

Edgar Filing: TERADYNE INC - Form 424B3

TERADYNE INC
Form 424B3
February 14, 2002

Filed pursuant to Rule 424(b)(3)
File No. 333-75632

PROSPECTUS

[TERADYNE LOGO]

TERADYNE, INC.
\$400,000,000
(AGGREGATE PRINCIPAL AMOUNT)

3.75% CONVERTIBLE SENIOR NOTES DUE OCTOBER 15, 2006 AND
THE COMMON STOCK ISSUABLE UPON THE CONVERSION OF THE NOTES

We issued the notes in a private placement in October 2001. This prospectus will be used by selling securityholders to resell their notes and the common stock issuable upon conversion of their notes. We will not receive any proceeds from this offering.

The notes are issued only in denominations of \$1,000 and integral multiples of \$1,000 and mature on October 15, 2006. You may convert the notes into shares of our common stock at any time prior to their maturity or their prior redemption or repurchase by us. The conversion rate is 38.4615 shares of common stock per each \$1,000 principal amount of notes, subject to adjustment in certain circumstances. This is equivalent to a conversion price of \$26.00 per share.

We will pay interest on the notes on April 15 and October 15 of each year. The first such payment will be made on April 15, 2002. The notes will be issued only in registered book-entry form, in denominations of \$1,000 and integral multiples of \$1,000. The notes are senior unsecured obligations of Teradyne.

We may redeem the notes at the times and at the prices specified in this prospectus. In the event of a change in control, you may require us to repurchase any notes held by you.

The notes are not listed on any securities exchange or included in any automated quotation system. The notes are currently eligible for trading on The Portal(SM) Market. Our common stock is quoted on the New York Stock Exchange under the symbol "TER". On February 13, 2002, the last reported sale price for our common stock on the New York Stock Exchange was \$33.28 per share. The securities offered by this prospectus may be offered by the selling securityholders in negotiated transactions or otherwise, at negotiated prices or at the market prices prevailing at the time of sale.

THE SECURITIES OFFERED HEREBY INVOLVE A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE 5.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

PROSPECTUS DATED FEBRUARY 14, 2002.

Edgar Filing: TERADYNE INC - Form 424B3

TABLE OF CONTENTS

| | PAGE |
|--|------|
| | ---- |
| DISCLOSURE REGARDING FORWARD LOOKING STATEMENTS..... | i |
| WHERE YOU CAN FIND MORE INFORMATION..... | iii |
| SUMMARY..... | 1 |
| RECENT DEVELOPMENT..... | 4 |
| RISK FACTORS..... | 5 |
| USE OF PROCEEDS..... | 12 |
| LEGAL PROCEEDINGS..... | 12 |
| DESCRIPTION OF THE NOTES..... | 13 |
| DESCRIPTION OF COMMON STOCK..... | 26 |
| CERTAIN UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS..... | 29 |
| SELLING SECURITYHOLDERS..... | 34 |
| PLAN OF DISTRIBUTION..... | 37 |
| LEGAL MATTERS..... | 38 |
| EXPERTS..... | 38 |

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

In addition to the other information contained or incorporated by reference in this prospectus, investors should carefully consider the risk factors disclosed in this prospectus, including those beginning on page 5, in evaluating an investment in the notes or the common stock issuable upon conversion of the notes. This prospectus includes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended ("Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended ("Exchange Act"). All statements other than statements of historical fact are "forward-looking statements" for purposes of these provisions, including any projections of earnings, revenues or other financial items, any statements of the plans and objectives of management for future operations, any statements concerning proposed new products or services, any statements regarding future economic conditions or performance, and any statement of assumptions underlying any of the foregoing. In some cases, forward-looking statements can be identified by the use of terminology such as "may," "will," "expects," "plans," "anticipates," "estimates," "potential," or "continue" or the negative thereof or other comparable terminology. Such forward-looking statements include statements as to, among other things:

- projections, plans and objectives for Teradyne's business;
- financial condition;
- operating results;
- future operations; and
- future economic performance or statements relating to the sufficiency of capital to meet working capital, planned capital expenditures and expectations as to customer orders.

There can be no assurance that such expectations or any of the forward-looking statements will prove to be correct, and actual results could differ materially from those projected or assumed in forward-looking statements.

Edgar Filing: TERADYNE INC - Form 424B3

Teradyne's future financial condition and results of operations, as well as any forward-looking statements, are subject to inherent risks and uncertainties, including but not limited to the risk factors set forth below and those described elsewhere in this prospectus. In particular, our business is dependent on the current and anticipated market demand for electronics, which has been impacted by the economic slowdown that began in the latter portions of 2000 and by the negative effects on the economy resulting from the terrorist attacks of September 11, 2001 and the resulting ongoing hostilities. The uncertainty regarding the future growth rate of worldwide economies has caused many companies to reduce capital investment and may cause further reduction of such investments. These reductions have been particularly severe in the electronics and semiconductor industry which Teradyne serves and have contributed to Teradyne incurring losses in recent periods and may contribute to further losses. In addition, the markets that Teradyne serves have historically been quite cyclical and may continue to be so. Further, our backlog has and may continue to be adversely affected as customers continue to defer or cancel orders which previously had been accepted. All of these factors could result in further decreased revenues. Our business is also affected by our ability to develop and ship new and sometimes more complex products to address changing customer needs, by new offerings by competitors and by intense competition throughout the world in each of our operating segments from competitors having substantial resources available for the engineering, manufacturing, marketing and distribution of their products. The current economic decline and the resulting oversupply could increase the possibility of intensified price competition in certain markets and result in the need to lower our prices, which could result in decreased revenues. In addition, our acquisition of GenRad, Inc. during 2001 and any future acquisitions or divestitures could affect our ability to manage and maintain our business. Further, as a result of our issuance of \$400 million aggregate principal amount of convertible senior notes in October 2001, together with the approximately \$45 million mortgage financing which we completed in December 2001, we have substantially increased our debt service obligations and ratio of debt to total capitalization. If our cash flow should be insufficient to meet these obligations, we might have to reduce or curtail certain activities of our business. Finally, our ongoing expense control measures may not have the intended effect on our future financial results. These measures could have long-term negative effects on our business by reducing our pool of

i

technical talent, decreasing improvements in our products and making it more difficult for us to respond to large customer orders if the economy does not recover.

All forward-looking statements and reasons why results may differ included in this prospectus are made as of the date hereof, and Teradyne assumes no obligation to update any such forward-looking statement or reason why actual results might differ.

ii

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. You can inspect and copy the registration statement on Form S-3 of which this prospectus is a part, as well as reports, proxy statements and other information filed by us, at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. You can obtain copies of such material from the Public Reference Room of the SEC at 450 Fifth Street, N.W., Washington, D.C. 20549, at prescribed rates. You can

Edgar Filing: TERADYNE INC - Form 424B3

call the SEC at 1-800-SEC-0330 for information regarding the operation of its Public Reference Room. The SEC also maintains an Internet site at <http://www.sec.gov> that contains reports, proxy and information statements, and other information regarding registrants, like us, that file electronically.

This prospectus provides you with a general description of the notes and common stock being registered. This prospectus is part of a registration statement that we have filed with the SEC. To see more detail, you should read the exhibits and schedules filed with, or incorporated by reference into, our registration statement.

The SEC allows us to "incorporate by reference" into this prospectus the information we file with the SEC. This means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is considered a part of this prospectus, and later information we file with the SEC will automatically update and supersede this information. We incorporate by reference our documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934 until this offering is completed:

- Annual Report on Form 10-K for the year ended December 31, 2000 and related exhibits;
- Current Reports on Form 8-K filed on October 18, 2001, October 19, 2001, October 24, 2001, and February 5, 2002 and related exhibits; and
- Quarterly Reports on Form 10-Q for the quarters ended April 1, 2001, July 1, 2001, and September 30, 2001 and related exhibits.

You may request these documents in writing or by telephone. We will provide to you, at no cost, a copy of any or all information incorporated by reference in the registration statement, of which this prospectus is a part. Requests should be directed to our Investor Relations Department at our principal offices which are located at 321 Harrison Avenue, Boston, Massachusetts 02118. You may contact our investor relations department by calling us at (617) 482-2700.

You should rely only on the information incorporated by reference or provided in this prospectus or any prospectus supplement. We have not authorized anyone else to provide you with different information. The selling securityholders are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of the document.

iii

SUMMARY

The following summary is qualified in its entirety by the more detailed information appearing elsewhere in this prospectus. You should consider carefully the information set forth in this prospectus under the heading "Risk Factors." All references to "Teradyne" or to the "Company" or to "we" or "us" refer to Teradyne, Inc.

TERADYNE

We design, manufacture, market and service automated test and inspection systems and related software, as well as backplanes and electronic connectors. We currently have four principal product lines:

- semiconductor test systems;

Edgar Filing: TERADYNE INC - Form 424B3

- connection systems;
- circuit-board test and inspection systems; and
- broadband test systems.

Semiconductor Test Systems. We produce semiconductor test systems for use by electronic component manufacturers in the design and testing of a wide variety of semiconductor products, including logic, memory, mixed signal and "system on a chip" integrated circuits. Semiconductor test systems are sold to semiconductor manufacturers and subcontractors to the semiconductor industry. Semiconductor manufacturers use our semiconductor test systems to:

- measure product performance;
- improve product quality;
- shorten time to market;
- enhance manufacturability;
- minimize labor costs; and
- increase production yields.

Connection Systems. Our connection systems include backplane assemblies, connectors and electro-mechanical systems integration for customers in the telecom, data networking, storage and server industries. A backplane is an assembly into which printed circuit boards are inserted that provides for the interconnection of electrical signals between the circuit boards and the other elements of the system. Connection systems provide design and applications engineering along with manufacturing for a total interconnect solution for our customers. Connection systems product technology can be found in diverse products such as Internet routers, computer servers, mass data storage and telecom switches.

Circuit-Board Test and Inspection Systems. Electronic equipment manufacturers use our circuit-board test and inspection systems for the design, inspection and testing of circuit boards and other assemblies. We also sell circuit-board test and inspection systems to customers across most sectors of the electronics industry and to companies in other industries that use electronic devices in high volume. Similar to semiconductor test systems, our customers use their systems and related software to increase product performance, to improve product quality, to shorten time to market, to enhance manufacturability, to minimize labor costs, and to increase production yields.

Broadband Test Systems. Broadband test systems are used by the communications industry for Internet testing, customer care and voice network maintenance. Broadband test systems perform qualification testing for digital subscriber line, or DSL, services, assist customer care centers in isolating network service problems, and perform integrated surveillance and maintenance for voice networks.

1

ORGANIZATION

We are a Massachusetts corporation. Our principal executive offices are located at 321 Harrison Avenue, Boston, Massachusetts 02118, and our telephone number is (617) 482-2700.

Edgar Filing: TERADYNE INC - Form 424B3

THE NOTES

SECURITIES OFFERED..... \$400,000,000 aggregate principal amount of 3.75% Convertible Senior Notes due October 15, 2006.

INTEREST..... We will pay interest on the notes semi-annually on April 15 and October 15 of each year, commencing April 15, 2002.

CONVERSION..... You may convert the notes into shares of common stock at a conversion rate of 38.4615 shares of common stock per \$1,000 principal amount of notes, which is equivalent to a conversion price of \$26.00 per share. The conversion rate is subject to adjustment in certain events.

You may convert the notes at any time before the close of business on the maturity date, unless we have previously redeemed or repurchased the notes. Holders of notes called for redemption or repurchase will be entitled to convert the notes up to and including the business day immediately preceding the date fixed for redemption or repurchase, as the case may be. See "Description of the Notes -- Conversion Rights."

RANKING..... The notes are senior unsecured obligations that rank equally with our existing and future unsecured and unsubordinated indebtedness. The indenture under which the notes were issued does not restrict us from incurring additional senior or other indebtedness and other liabilities. See "Description of the Notes -- General."

OPTIONAL REDEMPTION BY US..... We may redeem the notes, at our option, in whole or in part, on or after October 18, 2004, at the redemption prices set forth in this prospectus plus accrued interest to the redemption date. See "Description of the Notes -- Optional Redemption by Teradyne."

REPURCHASE AT OPTION OF
HOLDERS UPON A CHANGE IN
CONTROL..... Upon a Change in Control, as that term is defined in this prospectus, you will have the right, subject to certain conditions and restrictions, to require us to repurchase your notes, in whole or in part, at 100% of their principal amount, plus accrued interest to the repurchase date. The repurchase price is payable in cash or, at our option, in shares of common stock. However, we may only pay the repurchase price in common stock if we satisfy prescribed conditions. If we pay the repurchase price in common stock, the common stock will be valued at 95% of the average closing sales prices of the common stock for the five trading days preceding and including the third trading

Edgar Filing: TERADYNE INC - Form 424B3

day prior to the repurchase date. See "Description of the Notes -- Repurchase at Option of Holders Upon a Change in Control."

2

EVENTS OF DEFAULT..... The following will be events of default under the indenture for the notes:

- we fail to pay the principal of or any premium on any note when due;
- we fail to pay any interest on any note when due and that non-payment continues for 30 days;
- we fail to provide the notice that we are required to give in the event of a Change in Control;
- we fail to perform any other covenant in the indenture and that failure continues for 60 days after written notice to us by the trustee or the holders of at least 25% in aggregate principal amount of outstanding notes;
- we fail to pay when due the principal of, or acceleration of, any indebtedness for money borrowed by us or any of our subsidiaries in excess of \$30 million if the indebtedness is not discharged, or the acceleration is not annulled, within 30 days after written notice to us by the trustee or the holders of at least 25% in aggregate principal amount of the outstanding notes; and
- events of bankruptcy, insolvency or reorganization specified in the indenture.

See "Description of the Notes -- Events of Default."

TRADING..... Until registered pursuant to the registration statement of which this prospectus is a part, the notes are eligible for trading on the PORTAL(SM) Market. Our common stock is traded on the New York Stock Exchange under the symbol "TER".

RISK FACTORS..... You should read the "Risk Factors" section, beginning on page 5 of this prospectus, so that you understand the risks associated with an investment in the notes and the common stock.

RATIO OF EARNINGS TO FIXED CHARGES

The following summary represents our computation of the ratio of earnings to fixed charges (unaudited) for the respective periods:

Edgar Filing: TERADYNE INC - Form 424B3

| | YEAR ENDED DECEMBER 31, | | | | | NINE MONTHS ENDED SEPTEMBER 30, 2001 |
|--|-------------------------|------|------|------|------|---|
| | 1996 | 1997 | 1998 | 1999 | 2000 | |
| Ratio of earnings to fixed charges (A) | 20.1 | 27.6 | 20.5 | 35.6 | 83.7 | (B) |

- (A) The ratio of earnings to fixed charges is calculated by dividing (a) earnings before income taxes and cumulative effect of change in accounting principle adjusted for fixed charges by (b) fixed charges. Fixed charges include interest expense under operating leases the Company deems a reasonable approximation of the interest factor.
- (B) Due to Teradyne's loss for the nine months ended September 30, 2001, the ratio coverage was less than 1:1. Income before income taxes and cumulative effect of change in accounting principle was insufficient to cover fixed charges by \$144.6 million.

3

RECENT DEVELOPMENT

On December 19, 2001, we completed an approximately \$45 million mortgage financing. In connection with the financing, we mortgaged certain of our real estate assets located in California and granted a first deed of trust to such real estate assets. Under the terms of the loan documents, we are required to make monthly principal and interest payments based on a fixed rate of interest and a twenty year amortization schedule, with all unpaid principal and interest due on January 1, 2007. The notes, including all notes offered by the selling securityholders under this prospectus, will be structurally subordinated to our obligations under the mortgage financing to the extent of the value of the real estate assets that secure our obligations. For a further discussion of "structural subordination," see "Description of the Notes -- General." We are currently considering whether to obtain any additional financing that would be secured by certain of our owned real estate assets. However, there can be no assurance that any additional real estate financing will be pursued or completed.

4

RISK FACTORS

In addition to the other information contained or incorporated by reference in this prospectus, you should carefully consider the following risk factors. This prospectus contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Actual results could differ materially from those projected in the forward-looking statement as a result of the risk factors set forth below and elsewhere in this prospectus. These factors should be considered together with the other information included or incorporated by reference in this prospectus.

RISKS RELATED TO THE COMPANY

TERADYNE'S BUSINESS IS IMPACTED BY THE SLOWDOWN IN ECONOMIES WORLDWIDE.

Edgar Filing: TERADYNE INC - Form 424B3

Teradyne's business has been negatively impacted by the slowdown in the economies of the United States, Asia and elsewhere that began in the second half of 2000. The uncertainty regarding the growth rate of the worldwide economies has caused companies to reduce capital investment and may cause further reduction of such investments. These reductions have been particularly severe in the electronics and semiconductor industry which Teradyne serves and have contributed to Teradyne incurring losses in recent periods. Teradyne cannot predict if or when the growth rate of worldwide economies will rebound, whether the growth rate of its business will rebound when the worldwide economies begin to grow, or if or when Teradyne will return to profitability. While Teradyne's diverse business may allow it to perform better than some companies in periods of economic decline, the effects of the economic decline are being felt across all of Teradyne's business segments and have significantly slowed customer orders.

TERADYNE'S BUSINESS IS DEPENDENT ON THE CURRENT AND ANTICIPATED MARKET FOR ELECTRONICS.

Teradyne's business and results of operations depend in significant part upon capital expenditures of manufacturers of semiconductors and other electronics, which in turn depend upon the current and anticipated market demand for those products. The current and anticipated market demand for electronics has been impacted by the economic slowdown that began in the latter portions of 2000 and by the terrorist attacks of September 11, 2001 and the resulting ongoing hostilities. Historically, the electronic and semiconductor industry has been highly cyclical with recurring periods of over-supply, which often have had a severe negative effect on demand for test equipment, including systems manufactured and marketed by Teradyne. Teradyne believes that the markets for newer generations of electronic products such as those that Teradyne manufactures and markets will also be subject to similar fluctuations. Teradyne is dependent on the timing of customer orders and the deferral or cancellation of previous customer orders could have an adverse effect on its results of operations. Teradyne cannot assure you that the downward trend in new orders will turn around in the future or that any increase in sales or new orders for a calendar quarter will be sustained in subsequent quarters. In addition, any factor adversely affecting the electronics industry or particular segments within the electronics industry may adversely affect Teradyne's business, financial condition and operating results.

TERADYNE HAS TAKEN AND EXPECTS TO CONTINUE TO TAKE MEASURES TO ADDRESS THE CURRENT SLOWDOWN IN THE MARKET FOR ITS PRODUCTS WHICH COULD HAVE LONG-TERM NEGATIVE EFFECTS ON TERADYNE'S BUSINESS.

Teradyne has taken and expects to take additional measures to address the current slowdown in the market for its products. In particular, Teradyne has reduced its workforce, frozen hiring, delayed salary increases, reduced the pay of substantially all employees, implemented furloughs, discontinued its flash memory product line, recorded asset impairment charges and reduced its planned capital expenditures and expense budgets. These measures have reduced expenses in the face of decreased revenues due to decreased or cancelled customer orders. However, each measure Teradyne has taken and any additional measures taken in the future to contain expenditures could have long-term negative effects on Teradyne's business by reducing its pool of technical talent, decreasing or slowing improvements in its products, and making it more difficult for Teradyne to respond to customers or competitors.

TERADYNE'S BUSINESS MAY BE ADVERSELY IMPACTED BY ACQUISITIONS WHICH MAY AFFECT ITS ABILITY TO MANAGE AND MAINTAIN ITS BUSINESS.

Edgar Filing: TERADYNE INC - Form 424B3

Since Teradyne's inception, it has acquired a number of businesses. In the future, Teradyne may undertake additional acquisitions of businesses that complement its existing operations. Such past or future acquisitions could involve a number of risks, including:

- the possibility that one or more such acquisitions may not close due to closing conditions in the acquisition agreements, the inability to obtain regulatory approval, or the inability to meet conditions imposed for government or court approvals for the transaction;
- the diversion of the attention of management and other key personnel;
- the inability to effectively integrate an acquired business into Teradyne's culture, product and service delivery methodology and other standards, controls, procedures and policies;
- the inability to retain the management, key personnel and other employees of an acquired business;
- the inability to retain the customers of an acquired business;
- the possibility that Teradyne's reputation will be adversely affected by customer satisfaction problems of an acquired business;
- potential known or unknown liabilities associated with an acquired business, including but not limited to regulatory, environmental and tax liabilities;
- the amortization of acquired identifiable intangibles, which may adversely affect Teradyne's reported results of operations; and
- litigation which has or which may arise in the future in connection with such acquisitions.

For example, Teradyne completed its acquisition of GenRad, Inc., a Massachusetts corporation during the fourth quarter of 2001. Teradyne has attempted to sell GenRad's Diagnostic Solutions line of business, however, there can be no guarantee that such a transaction will be completed. Whether or not such a sale is consummated, Teradyne may be required to spend significant management time operating this non-core business unit and managing a potential divestiture. Further, there can be no guarantee that the Diagnostic Solutions line of business will break-even or operate at a profit in the near future, if at all. Any losses from the Diagnostic Solutions line of business will have a negative impact on Teradyne's operating results.

For further example, in connection with the August 2000 acquisition of each of Herco Technology Corp., a California company, and Perception Laminates, Inc., a California company, a complaint was filed by the former owners of those companies on or about September 5, 2001 naming as defendants Teradyne and two of its executive officers. The case was originally filed in the Superior Court in San Diego County, California, and was subsequently removed by the defendants to federal court. An amended complaint was filed in the federal court on October 12, 2001. The amended complaint alleges, among other things, that the sale of Teradyne's common stock to the former owners violated certain California securities statutes and common law, and that Teradyne breached certain contractual obligations in the agreements relating to the acquisitions. The amended complaint seeks unspecified damages, including compensatory, consequential and punitive damages, and recovery of reasonable attorney fees and costs. On or about November 14, 2001, Teradyne filed a motion to dismiss the amended complaint in its entirety. At the hearing on oral argument on January 28, 2002, the federal court ruled from the bench, granting in part and denying

Edgar Filing: TERADYNE INC - Form 424B3

in part Teradyne's motion to dismiss. The claims that were dismissed were dismissed with prejudice. The federal court also invited the parties to submit additional briefs on the adequacy of one of the claims that the federal court did not dismiss at oral argument. Those supplemental briefs were filed on February 1, 2002 and February 4, 2002, respectively. Teradyne disputes plaintiffs' remaining claims and believes that they are without merit, and intends to defend vigorously against this lawsuit. However, Teradyne could incur substantial costs defending the lawsuit. The lawsuit could also divert the time and attention of Teradyne's management. Teradyne cannot predict the outcome of the lawsuit at this time, and can give no assurance that it will not materially adversely affect Teradyne's financial condition or results of operations.

6

In addition to the foregoing, any acquired business could significantly underperform relative to Teradyne's expectations.

WE CURRENTLY FACE, AND IN THE FUTURE MAY BE THE SUBJECT OF, SECURITIES CLASS ACTION LITIGATION DUE TO PAST OR FUTURE STOCK PRICE VOLATILITY.

When the market price of a stock has been volatile, holders of that stock sometimes institute securities class action litigation against the company that issued the stock. Currently, Teradyne and two of its executive officers are named as defendants in three purported class action complaints that were filed in the United States District Court for the District of Massachusetts, Boston, Massachusetts, on or about October 16, 2001, October 19, 2001 and November 7, 2001. The complaints allege, among other things, that the defendants violated Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, by making, during the period from July 14, 2000 and October 17, 2000, material misrepresentations and omissions to the investing public regarding Teradyne's business operations and future prospects. The complaints seek unspecified damages, including compensatory damages and recovery of reasonable attorney fees and costs. Teradyne strongly believes that the purported class action complaints lack merit and it intends to defend against the claims vigorously. However, Teradyne could incur substantial costs defending the lawsuits. The lawsuits could also divert the time and attention of Teradyne's management. Teradyne cannot predict the outcome of the lawsuits at this time, and can give no assurance that they will not materially adversely affect Teradyne's financial condition or results of operations.

TERADYNE'S BUSINESS MAY BE ADVERSELY IMPACTED BY DIVESTITURES OF LINES OF BUSINESS WHICH MAY AFFECT ITS ABILITY TO MANAGE AND MAINTAIN ITS BUSINESS.

Since Teradyne's inception, it has divested itself of certain lines of business. In the future, Teradyne may undertake additional such divestitures. Such past or future divestitures could involve a number of risks, including:

- the diversion of the attention of management and other key personnel;
- disruptions and other effects caused by the divestiture of a line of business on Teradyne's culture, product and service delivery methodology and other standards, controls, procedures and policies;
- customer satisfaction problems caused by the loss of a divested line of business; and
- the decreased diversification of Teradyne's product lines caused by the divestiture of a line of business may make Teradyne's operating results subject to increased market fluctuations.

In addition, any divested line of business could significantly outperform relative to Teradyne's expectations.

Edgar Filing: TERADYNE INC - Form 424B3

IF TERADYNE IS UNABLE TO PROTECT ITS INTELLECTUAL PROPERTY, TERADYNE MAY LOSE A VALUABLE ASSET OR MAY INCUR COSTLY LITIGATION TO PROTECT ITS RIGHTS.

Teradyne's products incorporate technology that it protects in several ways, including patents, copyrights and trade secrets. While Teradyne believes that its patents, copyrights and trade secrets have value in general, no single one is in itself essential. At times, Teradyne has been notified that it may be in violation of patents held by others. An assertion of patent infringement against Teradyne, if successful, could have a material adverse effect on its ability to sell its products, or could require a lengthy and expensive defense which could adversely affect its operating results.

IF TERADYNE FAILS TO DEVELOP NEW TECHNOLOGIES TO ADAPT TO ITS CUSTOMERS' NEEDS AND IF ITS CUSTOMERS FAIL TO ACCEPT ITS NEW PRODUCTS, TERADYNE'S REVENUES WILL BE ADVERSELY AFFECTED.

Teradyne believes that its technological position depends primarily on the technical competence and creative ability of its engineers. Teradyne's development of new technologies, commercialization of those

7

technologies into products, and market acceptance and customer demand for those products is critical to its success. Successful product development and introduction depends upon a number of factors, including:

- new product selection;
- development of competitive products by competitors;
- timely and efficient completion of product design;
- timely and efficient implementation of manufacturing; and
- assembly processes and product performance at customer locations.

INTENSE COMPETITION IN TERADYNE'S INDUSTRY MAY AFFECT ITS REVENUES.

Teradyne faces substantial competition throughout the world in each of its operating segments. Some of these competitors also have substantial financial and other resources to pursue engineering, manufacturing, marketing and distribution of their products. Teradyne also faces competition from internal suppliers at several of its customers. Some of Teradyne's competitors have introduced or announced new products with certain performance characteristics which may be considered equal or superior to those Teradyne currently offers. Teradyne expects its competitors to continue to improve the performance of their current products and to introduce new products or new technologies that provide improved cost of ownership and performance characteristics. New product introductions by competitors could cause a decline in sales or loss of market acceptance of Teradyne's products. Moreover, increased competitive pressure could lead to intensified price based competition, which could materially adversely affect Teradyne's business, financial condition and results of operations.

TERADYNE IS SUBJECT TO RISKS OF OPERATING INTERNATIONALLY.

Teradyne derives a significant portion of its total revenue from customers outside the United States. Teradyne's international sales are subject to significant risks and difficulties, including:

Edgar Filing: TERADYNE INC - Form 424B3

- unexpected changes in legal and regulatory requirements and in policy changes affecting its markets;
- changes in tariffs and exchange rates;
- political and economic instability and acts of terrorism;
- difficulties in accounts receivable collection;
- difficulties in staffing and managing international operations; and
- potentially adverse tax consequences.

TERADYNE MAY INCUR SIGNIFICANT LIABILITIES IF IT FAILS TO COMPLY WITH ENVIRONMENTAL REGULATIONS.

Teradyne is subject to environmental regulations relating to the use, storage, discharge, site cleanup, and disposal of hazardous chemicals used in our manufacturing processes. If we fail to comply with present and future regulations, or are required to perform site remediation, we could be subject to future liabilities or the suspension of production. Present and future regulations may also:

- restrict our ability to expand our facilities;
- require us to acquire costly equipment; or
- require us to incur other significant costs and expenses.

8

TERADYNE'S OPERATING RESULTS ARE LIKELY TO FLUCTUATE SIGNIFICANTLY.

Teradyne's quarterly and annual operating results are affected by a wide variety of factors that could materially adversely affect revenues and profitability, including:

- competitive pressures on selling prices;
- the timing of customer orders and the deferral or cancellation of orders previously received;
- write-offs of excess and obsolete inventory;
- changes in product mix;
- Teradyne's ability to introduce new products and technologies on a timely basis;
- the introduction of products and technologies by Teradyne's competitors;
- market acceptance of Teradyne's and its competitors' products;
- fulfilling backlog on a timely basis;
- reliance on sole suppliers;
- potential retrofit costs;
- the level of orders received which can be shipped in a quarter; and

Edgar Filing: TERADYNE INC - Form 424B3

- the timing of investments in engineering and development.

In particular, due to the introduction of a number of new, complex test systems in 2001 and the planned introduction of other such systems in 2002, there can be no assurance that Teradyne will not experience delays in shipment of its products or that its products will achieve customer acceptance.

As a result of the foregoing and other factors, Teradyne has and may continue to experience material fluctuations in future operating results on a quarterly or annual basis which could materially and adversely affect its business, financial condition, operating results and stock price.

WE MAY NEED ADDITIONAL FINANCING, WHICH COULD BE DIFFICULT TO OBTAIN.

We expect that our existing cash and investment balances, cash generated from operations, the proceeds of the convertible senior note offering completed on October 24, 2001 and the proceeds from the real estate mortgage financing completed on December 19, 2001, will be sufficient to meet our cash requirements to fund operations and expected capital expenditures for at least twelve months. In addition, we are currently considering whether to obtain additional financing on certain of our owned real estate assets. However, there can be no assurances that any additional real estate financing will be pursued or completed. In the event we may need to raise additional funds, we cannot be certain that we will be able to obtain such additional financing on favorable terms, if at all. Further, if we issue additional equity securities, stockholders may experience additional dilution or the new equity securities may have rights, preferences or privileges senior to those of existing holders of common stock. Future financings may place restrictions on how we operate our business. If we cannot raise funds on acceptable terms, if and when needed, we may not be able to develop or enhance our products and services, take advantage of future opportunities, grow our business or respond to competitive pressures or unanticipated requirements, which could seriously harm our business.

PROVISIONS OF OUR CHARTER AND BY-LAWS AND MASSACHUSETTS LAW MAKE A TAKEOVER OF OUR COMPANY MORE DIFFICULT.

Our basic corporate documents, our stockholder rights plan and Massachusetts law contain provisions that could discourage, delay or prevent a change in the control of our company, even if a change of control would be beneficial to our stockholders.

9

RISKS RELATED TO THE NOTES

OUR DEBT SERVICE OBLIGATIONS MAY ADVERSELY AFFECT OUR CASH FLOW.

As a result of the issuance of the convertible senior notes, we have substantially increased our debt service obligations and ratio of debt to total capitalization. While the notes are outstanding, we will have debt service obligations on the notes of approximately \$15,000,000 per year in interest payments. If we issue other debt securities in the future, our debt service obligations will further increase. If we are unable to generate sufficient cash to meet these obligations and must instead use our existing cash or investments, we may have to reduce or curtail other activities of our business.

We intend to fulfill our debt service obligations from cash generated by our operations, if any, and from our existing cash and investments. If necessary, among other alternatives, we may add lease lines of credit to finance capital expenditures and obtain other long-term debt, lines of credit and mortgage financing.

Edgar Filing: TERADYNE INC - Form 424B3

Our indebtedness could have significant negative consequences, including:

- increasing our vulnerability to general adverse economic and industry conditions;
- limiting our ability to obtain additional financing;
- requiring the dedication of a substantial portion of any cash flow from operations to service our indebtedness, thereby reducing the amount of cash flow available for other purposes, including capital expenditures;
- limiting our flexibility in planning for, or reacting to, changes in our business and the industry in which we compete; and
- placing us at a possible competitive disadvantage to less leveraged competitors and competitors that have better access to capital resources.

FUTURE INDEBTEDNESS COULD EFFECTIVELY RANK SENIOR TO THE NOTES.

The notes are unsecured and rank equally in right of payment with our existing and future unsecured and unsubordinated indebtedness. The notes are effectively subordinated to any existing and future secured debt to the extent of the value of the assets that secure the indebtedness. The notes are also "structurally subordinated" to all indebtedness and other liabilities, including trade payables and lease obligations, of our subsidiaries. In the event of our bankruptcy, liquidation or reorganization or upon acceleration of the notes, payment on the notes could be less, ratably, than on any secured indebtedness. We may not have sufficient assets remaining to pay amounts due on the notes then outstanding.

The indenture governing the notes does not prohibit or limit us from incurring additional indebtedness and other liabilities, or from pledging assets to secure any indebtedness or liabilities. The incurrence of additional indebtedness, and in particular the granting of a security interest to secure that indebtedness, could adversely affect our ability to pay our obligations on the notes. We anticipate that we will incur additional indebtedness in the future. See "Description of Notes -- General."

BECAUSE THE NOTES WILL NOT BE LISTED ON AN EXCHANGE OR ON THE NEW YORK STOCK EXCHANGE, IT IS UNLIKELY THAT A MARKET FOR THEM WILL DEVELOP SO YOU MAY HAVE TO HOLD THEM TO MATURITY.

There is no public market for the notes, which may significantly limit:

- the liquidity of any market that may develop;
- your ability to sell your notes; and
- the price at which you will be able to sell your notes.

If a market were to develop, the notes could trade at prices that may be higher or lower than the principal amount or purchase price, depending on many factors, including prevailing interest rates, the market for

similar notes and our financial performance. We do not intend to list the notes for trading on any national securities exchange or on the New York Stock Exchange, so you may have to hold the notes to maturity unless you convert them.

Edgar Filing: TERADYNE INC - Form 424B3

Goldman, Sachs & Co. and Banc of America Securities LLC, the initial purchasers of the notes, have advised us that they intend to make a market in the notes. However, they are not obligated to make a market for the notes, and they may discontinue market-making activities at any time in their sole discretion.

WE MAY NOT HAVE SUFFICIENT FUNDS TO REPAY OR REDEEM THE NOTES.

At maturity, the entire outstanding principal amount of the notes will become due and payable by us. We cannot assure you that we will have sufficient funds or will be able to arrange for financing to pay the principal amount due. If there is a change in control of our company, you may be able to require us to redeem some or all of your notes. Although the indenture allows us in certain circumstances to pay the redemption price in shares of our common stock, if a change in control were to occur, we may not have sufficient funds to pay the redemption price for all the notes tendered by you and other holders. There is no sinking fund for the notes. The requirement that we offer to repurchase the notes upon a change in control does not apply to all possible transactions in which a change of control may occur. See "Description of the Notes -- Repurchase at Option of Holders Upon a Change in Control." Any future credit agreements or other agreements relating to other indebtedness, including any senior debt, to which we become a party may contain restrictions or prohibitions on our redeeming the notes while that indebtedness is outstanding. If a change in control occurs when we are prohibited from purchasing or redeeming the notes, we could seek the consent of lenders to the purchase of the notes or could attempt to refinance the borrowings that contain this prohibition. If we do not obtain a consent or refinance those borrowings, we would remain prohibited from purchasing or redeeming the notes. Our failure to redeem the notes would constitute an event of default under the indenture under which we are issuing the notes, which might constitute a default under the terms of other indebtedness that we may enter into from time to time. In these circumstances, the shortfall between cash available and the total amounts then due and payable would likely restrict payments to you.

THE MARKET PRICE OF OUR COMMON STOCK IS HIGHLY VOLATILE, WHICH COULD RESULT IN SUBSTANTIAL LOSSES FOR INVESTORS IN THE NOTES AND OUR COMMON STOCK.

The market price of our common stock has fluctuated widely and may continue to do so. For example, during fiscal year 2000 the closing price of our stock ranged from a high of \$109.31 per share to a low of \$24.31 per share. Similarly, during the fiscal year 2001 the closing price of our stock ranged from a high of \$47.19 per share to a low of \$19.00 per share, and from January 1, 2002 to February 4, 2002 the closing price of our stock ranged from a high of \$34.65 per share to a low of \$26.17 per share. Many factors could cause the market price of our common stock to rise and fall. These factors include, but are not limited to:

- variations in our quarterly operating results;
- announcements of technological innovations;
- introduction of new products or new pricing policies by us or our competitors;
- announcements by us or our competitors of significant customer orders;
- acquisitions or strategic alliances by us or others in our industry;
- the hiring or departure of key personnel;
- changes in the semiconductor industry cycle;

Edgar Filing: TERADYNE INC - Form 424B3

- changes in market valuations of companies within the semiconductor industry; and
- changes in estimates of our performance or recommendations by financial analysts.

Because the notes are convertible into shares of our common stock, these factors may also affect the value of the notes.

11

SECURITIES WE ISSUE TO FUND OUR OPERATIONS COULD DILUTE YOUR OWNERSHIP.

We may decide to raise additional funds through public or private debt or equity financing to fund our operations. If we raise funds by issuing equity securities, the percentage ownership of current stockholders will be reduced and the new equity securities may have rights prior to those of the common stock issuable upon conversion of the notes. We may not obtain sufficient financing on terms that are favorable to you or us. We may delay, limit or eliminate some or all of our proposed operations if adequate funds are not available.

USE OF PROCEEDS

We will not receive any proceeds from the resale of the notes or the underlying common stock by selling securityholders.

LEGAL PROCEEDINGS

On or about September 5, 2001, a complaint was filed in the Superior Court in San Diego County, California, naming as defendants Teradyne and two of its executive officers. On October 9, 2001, defendants removed the state court complaint to the U.S. District Court for the District of Southern California. On October 12, 2001, plaintiffs filed an amended complaint with the federal court. The amended complaint alleges, among other things, that the sale of Teradyne common stock in connection with Teradyne's acquisition of each of Herco Technology Corp., a California company, and Perception Laminates, Inc., a California company, violated certain California securities statutes and common law, and that Teradyne breached certain contractual obligations in the agreements relating to the acquisitions. The amended complaint seeks unspecified damages, including compensatory, consequential and punitive damages, and recovery of reasonable attorneys' fees and costs. On or about November 14, 2001, Teradyne filed a motion to dismiss the amended complaint in its entirety. At the hearing on oral argument on January 28, 2002, the federal court ruled from the bench, granting in part and denying in part Teradyne's motion to dismiss. The claims that were dismissed were dismissed with prejudice. The federal court also invited the parties to submit additional briefs on the adequacy of one of the claims that the federal court did not dismiss at oral argument. Those supplemental briefs were filed on February 1, 2002 and February 4, 2002, respectively. Teradyne disputes plaintiffs' remaining claims and believes they are without merit, and intends to defend vigorously against this lawsuit.

On or about October 16, 2001, October 19, 2001, and November 7, 2001, three purported class action complaints were filed in the United States District Court for the District of Massachusetts, Boston, Massachusetts, naming as defendants Teradyne and two of its executive officers. The complaints allege, among other things, that the defendants violated Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, by making, during the period from July 14, 2000 and October 17, 2000, material misrepresentations and omissions to the investing public regarding Teradyne's business operations and future prospects. The complaints seek unspecified damages, including compensatory damages and recovery of reasonable attorneys' fees and costs. Teradyne disputes the claims and

Edgar Filing: TERADYNE INC - Form 424B3

believes they are without merit, and intends to defend vigorously against the lawsuits.

In addition, Teradyne is subject to legal proceedings and claims that arise in the ordinary course of business. Management does not believe these actions will have a material adverse effect on the financial position or results of operations of Teradyne.

12

DESCRIPTION OF THE NOTES

The 3.75% Convertible Senior Notes due October 15, 2006 or as referred to herein, the notes, were issued under an indenture between us and State Street Bank and Trust Company, as trustee. Because this section is a summary, it does not describe every aspect of the notes and the indenture. The following summaries of certain provisions of the indenture do not purport to be complete and are subject to, and are qualified in their entirety by reference to, the detailed provisions of the notes and the indenture, including the definitions therein of certain terms.

GENERAL

The notes are senior, unsecured obligations of Teradyne, Inc. The notes are limited to \$400,000,000 aggregate principal amount. We are required to repay the principal amount of the notes in full on October 15, 2006.

The notes bear interest at the rate per annum shown on the front cover of this prospectus from the date of original issuance, October 24, 2001. We will pay interest on the notes on April 15 and October 15 of each year, commencing on April 15, 2002. Interest payable per \$1,000 principal amount of notes for the period from the issue date to April 15, 2002 will be approximately \$17.78.

You may convert the notes into shares of our common stock initially at the conversion rate stated on the front cover of this prospectus at any time before the close of business on the maturity date, unless the notes have been previously redeemed or repurchased. Holders of notes called for redemption or submitted for repurchase will be entitled to convert the notes up to and including the business day immediately preceding the date fixed for redemption or repurchase, as the case may be. The conversion rate may be adjusted as described below.

We may redeem the notes at our option at any time on or after October 18, 2004, in whole or in part, at the redemption prices set forth below under "-- Optional Redemption by Teradyne," plus accrued and unpaid interest to the redemption date. If we experience a change in control, you will have the right to require us to repurchase your notes as described below under "-- Repurchase at Option of Holders Upon a Change in Control."

The notes rank equally with our other senior unsecured indebtedness. The notes are "structurally subordinated" to all of our secured indebtedness and the indebtedness and other liabilities of our subsidiaries, including trade payables and lease obligations in existence on or after the date hereof. This occurs because our right to receive any assets of our subsidiaries upon their liquidation and reorganization, and your right to participate in those assets, will be effectively subordinated to claims of that subsidiary's creditors, including trade creditors, except to the extent that we are recognized as a creditor of such subsidiary. If we are recognized as a creditor of that subsidiary, our claims would still be subordinate to any security interest in the assets of the subsidiary and any indebtedness of the subsidiary senior to us. In addition, our secured creditors will be entitled to receive payment on

Edgar Filing: TERADYNE INC - Form 424B3

their claims by realizing on the collateral securing their claims prior to your right and that of our other senior unsecured creditors in respect of that collateral.

The indenture does not limit our ability to incur debt, including secured debt, or our ability or the ability of our subsidiaries to incur any indebtedness.

FORM, DENOMINATION, TRANSFER, EXCHANGE AND BOOK-ENTRY PROCEDURES

The notes are issued:

- only in fully registered form;
- without interest coupons; and
- in denominations of \$1,000 and greater multiples.

The notes are currently evidenced by one or more global notes (collectively referred to herein as, the global note), deposited with the trustee as custodian for the Depository Trust Company (DTC) and registered

13

in the name of Cede & Co., as nominee of DTC. The global note and any notes issued in exchange for the global note will be subject to restrictions on transfer and will bear a legend regarding those restrictions. Except as set forth below, record ownership of the global note may be transferred, in whole or in part, only to another nominee of DTC or to a successor of DTC or its nominee.

The global note will not be registered in the name of any person, or exchanged for notes that are registered in the name of any person, other than DTC or its nominee unless either of the following occurs:

- DTC notifies us that it is unwilling, unable or no longer qualified to continue acting as the depository for the global note; or
- an event of default with respect to the notes represented by the global note has occurred and is continuing.

In those circumstances, DTC will determine in whose names any securities issued in exchange for the global note will be registered.

DTC or its nominee will be considered the sole owner and holder of the global note for all purposes, and as a result:

- you cannot receive notes registered in your name if they are represented by the global note;
- you cannot receive physical certificated notes in exchange for your beneficial interest in the global notes;
- you will not be considered to be the owner or holder of the global note or any note it represents for any purpose; and
- all payments on the global note will be made to DTC or its nominee.

The laws of some jurisdictions require that certain kinds of purchasers, such as insurance companies, can only own securities in definitive certificated form. These laws may limit your ability to transfer your beneficial interests in the global note to these types of purchasers.

Edgar Filing: TERADYNE INC - Form 424B3

Only institutions, such as a securities broker or dealer, that have accounts with DTC or its nominee (called participants) and persons that may hold beneficial interests through participants can own a beneficial interest in the global note. The only place where the ownership of beneficial interests in the global note will appear and the only way the transfer of those interests can be made will be on the records kept by DTC (for their participants' interests) and the records kept by those participants (for interests of persons held by participants on their behalf). Please be advised that if you are not an institution or a person that may hold beneficial interests through a participant, you will not be able to trade the notes through DTC or obtain a beneficial interest in the global note.

Secondary trading in bonds and notes of corporate issuers is generally settled in clearinghouse (that is, next-day) funds. In contrast, beneficial interests in a global note usually trade in DTC's same-day funds settlement system, and settle in immediately available funds. As a result, purchasers of notes are required to provide adequate funds to the seller of the notes on the day of the transaction. It is possible that some prospective purchasers may not be able to provide same-day funds to a prospective seller, thus, preventing the consummation of the transaction. We make no representations as to the effect that settlement in immediately available funds will have on trading activity in those beneficial interests.

We will make cash payments of interest on and principal of and the redemption or repurchase price of the global note, as well as any payment of liquidated damages, to Cede, the nominee for DTC, as the registered owner of the global note. We will make these payments by wire transfer of immediately available funds on each payment date.

We have been informed that DTC's practice is to credit participants' accounts on the payment date with payments in amounts proportionate to their respective beneficial interests in the notes represented by the global note as shown on DTC's records, unless DTC has reason to believe that it will not receive payment on that payment date. Payments by participants to owners of beneficial interests in notes represented by the

14

global note held through participants will be the responsibility of those participants, as is now the case with securities held for the accounts of customers registered in street name.

We will send any redemption notices to Cede. We understand that if less than all the notes are being redeemed, DTC's practice is to determine by lot the amount of the holdings of each participant to be redeemed.

We also understand that neither DTC nor Cede will consent or vote with respect to the notes. We have been advised that under its usual procedures, DTC will mail an omnibus proxy to us as soon as possible after the record date. The omnibus proxy assigns Cede's consenting or voting rights to those participants to whose accounts the notes are credited on the record date identified in a listing attached to the omnibus proxy.

Because DTC can only act on behalf of participants, who in turn act on behalf of indirect participants, the ability of a person having a beneficial interest in the principal amount represented by the global note to pledge the interest to persons or entities that do not participate in the DTC book-entry system, or otherwise take actions in respect of that interest, may be affected by the lack of a physical certificate evidencing its interest.

Edgar Filing: TERADYNE INC - Form 424B3

DTC has advised us that it will take any action permitted to be taken by a holder of notes (including the presentation of notes for exchange) only at the direction of one or more participants to whose account with DTC interests in the global note are credited and only in respect of such portion of the principal amount of the notes represented by the global note as to which such participant or participants has or have given such direction.

DTC has also advised us as follows:

- DTC is a limited purpose trust company organized under the laws of the State of New York, a member of the Federal Reserve System, a clearing corporation within the meaning of the Uniform Commercial Code, as amended, and a clearing agency registered pursuant to the provisions of Section 17A of the Exchange Act;
- DTC was created to hold securities for its participants and facilitate the clearance and settlement of securities transactions between participants through electronic book-entry changes in accounts of its participants;
- Participants include securities brokers and dealers, banks, trust companies and clearing corporations and may include certain other organizations;
- Certain participants, or their representatives, together with other entities, own DTC; and
- Indirect access to the DTC system is available to other entities such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a participant, either directly or indirectly.

The policies and procedures of DTC, which may change periodically, will apply to payments, transfers, exchanges and other matters relating to beneficial interests in the global note. We and the trustee have no responsibility or liability for any aspect of DTC's or any participant's records relating to beneficial interests in the global note, including for payments made on the global note. Further, we and the trustee are not responsible for maintaining, supervising or reviewing any of those records.

CONVERSION RIGHTS

You may convert any portion of the principal amount of any note that is an integral multiple of \$1,000 into shares of our common stock at any time on or prior to the close of business on the maturity date, unless the notes have been previously redeemed or repurchased. The initial conversion rate is equal to 38.4615 shares per \$1,000 principal amount of notes. The conversion rate is equivalent to a conversion price of approximately \$26.00 per share. Your right to convert a note called for redemption or delivered for repurchase will terminate at the close of business on the business day immediately preceding the redemption date or repurchase date for that note, unless we default in making the payment due upon redemption or repurchase.

15

You may convert all or part of any note by delivering the note at the office of the trustee, 61 Broadway, 15th Floor, New York, New York 10006, accompanied by a duly signed and completed conversion notice, a copy of which may be obtained from the trustee. The conversion date will be the date on which the note and the duly signed and completed conversion notice are so delivered.

Edgar Filing: TERADYNE INC - Form 424B3

As promptly as practicable on or after the conversion date, we will issue and deliver to the trustee a certificate or certificates for the number of full shares of our common stock issuable upon conversion, together with payment in lieu of any fraction of a share. The certificate(s) will then be sent by the trustee to the conversion agent for delivery to the holder of the note being converted. The shares of our common stock issuable upon conversion of the notes will be fully paid and nonassessable and will rank equally with the other shares of our common stock.

If you surrender a note for conversion on a date that is not an interest payment date, you will not be entitled to receive any interest for the period from the immediately preceding interest payment date to the conversion date, except as described below in this paragraph. Any note surrendered for conversion during the period from the close of business on any regular record date to the opening of business on the next succeeding interest payment date (except notes, or portions thereof, called for redemption on a redemption date or to be repurchased on a repurchase date for which the right to convert would terminate during such a period) must be accompanied by payment of an amount equal to the interest payable on such interest payment date on the principal amount of notes being surrendered for conversion. In the case of any note that has been converted after any regular record date but before the next succeeding interest payment date, interest payable on such interest payment date shall be payable on such interest payment date notwithstanding such conversion, and such interest shall be paid to the holder of such note on such regular record date.

No other payment or adjustment for interest, or for any dividends in respect of our common stock, will be made upon conversion. Holders of our common stock issued upon conversion will not be entitled to receive any dividends payable to holders of our common stock as of any record time or date before the close of business on the conversion date. We will not issue fractional shares upon conversion. Instead, we will pay cash in lieu of fractional shares based on the market price of our common stock at the close of business on the conversion date. For a summary of the U.S. federal income tax considerations relating to conversion of a note, see "Certain United States Federal Income Tax Considerations -- U.S. Holders -- Conversion of the Notes."

You will not be required to pay any taxes or duties relating to the issue or delivery of our common stock on conversion but you will be required to pay any tax or duty relating to any transfer involved in the issue or delivery of our common stock in a name other than yours. Certificates representing shares of our common stock will not be issued or delivered unless all taxes and duties, if any, payable by you have been paid.

The conversion rate is subject to adjustment for, among other things:

- dividends and other distributions payable in our common stock on shares of our capital stock;
- the issuance to all holders of our common stock of rights, options or warrants entitling them to subscribe for or purchase our common stock at less than the then current market price of such common stock as of the record date for stockholders entitled to receive such rights, options or warrants;
- subdivisions, combinations and reclassifications of our common stock;
- distributions to all holders of our common stock of evidences of our indebtedness, shares of capital stock, cash or assets, including securities, but excluding:
 - those dividends, rights, options, warrants and distributions referred to above;

Edgar Filing: TERADYNE INC - Form 424B3

- dividends and distributions paid exclusively in cash other than those referred to the next two succeeding bullet points; and
- distributions upon mergers or consolidations discussed below;

16

- distributions consisting exclusively of cash, excluding cash distributed upon a merger or consolidation discussed below, to all holders of our common stock in an aggregate amount that, combined together with:
 - other all-cash distributions made within the preceding 365-day period in respect of which no adjustment has been made; and
 - any cash and the fair market value of other consideration payable in connection with any tender offer by us or any of our subsidiaries for our common stock concluded within the preceding 365-day period in respect of which no adjustment has been made,

exceeds 10% of our market capitalization, being the product of the current market price per share of our common stock on the record date for such distribution and the number of shares of common stock then outstanding; and

- the successful completion of a tender offer made by us or any of our subsidiaries for our common stock which involves an aggregate consideration that, together with:
 - any cash and other consideration payable in a tender offer by us or any of our subsidiaries for our common stock expiring within the 365-day period preceding the expiration of that tender offer in respect of which no adjustments have been made; and
 - the aggregate amount of any cash distributions to all holders of our common stock within the 365-day period preceding the expiration of that tender offer in respect of which no adjustments have been made,

exceeds 10% of our market capitalization on the expiration of such tender offer.

We have issued rights to all of our holders of common stock pursuant to the stockholder rights plan described under "Description of Common Stock." If any holder converts notes prior to the rights trading separately from the common stock, a "separation event," the holder will be entitled to receive rights in addition to the common stock. Following the occurrence of a separation event, holders will only receive common stock upon a conversion of any notes without the right. Instead, upon the occurrence of the separation event, the conversion ratio will be adjusted. If such an adjustment is made and the rights are later redeemed, invalidated or terminated, then a reversing adjustment will be made.

We reserve the right to effect such increases in the conversion rate in addition to those required by the foregoing provisions as we consider to be advisable in order that any event treated for United States federal income tax purposes as a dividend of stock or stock rights will not be taxable to the recipients. We will not be required to make any adjustment to the conversion rate until the cumulative adjustments amount to 1.0% or more of the conversion rate. We will compute all adjustments to the conversion rate and will give notice by mail to holders of the registered notes of any adjustments.

In the event that we consolidate or merge with or into another entity or another entity is merged into us, or in case of any sale or transfer of all or substantially all of our assets, each note then outstanding will become

Edgar Filing: TERADYNE INC - Form 424B3

convertible only into the kind and amount of securities, cash and other property receivable upon such consolidation, merger, sale or transfer by a holder of the number of shares of common stock into which the notes were convertible immediately prior to the consolidation or merger or sale or transfer. The preceding sentence will not apply to a merger or sale of all or substantially all of our assets that does not result in any reclassification, conversion, exchange or cancellation of the common stock.

We may increase the conversion rate for any period of at least 20 days if our board of directors determines that the increase would be in our best interest. The board of directors' determination in this regard will be conclusive. We will give holders of notes at least 15 days' notice of such an increase in the conversion rate. Any increase, however, will not be taken into account for purposes of determining whether the closing price of our common stock exceeds the conversion price by 105% in connection with an event that otherwise would be a change in control as defined below.

17

If at any time we make a distribution of property to our stockholders that would be taxable to such stockholders as a dividend for United States federal income tax purposes, such as distributions of evidences of indebtedness or assets by us, but generally not stock dividends on common stock or rights to subscribe for common stock, and, pursuant to the anti-dilution provisions of the indenture, the number of shares into which notes are convertible is increased, that increase may be deemed for United States federal income tax purposes to be the payment of a taxable dividend to holders of notes. See "Certain United States Federal Income Tax Considerations -- U.S. Holders."

OPTIONAL REDEMPTION BY TERADYNE

On or after October 18, 2004, we may redeem the notes, in whole or in part, at the prices set forth below. If we elect to redeem all or part of the notes, we will give at least 30, but no more than 60, days' notice to you.

The redemption price, expressed as a percentage of principal amount, is as follows for the following periods:

| PERIOD | REDEMPTION PRICE |
|--|---------------------|
| ----- | ----- |
| Beginning on October 18, 2004 and ending on October 14, 2005..... | 101.50% |
| Beginning on October 15, 2005 and ending on October 14, 2006..... | 100.75% |

and thereafter equal to 100% of the principal amount. In each case, we will pay interest to, but excluding the redemption date.

No sinking fund is provided for the notes, which means that the indenture does not require us to redeem or retire the notes periodically.

We may, to the extent permitted by applicable law, at any time purchase notes in the open market, by tender at any price or by private agreement. Any note that we purchase may, to the extent permitted by applicable law and subject to restrictions contained in the purchase agreement with the underwriters, be re-issued or resold or may, at our option, be surrendered to the trustee for

Edgar Filing: TERADYNE INC - Form 424B3

cancellation. Any notes surrendered for cancellation may not be re-issued or resold and will be canceled promptly.

PAYMENT AND CONVERSION

We will make all payments of principal and interest on the notes by dollar check drawn on an account maintained at a bank in The City of Boston. If you hold registered notes with a face value greater than \$2,000,000, at your request we will make payments of principal or interest to you by wire transfer to an account maintained by you at a bank in The City of New York. Payment of any interest on the notes will be made to the person in whose name the note, or any predecessor note, is registered at the close of business on April 1 or October 1, whether or not a business day, immediately preceding the relevant interest payment date (a "regular record date"). If you hold registered notes with a face value in excess of \$2,000,000 and you would like to receive payments by wire transfer, you will be required to provide the trustee with wire transfer instructions at least 15 days prior to the relevant payment date.

Payments on any global note registered in the name of DTC or its nominee will be payable by the trustee to DTC or its nominee in its capacity as the registered holder under the indenture. Under the terms of the indenture, we and the trustee will treat the persons in whose names the notes, including any global note, are registered as the owners for the purpose of receiving payments and for all other purposes. Consequently, neither we, the trustee nor any of our agents or the trustee's agents has or will have any responsibility or liability for:

- any aspect of DTC's records or any participant's or indirect participant's records relating to or payments made on account of beneficial ownership interests in the global note, or for maintaining, supervising or reviewing any of DTC's records or any participant's or indirect participant's records relating to the beneficial ownership interests in the global notes; or

18

- any other matter relating to the actions and practices of DTC or any of its participants or indirect participants.

We will not be required to make any payment on the notes due on any day which is not a business day until the next succeeding business day. The payment made on the next succeeding business day will be treated as though it were paid on the original due date and no interest will accrue on the payment for the additional period of time.

Notes may be surrendered for conversion at the office of the trustee, 61 Broadway, 15th Floor, New York, New York 10006. Notes surrendered for conversion must be accompanied by appropriate notices and any payments in respect of interest or taxes, as applicable, as described above under "-- Conversion Rights."

We have initially appointed the trustee as paying agent and conversion agent. We may terminate the appointment of any paying agent or conversion agent and appoint additional or other paying agents and conversion agents. However, until the notes have been delivered to the trustee for cancellation, or moneys sufficient to pay the principal of, premium, if any, and interest on the notes have been made available for payment and either paid or returned to us as provided in the indenture, the trustee will maintain an office or agency in the Borough of Manhattan, New York for surrender of notes for conversion. Notice of any termination or appointment and of any change in the office through which any paying agent or conversion agent will act will be given in accordance with

Edgar Filing: TERADYNE INC - Form 424B3

"-- Notices" below.

All monies deposited with the trustee or any paying agent, or then held by us, in trust for the payment of principal of, premium, if any, or interest on any notes which remain unclaimed at the end of two years after the payment has become due and payable will be repaid to us, and you will then look only to us for payment.

REPURCHASE AT OPTION OF HOLDERS UPON A CHANGE IN CONTROL

If a "change in control" as defined below occurs, you will have the right, at your option, to require us to repurchase all of your notes not previously called for redemption, or any portion of the principal amount thereof, that is equal to \$1,000 or an integral multiple of \$1,000. The price we are required to pay is 100% of the principal amount of the notes to be repurchased, together with interest accrued but unpaid to, but excluding, the repurchase date.

At our option, instead of paying the repurchase price in cash, we may pay the repurchase price in our common stock valued at 95% of the average of the closing prices of our common stock for the five trading days immediately preceding and including the third trading day prior to the repurchase date. We may only pay the repurchase price in our common stock if we satisfy conditions provided in the indenture.

Within 30 days after the occurrence of a change in control, we are obligated to give to you notice of the change in control and of the repurchase right arising as a result of the change of control. We must also deliver a copy of this notice to the trustee. To exercise the repurchase right, you must deliver on or before the 30th day after the date of our notice irrevocable written notice to the trustee of your exercise of your repurchase right, together with the notes with respect to which the right is being exercised. We are required to repurchase the notes on the date that is 45 days after the date of our notice.

A change in control will be deemed to have occurred at the time after the notes are originally issued that any of the following occurs:

- any person acquires beneficial ownership, directly or indirectly, through a purchase, merger or other acquisition transaction or series of transactions, of shares of our capital stock entitling the person to exercise 50% or more of the total voting power of all shares of our capital stock that is entitled to vote generally in elections of directors, other than an acquisition by us, any of our subsidiaries or any of our employee benefit plans; or
- we merge or consolidate with or into any other person, any merger of another person into us or we convey, sell, transfer or lease all or substantially all of our assets to another person, other than any such transaction:

19

- that does not result in any reclassification, conversion, exchange or cancellation of outstanding shares of our capital stock; and
- pursuant to which the holders of 50% or more of the total voting power of all shares of our capital stock entitled to vote generally in elections of directors immediately prior to such transaction have the entitlement to exercise, directly or indirectly, 50% or more of the total voting power of all shares of capital stock entitled to vote generally in the election of directors of the continuing or surviving corporation

Edgar Filing: TERADYNE INC - Form 424B3

immediately after such transaction; or

- which is effected solely to change our jurisdiction of incorporation and results in a reclassification, conversion or exchange of outstanding shares of our common stock into solely shares of common stock of the surviving entity.

However, a change in control will not be deemed to have occurred if:

- the closing price per share of our common stock for any five trading days within the period of 10 consecutive trading days ending immediately after the later of the change in control or the public announcement of the change in control, in the case of a change in control relating to an acquisition of capital stock, or the period of 10 consecutive trading days ending immediately before the change in control, in the case of change in control relating to a merger, consolidation or asset sale, equals or exceeds 105% of the conversion price of the notes in effect on each of those five trading days; or
- all of the consideration, excluding cash payments for fractional shares and cash payments made pursuant to dissenters' appraisal rights, in a merger or consolidation otherwise constituting a change of control under the first and second bullet points in the preceding paragraph above consists of shares of common stock, depository receipts or other certificates representing common equity interest traded on a national securities exchange or quoted on the NASDAQ National Market System, or will be so traded or quoted immediately following such merger or consolidation, and as a result of such merger or consolidation the notes become convertible solely into such common stock, depository receipts or other certificates representing common equity interests.

For purposes of these provisions:

- the conversion price is equal to \$1,000 divided by the conversion rate;
- whether a person is a "beneficial owner" will be determined in accordance with Rule 13d-3 under the Exchange Act; and
- a "person" includes any syndicate or group that would be deemed to be a person under Section 13(d)(3) of the Exchange Act.

The rules and regulations promulgated under the Exchange Act require the dissemination of prescribed information to security holders in the event of an issuer tender offer and may apply in the event that the repurchase option becomes available to you. We will comply with these rules to the extent they apply at that time.

The definition of change in control includes a phrase relating to the conveyance, transfer, sale, lease or disposition of all or substantially all of our assets. There is no precise, established definition of the phrase "substantially all" under applicable law. Accordingly, your ability to require us to repurchase your notes as a result of conveyance, transfer, sale, lease or other disposition of less than all of our assets may be uncertain.

The foregoing provisions would not necessarily provide you with protection if we are involved in a highly leveraged or other transaction that may adversely affect you.

Although we have the right to repurchase the notes with our common stock, subject to certain conditions, we cannot assure you that we would have the financial resources, or would be able to arrange financing, to pay the repurchase price in cash for all the notes that might be delivered by holders of

Edgar Filing: TERADYNE INC - Form 424B3

notes seeking to exercise the repurchase right. If we were to fail to repurchase the notes when required following a change in control, an

20

event of default under the indenture would occur. Some of the events constituting a change in control could cause an event of default under the terms of other debt instruments.

MERGERS AND SALES OF ASSETS BY TERADYNE

We may not consolidate with or merge into any other person or convey, transfer, sell or lease our properties and assets substantially as an entirety to any person other than to one or more of our subsidiaries, and we may not permit any entity to consolidate with or merge into us or convey, transfer, sell or lease such person's properties and assets substantially as an entirety to us unless:

- the surviving entity formed by such consolidation or into or with which we are merged or the surviving entity to which our properties and assets are so conveyed, transferred, sold or leased, shall be a corporation, limited liability company, partnership or trust organized and existing under the laws of the United States, any State within the United States or the District of Columbia and, if we are not the surviving entity, the surviving entity executes and files with the trustee a supplemental indenture assuming the payment of the principal of, premium, if any, and interest on the notes and the performance of our other covenants under the indenture;
- immediately after giving effect to the transaction, no event of default, and no event that, after notice or lapse of time or both, would become an event of default, will have occurred and be continuing; and
- other requirements as described in the indenture are met.

EVENTS OF DEFAULT

The following are events of default under the indenture:

- we fail to pay principal of or premium, if any, on any note when due;
- we fail to pay any interest, including any additional interest or liquidated damages, on any note when due, which failure continues for 30 days;
- we fail to provide notice of a change in control;
- we fail to perform any other covenant in the indenture, which failure continues for 60 days following notice as provided in the indenture;
- any indebtedness under any bonds, debentures, notes or other evidences of indebtedness for money borrowed, or any guarantee thereof, by us or any of our significant subsidiaries, in an aggregate principal amount in excess of \$30 million is not paid when due either at its stated maturity or upon acceleration thereof, and such indebtedness is not discharged, or such acceleration is not rescinded or annulled, within a period of 30 days after notice as provided in the indenture; and
- certain events of bankruptcy, insolvency or reorganization involving us or any of our significant subsidiaries.

Edgar Filing: TERADYNE INC - Form 424B3

Subject to the provisions of the indenture relating to the duties of the trustee in case an event of default shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request or direction of any holder, unless the holder shall have furnished the trustee indemnity reasonably satisfactory to the trustee. Subject to providing indemnification to the trustee, the holders of a majority in aggregate principal amount of the outstanding notes will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee.

If an event of default other than an event of default arising from events of insolvency, bankruptcy or reorganization occurs and is continuing, either the trustee or the holders of at least 25% in principal amount of the outstanding notes may accelerate the maturity of all notes. However, after such acceleration, but before a judgment or decree based on acceleration, the holders of a majority in aggregate principal amount of outstanding notes may, under certain circumstances, rescind and annul the acceleration if all events of default,

21

other than the non-payment of principal of the notes that have become due solely by such declaration of acceleration, have been cured or waived as provided in the indenture. If an event of default arising from events of insolvency, bankruptcy or reorganization occurs, then the principal of, and accrued interest on, all the notes will automatically become immediately due and payable without any declaration or other act on the part of the holders of the notes or the trustee. For information as to waiver of defaults, see "Meetings, Modification and Waiver" below.

You will not have any right to institute any proceeding with respect to the indenture, or for any remedy under the indenture, unless:

- you give the trustee written notice of a continuing event of default;
- the holders of at least 25% in aggregate principal amount of the outstanding notes have made written request and offered the trustee indemnity reasonably satisfactory to the trustee to institute proceedings;
- the trustee has not received from the holders of a majority in aggregate principal amount of the outstanding notes a direction inconsistent with the written request; and
- the trustee shall have failed to institute such proceeding within 60 days of the written request.

However, these limitations do not apply to a suit instituted by you for the enforcement of payment of the principal of, premium, if any, or interest, including liquidated damages, on your note on or after the respective due dates expressed in your note or your right to convert your note in accordance with the indenture.

We are required to furnish to the trustee annually a statement as to our performance of certain of our obligations under the indenture and as to any default in such performance.

MEETINGS, MODIFICATION AND WAIVER

The indenture contains provisions for convening meetings of the holders of

Edgar Filing: TERADYNE INC - Form 424B3

notes to consider matters affecting their interests.

Certain limited modifications of the indenture may be made without the necessity of obtaining the consent of the holders of the notes.

Other modifications and amendments of the indenture may be made, compliance by us with certain restrictive provisions of the indenture may be waived and any past defaults by us under the indenture (except a default in the payment of principal, premium, if any, or interest) may be waived, either:

- with the written consent of the holders of not less than a majority in aggregate principal amount of the notes at the time outstanding; or
- by the adoption of a resolution, at a meeting of holders of the notes at which a quorum is present, by the holders of at least 66 2/3% in aggregate principal amount of the notes represented at such meeting.

The quorum at any meeting called to adopt a resolution will be persons holding or representing a majority in aggregate principal amount of the notes at the time outstanding and, at any reconvened meeting adjourned for lack of a quorum, 25% of such aggregate principal amount.

However, a modification or amendment requires the consent of the holder of each outstanding note affected if it would:

- change the stated maturity of the principal or interest of a note;
- reduce the principal amount of, or any premium or interest on, any note;
- reduce the amount payable upon a redemption or mandatory repurchase;
- modify the provisions with respect to the repurchase rights of holders of notes in a manner adverse to the holders;
- modify our right to redeem the notes in a manner adverse to the holders;

22

- change the place or currency of payment on a note;
- impair the right to institute suit for the enforcement of any payment on any note;
- modify the ranking of the notes in a manner that is adverse to the holders of the notes;
- adversely affect the right to convert the notes other than a modification or amendment required by the terms of the indenture;
- modify our obligation to deliver information required under Rule 144A to permit resales of the notes and common stock issued upon conversion of the notes if we cease to be subject to the reporting requirements under the Exchange Act;
- reduce the above-stated percentage of the principal amount of the holders whose consent is needed to modify or amend the indenture;
- reduce the percentage of the principal amount of the holders whose consent is needed to waive compliance with certain provisions of the indenture or to waive certain defaults; or

Edgar Filing: TERADYNE INC - Form 424B3

- reduce the percentage required for the adoption of a resolution or the quorum required at any meeting of holders of notes at which a resolution is adopted.

REGISTRATION RIGHTS

We have entered into a registration rights agreement with the initial purchasers. In the registration rights agreement we have agreed, for the benefit of the holders of the notes and the shares of common stock issuable upon conversion of the notes, commonly referred to as the registrable securities, that we will, at our expense:

- file with the SEC, within 90 days after the date the notes were originally issued, this shelf registration statement covering resales of the registrable securities;
- use our reasonable best efforts to cause this shelf registration statement to be declared effective under the Securities Act within 180 days after the date the notes were originally issued; and
- use our reasonable best efforts to keep effective this shelf registration statement until two years after the date the notes were issued or, if earlier, until there are no outstanding registrable securities.

We will be permitted to suspend the use of the prospectus that is part of this shelf registration statement in connection with the sale of registrable securities during prescribed periods of time for reasons relating to pending corporate developments, public filings with the SEC and other events. The periods during which we can suspend the use of the prospectus may not, however, exceed a total of 30 days in any 90-day period or a total of 90 days in any 365-day period. We will provide to each holder of registrable securities copies of the prospectus that is a part of this shelf registration statement, notify each holder when this shelf registration statement has been filed with the SEC and when this shelf registration statement has become effective and take certain other actions required to permit public resales of the registrable securities.

We may, upon written notice to all holders of notes, postpone having this shelf registration statement declared effective for a reasonable period not to exceed 90 days if we possess material non-public information the disclosure of which would have a material adverse effect on us and our subsidiaries taken as a whole. Notwithstanding any such postponement, additional interest referred to as "liquidated damages," will accrue on the notes if either of the following registration defaults occurs:

- on or prior to the 90th day following the date the notes were originally issued, this shelf registration statement has not been filed with the SEC; or
- on or prior to the 180th day following the date the notes were originally issued, this shelf registration statement is not declared effective.

In that case, liquidated damages will accrue on any notes and shares issued on conversion of the notes, which are then restricted securities from and including the day following the registration default to but excluding the day on which the registration default has been cured. Liquidated damages will be paid semi-

annually in arrears, with the first semi-annual payment due on the first interest payment date following the date on which the liquidated damages began to accrue.

Edgar Filing: TERADYNE INC - Form 424B3

The rates at which liquidated damages will accrue will be as follows:

- 0.25% of the principal amount per annum to and including the 90th day after the registration default; and
- 0.5% of the principal amount per annum from and after the 91st day after the registration default.

In addition, liquidated damages will accrue on any notes and shares issued upon conversion of the notes if:

- this shelf registration statement ceases to be effective, or we otherwise prevent or restrict holders of registrable securities from making sales under this shelf registration statement, for more than 30 days, whether or not consecutive, during any 90-day period; or
- this shelf registration statement ceases to be effective, or we otherwise prevent or restrict holders of registrable securities from making sales under this shelf registration statement, for more than 90 days, whether or not consecutive, during any 365-day period.

In either event, liquidated damages will accrue at a rate of 0.50% per annum from the 31st day of the 90-day period or the 91st day of the 365-day period until the earlier of the following:

- the time this shelf registration statement again becomes effective or the holders of registrable securities are again able to make sales under this shelf registration statement, depending on which event triggered the increase in interest rate; or
- two years after the date the notes are issued or, if earlier, until there are no outstanding registrable securities.

A holder who elects to sell any registrable securities pursuant to this shelf registration statement:

- will be required to be named as a selling securityholder in the related prospectus;
- may be required to deliver a prospectus to purchasers;
- may be subject to certain civil liability provisions under the Securities Act in connection with those sales; and
- will be bound by the provisions of the registration rights agreement that apply to a holder making such an election, including certain indemnification provisions.

We mailed a notice and questionnaire to the holders of registrable securities not less than 30 calendar days prior to the time we intend in good faith to have this shelf registration statement declared effective.

No holder of registrable securities will be entitled:

- to be named as a selling securityholder in this shelf registration statement as of the date this shelf registration statement is declared effective; or
- to use the prospectus forming a part of this shelf registration statement for offers and resales of registrable securities at any time, unless such holder has returned a completed and signed notice and questionnaire to us

Edgar Filing: TERADYNE INC - Form 424B3

by the deadline for response set forth in the notice and questionnaire.

Holders of registrable securities will, however, have at least 28 calendar days from the date on which the notice and questionnaire was first mailed to return a completed and signed notice and questionnaire to us.

Beneficial owners of registrable securities who have not returned a notice and questionnaire by the questionnaire deadline described above may receive another notice and questionnaire from us upon request. Following our receipt of a completed and signed notice and questionnaire, we will include the registrable securities covered thereby in this shelf registration statement, subject to restrictions on the timing and number of supplements to this shelf registration statement provided in the registration rights agreement.

24

We agreed in the registration rights agreement to use our best efforts to cause the shares of common stock issuable upon conversion of the notes to be quoted on the New York Stock Exchange. However, if the common stock is not then quoted on the New York Stock Exchange, we will use our best efforts to cause the shares of common stock issuable upon conversion of the notes to be quoted or listed on whichever market or exchange the common stock is then quoted or listed, upon effectiveness of this shelf registration statement.

This summary of certain provisions of the registration rights agreement is not complete and is subject to, and qualified in its entirety by reference to, all the provisions of the registration rights agreement, a copy of which will be made available to beneficial owners of the notes upon request to us.

NOTICES

Notice to holders of the registered notes will be given by mail to the addresses as they appear in the security register. Notices will be deemed to have been given on the date of such mailing.

Notice of a redemption of notes will be given not less than 30 nor more than 60 days prior to the redemption date and will specify the redemption date. A notice of redemption of the notes will be irrevocable.

REPLACEMENT OF NOTES

We will replace any note that becomes mutilated, destroyed, stolen or lost at the expense of the holder upon delivery to the trustee of the mutilated notes or evidence of the loss, theft or destruction satisfactory to us and the trustee. In the case of a lost, stolen or destroyed note, indemnity satisfactory to the trustee and us may be required at the expense of the holder of the note before a replacement note will be issued.

PAYMENT OF STAMP AND OTHER TAXES

We will pay all stamp and other duties, if any, that may be imposed by the United States or any political subdivision thereof or taxing authority thereof or therein with respect to the issuance of the notes or of shares of stock upon conversion of the notes. We are not required to make any payment with respect to any other tax, assessment or governmental charge imposed by any government or any political subdivision thereof or taxing authority thereof or therein.

GOVERNING LAW

The indenture, the notes, and the registration rights agreement shall be governed by and construed in accordance with the laws of the State of New York,

Edgar Filing: TERADYNE INC - Form 424B3

United States of America.

THE TRUSTEE

If an event of default occurs and is continuing, the trustee will be required to use the degree of care of a prudent person in the conduct of his own affairs in the exercise of its powers as trustee under the indenture. Subject to the terms of the indenture, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request of any of the holders of notes, unless they shall have furnished to the trustee reasonable security or indemnity.

25

DESCRIPTION OF COMMON STOCK

OUR COMMON STOCK

Holders of Teradyne common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. Since holders of Teradyne common stock do not have cumulative voting rights, the holders of more than 50% of our common stock can elect all the directors if they so choose. Holders of Teradyne common stock are entitled to receive ratably dividends, if any, as may be declared by the Teradyne board of directors out of funds legally available for payment of dividends. Upon the liquidation, dissolution or winding up of Teradyne, holders of Teradyne common stock are entitled to receive ratably the net assets of Teradyne available after the payment of all debts and other liabilities of Teradyne. Holders of Teradyne common stock have no preemptive, subscription, redemption or conversion rights, nor are they entitled to the benefit of any sinking fund.

OUR RIGHTS PLAN

On November 16, 2000, the Teradyne board of directors declared a dividend of one right for each outstanding share of Teradyne common stock outstanding on November 27, 2000 to the stockholders of record on that date. Each right entitled the registered holder to purchase from Teradyne one share of Teradyne common stock at a price of \$540.00 per share, subject to adjustment. The description and terms of the rights are set forth in a rights agreement between Teradyne and Fleet National Bank and are evidenced by a common stock certificate with a copy of the summary of the rights.

The rights will be exercisable on the earlier to occur of:

- a public announcement that a person or group of affiliated or associated persons, known as an acquiring person, has acquired beneficial ownership of 20% or more of the outstanding shares of Teradyne common stock; or
- 10 business days (or such later date as may be determined by action of the Teradyne board of directors prior to such time as any person becomes an acquiring person) following the commencement of, or announcement of an intention to make, a tender offer or exchange offer the consummation of which would result in the beneficial ownership by a person or group of 20%, or more of such outstanding shares of Teradyne common stock.

Prior to the earlier of either of the two dates set forth above, sometimes referred to as the distribution date, the rights are not exercisable. Until the rights are exercised, the holder of the right will have no rights as a shareholder of Teradyne, including but not limited to the right to receive dividends.

Edgar Filing: TERADYNE INC - Form 424B3

The rights agreement provides that, until exercised, redeemed or their expiration, the rights will be transferred with and only with the Teradyne common stock. Further, until the rights are exercised, redeemed or their expiration, certificates for Teradyne common stock issued after November 27, 2000 or upon transfer or new issuance of shares of Teradyne common stock will contain a notation incorporating the rights agreement by reference. All certificates outstanding on November 27, 2000 for Teradyne common stock surrendered for transfer prior to the exercise, redemption or expiration of the rights, even without a notation or a copy of the summary of the rights being attached thereto, will also constitute the transfer of the rights associated with each share of Teradyne common stock.

The rights will expire on November 27, 2010, unless extended or unless the rights are earlier redeemed by Teradyne, in each case, as described below.

The purchase price payable, and the number of shares of Teradyne common stock or other securities or property issuable upon exercise of the rights are subject to adjustment from time to time to prevent dilution:

- in the event of a stock dividend on, or a subdivision, combination or reclassification of, the shares of Teradyne common stock;

26

- upon the grant to holders of shares of Teradyne common stock of certain rights or warrants to subscribe for or purchase shares of Teradyne common stock at a price, or securities convertible into shares of Teradyne common stock with a conversion price, less than the then current market price of the shares of Teradyne common stock; or
- upon the distribution to holders of shares of Teradyne common stock of evidences of indebtedness or assets (excluding regular periodic cash dividends paid out of earnings or retained earnings or dividends payable in shares of Teradyne common stock) or of subscription rights or warrants (other than those referred to above).

From and after the date any person becomes an acquiring person, if the rights are or were at any time on or after the earlier of (x) the date of such event and (y) the distribution date acquired or beneficially owned by an acquiring person or an associate or affiliate of an acquiring person, such rights shall become void, and any holder of such rights shall thereafter have no right to exercise such rights.

In the event that, at any time after a person becomes an acquiring person, Teradyne is acquired in a merger or other business combination transaction or 50% or more of its consolidated assets or earning power are sold, proper provision will be made so that each holder of a right will thereafter have the right to receive, upon the exercise thereof at the then current exercise price of the right, that number of shares of common stock of the acquiring company which at the time of such transaction will have a market value of two times the exercise price of the right. In the event that any person becomes an acquiring person, proper provision shall be made so that each holder of a right, other than the rights beneficially owned by the acquiring person and its affiliates and associates (which will thereafter be void), will thereafter have the right to receive upon exercise that number of shares of Teradyne common stock having a market value of two times the exercise price of the right. If Teradyne does not have sufficient shares of Teradyne common stock to satisfy such obligation to issue shares of Teradyne common stock, or if the Teradyne board of directors so elects, Teradyne will deliver upon payment of the exercise price of a right an amount of cash or securities equivalent in value to the shares of Teradyne common stock issuable upon exercise of a right. However, if Teradyne fails to

Edgar Filing: TERADYNE INC - Form 424B3

meet such obligation within 30 days following the later of (x) the first occurrence of an event triggering the right to purchase shares of Teradyne common stock and (y) the date on which Teradyne's right to redeem the common share purchase rights expires, Teradyne must deliver, upon exercise of a right but without requiring payment of the exercise price then in effect, shares of Teradyne common stock (to the extent available) and cash equal in value to the difference between the value of the shares of Teradyne common stock otherwise issuable upon the exercise of a right and the exercise price then in effect. The Teradyne board of directors may extend the 30-day period described above for up to an additional 90 days to permit the taking of action that may be necessary to authorize sufficient additional shares of Teradyne common stock to permit the issuance of shares of Teradyne common stock upon the exercise in full of the rights.

At any time after any person becomes an acquiring person and prior to the acquisition by any person or group of a majority of the outstanding shares of Teradyne common stock, the Teradyne board of directors may exchange the rights (other than rights owned by such person or group which have become void), in whole or in part, at an exchange ratio of one share of Teradyne common stock per right (subject to adjustment).

With certain exceptions, no adjustment in the purchase price will be required until cumulative adjustments require an adjustment of at least 1% in such purchase price. No fractional shares of Teradyne common stock will be issued and in lieu thereof, an adjustment in cash will be made based on the market price of the shares of Teradyne common stock on the last trading day prior to the date of exercise.

At any time prior to the time any person becomes an acquiring person, the Teradyne board of directors may redeem the rights in whole, but not in part, at a price equal to \$0.001 per right. The redemption of the rights may be made effective at such time, on such basis and with such conditions as the Teradyne board of directors in its sole discretion may establish. Immediately upon any redemption of the rights, the right to exercise the rights will terminate and the only right of the holders of rights will be to receive the redemption price.

27

The terms of the rights may be amended by the Teradyne board of directors without the consent of the holders of the rights, except that from and after such time as any person becomes an acquiring person no such amendment may adversely affect the interests of the holders of the rights (other than the acquiring person and its affiliates and associates).

MASSACHUSETTS LAW AND CERTAIN PROVISIONS OF OUR BY-LAWS

Teradyne is subject to the provisions of Chapter 110F of the Massachusetts General Laws, the so-called Business Combination Statute. Under Chapter 110F, a Massachusetts corporation with at least 200 stockholders, such as Teradyne, may not engage in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person becomes an interested stockholder, unless (i) the interested stockholder obtains the approval of the Board of Directors prior to becoming an interested stockholder, (ii) the interested stockholder acquires 90% of the outstanding voting stock of the corporation (excluding shares held by certain affiliates of the corporation) at the time it becomes an interested stockholder, or (iii) the business combination is approved by both the Board of Directors and the holders of at least two-thirds of the outstanding voting stock of the corporation (excluding shares held by the interested stockholder). An "interested stockholder" is a person who, together with affiliates and associates, owns (or at any time within the prior three years did own) 5% or more of the outstanding

Edgar Filing: TERADYNE INC - Form 424B3

voting stock of the corporation. A "business combination" includes a merger, a stock or assets sale, and other transactions resulting in a financial benefit to the stockholder. In addition, the classification of our Board of Directors under our By-laws may deter a stockholder from voting to remove incumbent directors and gaining control of the Board of Directors.

28

CERTAIN UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS

The following is a summary of certain U.S. federal income tax considerations relating to the purchase, ownership and disposition of the notes and common stock into which notes may be converted, but does not provide a complete analysis of all potential tax considerations. This summary is based on laws, regulations, rulings and decisions now in effect, all of which are subject to change or differing interpretation, possibly with retroactive effect. Except as specifically discussed below with regard to Non-U.S. Holders (as defined below), this summary applies only to U.S. Holders (as defined below) that are beneficial owners of notes and that will hold notes and common stock into which notes may be converted as "capital assets" (within the meaning of Section 1221 of the Internal Revenue Code of 1986, as amended (the "Code")). For purposes of this summary, "U.S. Holders" generally include citizens or resident individuals of the United States and corporations organized under the laws of the United States or any political subdivision thereof. Trusts are U.S. Holders if they are subject to the primary supervision of a U.S. court and the control of one or more U.S. persons. Persons other than U.S. Holders ("Non-U.S. Holders") are subject to special U.S. federal income tax considerations, some of which are discussed below. This discussion does not address tax considerations applicable to an investor's particular circumstances or to investors that may be subject to special tax rules such as banks, holders subject to the alternative minimum tax, tax-exempt organizations, persons that have a functional currency other than the U.S. dollar, persons holding notes or common stock in a tax deferred or tax advantaged account, persons who are partners, shareholders or beneficiaries of an entity that holds the notes or common stock, insurance companies, foreign persons or entities (except to the extent specifically set forth below), dealers in securities or currencies, persons that will hold notes as a position in a hedging transaction, "straddle" or "conversion transaction" for tax purposes or persons deemed to sell notes or common stock under the constructive sale provisions of the Code. This summary discusses the tax considerations applicable to the initial holders of the notes who purchase the notes at their "issue price" as defined in Section 1273 of the Code and does not discuss the tax considerations applicable to subsequent purchasers of the notes. We have not sought any ruling from the Internal Revenue Service (the "IRS") or an opinion of counsel with respect to the statements made and the conclusions reached in the following summary. Accordingly, there can be no assurance that the IRS will not challenge such statements and conclusions or that a court will not sustain such a challenge. This summary does not consider the effect of the federal estate or gift tax laws (except as set forth below with respect to Non-U.S. Holders) or the tax laws of any applicable foreign, state, local or other jurisdiction.

INVESTORS CONSIDERING THE PURCHASE OF NOTES SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX RULES OR UNDER THE LAWS OF ANY STATE, LOCAL OR FOREIGN TAXING JURISDICTION OR UNDER ANY APPLICABLE TAX TREATY.

U.S. HOLDERS

TAXATION OF INTEREST

Interest paid on the notes will be included in the income of a U.S. Holder

Edgar Filing: TERADYNE INC - Form 424B3

as ordinary income at the time it is treated as received or accrued, in accordance with such holder's regular method of accounting for U.S. federal income tax purposes.

In certain circumstances, we may be obligated to pay a holder amounts in excess of stated interest and principal on the notes. For example, we may be required to make additional payments as liquidated damages if we do not file or cause to be declared effective this registration statement, as described under "Description of the Notes -- Registration Rights." In addition, a holder may require us to redeem some or all of the holder's notes in the event of a change in control, and we may voluntarily redeem the notes at a premium at the times and in the manner described under "Description of the Notes -- Optional Redemption by Teradyne." Under Treasury Regulations, the possibility of an additional payment under a note may be disregarded for purposes of determining the amount of interest or original issue discount income to be recognized by a holder in respect of

29

such note (or the timing of such recognition) if the likelihood of the payment, as of the date the notes are issued, is remote. We believe that the likelihood of a liquidated damages payment with respect to the notes or a "change of control" or optional redemption is remote and do not intend to treat these possibilities as affecting the yield to maturity of any note. Our determination that this likelihood is remote is binding on you unless you disclose your contrary position in a timely filed tax return for the taxable year in which you acquire the note. In the event any such contingency occurs, it would affect the amount and timing of the income that must be recognized by a U.S. Holder of notes. There can be no assurance that the IRS will agree with such positions.

SALE, EXCHANGE OR REDEMPTION OF THE NOTES

Upon the sale, exchange (other than a conversion) or redemption of a note, a U.S. Holder generally will recognize capital gain or loss equal to the difference between (i) the sum of the amount of cash proceeds and the fair market value of any property received on the sale, exchange or redemption (except to the extent such cash or property is attributable to accrued interest income, which will be taxable as such) and (ii) such holder's adjusted tax basis in the note. A U.S. Holder's adjusted tax basis in a note generally will equal the cost of the note to such holder. Such capital gain or loss will be long-term capital gain or loss if the U.S. Holder's holding period in the note is more than one year at the time of sale, exchange or redemption. Long-term capital gains recognized by certain non-corporate U.S. Holders, including individuals, will generally be subject to a maximum rate of tax of 20% (or 18% in the case of the sale or exchange of notes held for more than five years). Capital gain recognized by non-corporate U.S. Holders that is not long-term capital gain, and all capital gain recognized by corporate U.S. Holders, is taxed at ordinary income rates. The deductibility of capital losses is subject to limitations.

CONVERSION OF THE NOTES

A U.S. Holder generally will not recognize any income, gain or loss upon conversion of a note into common stock except (i) with respect to cash received in lieu of a fractional share of common stock and (ii) to the extent that the common stock issued upon conversion is treated as attributable to accrued interest on the note (which will be treated as interest for federal income tax purposes). A U.S. Holder's tax basis in the common stock received on conversion of a note will be the same as such holder's adjusted tax basis in the note at the time of conversion (reduced by any basis allocable to a fractional share interest), and the holding period for the common stock received on conversion will generally include the holding period of the note converted. However, if a

Edgar Filing: TERADYNE INC - Form 424B3

U.S. Holder receives shares of common stock attributable to accrued interest, the U.S. Holder's basis in such shares generally will equal the amount of such accrued interest included in income, and the holding period for such shares will begin on the date of conversion. In the event of a repurchase of a note upon a change in control for common stock pursuant to such repurchase right, a U.S. Holder may be subject to the same treatment as described above with respect to conversion of a note; U.S. Holders should consult their tax advisors in such circumstances.

Cash received in lieu of a fractional share of common stock upon conversion will be treated as a payment in exchange for the fractional share of common stock. Accordingly, the receipt of cash in lieu of a fractional share of common stock generally will result in capital gain or loss (measured by the difference between the cash received for the fractional share and the holder's adjusted tax basis in the fractional share). Such capital gain or loss will be long-term capital gain or loss if the U.S. Holder's holding period in the fractional share (determined under the rules described in the immediately preceding paragraph) is more than one year at the time of such exchange.

SALE OF COMMON STOCK

Upon the sale or exchange of common stock a U.S. Holder generally will recognize capital gain or loss equal to the difference between (i) the sum of the amount of cash and the fair market value of any property received upon the sale or exchange and (ii) such U.S. Holder's adjusted tax basis in the common stock. Such capital gain or loss will be long-term capital gain or loss if the U.S. Holder's holding period in the common stock is more than one year at the time of the sale or exchange. Long-term capital gains recognized by certain

30

non-corporate U.S. Holders, including individuals, will generally be subject to a maximum rate of tax of 20% (or 18% in the case of the sale or exchange of common stock held for more than five years). Capital gain recognized by non-corporate U.S. Holders that is not long-term capital gain, and all capital gain recognized by corporate U.S. Holders, is taxed at ordinary income rates. A U.S. Holder's basis and holding period in common stock received upon conversion of a note are determined as discussed above under "Conversion of the Notes." The deductibility of capital losses is subject to limitations.

DIVIDENDS

Distributions, if any, made on the common stock after a conversion generally will be included in the income of a U.S. Holder as ordinary dividend income to the extent of our current and accumulated earnings and profits, subject to a possible dividends-received deduction in the case of corporate holders. Distributions in excess of our current and accumulated earnings and profits generally will be treated as a return of capital to the extent of the U.S. Holder's basis in the common stock and thereafter as capital gain.

ADJUSTMENTS IN THE CONVERSION PRICE OF THE NOTES

Holders of convertible debt instruments such as the notes may, in certain circumstances, be deemed to have received distributions of stock if the conversion price of such instruments is adjusted. Adjustments to the conversion price made pursuant to a bona fide reasonable adjustment formula which has the effect of preventing the dilution of the interest of the holders of the debt instruments, however, will generally not be considered to result in a constructive distribution of stock. Certain of the possible adjustments provided in the notes (including, without limitation, adjustments in respect of taxable dividends to our stockholders) will not qualify as being pursuant to a bona fide

Edgar Filing: TERADYNE INC - Form 424B3

reasonable adjustment formula. If such adjustments are made, the holders of the notes may be deemed to have received constructive distributions taxable as dividends (subject to a possible dividends-received deduction in the case of corporate holders) to the extent of our current and accumulated earnings and profits even though the holders have not received any cash or property as a result of such adjustments, and without regard to whether the conversion privilege is ever exercised. In certain circumstances, the failure to provide for such an adjustment may result in taxable dividend income to the holders of common stock, subject to a possible dividends-received deduction in the case of corporate holders.

SPECIAL TAX RULES APPLICABLE TO NON-U.S. HOLDERS

In general, subject to the discussion below concerning backup withholding:

(a) Payments of principal, premium or interest on the notes by us or any paying agent to a beneficial owner of a note that is a Non-U.S. Holder will not be subject to U.S. federal income tax or U.S. withholding tax, provided that, in the case of interest, (i) such Non-U.S. Holder does not own, actually or constructively, 10% or more of the total combined voting power of all classes of our stock entitled to vote within the meaning of Section 871(h)(3) of the Code, (ii) such Non-U.S. Holder is not a "controlled foreign corporation" within the meaning of Section 957(a) of the Code with respect to which we are a "related person" within the meaning of Section 864(d)(4) of the Code, and (iii) the certification requirements under Section 871(h) or Section 881(c) of the Code and Treasury Regulations thereunder (discussed below) are satisfied.

(b) A Non-U.S. Holder of a note or common stock will not be subject to U.S. federal income tax on gains realized on the sale, exchange or other disposition of such note or common stock unless (i) such Non-U.S. Holder is an individual who is present in the U.S. for 183 days or more in the taxable year of sale, exchange or other disposition, and certain conditions are met, (ii) such gain is effectively connected with the conduct by the Non-U.S. Holder of a trade or business in the U.S. and, if certain U.S. income tax treaties apply, is attributable to a U.S. permanent establishment maintained by the Non-U.S. Holder, (iii) the Non-U.S. Holder is subject to Code provisions applicable to certain U.S. expatriates, or (iv) in the case of common stock held by a person who holds more than 5% of such stock, we are or have been, at any time within the shorter of the five-year period preceding such sale or other disposition or the period such Non-U.S. Holder held the common stock, a U.S. real property holding corporation (a "USRPHC")

31

within the meaning of Section 897(c)(2) of the Code for U.S. federal income tax purposes. We do not believe that we are currently a USRPHC or that we will become one in the future.

(c) Interest on notes not excluded from U.S. federal income tax or U.S. withholding tax as described in (a) above and dividends on common stock after conversion generally will be subject to U.S. withholding tax at a 30% rate, except where an applicable U.S. income tax treaty provides for the reduction or elimination of such withholding tax and the Non-U.S. Holder complies with applicable certification requirements by providing a properly executed IRS Form W-8BEN. Under applicable U.S. Treasury regulations, special procedures are provided for payments through qualified intermediaries.

To satisfy the certification requirements referred to in (a)(iii) above,

Edgar Filing: TERADYNE INC - Form 424B3

Sections 871(h) and 881(c) of the Code and Treasury Regulations thereunder require that either (i) the beneficial owner of a note certify, under penalties of perjury, to us or our paying agent, as the case may be, that such owner is a Non-U.S. Holder, or (ii) a securities clearing organization, bank or other financial institution that holds customer securities in the ordinary course of its trade or business (a "Financial Institution") and holds the note on behalf of the beneficial owner thereof certify, under penalties of perjury, to us or our paying agent, as the case may be, that such certificate has been received from the beneficial owner and furnish the payor with a copy thereof. Such requirement will be fulfilled if the beneficial owner of a note certifies on IRS Form W-8BEN, under penalties of perjury, that it is a Non-U.S. Holder or any Financial Institution holding the note on behalf of the beneficial owner files a statement with the withholding agent to the effect that it has received such a statement from the beneficial owner (and furnishes the withholding agent with a copy thereof). As noted in (c) above, special procedures are provided for payments through qualified intermediaries; Non-U.S. Holders should consult their tax advisors with respect to such procedures.

If a Non-U.S. Holder of a note or common stock is engaged in a trade or business in the United States and if interest or premium on the note, dividends on the common stock, or gain realized on the sale, exchange or other disposition of the note or common stock is effectively connected with the conduct of such trade or business (and, if certain tax treaties apply, is attributable to a U.S. permanent establishment maintained by the Non-U.S. Holder in the United States), the Non-U.S. Holder, although exempt from U.S. withholding tax (provided that the certification requirements discussed in the next sentence are met), will generally be subject to U.S. federal income tax on such interest, premium, dividends or gain on a net income basis in the same manner as if it were a U.S. Holder. In lieu of the certificate described above, such a Non-U.S. Holder will be required, under currently effective Treasury Regulations, to provide us or our paying agent, as the case may be, with a properly executed IRS Form W-8ECI in order to claim an exemption from U.S. tax withholding. In addition, if such Non-U.S. Holder is a foreign corporation, it may be subject to a branch profits tax equal to 30% (or such lower rate provided by an applicable U.S. income tax treaty) of a portion of its effectively connected earnings and profits for the taxable year.

U.S. FEDERAL ESTATE TAX

A note held by an individual who at the time of death is not a citizen or resident of the United States (as specially defined for U.S. federal estate tax purposes) will not be subject to U.S. federal estate tax if the individual did not actually or constructively own 10% or more of the total combined voting power of all classes of our stock and, at the time of the individual's death, payments with respect to such note would not have been effectively connected with the conduct by such individual of a trade or business in the United States. Common stock held (or, under certain circumstances, previously transferred subject to certain rights or powers or, under certain circumstances, transferred by gift within three years of death) by an individual who at the time of death is not a citizen or resident of the United States (as specially defined for U.S. federal estate tax purposes) will be included in such individual's estate for U.S. federal estate tax purposes, unless an applicable U.S. estate tax treaty otherwise applies.

NON-U.S. HOLDERS SHOULD CONSULT WITH THEIR TAX ADVISORS REGARDING U.S. AND FOREIGN TAX CONSEQUENCES WITH RESPECT TO THE NOTES AND COMMON STOCK.

Edgar Filing: TERADYNE INC - Form 424B3

Backup withholding of U.S. federal income tax at a rate of 30.5% may apply to payments pursuant to the terms of a note or common stock to a U.S. Holder that is not an "exempt recipient" and that fails to provide certain identifying information (such as the holder's taxpayer identification number) in the manner required; under the Economic Growth and Tax Relief Reconciliation Act of 2001, the backup withholding rate will be reduced for payments made prior to January 1, 2011. The rate will be reduced to 30% on January 1, 2002, 29% on January 1, 2004 and 28% on January 1, 2006. Generally, individuals are not exempt recipients, whereas corporations and certain other entities are exempt recipients. Payments made in respect of a note or common stock must be reported to the IRS, unless the U.S. Holder is an exempt recipient or otherwise establishes an exemption.

In the case of payments of interest or premium on a note to a Non-U.S. Holder, backup withholding and information reporting will not apply to payments with respect to which either requisite certification has been received or an exemption has otherwise been established, provided that neither we nor a paying agent has actual knowledge or reason to know that the holder is a U.S. Holder or that the conditions of any other exemption are not in fact satisfied.

Dividends on the common stock paid to Non-U.S. Holders that are subject to U.S. withholding tax, as described above, generally will be exempt from U.S. backup withholding tax but will be subject to certain information reporting requirements.

Payments of the proceeds of the sale of a note or common stock to or through a foreign office of a U.S. Holder or a foreign office of a broker that is a U.S. related person (either a "controlled foreign corporation" or a foreign person, 50% or more of whose gross income from all sources for the three-year period ending with the close of its taxable year preceding the payment was effectively connected with the conduct of a trade or business within the United States) or a foreign partnership (if at any time during its tax year, one or more of its partners are U.S. persons who in the aggregate hold more than 50% of the income or capital interests in the partnership, or such foreign partnership is engaged in a U.S. trade or business) are subject to certain information reporting requirements, unless the payee is an exempt recipient or such broker has evidence in its records that the payee is a Non-U.S. Holder and no actual knowledge or reason to know that such evidence is false and certain other conditions are met. Such payments are not currently subject to backup withholding.

Payments to a Non-U.S. Holder of the proceeds of a sale of a note or common stock to or through the U.S. office of a broker will be subject to information reporting and backup withholding unless the payee certifies under penalties of perjury as to his or her status as a Non-U.S. Holder and satisfies certain other qualifications (and no agent of the broker who is responsible for receiving or reviewing such statement has actual knowledge or reason to know that it is incorrect) and provides his or her name and address or the payee otherwise establishes an exemption.

Any amounts withheld under the backup withholding rules from a payment to a holder of a note or common stock will be allowed as a refund or credit against such holder's U.S. federal income tax provided that the required information is furnished to the IRS in a timely manner.

A holder of a note or common stock should consult with its tax advisor regarding the application of the backup withholding rules to its particular situation, the availability of an exemption therefrom and the procedure for obtaining such an exemption, if available.

THE PRECEDING DISCUSSION OF CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY AND IS NOT TAX ADVICE. ACCORDINGLY, EACH

Edgar Filing: TERADYNE INC - Form 424B3

PROSPECTIVE INVESTOR SHOULD CONSULT ITS TAX ADVISOR AS TO THE PARTICULAR U.S. FEDERAL, STATE, AND LOCAL TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF THE NOTES AND OUR COMMON STOCK. TAX ADVISORS SHOULD ALSO BE CONSULTED AS TO THE U.S. ESTATE AND GIFT TAX CONSEQUENCES AND THE FOREIGN TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF THE NOTES AND OUR COMMON STOCK, AS WELL AS THE CONSEQUENCES OF ANY PROPOSED OR EFFECTIVE CHANGE IN APPLICABLE LAWS.

33

SELLING SECURITYHOLDERS

We originally issued the notes in a private placement to Goldman, Sachs & Co. and Banc of America Securities LLC. The notes were resold by the initial purchasers to qualified institutional buyers within the meaning of Rule 144A under the Securities Act in transactions exempt from registration under the Securities Act. The notes and the shares of common stock issuable upon the conversion of the notes that may be offered pursuant to this prospectus will be offered by the selling securityholders, which includes their transferees, distributees, pledgees or donees or their successors. The following table sets forth certain information concerning the principal amount of notes beneficially owned by each selling securityholder and the number of conversion shares that may be offered from time to time pursuant to this prospectus.

The number of conversion shares shown in the table below assumes conversion of the full amount of notes held by such holder at the initial conversion rate of 38.4615 shares per \$1,000 principal amount at maturity of notes. This conversion rate is subject to certain adjustments. Accordingly, the number of shares of common stock issuable upon conversion of the notes may increase or decrease from time to time. Under the terms of the indenture, fractional shares will not be issued upon conversion of the notes. Cash will be paid instead of fractional shares, if any. As of February 4, 2002, we had 182,364,844 shares of common stock outstanding.

| NAME | PRINCIPAL AMOUNT AT MATURITY OF NOTES BENEFICIALLY OWNED THAT MAY BE SOLD | PERCENTAGE OF NOTES OUTSTANDING | NUMBER CONVERSION SHARES MAY BE SOLD |
|---|--|---------------------------------------|--|
| ---- | ----- | ----- | ----- |
| White River Securities L.L.C. | \$ 2,500,000 | * | 96 |
| Bear Stearns & Co. Inc. | 2,500,000 | * | 96 |
| First Union National Bank..... | 12,000,000 | 3.00% | 461 |
| First Union Securities Inc. | 2,100,000 | * | 80 |
| Lipper Convertibles, L.P. | 1,750,000 | * | 67 |
| Lipper Offshore Convertibles, L.P. | 1,750,000 | * | 67 |
| The Class I C Company..... | 1,500,000 | * | 57 |
| Stark International..... | 2,538,000 | * | 97 |
| Shepherd Investments International, Ltd. | 3,712,000 | * | 142 |
| RCG Halifax Master Fund, LTD..... | 600,000 | * | 23 |
| RCG Multi Strategy LP..... | 1,250,000 | * | 48 |
| Ramius Capital Group..... | 500,000 | * | 19 |
| RCG Latitude Master Fund, LTD..... | 3,350,000 | * | 128 |
| Bank Austria Cayman Islands, LTD..... | 10,300,000 | 2.58% | 396 |
| JMG Convertible Investments, LP..... | 3,000,000 | * | 115 |
| JMG Triton Offshore Fund, LTD..... | 5,000,000 | 1.25% | 192 |
| BNP Paribas Equity Strategies, SNC..... | 3,164,000 | * | 121 |
| Tribeca Investments L.L.C. | 4,000,000 | 1.0% | 153 |
| Fidelity Devonshire Trust: Fidelity Equity-Income | | | |

Edgar Filing: TERADYNE INC - Form 424B3

| | | | |
|--|------------|--------|-------|
| Fund..... | 3,390,000 | * | 130 |
| Fidelity Puritan Trust: Fidelity Puritan Fund..... | 2,000,000 | * | 76 |
| Variable Insurance Products Fund: Equity Income Portfolio..... | 1,610,000 | * | 61 |
| Sturgeon Limited..... | 409,000 | * | 15 |
| Robertson Stephens..... | 7,000,000 | 1.75% | 269 |
| Deutsche Bank Alex Brown Inc. | 17,475,000 | 4.37% | 672 |
| SG Cowen Securities Corporation..... | 3,000,000 | * | 115 |
| Highbridge International L.L.C. | 54,500,000 | 13.63% | 2,096 |
| Spear, Leeds & Kellogg, L.P. | 2,000,000 | * | 76 |
| Alta Partners Holdings, LDC..... | 5,000,000 | 1.25% | 192 |

34

| NAME | PRINCIPAL AMOUNT AT MATURITY OF NOTES BENEFICIALLY OWNED THAT MAY BE SOLD | PERCENTAGE OF NOTES OUTSTANDING | NUMBER OF SHARES MAY BE SOLD |
|---|---|---------------------------------|------------------------------|
| Morgan Stanley Dean Witter Convertible Securities Trust..... | 2,000,000 | * | 76 |
| HFR CA Select Fund..... | 400,000 | * | 15 |
| San Diego County Employee Retirement Association..... | 2,000,000 | * | 76 |
| Zazove Hedged Convertible Fund L.P. | 2,000,000 | * | 76 |
| Zazove Income Fund L.P. | 2,000,000 | * | 76 |
| Zurich Institutional Benchmarks Masters Fund LTD..... | 1,100,000 | * | 42 |
| Grace Brothers Management LLC..... | 3,000,000 | * | 115 |
| Aristeia International Limited..... | 9,750,000 | 2.44% | 374 |
| Aristeia Partners, LP..... | 2,750,000 | * | 105 |
| Purchase Associates, LP..... | 1,537,000 | * | 59 |
| Levco Alternative Fund, Ltd. | 5,377,000 | 1.34% | 206 |
| Common Fund Event Driven Company, Ltd. | 189,000 | * | 7 |
| Lyxor Master Fund..... | 397,000 | * | 15 |
| Rockhaven Premier Dividend Fund..... | 700,000 | * | 26 |
| Goldman, Sachs and Company(1)..... | 10,000,000 | 2.50% | 384 |
| TD Securities (USA) Inc. | 7,000,000 | 1.75% | 269 |
| CooperNeff Convertible Strategies Fund, L.P. | 927,000 | * | 35 |
| UBS AG London Branch..... | 38,750,000 | 9.69% | 1,490 |
| Salomon Brothers Asset Management Inc. | 50,486,000 | 12.62% | 1,941 |
| MLQA Convertible Securities Arbitrage Ltd. | 16,000,000 | 4.00% | 615 |
| Silvercreek Limited Partnership..... | 1,200,000 | * | 46 |
| Silvercreek II Limited..... | 500,000 | * | 19 |
| Onex Industrial Partners Limited..... | 1,400,000 | * | 53 |
| Morgan Stanley..... | 16,000,000 | 4.0% | 615 |
| Oppenheimer Convertible Securities Fund..... | 2,000,000 | * | 76 |
| First Union International Capital Markets Inc. | 14,500,000 | 3.63% | 557 |
| Palladin Securities LLC..... | 1,500,000 | * | 57 |
| DeAm Convertible Arbitrage Ltd. | 3,500,000 | * | 134 |
| Oakwood Healthcare, Inc. Pension Plan..... | 95,000 | * | 3 |
| Oakwood Healthcare, Inc. | 128,250 | * | 4 |
| Pebble Capital Inc. | 400,000 | * | 15 |
| UBS Warburg LLC..... | 8,275,000 | 2.07% | 318 |
| Any other holder of notes or future transferee from any such holder(2)..... | 36,240,750 | 9.06% | 1,393 |

* Less than 1%

- (1) The investment banking division of Goldman, Sachs & Co. has, from time to time and in exchange for fees, been engaged by Teradyne in connection with various financial advisory and transactional matters, including acting as one of the initial purchasers of the notes as described above.
- (2) Information concerning other selling holders of notes will be set forth in prospectus supplements from time to time, if required.

The preceding table has been prepared based upon the information furnished to us by the selling securityholders named above.

35

Except as noted above, none of the selling securityholders has had any position, office or other material relationship with us or our affiliates within the past three years.

The selling securityholders identified above may have sold, transferred or otherwise disposed of some or all of their notes since the date on which the information in the preceding table is presented in transactions exempt from the registration requirements of the Securities Act. Information concerning the selling securityholders may change from time to time and, if necessary, we will supplement this prospectus accordingly. We cannot give an estimate as to the amount of the notes or conversion shares that will be held by the selling securityholders upon the termination of this offering because the selling securityholders may offer some or all of their notes or conversion shares pursuant to the offering contemplated by this prospectus. See "Plan of Distribution."

36

PLAN OF DISTRIBUTION

The selling securityholders and their successors, which includes their transferees, distributees, pledgees or donees or their successors, may sell the notes and the underlying common stock directly to purchasers or through underwriters, broker-dealers or agents. Underwriters, broker-dealers or agents may receive compensation in the form of discounts, concessions or commissions from the selling securityholders or the purchasers. These discounts, concessions or commissions may be in excess of those customary in the types of transactions involved.

The notes and the underlying common stock may be sold in one or more transactions at fixed prices:

- at prevailing market prices at the time of sale;
- at prices related to such prevailing market prices;
- at varying prices determined at the time of sale; or
- at negotiated prices.

Such sales may be effected in transactions in the following manner (which may involve crosses or block transactions):

Edgar Filing: TERADYNE INC - Form 424B3

- on any national securities exchange or quotation service on which the notes or the common stock may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on such exchanges or services or in the over-the-counter market;
- through the writing of options, whether such options are listed on an options exchange or otherwise; or
- through the settlement of short sales.

Selling securityholders may enter into hedging transactions with broker-dealers or other financial institutions which may in turn engage in short sales of the notes or the underlying common stock and deliver these securities to close out such short positions, or loan or pledge the notes or the common stock into which the notes are convertible to broker-dealers that in turn may sell these securities.

From time to time, one or more of the selling securityholders may distribute, devise, gift, pledge, hypothecate or grant a security interest in some or all of the securities owned by them. Any such distributees, devisees or donees will be deemed to be selling securityholders. Any such pledgees, secured parties or persons to whom the securities have been hypothecated will, upon foreclosure in the event of default, be deemed to be selling securityholders.

The aggregate proceeds to the selling securityholders from the sale of the notes or underlying common stock will be the purchase price of the notes or common stock less any discounts and commissions. A selling securityholder reserves the right to accept and, together with their agents, to reject, any proposed purchase of notes or common stock to be made directly or through agents. We will not receive any of the proceeds from this offering.

Our outstanding common stock is listed for trading on the New York Stock Exchange. We do not intend to list the notes for trading on any national securities exchange or on the New York Stock Exchange. We cannot guarantee that any trading market will develop for the notes.

The notes and underlying common stock may be sold in some states only through registered or licensed brokers or dealers. The selling securityholders and any underwriters, broker-dealers or agents that participate in the sale of the notes and common stock into which the notes are convertible may be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling securityholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act. The selling securityholders have

37

acknowledged that they understand their obligations to comply with the provisions of the Securities Exchange Act and the rules thereunder relating to stock manipulation, particularly Regulation M, and have agreed that they will not engage in any transaction in violation of such provisions.

In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 or Rule 144A of the Securities Act may be sold under Rule 144 or Rule 144A rather than pursuant to this prospectus. A selling securityholder may not sell any notes or common stock described herein and may

Edgar Filing: TERADYNE INC - Form 424B3

not transfer, devise or gift such securities by other means not described in this prospectus.

If required, the specific notes or common stock to be sold, the names of the selling securityholders, the respective purchase prices and public offering prices, the names of any agent, dealer or underwriter, and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement of which this prospectus is a part.

Pursuant to the registration rights agreement filed as an exhibit to the registration statement of which this prospectus is a part, we and the selling securityholders will be indemnified by each other against certain liabilities, including certain liabilities under the Securities Act or will be entitled to contribution in connection with these liabilities.

We have agreed to pay substantially all of the expenses incidental to the registration, offering and sale of the notes and underlying common stock to the public other than applicable transfer taxes and commissions, fees and discounts of underwriters, brokers, dealers and agents.

LEGAL MATTERS

Certain legal matters with respect to the issuance of the securities offered hereby will be passed upon for Teradyne, Inc. by Testa, Hurwitz & Thibeault, LLP, Boston, Massachusetts. As of the date of this prospectus, certain attorneys with the firm of Testa, Hurwitz & Thibeault, LLP beneficially own an aggregate of 70,126 shares of Teradyne's common stock. In addition, Richard J. Testa is a member of the law firm Testa, Hurwitz & Thibeault, LLP and serves as Clerk of Teradyne and on Teradyne's board of directors.

EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2000, have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

38

\$400,000,000

TERADYNE, INC.

3.75% CONVERTIBLE SENIOR NOTES

DUE OCTOBER 15, 2006

[TERADYNE, INC. LOGO]

