

PROSPECTUS SUPPLEMENT

*(To prospectus dated May 9, 2016, as supplemented
by prospectus supplement dated May 10, 2016)*

ReWalk Robotics Ltd.

Up to \$4,352,081

Ordinary Shares



This prospectus supplement amends and supplements the information in our prospectus dated, May 9, 2016 (File No. 333-209833), or the Prospectus, and our original prospectus supplement dated, May 10, 2016, or the Original Prospectus Supplement. This prospectus supplement should be read in conjunction with the Prospectus and the Original Prospectus Supplement and is qualified in its entirety by reference thereto, except to the extent that the information herein amends or supersedes the information contained in the Prospectus or the Original Prospectus Supplement. This prospectus supplement is not complete without, and may only be delivered or utilized in connection with, the Prospectus and the Original Prospectus Supplement and any future amendments or supplements thereto.

We filed the Original Prospectus Supplement to register the offer and sale of our ordinary shares, par value NIS 0.01 per share, from time to time pursuant to the terms of an equity distribution agreement, dated May 10, 2016, that we entered into with Piper Jaffray & Co., or Piper Jaffray, as our sales agent thereunder. As of the date of this prospectus supplement, we have sold our ordinary shares through Piper Jaffray in an at-the-market offering program, or the ATM Program, under the equity distribution agreement having an aggregate offering price of \$13,950,602. In accordance with the terms of the equity distribution agreement (without giving effect to any offering limit imposed by General Instruction I.B.6 of Form S-3), we may offer and sell ordinary shares having an aggregate offering price of up to \$25,000,000 from time to time through Piper Jaffray acting as our agent.

As previously disclosed, on February 17, 2017, the date on which we filed our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, the Prospectus became subject to the offering limits set forth in General Instruction I.B.6 of Form S-3. As of February 17, 2017, the aggregate market value of our outstanding ordinary shares held by non-affiliates, or our public float, calculated in accordance with General Instruction I.B.6 of Form S-3, was \$41,207,411, based on (i) 13,165,307 outstanding ordinary shares held by non-affiliates (calculated using 16,351,009 ordinary shares outstanding as of February 15, 2017) and (ii) a price of \$3.13 per share, which was the price at which our ordinary shares were last sold on the Nasdaq Global Select Market on January 4, 2017 (a date within 60 days of February 17, 2017). As a result of limitations imposed by General Instruction I.B.6 of Form S-3, we may offer and sell securities registered on our registration statement on Form S-3 (File No. 333-209833), including the ordinary shares offered and sold through Piper Jaffray under the ATM and otherwise under the equity distribution agreement, having an aggregate offering price of up to \$13,735,804 in the 12 calendar months after February 17, 2017.

We are filing this prospectus supplement to amend and supplement the information in our Prospectus and Original Prospectus Supplement based on the amount of securities that we are eligible to sell under General Instruction I.B.6 of Form S-3. We have sold \$9,383,723 in securities pursuant to General Instruction I.B.6 of Form S-3 between February 17, 2017 and the date of this prospectus supplement, all of which were under the ATM Program. After giving effect to the \$13,730,345 offering limit described above, in the 12 calendar months after February 17, 2017, we may offer and sell additional ordinary shares having an aggregate offering price of up to \$4,352,081 (after rounding) from time to time through Piper Jaffray acting as our sales agent under the equity distribution agreement, unless and until we cease to be subject to General Instruction I.B.6 of Form S-3.

Our ordinary shares are listed on the Nasdaq Capital Market under the symbol "RWLK." On September 19, 2017, the last reported sale price of our ordinary shares on the Nasdaq Capital Market was \$1.70 per ordinary share.

Investing in our ordinary shares involves a high degree of risk. See "Risk Factors" set forth in the documents we file with the Securities and Exchange Commission that are incorporated by reference in the Prospectus and Original Prospectus Supplement for more information.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the securities being offered by this prospectus supplement or accompanying prospectus, or determined if this prospectus supplement or accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Piper Jaffray
September 20, 2017
