

PROSPECTUS SUPPLEMENT NO. 1
(to Prospectus dated December 2, 2024)

SPECTRAL AI, INC.

UP TO 1,000,000 SHARES OF COMMON STOCK

This prospectus supplement is being filed solely to update the information contained in the table in the “Selling Securityholders” section of the prospectus dated December 2, 2024 (the “Prospectus”) to reflect certain transfers described herein.

The Prospectus and this prospectus supplement relate to the offer and sale from time to time by the selling securityholders named in this prospectus or their permitted transferees (the “**Selling Securityholders**”) of (i) up to 1,000,000 shares of Common Stock issuable upon conversion of the Promissory Note. We will not receive any proceeds from the sale of shares of Common Stock by the Selling Securityholders pursuant to this prospectus.

The Selling Securityholders may offer and sell the securities covered by the Prospectus in a number of different ways and at varying prices. We provide more information about how the Selling Securityholders may sell the shares in the section entitled “*Plan of Distribution*.”

Our shares of Common Stock are listed on the Nasdaq Capital Market (“*Nasdaq*”) under the symbol “MDAI.” On December 3, 2024, the closing price of our Common Stock was \$2.20 per share.

This prospectus supplement updates and supplements the information in the Prospectus and is not complete without, and may not be delivered or utilized except in combination with, the Prospectus, including any amendments or supplements thereto. This prospectus supplement should be read in conjunction with the Prospectus and if there is any inconsistency between the information in the Prospectus and this prospectus supplement, you should rely on the information in this prospectus supplement.

Investing in our Common Stock involves risks that are described in the “*Risk Factors*” section beginning on page 4 of the Prospectus and under similar headings in any further amendments or supplements to the Prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if the Prospectus or this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is December 4, 2024.

SELLING SECURITYHOLDERS

The following information is provided as of December 3, 2024 to update the “Selling Securityholders” section of the Prospectus to reflect the purchase of a portion of the Promissory Note by Eleven Ventures LLC.

Where the name of a Selling Securityholder identified in the table below also appears in the table in the Prospectus, the information set forth in the table below regarding that Selling Securityholder supersedes and replaces the information regarding such Selling Securityholder in the Prospectus. Information regarding the Selling Securityholders listed in the table below, including the number of shares of Common Stock beneficially owned by them, is based on information provided by such Selling Securityholders as of the date of this prospectus supplement.

Information about the Selling Securityholders, including those listed below, may change over time. Since the effectiveness of the Registration Statement on Form S-1 of which the Prospectus is a part, Selling Securityholders have sold or otherwise transferred their securities registered thereunder. This prospectus supplement does not provide any updates with respect to any such exercises, sales or transfers, except for those expressly referred to in the immediately preceding paragraph.

Name	Shares of Common Stock			
	Number Beneficially Owned Prior to Offering	Percent Beneficially Owned Prior to Offering	Number Registered for Sale Hereby	Number Beneficially Owned After Offering
IP Protocol, LLC ⁽¹⁾	778,394	4.19%	778,394	—
Eleven Ventures LLC ⁽²⁾	221,606	1.19%	221,606	—
Total	1,000,000		1,000,000	—

(1) IP Protocol, LLC is the direct holder of these shares. Peter Benz is the managing member and has voting and investment power over the reported shares offered hereby. The address of the selling stockholder is 4843 Three Oaks Blvd., Sarasota, FL 34233.

(2) Eleven Ventures LLC is managed by Eleven Managers LLC. Hartley Wasko is the sole manager of Eleven Managers LLC. Accordingly, Eleven Managers LLC and Hartley Wasko are each deemed to have beneficial ownership of Eleven Ventures LLC. The business address of Eleven Ventures LLC is 463 Adams Street, Denver, CO 80206.