications, contraindications, warnings, precautions, and potential adverse events. For further information, contact your local Medtronic representative and/or consult the Medtronic website at www.medtronic.eu

For applicable products, consult instructions for use on manuals.medtronic.com. Manuals can be viewed using a current version of any major internet browser. For best results, use Adobe Acrobat® Reader with the browser.

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