

Registration No. 33-25782  
33-78196  
333-05440  
333-06542  
333-08404  
333-09342  
333-11124  
333-12692  
333-127979  
333-154394  
333-169146  
333-207878

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**POST-EFFECTIVE AMENDMENT NO. 1 TO:**

Form S-8 Registration Statement No. 33-25782,  
Form S-8 Registration Statement No. 33-78196,  
Form S-8 Registration Statement No. 333-05440,  
Form S-8 Registration Statement No. 333-06542,  
Form S-8 Registration Statement No. 333-08404,  
Form S-8 Registration Statement No. 333-09342,  
Form S-8 Registration Statement No. 333-11124,  
Form S-8 Registration Statement No. 333-12692,  
Form S-8 Registration Statement No. 333-127979,  
Form S-8 Registration Statement No. 333-154394,  
Form S-8 Registration Statement No. 333-169146,  
and  
Form S-8 Registration Statement No. 333-207878

*UNDER  
THE SECURITIES ACT OF 1933*

**ORBOTECH LTD.**

(Exact name of registrant as specified in its charter)

**Israel**  
(State or other jurisdiction of  
incorporation or organization)

**None**  
(I.R.S. Employer  
Identification No.)

7 Sanhedrin Boulevard  
North Industrial Zone  
Yavne, Israel 8110101  
(Address of principal executive offices including zip code)

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Optrotech Ltd. Key Employee Share Option Plan (1984)  
Orbot Systems Ltd. Employee Share Ownership and Option Plan  
Stock Option Plan for the Directors of Orbotech Ltd. (1994)  
Orbotech Ltd. Israeli Key Employee Share Incentive Plan (1992) (As Amended, 1994, 1996, 1997, 1998)  
The Stock Option Plan for Consultants of Orbotech Ltd. (1998)  
1995 Incentive Stock Plan for Key Employees of Orbotech Ltd.'s Subsidiaries (As Amended, 1997, 1998, 1999, 2000)  
Orbotech Ltd. Employee Share Ownership and Option Plan (2000)  
Equity Remuneration Plan for Key Employees of Orbotech Ltd. and its Affiliates and Subsidiaries (as Amended and Restated, 2005)  
Photon Dynamics, Inc. 2005 Equity Incentive Plan  
Photon Dynamics, Inc. 2001 Equity Incentive Plan  
Photon Dynamics, Inc. 2005 Non-Employee Directors' Stock Option Plan  
Photon Dynamics, Inc. Amended and Restated 1995 Stock Option Plan  
CR Technology, Inc. 1991 Stock Option Plan  
2010 Equity-Based Incentive Plan  
2015 Equity-Based Incentive Plan  
(Full Title of the Plan)

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**Teri A. Little**  
Executive Vice President and Chief Legal Officer  
KLA-Tencor Corporation  
1 Technology Drive  
Milpitas, California 95035  
(Name and address of agent for service)

**(408) 875-3000**  
(Telephone number, including area code, of agent for service)

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*Copies to:*

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**Jeffrey Cannon**  
Associate General Counsel  
KLA-Tencor Corporation  
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Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

## DEREGISTRATION OF SECURITIES

These Post-Effective Amendments relate to the following Registration Statements of Orbotech Inc., a company organized under the laws of the State of Israel (the “**Company**”), on Form S-8 (collectively, the “**Registration Statements**”) filed by the Company with the U.S. Securities and Exchange Commission (“**SEC**”), each pertaining to the registration of ordinary shares, New Israeli Shekels (“**NIS**”) 0.14 nominal (par) value per share (the “**Ordinary Shares**”), offered under certain employee benefit and equity plans and agreements:

File No.	Date Filed with the SEC	Name of Equity Plan or Agreement	Ordinary Shares Registered (#)
33-25782	November 29, 1988	Optrotech Ltd. Key Employee Share Option Plan	227,330(1)
33-78196	April 26, 1994	Optrotech Ltd. Key Employee Share Option Plan (1984) Optrotech Ltd. Israeli Key Employee Share Incentive Plan (1992) Orbot Systems Ltd. Employee Share Ownership and Option Plan	700,000
333-05440	August 14, 1996	1995 Incentive Stock Plan for Key Employees of Orbotech Ltd.’s Subsidiaries	258,350
333-06542	February 26, 1997	Stock Option Plan for the Directors of Orbotech Ltd. (1994) Orbotech Ltd. Israeli Key Employee Share Incentive Plan (1992) (As Amended, 1994, 1996)	710,875
333-08404	March 3, 1998	1995 Incentive Stock Plan for Key Employees of Orbotech Ltd.’s Subsidiaries (As Amended, 1997) Orbotech Ltd. Israeli Key Employee Share Incentive Plan (1992) (As Amended, 1994, 1996, 1997)	500,000
333-09342	August 27, 1998	1995 Incentive Stock Plan for Key Employees of Orbotech Ltd.’s Subsidiaries (As Amended, 1997, 1998) Orbotech Ltd. Israeli Key Employee Share Incentive Plan (1992) (As Amended, 1994, 1996, 1997, 1998) The Stock Option Plan for Consultants of Orbotech Ltd. (1998)	312,125
333-11124	November 12, 1999	1995 Incentive Stock Plan for Key Employees of Orbotech Ltd.’s Subsidiaries (As Amended, 1997, 1998, 1999)	250,000
333-12692	October 5, 2000	1995 Incentive Stock Plan for Key Employees of Orbotech Ltd.’s Subsidiaries (As Amended, 1997, 1998, 1999, 2000) Orbotech Ltd. Employee Share Ownership and Option Plan (2000)	5,250,000
333-127979	August 31, 2005	Equity Remuneration Plan for Key Employees of Orbotech Ltd. and its Affiliates and Subsidiaries (as Amended and Restated, 2005)	1,000,000
333-154394	October 17, 2008	Photon Dynamics, Inc. 2005 Equity Incentive Plan Photon Dynamics, Inc. 2001 Equity Incentive Plan Photon Dynamics, Inc. 2005 Non-Employee Directors’ Stock Option Plan Photon Dynamics, Inc. Amended and Restated 1995 Stock Option Plan CR Technology, Inc. 1991 Stock Option Plan	3,305,628
333-169146	September 2, 2010	2010 Equity-Based Incentive Plan	1,000,000
333-207878	November 9, 2015	2015 Equity-Based Incentive Plan	6,000,000

(1) These ordinary shares had a par value of 0.0014

Pursuant to the Agreement and Plan of Merger dated as of March 18, 2018 (as amended on May 11, 2018), by and among the Company, KLA-Tencor Corporation, and Tiburon Merger Sub Technologies Ltd. (the “**Merger Sub**”), the Merger Sub merged with and into the Company, with the Company continuing as the surviving company in the merger and a wholly owned subsidiary of KLA-Tencor Corporation (the “**Merger**”).

In connection with the Merger, the Company is terminating all offers and sales of its securities registered pursuant to its existing registration statements under the Securities Act of 1933, as amended, including the Registration Statements. In accordance with undertakings made by the Company to remove from registration, by means of a post-effective amendment, any of the securities which remain unsold at the termination of the offerings, the Company hereby removes from registration any and all securities registered but unsold under the Registration Statements as of the date hereof. Each Registration Statement is hereby amended, as appropriate, to reflect the deregistration of all such securities.

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**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the undersigned registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused the Post-Effective Amendments to the Registration Statements described above to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Milpitas on February 27, 2019.

Orbotech Ltd.

By: /s/ Bren D. Higgins

Name: Bren D. Higgins

Title: Director

No other person is required to sign the Post-Effective Amendments to the Registration Statements in reliance upon Rule 478 under the Securities Act of 1933.