## PROSPECTUS SUPPLEMENT

(To Prospectus Supplement dated September 13, 2024 to Prospectus dated September 15, 2023)



AEYE, INC.

Up to \$5,230,000

Common Stock

This Prospectus Supplement amends and supplements the information in the prospectus, dated September 15, 2023 (the "Prospectus"), filed with the Securities and Exchange Commission as a part of our registration statement on Form S-3 (File No. 333-274546), as previously supplemented by our prospectus supplement, dated September 13, 2024 (the "Prior Supplement" and together with the Prospectus, the "Prior Prospectus"), relating to the offer and sale of shares of our common stock having an aggregate offering price of up to \$2,600,000 pursuant to the terms of At Market Issuance Sales Agreement, dated September 12, 2024 (the "Sales Agreement"), with A.G.P./Alliance Global Partners ("A.G.P."). This Prospectus Supplement should be read in conjunction with the Prior Prospectus, and is qualified by reference thereto, except to the extent that the information herein amends or supersedes the information contained in the Prior Prospectus. This Prospectus Supplement is not complete without, and may only be delivered or utilized in connection with, the Prior Prospectus and any future amendments or supplements thereto.

We are filing this Prospectus Supplement to amend the Prior Prospectus to update the maximum amount of shares that we are eligible to sell under our Registration Statement pursuant to the Sales Agreement under General Instruction I.B.6 of Form S-3. As a result of these limitations and the current public float of our common stock, and in accordance with the terms of the Sales Agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to \$5,230,000 from time to time through A.G.P. In the event that we may sell additional amounts under the Sales Agreement in accordance with General Instruction I.B.6, we will file another prospectus supplement prior to making such additional sales. This Prospectus Supplement amends and/or supplements only those sections of the Prior Prospectus as listed in this Prospectus Supplement, and all other sections of the Prior Prospectus remain as is.

We are an "emerging growth company" and "smaller reporting company" as defined under U.S. federal securities laws and are subject to reduced public company reporting requirements. Our common stock is listed on the Nasdaq Capital Market ("Nasdaq") under the symbol "LIDR." The last sale price of our common stock, as reported on Nasdaq on December 27, 2024, was \$2.04 per share.

As of December 27, 2024, the aggregate market value of our outstanding shares of common stock held by non-affiliates, or public float, was determined to be \$23,235,139 based on 12,005,988 shares of common stock outstanding, of which 616,214 are held by non-affiliates, and at a price of \$2.04 per share, the closing price of our common stock on December 27, 2024. In no event will the aggregate market value of securities sold by us or on our behalf pursuant to General Instruction I.B.6 of Form S-3 during the 12 calendar month period immediately prior to, and including, the date of any such sale exceed one-third of the aggregate market value of our shares of common stock held by non-affiliates, so long as the aggregate market value of our common stock held by non-affiliates is less than \$75,000,000. During the prior 12 calendar month period that ends on, and includes, December 27, 2024, we have sold \$5,105,173 of our securities pursuant to General Instruction I.B.6 of Form S-3.

Investing in our common stock involves a high degree of risk. See the "Risk Factors" section beginning on page S-6 of the Prior Supplement and the documents incorporated by reference into this Prospectus Supplement and the Prior Prospectus, as they may be amended, updated or supplemented periodically in our reports filed with the Securities and Exchange Commission, before investing in our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this Prospectus Supplement or the Prior Prospectus are truthful or complete. Any representation to the contrary is a criminal offense.	
A.G.P.	
The date of this prospectus supplement is December 30, 2024	