Registration No. 333-

# SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

# **DIGIRAD CORPORATION**

(Exact Name of Registrant as Specified in its Charter)

**Delaware** (State or Other Jurisdiction of Incorporation or Organization) 33-0145723 (I.R.S. Employer Identification Number)

13950 Stowe Drive Poway, California 92064 (858) 726-1600

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Digirad Corporation 1991 Stock Option Program
Digirad Corporation 1997 Stock Option/Stock Issuance Plan
Digirad Corporation 1998 Stock Option/Stock Issuance Plan
Digirad Corporation 2004 Stock Incentive Plan
(Full title of the Plan(s))

David M. Sheehan Chief Executive Officer Digirad Corporation 13950 Stowe Drive Poway, California 92064 (838) 726-1600

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

John A. de Groot, Esq. Morrison & Foerster LLP 3811 Valley Centre Drive, Suite 500 San Diego, California 92130 (858) 720-5100

### CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be registered(1)	Proposed maximum offering price per share	Proposed maximum aggregate offering price	Amount of registration fee
Common Stock, par value \$0.0001 per share	539(2)	\$446.45(3)	\$240,636.55	\$30.49
Common Stock, par value \$0.0001 per share	118(4)	\$175.83(5)	\$20,747.94	\$2.63
Common Stock, par value \$0.0001 per share	1,628,251(6)	\$2.36(7)	\$3,842,672.36	\$486.87
Common Stock, par value \$0.0001 per share	1,400,000(8)	\$12.00(9)	\$16,800,000.00	\$2,128.56
Total	3,028,908	_	\$20,904,056.85	\$2,648.54

Pursuant to Rule 416(a), this Registration Statement shall also cover any additional shares of the registrant's common stock, par value \$0.0001 per share (the "Common Stock"), that become issuable under any of the plans by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of outstanding shares of Common Stock.

(1)

Represents 539 shares of Common Stock subject to outstanding options under the Digirad Corporation 1991 Stock Option Program (the "1991 Program") as of the date of the registrant's initial public offering

This estimate is made pursuant to Rule 457(h) solely for purposes of calculating the registration fee. For the 539 shares of Common Stock reserved for issuance upon the exercise of outstanding awards granted under the 1991 Program, the Proposed Maximum Offering price per share is \$446.45 per share, which is the weighted average exercise price of the options granted under the 1991 Program.

Represents 118 shares of Common Stock subject to outstanding options under the Digirad Corporation 1997 Stock Option/Stock Issuance Plan (the "1997 Plan") as of the date of the registrant's initial

public offering.

This estimate is made pursuant to Rule 457(h) solely for purposes of calculating the registration fee. For the 118 shares of Common Stock reserved for issuance upon the exercise of outstanding awards granted under the 1997 Plan, the Proposed Maximum Offering price per share is \$175.83 per share, which is the weighted average exercise price of the options granted under the 1997 Plan.

Represents 1,628,251 shares of Common Stock subject to outstanding options under the Digirad Corporation 1998 Stock Option/Stock Issuance Plan (the "1998 Plan"). Any shares of Common Stock (up to a maximum of 1,500,000 shares) that are represented by awards under the 1998 Plan, that are forfeited, expire or are cancelled without delivery of the shares of Common Stock or which result in forfeiture of the shares of Common Stock back to the registrant on or after the date of the registrant's initial public offering will be available for future issuance under the Digirad Corporation 2004 Stock Incentive Plan (the "2004 Plan").
This estimate is made pursuant to Rule 457(h) solely for purposes of calculating the registration fee. For the 1,628,251 shares of Common Stock reserved for issuance upon the exercise of outstanding

- (7)
- awards granted under the 1998 Plan, the Proposed Maximum Offering price per share is \$2.36 per share, which is the weighted average exercise price of the options granted under the 1998 Plan. Represents 1,400,000 shares of Common Stock available for future issuance under the 2004 Plan. In addition, the maximum aggregate number of shares of Common Stock available for issuance under the 2004 Plan will be increased by any shares of Common Stock (up to a maximum of 1,500,000 shares) that are represented by awards under the 1998 Plan, that are forfeited, expire or are cancelled (8)
- without delivery of the shares of Common Stock or which result in forfeiture of the shares of Common Stock back to the registrant on or after the date of the registrant's initial public offering. Such additional shares of Common Stock are registered pursuant to footnote (6) above.

  This estimate is made pursuant to Rule 457(h) solely for purposes of calculating the registration fee. For the 1,400,000 shares of Common Stock available for future grants under the 2004 Plan, the Proposed Maximum Offering Price Per Share is \$12.00, the initial public offering price of the registrant's Common Stock as set forth in the registrant's Prospectus filed with the Securities and (9) Exchange Commission on June 10, 2004 pursuant to Rule 424(b) under the Securities Act of 1933, as amended.

#### PART I

### INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

#### Item 1. Plan Information.

Not required to be filed with this Registration Statement.

### Item 2. Registrant Information and Employee Plan Annual Information.

Not required to be filed with this Registration Statement.

#### PART II

### INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

### Item 3. Incorporation of Documents by Reference.

The following documents filed with the Securities and Exchange Commission (the "SEC") by Digirad Corporation (the "Company") are incorporated by reference in this Registration Statement:

- (a) the Prospectus filed by the Company pursuant to Rule 424(b) under the Securities Act of 1933, as amended (the "Securities Act"), relating to the Registration Statement on Form S-1, as amended (File No. 333-113760), on June 10, 2004, which contains audited financial statements of the Company for the latest fiscal year for which such statements have been filed; and
- (b) the description of the Company's Common Stock contained in the Company's Registration Statement on Form 8-A filed under Section 12(g) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), on June 3, 2004, including any subsequent amendment or report filed for the purpose of amending such description.

All documents filed by the Company pursuant to Sections 13(a), 13(c), 14 or 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 de-registers all securities then remaining unsold, are incorporated by reference in this Registration Statement and are a part hereof from the date of filing of such documents. 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 or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

## Item 4. Description of Securities.

Not applicable.

### Item 5. Interests of Named Experts and Counsel.

Not applicable.

### Item 6. Indemnification of Directors and Officers.

As permitted by Section 102 of the Delaware General Corporation Law, the Company has adopted provisions in its restated certificate of incorporation and restated bylaws that limit or eliminate the personal liability of its directors for a breach of their fiduciary duty of care as a director. The duty of care generally requires that, when acting on behalf of the Company, directors exercise an informed

business judgment based on all material information reasonably available to them. Consequently, a director will not be personally liable to the Company or its stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to the Company or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any act related to unlawful stock repurchases, redemptions or other distributions or payment of dividends; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not affect the availability of equitable remedies such as injunctive relief or rescission. The Company's restated certificate of incorporation also authorizes the Company to indemnify its officers, directors and other agents to the fullest extent permitted under Delaware law.

As permitted by Section 145 of the Delaware General Corporation Law, the Company's restated bylaws provide that:

- the Company may indemnify its directors, officers, and employees to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions;
- the Company may advance expenses to its directors, officers and employees in connection with a legal proceeding to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions; and
- the rights provided in its restated bylaws are not exclusive.

The Company has entered, and intends to continue to enter, into separate indemnification agreements with each of its directors and officers which may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements require the Company, among other things, to indemnify its officers and directors against liabilities that may arise by reason of their status or service as directors or officers, other than liabilities arising from willful misconduct. These indemnification agreements also require the Company to advance any expenses incurred by the directors or officers as a result of any proceeding against them as to which they could be indemnified. The Company has purchased a policy of directors' and officers' liability insurance that insures its directors and officers against the cost of defense, settlement or payment of a judgment in some circumstances.

## Item 7. Exemption From Registration Claimed.

Not applicable.

### Item 8. Exhibits.

The following is a list of exhibits filed as part of this Registration Statement, which are incorporated herein:

Exhibit Numbers	Exhibit Description	
4.1*	Digirad Corporation 1991 Stock Option Agreement	
4.2*	Digirad Corporation 1997 Stock Option/Stock Issuance Plan	
4.3*	Digirad Corporation 1998 Stock Option/Stock Issuance Plan, as amended	
4.4*	Digirad Corporation 2004 Stock Incentive Plan	
5.1**	Opinion of Morrison & Foerster LLP	
23.1**	Consent of Ernst & Young LLP	
23.2**	Consent of Morrison & Foerster LLP (contained in Exhibit 5.1)	
24.1**	Power of Attorney (included in the signature page of this Registration Statement)	

<sup>\*</sup> Incorporated by reference to the Company's Registration Statement on Form S-1, as amended (File No. 333-113760).

### 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. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high and of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement;
    - (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 the undertakings set forth in paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the Registration Statement is on Form S-3, Form S-8 or Form F-3, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic 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

<sup>\*\*</sup> Filed herewith

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 (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 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 the 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, the Company 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 Poway, State of California, on June 10, 2004.

DIGIRAD C	DRPORATION
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By:	/s/ DAVID M. SHEEHAN

David M. Sheehan

President and Chief Executive Officer

### POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each such person whose signature appears below constitutes and appoints, jointly and severally, David M. Sheehan and Todd P. Clyde 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 (including post-effective amendments), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the SEC, 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, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ DAVID M. SHEEHAN  David M. Sheehan	President, Chief Executive Officer and Director (Principal Executive Officer)	June 10, 2004
/s/ TODD P. CLYDE	Chief Financial Officer (Principal Financial and Accounting	June 10, 2004
Todd P. Clyde	Officer)	
/s/ TIMOTHY J. WOLLAEGER	Chairman of the Board of Directors	June 10, 2004
Timothy J. Wollaeger		
Raymond V. Dittamore /s/ R. KING NELSON	Director	June 10, 2004
R. King Nelson	Director	June 10, 2004
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/s/ KENNETH E. OLSON		
Kenneth E. Olson	Director	June 10, 2004
/s/ DOUGLAS REED, M.D.		
Douglas Reed, M.D.	Director	June 10, 2004
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# EXHIBIT INDEX

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Filed herewith.

## QuickLinks

PART I INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS
PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT
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EXHIBIT INDEX

Exhibit 5.1

[Morrison & Foerster LLP Letterhead]

June 10, 2004

Digirad Corporation 13950 Stowe Drive Poway, CA 92064

Re: 1991 Stock Option Program, 1997 Stock Option/Stock Issuance Plan,

1998 Stock Option/Stock Issuance Plan and 2004 Stock Incentive Plan

### Ladies and Gentlemen:

At your request, we have examined the Registration Statement on Form S-8 of Digirad Corporation, a Delaware corporation (the "Company"), to be filed with the Securities and Exchange Commission in connection with the registration under the Securities Act of 1933, as amended, of an aggregate of 3,028,908 shares of the Company's common stock, \$0.0001 par value (the "Stock") which will be issuable under the Company's 1991 Stock Option Program, 1997 Stock Option/Stock Issuance Plan, 1998 Stock Option/Stock Issuance Plan and 2004 Stock Incentive Plan (collectively the "Plans").

As the Company's counsel, we have examined the proceedings taken by the Company in connection with the adoption of the Plans and the authorization of the issuance of the Stock under the Plans, and such documents as we have deemed necessary to render this opinion. For the purpose of the opinion rendered below, we have assumed that in connection with the issuance of Stock under the Plans, the Company will receive consideration in an amount not less than the aggregate par value of the Stock covered by each such issuance.

Based upon and subject to the foregoing, it is our opinion that the Stock, when issued and outstanding pursuant to the terms of the Plans, will be validly issued, fully paid and nonassessable.

We consent to the use of this opinion as an exhibit to the Registration Statement.

Very truly yours,

/s/ MORRISON & FOERSTER LLP

Morrison & Foerster LLP

QuickLinks

Exhibit 5.1

Exhibit 23.1

### CONSENT OF ERNST & YOUNG LLP

We consent to the incorporation by reference in the Registration Statement on Form S-8 pertaining to the Digirad Corporation 1991 Stock Option Program, the Digirad Corporation 1997 Stock Option/ Stock Issuance Plan, the Digirad Corporation 1998 Stock Option/ Stock Issuance Plan and the Digirad Corporation 2004 Stock Incentive Plan of our report dated March 12, 2004, except for Note 9 "Changes in Capitalization" as to which the date is April 30, 2004, with respect to the consolidated financial statements of Digirad Corporation, included in its Registration Statement (Form S-1 No. 333-113760) and related Prospectus.

Our audits also included the financial statement schedule of Digirad Corporation listed in Item 16(b) to the Registration Statement (Form S-1 No. 333-113760). This schedule is the responsibility of the Company's management. Our responsibility is to express an opinion based on our audits. In our opinion, the financial statement schedule referred to above, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

/s/ ERNST & YOUNG LLP

San Diego, California June 8, 2004 QuickLinks

Exhibit 23.1

**CONSENT OF ERNST & YOUNG LLP**