Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

DUOS TECHNOLOGIES GROUP, INC.

(Exact Name of Registrant as Specified in Its Charter)

Florida
(State or Other Jurisdiction of Incorporation or Organization)

65-0493217 (I.R.S. Employer Identification No.)

7660 Centurion Parkway, Suite 100
Jacksonville, FL 32256
(904) 296-2807
(Address of Principal Executive Offices, Including Zip Code)

2021 Equity Incentive Plan, as Amended
(Full Title of the Plan)

Adrian G. Goldfarb
Chief Financial Officer
Duos Technologies Group, Inc.
7660 Centurion Parkway, Suite 100
Jacksonville, FL 32256
(Name and Address of Agent for Service)
(904) 296-2807
(Telephone Number, Including Area Code, of Agent for Service)

Copies to:

J. Thomas Cookson, Esq. Shutts & Bowen LLP 200 South Biscayne Boulevard, Suite 4100 Miami, FL 33131 (305) 358-6300

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See definitions of "large accelerated filer", "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Securities Exchange Act of 1934:

Large accelerated filer □ Non-accelerated filer ⊠	Accelerated filer □ Smaller reporting company ⊠
Non-accelerated filer 🖂	Emerging growth company □
f an emerging growth company, indicate by check mark if the registrant has elected not to use the executing standards provided pursuant to Section $7(a)(2)(B)$ of the Securities Act. \Box	xtended transition period for complying with any new or revised financial

EXPLANATORY NOTE

This registration statement (the "Registration Statement"), on Form S-8 is being filed by Duos Technologies Group, Inc. (the "Company") for the purpose of registering 405,334 additional shares of its common stock, \$0.001 par value per share, issuable under the Duos Technologies Group, Inc. 2021 Equity Incentive Plan, as amended (the "Plan"), pursuant to the provisions of the Plan providing for an increase in the number of shares reserved and available under the Plan on February 1, 2025. The Company previously filed with the Securities and Exchange Commission (the "SEC") registration statements on Form S-8 (File Nos. 333-258525 and 333-282568) on August 5, 2021 and October 9, 2024, respectively, with respect to the Plan (collectively, the "Prior Registration Statements"). This Registration Statement relates to the securities of the same class as that to which the Prior Registration Statements relate and is submitted in accordance with General Instruction E to Form S-8 regarding registration of additional securities. In accordance with such instruction, except as otherwise set forth below, the contents of the Prior Registration Statements relating to the Plan are incorporated herein by reference.

Part II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, which have been filed with the SEC pursuant to the Securities Act of 1933, as amended (the "Securities Act") and the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are hereby incorporated by reference in, and shall be deemed to be a part of, this Registration Statement (excluding any portions of such documents that have been "furnished" but not "filed" for purposes of the Exchange Act):

- The Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed April 1, 2024;
- The Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, filed May 13, 2024;
- The Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2024, filed August 13, 2024;
- · The Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2024, filed November 19, 2024;
- The Company's Current Reports on Form 8-K filed March 25, 2024, April 5, 2024, April 30, 2024, May 17, 2024, June 6, 2024, July 23, 2024, September 23, 2024, November 7, 2024, November 20, 2024, January 6, 2025 and February 4, 2025;
- The Company's definitive Proxy Statement for its Annual Meeting of Shareholders, filed August 16, 2024, as supplemented on September 24, 2024; and
- The description of the Company's common stock contained in Exhibit 4.4 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2021, filed with the SEC on March 31, 2022, including any amendments or reports filed for the purpose of updating such description.

All documents, reports, or definitive proxy or information statements subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14, and 15(d) of the Exchange Act, subsequent to the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered hereby have been sold or which deregisters all such securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents (excluding any portions of such documents that have been "furnished" but not "filed" for purposes of the Exchange Act).

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein (or in any other subsequently filed document which also is incorporated or deemed to be incorporated by reference herein) modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 8. Exhibits.

- 4.1 Amendment to Amended and Restated Articles of Incorporation (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on July 13, 2015).
- 4.2 Amended and Restated Articles of Incorporation (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on April 7, 2015).
- 4.3 <u>Amended and Restated By-Laws, as amended</u> (incorporated herein by reference to Exhibit 3.3 to the Company's Registration Statement on Form S-1/A (No. 333-256110) filed on May 28, 2021).
- 4.4 Articles of Amendment to Articles of Incorporation (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on April 28, 2017)
- 4.5 <u>Articles of Amendment to Articles of Incorporation Designation of Series B Convertible Preferred Stock</u> (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on November 29, 2017).
- 4.6 <u>Certificate of Amendment to Articles of Incorporation</u> (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on January 15, 2020).
- 4.7 <u>Articles of Amendment to Articles of Incorporation Designation of Series C Convertible Preferred Stock</u> (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on March 1, 2021).
- 4.8 <u>Articles of Amendment to Articles of Incorporation Designation of Series D Convertible Preferred Stock</u> (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on October 3, 2022).
- 4.9 <u>Articles of Amendment to Articles of Incorporation Designation of Series E Convertible Preferred Stock</u> (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on March 28, 2023).
- 4.10 <u>Articles of Amendment to Articles of Incorporation Designation of Series F Convertible Preferred Stock</u>(incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on August 3, 2023).
- 4.11 Articles of Amendment to Articles of Incorporation (incorporated herein by reference to Exhibit 3.12 to the Company's Current Report on Form 8-K filed on September 23, 2024).
- 5.1 Opinion of Shutts & Bowen LLP, counsel to the Company.
- 23.1 Consent of Shutts & Bowen LLP (included in Exhibit 5.1).
- 23.2 Consent of Salberg & Company, P.A.
- 24.1 <u>Power of Attorney</u> (included on the signature page of this Registration Statement).

- 99.1* <u>Duos Technologies Group, Inc. 2021 Equity Incentive Plan, as amended</u> (incorporated herein by reference from Exhibit B to the Company's Proxy Statement on Schedule 14A filed on August 16, 2024).
- 107 Filing Fee Table
- * Indicates management contract or compensatory plan or arrangement.

Item 9. Undertakings.

- (a) The undersigned registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement; provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) of this Item do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement.
 - (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
 - (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act, that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Jacksonville, State of Florida, on February 5, 2025.

DUOS TECHNOLOGIES GROUP, INC.

By: /s/ Charles P. Ferry
Charles P. Ferry
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints CHARLES P. FERRY his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the date indicated.

Signature	Title	Date

/s/ Charles P. Ferry CHARLES P. FERRY	Chief Executive Officer, Director (Principal Executive Officer)	February 5, 2025
/s/ Adrian G. Goldfarb ADRIAN G. GOLDFARB	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 5, 2025
/s/ Kenneth Ehrman KENNETH EHRMAN	Chairman of the Board	February 5, 2025
/s/ Frank A. Lonegro FRANK A. LONEGRO	Director	February 5, 2025
/s/ Ned Mavrommatis NED MAVROMMATIS	Director	February 5, 2025
/s/ James Craig Nixon JAMES CRAIG NIXON	Director	February 5, 2025



Shutts & Bowen LLP 200 South Biscayne Boulevard Suite 4100 Miami, FL 33131

February 5, 2025

Duos Technologies Group, Inc. 7660 Centurion Parkway Suite 100 Jacksonville, Florida 32256

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to Duos Technologies Group, Inc., a Florida corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission (the "Commission") of a Registration Statement on Form S-8 pursuant to General Instruction E thereunder (the "Registration Statement"), under the Securities Act of 1933, as amended (the "Act"). The Registration Statement relates to the offering and sale by the Company of up to 405,334 shares of the Company's Common Stock, par value \$0.001 per share (the "Shares"), to be issued pursuant to equity awards ("Awards") granted under the Company's 2021 Equity Incentive Plan, as amended (the "Plan").

In connection with this opinion letter, we have examined the Registration Statement and such corporate records, documents, instruments and certificates of public officials and of the Company that we have deemed necessary for the purpose of rendering the opinions set forth herein. We have also reviewed such matters of law as we considered necessary or appropriate as a basis for the opinion set forth below.

With your permission, we have made and relied upon the following assumptions, without any investigation or inquiry by us, and our opinion expressed below is subject to, and limited and qualified by the effect of, such assumptions: (i) all corporate records furnished to us by the Company are accurate and complete; (ii) the Registration Statement filed by the Company with the Commission is identical to the form of the document that we have reviewed; (iii) all statements as to factual matters that are contained in the Registration Statement (including the exhibits to the Registration Statement) are accurate and complete; (iv) the Company will at all times reserve a sufficient number of shares of its unissued common stock as is necessary to provide for the issuance of the Shares; and (v) with respect to documents that we reviewed in connection with this opinion letter, all documents submitted to us as originals are authentic, all documents submitted to us as certified, facsimile or photostatic copies conform to the originals of such documents, all such original documents are authentic, the signatures on all documents are genuine, and all natural persons who have executed any of the documents have the legal capacity to do so.

Based upon the foregoing examination, we are of the opinion that, based upon the assumptions listed above, the Shares when issued and paid for in accordance with the terms of the Plan (and any Award Agreements issued thereunder) will be duly authorized, validly issued, fully paid and nonassessable.

We express no opinion as to matters governed by laws of any jurisdiction other than the federal laws of the United States and the laws of the State of Florida. We neither express nor imply any obligation with respect to any other laws or the laws of any other jurisdiction. For purposes of this opinion, we assume that the Awards and Shares will be issued in compliance with all applicable state securities or blue sky laws.

We assume no obligation to update or supplement this opinion letter if any applicable laws change after the date of this opinion letter or if we become aware after the date of this opinion letter of any facts, whether existing before or arising after the date hereof, that might change the opinions expressed above. This opinion letter is limited to the matters expressly stated herein and no opinions are to be inferred or may be implied beyond the opinions expressly so stated. Without limiting the generality of the foregoing, we neither express nor imply any opinion regarding the contents of the Registration Statement, other than as expressly stated herein with respect to the Shares.

This opinion letter is furnished in connection with the filing of the Registration Statement and may not be relied upon for any other purpose without our prior written consent in each instance. Further, no portion of this letter may be quoted, circulated or referred to in any other document for any other purpose without our prior written consent.

We further consent to your filing a copy of this opinion as Exhibit 5.1 to the Registration Statement. In giving such permission, we do not admit hereby that we come within the category of persons whose consent is required under Section 7 of the Act, or the rules and regulations of the Commission thereunder.

Sincerely,

/s/ Shutts & Bowen LLP

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 of Duos Technologies Group, Inc. of our report dated April 1, 2024 on the consolidated financial statements of Duos Technologies Group, Inc. and Subsidiaries as of December 31, 2023 and 2022 and for each of the two years in the period ended December 31, 2023.

/s/ Salberg & Company, P.A.

SALBERG & COMPANY, P.A. Boca Raton, Florida February 5, 2025

Calculation of Filing Fee Tables

Form S-8 (Form Type)

Duos Technologies Group, Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

Newly	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Share	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial effective date	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
Registered Securities												
Fees to Be Paid	Equity	Common Stock, Par Value \$0.001 per share	457(c) and 457(h)	405,334(2)	<u>\$ 6.45</u> (3) <u>\$</u>	2,614,404.30 (3)	0.0001531	<u>\$ 400.27</u>				
Carry Forward Securities												
Carry Forward Securities												
				Total Offering Amounts				\$ 400.27				
				Total Fees Previously Paid Total Fee Offsets				\$ 400.27 —				
				Net Fee Due				\$ 400.27				

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), the securities being registered include such indeterminate number of additional shares of common stock as may become issuable after the date hereof as a result of stock splits, stock dividends, anti-dilution adjustments and similar transactions.
- (2) Represents additional shares of common stock reserved for issuance under the Duos Technologies Group, Inc. 2021 Equity Incentive Plan, as amended.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) and Rule 457(h) under the Securities Act based on the average of the high and low sales prices of the common stock as reported on the Nasdaq Capital Market on February 4, 2025.

Table 2: Fee Offset Claims and Sources

	Registrant or Filer Name	Form or Filing File Type Number	Initial Filing Filing Date Date	As Fee v Offset	Security Type ssociated with Fee Offset Claimed	Security Title Associated with Fee Offset Claimed	Unsold Securities Associated with Fee Offset Claimed	Unsold Aggregate Offering Amount Associated with Fee Offset Claimed	Fee Paid with Fee Offset Source
			Rules 457	(b) and 0-11(a)(2)					
Fee Offset Claims									
Fee Offset Sources									
			Rı	ule 457(p)					
Fee Offset Claims				-					
Fee Offset Sources									
			Table 3: Com	bined Prospectuses					
		Amount of		Maximum Aggregate fering Price of					
		Securities		Securities					
Security Type	Security Class Title	Previously Registered		Previously Registered	Form Type		File Number	Initial Effe Date	