AEYE, INC.

Up to 68,139,193 Shares of Common Stock Up to 166,666 Warrants Up to 7,833,332 Shares of Common Stock Issuable Upon Exercise of Warrants

This prospectus supplement (this "Supplement") supplements the prospectus dated May 12, 2022 (as may be supplemented from time to time, the "Prospectus"), which is part of a registration statement on Form S-1 (File No. 333-259554) relating to (i) the resale of 64,232,845 shares of Common Stock by certain of the selling securityholders named in the Prospectus (the "Selling Securityholders"), (ii) the issuance by us and resale of 3,885,268 shares of Common Stock upon the exercise of options to purchase Common Stock and 21,080 shares of Common Stock upon the settlement of outstanding RSUs, and (iii) the issuance by us of up to 7,833,332 shares of Common Stock upon the exercise of outstanding warrants to purchase Common Stock (the Warrants"). The Prospectus also relates to the resale of up to 166,666 of our outstanding Warrants originally issued in a private placement in connection with the initial public offering of CF Finance Acquisition Corp. III by the holders thereof. We will not receive any proceeds from the sale by the Selling Securityholders of the securities offered by them described in the Prospectus, although we will receive the proceeds from any exercise of any Warrants for

This Supplement is being filed to update and supplement the information in the Prospectus with the information contained in the Form 8-K filed with the Securities and Exchange Commission on September 16, 2022.

This Supplement is not complete without, and may not be delivered or utilized except in connection with, the Prospectus. This Supplement should be read in conjunction with the Prospectus, and if there is any inconsistency between the information in the Prospectus and this Supplement, you should rely on the information in this Supplement.

Our Common Stock and Warrants are listed on The Nasdaq Stock Market LLC ("Nasdaq") under the symbols "LIDR" and "LIDRW," respectively. On September 15, 2022, the closing price of our Common Stock was \$1.38 per share and the closing price of our Warrants was \$0.24 per Warrant.

We are an "emerging growth company" as defined in Section 2(a) of the Securities Act of 1933, as amended, and are subject to reduced public company reporting requirements.

Our business and investment in our Common Stock and Warrants involve significant risks. These risks are described in the section titled "Risk Factors" beginning on page 10 of the Prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of the Prospectus. Any representation to the contrary is a criminal offense.

The date of this Supplement is September 16, 2022.							

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): September 15, 2022

AEYE, INC. (Exact name of registrant as specified in its charter) **Delaware** 001-39699 37-1827430 (State or other jurisdiction (Commission File Number) (IRS Employer Identification No.) of incorporation) One Park Place, Suite 200, Dublin, California 94568 (Address of principal executive offices) (Zip Code) Registrant's telephone number, including area code: (925) 400-4366 (Former Name or Former Address, if Changed Since Last Report) Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligations of the registrant under any of the following provisions: Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425) Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered		
Common Stock, par value \$0.0001 per share	LIDR	The Nasdaq Stock Market LLC		
Warrants to receive one share of Common Stock	LIDRW	The Nasdaq Stock Market LLC		

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Emerging growth company ⊠

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 1.01. Entry into a Material Definitive Agreement.

On September 15, 2022, AEye, Inc. ("AEye" or the "Company") entered into a Securities Purchase Agreement (the "Purchase Agreement") to finance an aggregate principal amount of up to \$21,000,000 with a certain institutional investor (the "Purchaser").

At the first closing under the Purchase Agreement, which occurred on September 15, 2022, the Company issued to the Purchaser (i) a senior unsecured convertible promissory note in the aggregate principal amount of \$10,500,000 for an aggregate purchase price of \$10,000,000 (the "Note") and (ii) a warrant (the "Warrant") to purchase up to 1,750,000 shares of the Company's common stock, par value \$0.0001 per share (the "Common Stock"). At the second closing under the Purchase Agreement, which will occur upon certain conditions being satisfied, the Company may, at its option, issue to the Purchaser (i) an additional Note in the aggregate principal amount of \$10,500,000 for an aggregate purchase price of \$10,000,000 and (ii) an additional Warrant to purchase up to 1,750,000 shares of the Common Stock.

The Note, subject to an original issue discount of four and seventy-six hundredths percent (4.76%), has a term of eighteen months and accrues interest at the rate of 5.0% per annum. The Note is convertible into the Common Stock, at a per share conversion price equal to \$2.50, subject to adjustments noted in the Note (the "Conversion Price"). Pursuant to the Note, commencing on the date that is 90 days from the date of the first closing, and on the first trading day of each month thereafter (each, an "Installment Date") until the Note is fully redeemed, the Company is generally obligated to pay the holder of the Note an amount equal to the sum of (A) the lesser of (x) one-fifteenth of the initial principal amount under the Note and (y) the principal amount then outstanding under the Note as of such Installment Date, (B) any amounts accelerated pursuant to the terms of the Note and (C) the sum of any accrued and unpaid interest and late fees, if any, as of such Installment Date (the "Installment Amount"). The Company, if certain equity conditions are satisfied, may elect to pay all or part of the Installment Amount in shares of Common Stock based on a conversion price equal to the lower of (i) the Conversion Price and (ii) 95% of the lowest VWAP (as defined in the Note) in the five (5) trading days immediately prior to the applicable conversion date. If the Company fails to satisfy certain equity conditions or at the election of the Company, the Company may redeem the Installment Amount in cash with a premium of five percent (5%).

The Warrant has an initial exercise price of \$3.50, a 40% premium to the Conversion Price, and is exercisable for four years following issuance. Subject to the terms and conditions of the Warrant, if (x) the VWAP (as defined in the Warrant) of the Common Stock exceeds \$4.00 for ten consecutive trading days (the "Forced Exercise Measuring Period"), (y) the average daily trading volume of the Common Stock on each trading day during the Forced Exercise Measuring Period exceeds \$5,000,000 and (z) there is an effective registration statement permitting the resale of the Common Stock underlying the Warrant, the Company has the right, within three trading days following such Forced Exercise Measuring Period, at its option, to require the holder of the Warrant to exercise all, but not less than all, of the then outstanding Warrant.

The Company has agreed to register under the Securities Act of 1933, as amended of 1933 (the "Securities Act") the resale of the shares of Common Stock issuable upon conversion of the Note as well as the shares of Common Stock issuable upon the exercise of the Warrant pursuant to the Registration Rights Agreement, dated September 15, 2022, by and between the Company and the Purchaser (the "Registration Rights Agreement").

The Note contains certain covenants, events of default and triggering events, respectively, which would require repayment of the obligations outstanding pursuant to the Note.

The Purchaser has provided a covenant not to enter into or effect, in any manner whatsoever, directly or indirectly, any short sales of the Common Stock or hedging transaction which establishes a net short position with respect to the Common Stock.

The Purchase Agreement, Registration Rights Agreement, Note and Warrant contain customary representations, warranties, conditions, and indemnification obligations of the parties.

The foregoing descriptions of the Purchase Agreement, Registration Rights Agreement, Note and Warrant are qualified in their entirety by reference to the full text of such agreements, copies of which are attached hereto as Exhibits 10.1, 10.2, 4.1 and 4.2, respectively, and each of which is incorporated herein in its entirety by reference. The representations, warranties, and covenants contained in such agreements were made only for purposes of such agreements and as of specific dates, were solely for the benefit of the parties to such agreements and may be subject to limitations agreed upon by the contracting parties.

This current report on Form 8-K shall not constitute an offer to sell or a solicitation of an offer to buy any Note, Warrant or shares of Common Stock in any state or jurisdiction in which such an offer, solicitation, or sale would be unlawful prior to registration or qualification under the securities laws of any such state or other jurisdiction.

Item 3.02. Unregistered Sales of Equity Securities.

The information contained above in Item 1.01 is hereby incorporated by reference into this Item 3.02.

The securities referred to in this Current Report on Form 8-K are being issued and sold by the Company to the Purchaser in reliance upon the exemptions from the registration requirements of the Securities Act afforded by Section 4(a)(2) of the Securities Act and Rule 506(b) of Regulation D promulgated thereunder.

Item 9.01. Financial Statement and Exhibits.

(d) Exhibits.

Exhibit Number Description

4.1	Form of Senior Unsecured Convertible Promissory Note to be issued by the Company pursuant to and in accordance with the Securities Purchase Agreement.
4.2	Form of Common Stock Purchase Warrant to be issued by the Company pursuant to and in accordance with the Securities Purchase Agreement.
10.1*	Securities Purchase Agreement by and among AEye, Inc. and the purchaser named in the signature pages thereto, dated September 15, 2022.
10.2	Registration Rights Agreement by and among AEye, Inc. and the party named in the signature pages thereto, dated September 15, 2022.
104	Cover Page Interactive Data File (formatted as Inline XBRL).

^{*} Schedules, exhibits and similar supporting attachments to this exhibit are omitted pursuant to Item 601(b)(2) of Regulation S-K. We agree to furnish a supplemental copy of any omitted schedule or similar attachment to the SEC upon request.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

AEye, Inc.

Dated: September 16, 2022

By: /s/ Andrew S. Hughes

Andrew S. Hughes

Senior Vice President, General Counsel & Corporate Secretary