#### PROSPECTUS SUPPLEMENT NO. 6

To Prospectus dated September 27, 2021

### 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 September 27, 2021, 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 cash.

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 March 18, 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 March 25, 2022, the closing price of our Common Stock was \$5.29 per share and the closing price of our Warrants was \$1.10 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 9 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 March 28, 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): March 15, 2022

AEYE, INC.  (Exact name of registrant as specified in its charter)		
(State or other jurisdiction of incorporation)	(Commission File Numb	er) (IRS Employer Identification No.)
One Park Place, Suite 200, Dublin, California		94568
(Address of principal executive offices)		(Zip Code)
Registrant's	telephone number, including are	a code: <b>(925) 400-4366</b>
(Former Name or Former Address, if Changed Since Last Report)		
following provisions:  Written communications pursuant to Rule 425 und Soliciting material pursuant to Rule 14a-12 under Pre-commencement communications pursuant to I	der the Securities Act (17 CFR 240 the Exchange Act (17 CFR 240 Rule 14d-2(b) under the Exchange Rule 13e-4(c) under the Exchange	14a-12) ge Act (17 CFR 240.14d-2(b))
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
chapter) or Rule 12b-2 of the Securities Exchange Act of Emerging growth company ⊠	f 1934 (§240.12b-2 of this chapt if the registrant has elected not	to use the extended transition period for complying with any new

## Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On March 15, 2022, the Board of Directors of AEye, Inc. (the "Company"), as part of its ongoing review of the Company's executive compensation and retention program, approved the terms of a form of Change in Control Severance Agreement (the "Severance Agreement") to be entered into with eligible participants, including each of the Company's named executive officers. The Severance Agreement provides for severance payments and benefits in the event that the participant: (i) voluntarily resigns for "good reason" (as defined in the Severance Agreement) or (ii) is involuntary terminated by the Company without "cause" (as defined in the Severance Agreement), and such separation from service occurs in connection with, or within a specified period of time following, a "change in control" (as defined in the Severance Agreement) (each, a "Covered Termination").

Upon a Covered Termination, and subject to his or her satisfaction of the conditions to severance described below, an eligible participant, including our named executive officers, would be entitled to receive: (i) severance pay equal to 1.5 times the sum of such participant's annual base salary and target bonus; (ii) an annual bonus payment prorated for the year in which the Covered Termination occurs; (iii) accelerated vesting and exercisability of all then-outstanding equity awards; and (iv) payment of group health insurance coverage for a period of 18 months following the Covered Termination.

As a condition to any participant's receipt of severance benefits under the Severance Agreement, the participant must sign a general waiver and release of claims, the form of which is attached as an exhibit to the Severance Agreement, confirm his or her obligations under the Company's standard form of proprietary information agreement, and allow the recission period to expire and the waiver and release of claims to become effective.

If the severance benefits provided under the Severance Agreement, along with any other payments occurring in connection with a change in control of the Company, were to cause a participant to be subject to the excise tax provisions of Section 4999 of the Internal Revenue Code of 1986, as amended, then the amount of the severance benefits will either be reduced, such that the excise tax would not be applicable, or such participant will be entitled to retain his or her full severance benefits, whichever results in the better after-tax position to the participant.

The foregoing description of the Severance Agreement is not complete and is qualified in its entirety by reference to the full text of the Form of Change in Control Severance Agreement, which is filed as Exhibit 10.1 to this Current Report on Form 8-K and is incorporated into this Item 5.02 by reference.

#### Item 9.01. Financial Statement and Exhibits.

(d) Exhibits.

Exhibit Number Description

10.1 Form of Change in Control Severance Agreement.

104 Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

#### **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: March 18, 2022

By: /s/ Andrew S. Hughes

Andrew S. Hughes

Senior Vice President, General Counsel & Corporate Secretary