

SECURITIES AND EXCHANGE COMMISSION  
 WASHINGTON, D.C. 20549

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 FORM S-8  
 REGISTRATION STATEMENT  
 UNDER  
 THE SECURITIES ACT OF 1933  
 -----

HARMONIC LIGHTWAVES, INC.  
 (Exact name of registrant as specified in its charter)

DELAWARE

77-0201147

-----  
 (State or other jurisdiction  
 of incorporation)

-----  
 (IRS Employer  
 Identification No.)

549 Baltic Way  
 Sunnyvale, California 94089  
 (Address of principal executive offices)

-----  
 1995 Stock Plan  
 1995 Employee Stock Purchase Plan  
 (Full Title of the Plans)  
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ANTHONY J. LEY  
 CHAIRMAN OF THE BOARD OF DIRECTORS,  
 PRESIDENT AND CHIEF  
 EXECUTIVE OFFICER HARMONIC  
 LIGHTWAVES, INC.  
 549 BALTIC WAY  
 SUNNYVALE, CALIFORNIA 94089  
 (Name and address of agent for service)

(408) 542-2500  
 (Telephone number, including area code, of agent for service)

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 Copies to:  
 PATRICK J. SCHULTHEIS, ESQ.  
 WILSON SONSINI GOODRICH & ROSATI  
 Professional Corporation  
 650 Page Mill Road  
 Palo Alto, California 94304

Title of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock (par value \$0.001 par value) reserved for issuance under the 1995 Stock Plan	575,000	\$12.0156(1)	\$6,908,984.38(1)	\$2,038.15
Common Stock (par value \$0.001 par value) reserved for issuance under the 1995 Employee Stock Purchase Plan	200,000	\$10.2133(2)	\$2,042,656.25(2)	\$ 602.58

- (1) Estimated pursuant to Rule 457(h) of the Securities Act of 1933, as amended, solely for the purpose of calculating the registration fee. The proposed maximum offering price per share with respect to the 575,000 shares reserved for issuance under the 1995 Stock Plan was determined by reference to the fair market value of the Common Stock (the "FMV"), or, the average of the high and low price reported in the Nasdaq National Market on September 24, 1998.
- (2) Estimated pursuant to Rule 457(h) of the Securities Act of 1933, as amended, solely for the purpose of calculating the registration fee. The proposed maximum offering price per share with respect to the 200,000 shares reserved for issuance under the 1995 Employee Stock Purchase Plan was determined to be 85% of the FMV.

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## PART II

### INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

#### ITEM 3. INFORMATION INCORPORATED BY REFERENCE.

There are hereby incorporated by reference in this Registration Statement the following documents and information heretofore filed with the Securities and Exchange Commission:

(a) The Registrant's Annual Report on Form 10-K for the year ended December 31, 1997 filed pursuant to Section 13(a) or 15(d) of the Securities Exchange Act, as amended (the "Exchange Act").

(b) The Registrant's quarterly reports on Form 10-Q for the quarter ended April 3, 1998 and the quarter ended July 3, 1998 filed pursuant to Section 13(a) or 15(d) of the Exchange Act.

(c) The description of the Registrant's Common Stock contained in the Registrant's Registration Statement on Form 8-A dated April 6, 1995, filed pursuant to Section 12 of the Securities Exchange Act of 1934, as amended, including any amendment or report filed for the purpose of updating such description.

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this registration statement and prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be part hereof from the date of filing such documents.

#### ITEM 4. DESCRIPTION OF SECURITIES.

Not applicable.

#### ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL.

Not applicable.

#### ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145 of the Delaware General Corporations Law authorizes a court to award, or a corporation's Board of Directors to grant, indemnification to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act. Article VI of the Company's Bylaws provides for the mandatory indemnification of its directors, officers, employees and other agents to the maximum extent permitted by Delaware General Corporation Law, and the Company has entered into agreements with its officers, directors and certain key employees implementing such indemnification.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED.

Not applicable.

ITEM 8. EXHIBITS.

Exhibit  
Number  
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- 5.1 Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation, as to the legality of securities being registered.
- 10.1\* 1995 Stock Plan, as amended.
- 10.2\* 1995 Employee Stock Purchase Plan, as amended.
- 23.1 Consent of Independent Accountants.
- 23.2 Consent of Counsel (included in Exhibit 5.1).
- 24.1 Power of Attorney (see page II-4).

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 \* Incorporated by reference to the Registrant's Proxy Statement on Schedule 14A filed with the SEC on March 26, 1998, pursuant to Section 14(a) of the Exchange Act.

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 to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the 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 Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee

benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the 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 of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the Registrant's Bylaws, indemnification

agreements, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the 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 Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant, Harmonic Lightwaves, Inc., a Delaware corporation, 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 Sunnyvale, State of California, on September 30, 1998.

HARMONIC LIGHTWAVES, INC.

By: /s/ Anthony J. Ley

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Anthony J. Ley, Chairman of the Board,  
President and Chief Executive Officer

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POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Anthony J. Ley and Robin N. Dickson, jointly and severally, his attorneys-in-fact, each with the power of substitution, for him in any and all capacities, to sign any amendments to this Registration Statement on Form S-8, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the date indicated.

SIGNATURE	TITLE	DATE
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/s/ Anthony J. Ley ----- (Anthony J. Ley)	Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)	September 30, 1998
/s/ Robin N. Dickson ----- (Robin N. Dickson)	Chief Financial Officer (Principal Financial and Accounting Officer)	September 30, 1998
/s/ E. Floyd Kvamme -----	Director	September 30, 1998

(E. Floyd Kvamme)

/s/ David A. Lane ----- (David A. Lane)	Director	September 30, 1998
/s/ Barry D. Lemieux ----- (Barry D. Lemieux)	Director	September 30, 1998
/s/ Moshe Nazarathy ----- (Moshe Nazarathy)	Director	September 30, 1998
/s/ Michel L. Vaillaud ----- (Michel L. Vaillaud)	Director	September 30, 1998

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SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

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EXHIBITS  
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REGISTRATION STATEMENT ON FORM S-8

HARMONIC LIGHTWAVES, INC.

SEPTEMBER 30, 1998

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INDEX TO EXHIBITS

Exhibit Number	Description
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5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation.
10.1*	1995 Stock Plan, as amended.
10.2*	1995 Employee Stock Purchase Plan, as amended.
23.1	Consent of PriceWaterhouseCoopers LLP.
23.2	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1).
24.1	Power of Attorney (See page II-4).

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\* Incorporated by reference to the Registrant's Proxy Statement on Schedule 14A filed with the SEC on March 26, 1998, pursuant to Section 14(a) of the Exchange Act.

September 30, 1998

Harmonic Lightwaves, Inc.  
549 Baltic Way  
Sunnyvale, California 94089

Re: Registration Statement on Form S-8

Gentlemen:

We have examined the Registration Statement on Form S-8 to be filed by you with the Securities and Exchange Commission on or about September 30, 1998 (the "Registration Statement") in connection with the registration under the Securities Act of 1933, as amended, of 575,000 shares of your Common Stock under the 1995 Stock Plan, as amended, and 200,000 shares of your Common Stock under the 1995 Employee Stock Purchase Plan, as amended. Such shares of Common Stock are referred to herein as the "Shares," and such plans are referred to herein as the "Plans." As your counsel in connection with this transaction, we have examined the proceedings taken and are familiar with the proceedings proposed to be taken by you in connection with the issuance and sale of the Shares pursuant to the Plans.

It is our opinion that, when issued and sold in the manner described in the Plans and pursuant to the agreements which accompany each grant under the Plans, the Shares will be legally and validly issued, fully paid and non-assessable.

We consent to the use of this opinion as an exhibit to the Registration Statement, and further consent to the use of our name wherever appearing in the Registration Statement and any amendments thereto.

Very truly yours,

WILSON SONSINI GOODRICH & ROSATI  
Professional Corporation

/s/ WILSON SONSINI GOODRICH & ROSATI  
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## CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated January 20, 1998, which appears on page 34 of the 1997 Annual Report to Shareholders of Harmonic Lightwaves, Inc., which is incorporated by reference in the Annual Report on Form 10-K of Harmonic Lightwaves, Inc. for the year ended December 31, 1997.

/s/ PRICEWATERHOUSECOOPERS LLP

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San Jose, California  
September 30, 1998