

CTDS | MAGVENTURE COOL D-B80

Evidence-based OCD coil placement summary • Website reference sheet • 17 October 2026

Regulatory status. FDA 510(k) K193006, cleared 9 August 2020, for adjunctive treatment of adults with obsessive-compulsive disorder (OCD). Device: MagVenture TMS Therapy System with Cool D-B80 coil. Clearance was based on substantial equivalence to the BrainsWay H7 predicate, not a new DB80-specific pivotal OCD trial. [1]

1 | Cleared treatment parameters

Parameter	Specification
Anatomical treatment region	Bilateral dorsomedial prefrontal cortex (dmPFC)
Localization reference	Leg motor hotspot / leg motor cortex
Scalp treatment location	4 cm anterior to leg motor cortex along the prefrontal direction [2]
Treatment intensity	100% leg motor threshold
Frequency	20 Hz
Train duration / intertrain interval	2 s / 20 s
Number of trains	50
Pulses per session	2,000
Nominal treatment duration	18.0 minutes [1]
Handle angle / rotation	Not stated in public 510(k) summary; verify current manufacturer IFU

2 | Positioning sequence

1. Identify the leg motor hotspot and measure the leg motor threshold using the approved, device-specific workflow.
2. Identify the prefrontal treatment location 4 cm anterior to the leg motor cortex reference, as described in the published comparison of cleared OCD coils.
3. Centre and secure the Cool D-B80 at the treatment location using the manufacturer's current OCD setup, contact, orientation, and fixation instructions.
4. Verify placement, threshold, safety screening, and stimulation parameters before treatment.

3 | Coil orientation and interpretation

Orientation is not verified from the publicly available FDA K193006 summary. It does not provide a reproducible handle direction, rotation angle, or setup illustration. The 120-degree angle between double-cone coil wings describes coil geometry, not scalp rotation. Do not substitute a conventional 45-degree DLPFC orientation or assume the H7 and DB80 are physically interchangeable.

A published electric-field comparison found substantial differences between D-B80 and H7 field distributions despite regulatory substantial equivalence. The manufacturer's current, model-specific OCD instructions for use (IFU) are necessary to complete an actionable positioning diagram. [2]

4 | Recommended CTDS label

Cool D-B80 / OCD | FDA 510(k) cleared | Target: bilateral dmPFC
Reference: leg motor hotspot → prefrontal point 4 cm anterior
Dose: 20 Hz; 100% leg MT; 50 × 2 s; 20 s intertrain; 2,000 pulses (~18 min)
Orientation: manufacturer IFU verification required.

5 | References

[1] US Food and Drug Administration. MagVenture TMS Therapy System for Adjunctive Treatment of OCD. 510(k) K193006. Clearance letter and 510(k) summary, 9 August 2020. [FDA source PDF](#).

[2] Tzirini M, Roth Y, Harmelech T, et al. Detailed measurements and simulations of electric field distribution of two TMS coils cleared for obsessive compulsive disorder in the brain and in specific regions associated with OCD. PLoS One. 2022;17(8):e0263145. doi:10.1371/journal.pone.0263145. [Full text](#).

[3] MagVenture. FDA clearances: adjunctive treatment of adult OCD (K193006). [Manufacturer regulatory page](#).

Clinical-use limitation: Educational reference for CTDS. Not a standalone operator protocol; use current device-specific IFU, institutional procedures, and clinician judgment.