

MISONIX INC
Form S-3/A
April 24, 2018

As filed with the Securities and Exchange Commission on April 24, 2018

Registration No. 333-223878

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

AMENDMENT NO. 1

TO

FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

MISONIX, INC.

(Exact name of registrant as specified in its charter)

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: From time to time after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a 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. (Check one):

Large accelerated filer		Accelerated filer
Non-accelerated filer	(Do not check if a smaller reporting	Smaller reporting company

company)

Emerging growth company

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.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

PROSPECTUS

MISONIX, INC.

\$75,000,000

Common Stock

Preferred Stock

Warrants

Units

From time to time, we may offer and sell common stock, preferred stock or warrants and/or any combination of securities described in this prospectus, either individually or in units, at prices and on terms described in one or more supplements to this prospectus. The aggregate public offering price of the securities offered by us under this prospectus, sometimes referred to as the “shelf securities,” will not exceed \$75,000,000.

This prospectus provides you with a general description of the securities that we may offer in one or more offerings. Each time we offer securities, we will provide a supplement to this prospectus that will contain more specific information about the terms of that offering. We may also add, update or change in a prospectus supplement any of the information contained in this prospectus.

You should read both this prospectus and the applicable prospectus supplement, as well as any documents incorporated by reference in this prospectus and/or the applicable prospectus supplement, before you make your investment decision.

Our common stock is traded on the Nasdaq Global Market under the trading symbol “MSON.” On April 23, 2018, the last reported sale price of our common stock on the Nasdaq Global Market was \$10.9545 per share.

Investing in our securities involves risks. See the risks and uncertainties described under the heading “Risk Factors” beginning on page 2 of this prospectus, in any applicable prospectus supplement and under similar headings in the other documents that are incorporated by reference into this prospectus.

This prospectus may not be used by us to sell any securities unless accompanied by a prospectus supplement.

As of March 16, 2018, the aggregate market value of our common stock held by non-affiliates was approximately \$78.2 million based on 9,402,466 shares of outstanding common stock, of which 1,842,816 shares are held by affiliates, and a price of \$10.35 per share, which was the last reported sale price of our common stock as quoted on The Nasdaq Global Market on that date. We have not offered any securities pursuant to General Instruction I.B.6 of Form S-3 during the prior 12 month calendar period that ends on, and includes, the date of this prospectus.

The securities offered by this prospectus may be sold directly to investors, through agents designated from time to time or to or through one or more underwriters or dealers or in other manners as set forth under the heading “Plan of Distribution.” Each time we offer shelf securities in a primary offering, a supplement to this prospectus applicable to such offering will provide the specific terms of the plan of distribution for such offering and the net proceeds that we expect to receive from any such primary offering. We are bearing all of the expenses in connection with this registration statement.

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.

The date of this prospectus is April 24, 2018.

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ABOUT THIS PROSPECTUS

The information contained in this prospectus is not complete and may be changed. You should rely only on the information provided in or incorporated by reference in this prospectus, any prospectus supplement or documents to which we otherwise refer you. We have not authorized anyone else to provide you with different information. We are not making an offer of any securities in any jurisdiction where the offer is not permitted, and this document may only be used where it is legal to sell the securities described herein. You should not assume that the information in this prospectus, any prospectus supplement or any document incorporated by reference is accurate as of any date other than the date of the document in which such information is contained or such other date referred to in such document, regardless of the time of any sale or issuance of the securities.

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, to register an indeterminable number of shares of common stock, preferred stock and warrants as may from time to time be offered for sale by us, either individually or in units, at indeterminate prices (up to an aggregate maximum offering price for all such securities of \$75,000,000), using a “shelf” registration process. By using a shelf registration statement, we may offer and sell from time to time in one or more offerings the securities described in this prospectus.

This prospectus provides you with some of the general terms that may apply to an offering of our securities. Each time we sell securities under this shelf registration we will provide a prospectus supplement that will contain specific information about the terms of that specific offering, including the number and price per security (or exercise price) of the securities to be offered and sold in that offering and the specific manner in which such securities may be offered. A prospectus supplement may also add to, update or change any of the information contained in this prospectus. If there is an inconsistency between the information in this prospectus and a prospectus supplement, you should rely on the information in the prospectus supplement.

You should read carefully both this prospectus and the applicable prospectus supplement, together with the additional information incorporated by reference herein as described under the heading “Information Incorporated by Reference,” before making an investment decision.

The registration statement that contains this prospectus (including the exhibits to the registration statement) contains additional information about us and the securities offered under this prospectus. The registration statement can be read at the SEC web site (www.sec.gov) or at the SEC offices mentioned under the heading “Where You Can Find More Information.”

ABOUT MISONIX, INC.

Misonix designs, manufactures, develops and markets therapeutic ultrasonic devices. These products are used for precise bone sculpting, removal of soft tumors, and tissue debridement in the fields of orthopedic surgery, plastic surgery, neurosurgery, podiatry and vascular surgery. In the United States, we sell our products through a network of commissioned agents assisted by Company personnel. Outside of the United States, we sell to distributors who then resell the product to hospitals. Unless the context requires otherwise, references to the “Company”, “Misonix”, “we”, “us”, “our” or similar pronouns refer to Misonix, Inc. and its subsidiaries.

We were incorporated under the laws of the State of New York. Our executive offices are located at 1938 New Highway, Farmingdale, New York 11735 and our telephone number is (631) 694-9555.

RISK FACTORS

Any investment in our securities involves a high degree of risk. You should consider carefully the risk factors described in our periodic reports filed with the SEC, including the risks, uncertainties and assumptions discussed under the heading “Risk Factors” included in our most recent annual report on Form 10-K, as such may be revised or supplemented prior to the completion of this offering by more recently filed quarterly reports on Form 10-Q, each of which is or upon filing will be incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future, and those identified in any applicable prospectus supplement, as well as other information in this prospectus and any applicable prospectus supplement and the documents incorporated by reference herein before purchasing any of our securities. Each of these risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business, operating results, prospects or financial condition. The additional risks discussed below also include forward-looking statements and our actual results may differ substantially from those discussed in these forward-looking statements.

We may need additional financing to satisfy our future capital requirements, which may not be readily available to us.

Our capital requirements may be significant in the future. In the future, we may incur additional expenses in the development and implementation of our operations. We have no current arrangements with respect to, or sources of, additional financing. There can be no assurance that we will be able to obtain any additional financing on terms acceptable to us or at all. Our inability to obtain financing, if and when needed, could materially adversely affect our business and future financial condition and could require us to curtail or otherwise cease our existing operations.

We will have broad discretion over the use of the proceeds to us from any primary offering and may apply the proceeds to uses that do not improve our operating results or the value of your securities.

We will have broad discretion to use the net proceeds to us from any offering, if any, and investors will be relying solely on the judgment of our board of directors and management regarding the application of these proceeds. Although we expect to use the net proceeds from a primary offering for investments in companies and technologies that complement our businesses, or for general corporate purposes, including without limitation additions to our working capital, capital expenditures, or potentially for the repayment of indebtedness, we have not allocated these net proceeds for specific purposes. Investors will not have the opportunity, as part of their investment decision, to assess whether the proceeds are being used appropriately. Our use of any such proceeds may not improve our operating results or increase the value of the securities being offered hereby.

Future sales of shares of our common stock may cause the prevailing market price of our shares to decrease and could harm our ability to raise additional capital.

We have previously issued shares of common stock, which are eligible for resale under Rule 144 of the Securities Act of 1933, or Securities Act, and may become freely tradable. We have also registered shares that are issuable upon the exercise of options. If holders of options choose to exercise their purchase rights and sell shares of common stock in the public market, or if holders of currently restricted common stock choose to sell such shares of common stock in the public market under Rule 144 or otherwise, or attempt to publicly sell such shares all at once or in a short time period, the prevailing market price for our common stock may decline. The sale of shares of common stock issued upon the exercise of our securities could also dilute the holdings of our existing shareholders. The market price of our common stock could drop due to sales of a large number of shares or the perception that such sales could occur. These factors also could make it more difficult to raise funds through future offerings of our securities.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain statements that we believe are “forward-looking statements” as that term is used in the Private Securities Litigation Reform Act of 1995 and are intended to enjoy protection of the safe harbor for forward-looking statements provided by that Act. These forward-looking statements are based on our current expectations, assumptions, estimates and projections about our business and our industry. Forward-looking statements include statements regarding our future financial position, performance and achievements, business strategy, and plans and objectives of management for future operations.

In some cases, you can identify forward-looking statements by terms such as “may,” “should,” “will,” “could,” “estimate,” “project,” “predict,” “potential,” “continue,” “anticipate,” “believe,” “plan,” “seek,” “expect,” “future” and “intend” or the negative terms or other comparable expressions which are intended to identify forward-looking statements. These statements are only predictions and are not guarantees of future performance. They are subject to known and unknown risks, uncertainties and other factors, some of which are beyond our control and difficult to predict and could cause our actual results to differ materially from those expressed or forecasted in, or implied by, the forward-looking statements. In evaluating these forward-looking statements, you should carefully consider the risks and uncertainties referred to under the caption “Risk Factors” above and elsewhere in this prospectus, including those described in documents incorporated by reference herein, and those described in any applicable prospectus supplement. Given these uncertainties, you should not place undue reliance on these forward-looking statements. In addition, these forward-looking statements reflect our view only as of the date they are made.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements.

USE OF PROCEEDS

Except as described in any prospectus supplement, we currently intend to use the net proceeds from the sale of shelf securities under this prospectus for potential acquisitions of, or investments in, companies and technologies that complement our businesses, although we have no present understandings, commitments or agreements to do so, or for general corporate purposes, including without limitation, additions to our working capital, and capital expenditures, or potentially for the repayment of indebtedness. The prospectus supplement with respect to an offering of the shelf

securities may identify different or additional uses for the proceeds of that offering. Pending any such uses, we may temporarily invest the net proceeds.

DESCRIPTION OF CAPITAL STOCK

The following description summarizes the material terms of our capital stock. Because it is only a summary, it does not contain all the information that may be important to you. For a complete description, you should refer to the applicable prospectus supplement, our restated certificate of incorporation and by-laws, as amended, and to the applicable provisions of New York law.

Common Stock

As of the date of this prospectus, Misonix is authorized to issue 20,000,000 shares of common stock. As of April 18, 2018, there were 9,402,466 shares of common stock outstanding.

The holders of common stock are entitled to one vote for each share held of record on all matters to be voted on by shareholders. There is no cumulative voting with respect to the election of directors, with the result that the holders of more than 50% of the shares voting for the election of directors can elect all of the directors then up for election. The holders of common stock are entitled to receive dividends when, as and if declared by our board of directors out of funds legally available therefor. In the event of liquidation, dissolution or winding up of Misonix, the holders of common stock are entitled to share in all assets remaining which are available for distribution to them after payment of liabilities and after provision has been made for each class of stock, if any, having preference over the common stock. Holders of shares of common stock have no conversion, preemptive or other subscription rights, and there are no redemption provisions applicable to the common stock. All of the outstanding shares of common stock are fully paid and non-assessable.

Our common stock is listed on the Nasdaq Global Market under the symbol “MSON.”

Transfer Agent

The transfer agent and registrar for the common stock is Continental Stock Transfer & Trust Company, New York, New York.

Preferred Stock

As of the date of this prospectus, Misonix is authorized to issue 2,000,000 shares of preferred stock. As of April 18, 2018, there were no shares of preferred stock outstanding.

This section describes the general terms of our preferred stock to which any prospectus supplement may relate. A prospectus supplement will describe the terms relating to any preferred stock to be offered by us in greater detail, and may provide information that is different from this prospectus. If the information in the prospectus supplement with respect to the particular preferred stock being offered differs from this prospectus, you should rely on the information in the prospectus supplement. A copy of our restated certificate of incorporation has been incorporated by reference from our filings with the SEC as an exhibit to the registration statement of which this prospectus is a part. A certificate of amendment to our certificate of incorporation will specify the terms of any preferred stock being offered, and will be filed or incorporated by reference from a report that we file with the SEC.

Under our restated certificate of incorporation we have the authority to issue 2,000,000 shares of preferred stock. The authorized preferred stock can be issued from time to time in one or more series. Our board of directors has the power, without shareholder approval, to issue shares of one or more series of preferred stock, at any time, for such consideration and with such relative rights, privileges, preferences and other terms as the board may determine, including terms relating to dividend rates, redemption rates, liquidation preferences and voting, sinking fund and conversion or other rights. The rights and terms relating to any new series of preferred stock could adversely affect the voting power or other rights of the holders of the common stock or could be utilized, under certain circumstances, as a method of discouraging, delaying or preventing a change in control of Misonix.

The following description of our preferred stock, and any description of our preferred stock in a prospectus supplement, may not be complete and is subject to, and qualified in its entirety by reference to, New York law and the actual terms and provisions contained in our restated certificate of incorporation and bylaws, each as amended from

time to time.

Terms

Our board of directors will fix the rights, preferences, privileges, qualifications and restrictions of the preferred stock of each series that we sell under this prospectus and applicable prospectus supplements in the amendment to our certificate of incorporation relating to that series. We will incorporate by reference into the registration statement, of which this prospectus is a part, the form of any amendment to our certificate of incorporation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. This description of the preferred stock in the amendment to our certificate of incorporation and any applicable prospectus supplement may include:

the number of shares of preferred stock to be issued and the offering price of the preferred stock;

the title and stated value of the preferred stock;

dividend rights, including dividend rates, periods, or payment dates, or methods of calculation of dividends applicable to the preferred stock;

whether dividends will be cumulative or non-cumulative, and if cumulative the date from which distributions on the preferred stock shall accumulate;

the right to convert the preferred stock into a different type of security;

voting rights, if any, attributable to the preferred stock;

rights and preferences upon our liquidation or winding up of our affairs;

terms of redemption;

preemption rights, if any;

the procedures for any auction and remarketing, if any, for the preferred stock;

the provisions for a sinking fund, if any, for the preferred stock;

any listing of the preferred stock on any securities exchange;

the terms and conditions, if applicable, upon which the preferred stock will be convertible into our common stock, including the conversion price (or manner of calculation thereof);

a discussion of federal income tax considerations applicable to the preferred stock, if material;

the relative ranking and preferences of the preferred stock as to dividend or other distribution rights and rights if we liquidate, dissolve or wind up our affairs;

any limitations on issuance of any series of preferred stock ranking senior to or on a parity with the series of preferred stock being offered as to distribution rights and rights upon the liquidation, dissolution or winding up or our affairs; and

any other specific terms, preferences, rights, limitations or restrictions of the preferred stock.

Rank

Unless otherwise indicated in the applicable supplement to this prospectus, shares of our preferred stock will rank, with respect to payment of distributions and rights upon our liquidation, dissolution or winding up, and allocation of our earnings and losses:

senior to all classes or series of our common stock, and to all of our equity securities ranking junior to the preferred stock;

on a parity with all equity securities issued by us, the terms of which specifically provide that these equity securities rank on a parity with the preferred stock; and

junior to all equity securities issued by us, the terms of which specifically provide that these equity securities rank senior to the preferred stock.

Distributions

Subject to any preferential rights of any outstanding stock or series of stock, our preferred shareholders are entitled to receive distributions, when and as authorized by our board of directors, out of legally available funds, and share pro rata based on the number of shares of preferred stock, common stock and other equity securities outstanding.

Voting Rights

Unless otherwise indicated in the applicable supplement to this prospectus, or otherwise required under New York law, holders of our preferred stock will not have any voting rights.

Liquidation Preference

Upon the voluntary or involuntary liquidation, dissolution or winding up of our affairs, then, before any distribution or payment shall be made to the holders of any common stock or any other class or series of stock ranking junior to the preferred stock in our distribution of assets upon any liquidation, dissolution or winding up, the holders of each series of our preferred stock are entitled to receive, after payment or provision for payment of our debts and other liabilities, out of our assets legally available for distribution to shareholders, liquidating distributions in the amount of the liquidation preference per share (set forth in the applicable supplement to this prospectus), plus an amount, if applicable, equal to all distributions accrued and unpaid thereon (which shall not include any accumulation in respect of unpaid distributions for prior distribution periods if the preferred stock does not have a cumulative distribution). Unless otherwise indicated in the applicable supplement to this prospectus, after payment of the full amount of the liquidating distributions to which they are entitled, the holders of preferred stock will have no right or claim to any of our remaining assets. In the event that, upon our voluntary or involuntary liquidation, dissolution or winding up, the legally available assets are insufficient to pay the amount of the liquidating distributions on all of our outstanding preferred stock and the corresponding amounts payable on all of our stock of other classes or series of equity security ranking on a parity with the preferred stock in the distribution of assets upon liquidation, dissolution or winding up, then the holders of our preferred stock and all other such classes or series of equity securities will share ratably in the distribution of assets in proportion to the full liquidating distributions to which they would otherwise be respectively entitled.

If the liquidating distributions are made in full to all holders of preferred stock, our remaining assets will be distributed among the holders of any other classes or series of equity security ranking junior to the preferred stock upon our liquidation, dissolution, or winding up, according to their respective rights and preferences and in each case according to their respective number of shares of stock.

Conversion Rights

The terms and conditions, if any, upon which shares of any series of preferred stock are convertible into other securities will be set forth in the applicable supplement to this prospectus. These terms will include the amount and type of security into which the shares of preferred stock are convertible, the conversion price (or manner of calculation thereof), the conversion period, provisions as to whether conversion will be at the option of the holders of the preferred stock or us, the events, if any, requiring an adjustment of the conversion price and provisions, if any, affecting conversion in the event of the redemption of that preferred stock.

Redemption

If so provided in the applicable supplement to this prospectus, our preferred stock will be subject to mandatory redemption or redemption at our option, in whole or in part, in each case upon the terms, at the times and at the redemption prices set forth in such supplement to this prospectus.

Anti-Takeover Considerations and Special Provisions of our Certificate of Incorporation and our By-laws

A number of provisions of both our restated certificate of incorporation and our by-laws concern matters of corporate governance and the rights of our shareholders. Provisions that grant our board of directors the ability to issue shares of preferred stock and to set the voting rights, preferences and other terms thereof may discourage takeover attempts that are not first approved by our board of directors, including takeovers which may be considered by some shareholders to be in their best interests. Certain provisions could delay or impede the removal of incumbent directors or the assumption of control by shareholders, even if such removal or assumption would be beneficial to our shareholders. These provisions also could discourage or make more difficult a merger, tender offer or proxy contest, even if they could be favorable to the interests of shareholders, and could potentially depress the market price of our common stock. Our board of directors believes that these provisions are appropriate to protect our interests and the interests of our shareholders.

DESCRIPTION OF WARRANTS

General

The following description, together with the additional information we may include in any applicable prospectus supplement, summarizes the material terms and provisions of the warrants that we may offer under this prospectus. While the terms we have summarized below will apply generally to any warrants that we may offer under this prospectus, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. The terms of any warrants offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from another report that we file with the SEC, the form of warrant agreement, which may include a form of warrant certificate, that describes the terms of the particular series of warrants we are offering before the issuance of the related series of warrants. The following summary of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to a particular series of warrants. We urge you to read the applicable prospectus supplement related to the particular series of warrants that we sell under this prospectus, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants.

We will describe in the applicable prospectus supplement the terms relating to warrants being offered including:

the offering price and aggregate number of warrants offered;

if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;

if applicable, the date on and after which the warrants and the related securities will be separately transferable;

in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;

the terms of any rights to redeem or call the warrants;

any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;

the dates on which the right to exercise the warrants will commence and expire;

the manner in which the warrant agreements and warrants may be modified;

federal income tax consequences of holding or exercising the warrants, if material;

the terms of the securities issuable upon exercise of the warrants; and

any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including, in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or payments upon our liquidation, dissolution or winding up of our affairs or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We intend to set forth in any warrant agreement and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and any warrant certificate or other form required for exercise properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant or warrant certificate are exercised, then we will issue a new warrant or warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

DESCRIPTION OF UNITS

As specified in the applicable prospectus supplement, we may issue units consisting of one or more of the following: shares of common stock and/or preferred stock, warrants, or any combination of such securities. The applicable prospectus supplement will describe:

the terms of the units and of any of our common shares, preferred shares or warrants comprising the units, including whether and under what circumstances the securities comprising the units may be traded separately;

a description of the terms of any unit agreement governing the units;

a description of the provisions for the payment, settlement, transfer or exchange of the units; and

if applicable, a discussion of any material United States federal income tax considerations.

PLAN OF DISTRIBUTION

We may sell the securities covered by this prospectus from time to time. Registration of our securities covered by this prospectus does not mean, however, that those securities will necessarily be offered or sold.

We may sell the securities:

to or through one or more underwriters or dealers;

directly to one or more purchasers, through agents, in private or open market transactions; or

through a combination of any of these methods of sale.

We may distribute securities:

from time to time in one or more transactions at a fixed price or prices, which may be changed from time to time;

at market prices prevailing at the times of sale;

at prices related to such prevailing market prices; or

at negotiated prices.

The method of distribution of the securities will be described in any applicable prospectus supplement.

Underwriters, dealers or agents may receive compensation in the form of discounts, concessions or commissions from us or purchasers (as their agents in connection with the sale of the securities). In addition, underwriters may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they act as agent. These

underwriters, dealers or agents may be considered to be underwriters under the Securities Act. As a result, discounts, commissions, or profits on resale received by the underwriters, dealers or agents may be treated as underwriting discounts and commissions. Each applicable prospectus supplement will identify any such underwriter, dealer or agent, and describe any compensation received by them from us. Any initial public offering price and any discounts or concessions allowed or re-allowed or paid to dealers may be changed from time to time. We may use underwriters with whom we have a material relationship. We will describe the nature of the relationship in an applicable prospectus supplement, naming the underwriter.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in an applicable prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may enter into agreements that provide for indemnification against certain civil liabilities, including liabilities under the Securities Act, or for contribution with respect to payments made by the underwriters, dealers or agents and to reimburse these persons for certain expenses.

All shelf securities we offer, other than common stock, will be new issues of securities with no established trading market. If the shelf securities are traded after their initial issuance, they may trade at a discount from their initial offering price, depending upon prevailing interest rates, the market for similar securities and other factors. Any underwriters may make a market in our securities, but will not be obligated to do so and may discontinue any market making at any time without notice. Therefore, no assurance can be given as to whether an active trading market will develop for any new shelf securities. We have no current plans for listing of the preferred stock on any securities exchange or quotation system; any such listing with respect to the preferred stock will be described in the applicable prospectus supplement or pricing supplement, as the case may be. We cannot guarantee the liquidity of the trading markets for any of our securities.

We may grant underwriters who participate in the distribution of the securities an option to purchase additional securities to cover over-allotments, if any, in connection with the distribution. Underwriters, broker dealers or agents and their associates may be customers of, engage in transactions with, or perform services for us in the ordinary course of business for which they receive compensation.

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended, or Exchange Act. Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchase of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of these activities at any time.

Any underwriters who are qualified market makers on the Nasdaq Global Market may engage in passive market making transactions in our common stock on the Nasdaq Global Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution.

We make no representation or prediction as to the direction or magnitude of any effect that any of the foregoing activities may have on the price of our common stock or, if applicable, the price for any of our other securities. For a description of these activities, see the information under the heading "Underwriting" or "Plan of Distribution" in the

applicable prospectus supplement. We will pay all expenses related to this registration statement.

LEGAL MATTERS

The validity of the securities being offered by this prospectus will be passed upon for us by Wiggin and Dana LLP, Stamford, Connecticut and for any underwriters, dealers or agents by counsel named in the applicable prospectus supplement.

EXPERTS

The audited financial statements and management's assessment of the effectiveness of internal control over financial reporting incorporated by reference in this prospectus and elsewhere in the registration statement have been so incorporated by reference in reliance upon the reports of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Exchange Act, and we file reports and other information with the SEC.

You may read and copy any of the reports, statements, or other information we file with the SEC at its Public Reference Section at 100 F Street, N.E., Washington, D.C. 20549 at prescribed rates. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. The SEC also maintains a Web site at <http://www.sec.gov> that contains reports, proxy statements and other information regarding issuers that file electronically with the SEC. In addition, the Nasdaq Stock Market maintains a Web site at <http://www.nasdaq.com> that contains reports, proxy statements and other information filed by us.

We make available free of charge, on or through our web site, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Our internet address is www.misonix.com. Information contained on or that can be accessed through our web site is not part of this prospectus.

This prospectus constitutes a part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act. This prospectus does not contain all of the information set forth in the registration statement, certain parts of which are omitted in accordance with the rules and regulations of the SEC. For further information about us and our securities we refer you to the registration statement and the accompanying exhibits and schedules. The registration statement may be inspected at the Public Reference Room maintained by the SEC at the address set forth in the first paragraph of this section or on the SEC's Web site. Statements contained in this prospectus regarding the contents of any contract or any other document filed as an exhibit are not necessarily complete. In each instance, reference is made to the copy of such contract or document filed as an exhibit to the registration statement, and each statement is qualified in all respects by that reference.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus the information we file with them. This means that we may disclose important information to you by referring you to other documents filed separately with the SEC. The information we incorporate by reference into this prospectus is legally deemed to be a part of this prospectus, except for any information superseded by other information contained in, or incorporated by reference into, this prospectus. Any statement contained in a document incorporated or deemed to be incorporated by reference into this prospectus

will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus. Our SEC File Number for documents we file under the Exchange Act is 001-10986. The following documents filed by us with the SEC are hereby incorporated by reference in this prospectus:

our annual report on Form 10-K for the fiscal year ended June 30, 2017;

our quarterly reports on Form 10-Q for the fiscal quarters ended September 30, 2017 and December 31, 2017;

our current reports on Form 8-K filed with the SEC on August 23, 2017, September 18, 2017, October 20, 2017, and November 13, 2017; and

the description of our common stock contained in our Registration Statement on Form 8-A (Registration No. 1-10986) filed with the SEC on January 22, 1992 under Section 12 of the Exchange Act and all amendments or reports filed by us for the purpose of updating those descriptions.

All reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (i) after the date of the initial registration statement and before effectiveness of the registration statement and (ii) after the date of this prospectus and prior to the termination of this offering also shall be deemed to be incorporated by reference in this prospectus and to be part hereof from the dates of filing of such reports and other documents; provided, however, that we are not incorporating any information furnished under either Item 2.02 or Item 7.01 of any current report on Form 8-K.

We hereby undertake to provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon written or oral request of any such person, a copy of any and all of the information that has been or may be incorporated by reference in this prospectus, other than exhibits to such documents, unless the exhibits are specifically incorporated by reference into the documents that this prospectus incorporates. Requests for such copies should be directed to our corporate secretary, at the following address or by calling the following telephone number:

Misonix, Inc.

1938 New Highway

Farmingdale, NY 11735

Telephone: (631) 694-9555

MISONIX, INC.

\$75,000,000

Common Stock

Preferred Stock

Warrants

Units

PROSPECTUS

April 24, 2018

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****Item 14. Other Expenses of Issuance and Distribution.**

The following table sets forth an estimate of the fees and expenses payable by the registrant in connection with the offering described in this registration statement

SEC registration fees	\$9,337.50
NASDAQ Global Market Listing Fee	\$*
Legal fees and expenses	\$*
Accounting fees and expenses	\$*
Printing fees and expenses	\$*
Miscellaneous expenses	\$*
Total	\$*

*These fees and expenses depend on the securities offered and the number of issuances and, accordingly, cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers

Section 722 of the New York Business Corporation Law (“BCL”) permits, in general, a New York corporation to indemnify any person made, or threatened to be made, a party to an action or proceeding by reason of the fact that he or she was a director or officer of the corporation, or served another entity in any capacity at the request of the corporation, against any judgments, fines, amounts paid in settlement and reasonable expenses, including attorney’s fees actually and necessarily incurred as a result of such action or proceeding, or any appeal therein, if such person acted in good faith, for a purpose he or she reasonably believed to be in, or, in the case of service for another entity, not opposed to, the best interests of the corporation and, in criminal actions or proceedings, in addition, had no reasonable cause to believe that his or her conduct was unlawful. Section 723 of the BCL permits the corporation to pay in advance of a final disposition of such action or proceeding the expenses incurred in defending such action or proceeding upon receipt of an undertaking by or on behalf of the director or officer to repay such amount as, and to the extent, required by statute. Section 721 of the BCL provides that the indemnification and advancement of expense provisions contained in the BCL shall not be deemed exclusive of any rights to which a director or officer seeking

indemnification or advancement of expenses may be entitled, provided no indemnification may be made on behalf of any director or officer if a judgment or other final adjudication adverse to the director or officer establishes that his or her acts were committed in bad faith or were the result of active or deliberate dishonesty and were material to the cause of action so adjudicated, or that he or she personally gained in fact a financial profit or other advantage to which he or she was not legally entitled. Section 724 of the BCL provides that a person who is entitled to indemnification may seek such indemnification in court. Section 725 of the BCL provides that expenses which were advanced to a person in defending a civil or criminal action in connection with services performed as an officer and director shall be repaid if it is ultimately determined that such person was not entitled to indemnification. Section 726 of the BCL provides that a corporation has the power to purchase and maintain insurance to cover claims for indemnification.

Article Seventh of the registrant's Certificate of Incorporation provides, in general, that the registrant may indemnify, and advance expenses to, any officer, director or other person to the fullest extent permitted by applicable law, and shall indemnify or advance expenses to such persons to the fullest extent required by the registrant's bylaws, any indemnification agreement or director resolution. Article Seventh of the Certificate of Incorporation also limits the personal liability of any director to the Company or its shareholders for damages for breach of duty as a director; provided, that Article Seventh shall not eliminate or limit such liability to the extent (i) his or her acts or omissions were in bad faith or involved intentional misconduct or knowing violation of law, (ii) he or she personally gained in fact a financial profit or other advantage to which he or she was not legally entitled, or (iii) his or her acts violated Section 719 of the BCL.

In accordance with that provision of the Certificate of Incorporation, the registrant's Bylaws provide that the registrant shall indemnify any officer or director (including officers and directors serving another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise in any capacity at the registrant's request) made, or threatened to be made, a party to an action or proceeding (whether civil, criminal, administrative or investigative) by reason of the fact that he or she was serving in any of those capacities against judgments, fines, amounts paid in settlement and reasonable expenses (including attorneys' fees) incurred as a result of such action or proceeding. Indemnification would not be available under the Bylaws if a judgment or other final adjudication adverse to such director or officer establishes that (i) his or her acts were committed in bad faith or were the result of active and deliberate dishonesty and, in either case, were material to the cause of action so adjudicated, or (ii) he or she personally gained in fact a financial profit or other advantage to which he or she was not legally entitled. The Bylaws also provide that the registrant shall, from time to time, advance to any director or officer expenses (including attorneys' fees) incurred in defending any such action in advance of the final disposition of such action; provided that no such advancement shall be made until receipt of any undertaking by or on behalf of such director or officer to repay such amount as, and to the extent, required by law.

Item 16. Exhibits

The following exhibits are filed herewith:

Number Exhibit Title

- 1.1* Form of Underwriting Agreement
- 4.1 Restated Certificate of Incorporation of the Company (1)
- 4.2 By-Laws of the Company (2)
- 4.3* Form of Warrant Agreement
- 4.4* Form of Unit Agreement
- 5** Opinion of Wiggin and Dana LLP
- 23.1 Consent of Grant Thornton LLP
- 23.2** Consent of Wiggin and Dana LLP (included in Exhibit 5)
- 24** Power of Attorney (included on the signature page of the Registration Statement)

(1)(incorporated by reference from the Company's Registration Statement on Form S-8 filed on February 26, 2010)

(2)(incorporated by reference from the Company's Current Report on Form 8-K filed on October 3, 2014)

* If applicable, to be subsequently filed by amendment or as an exhibit to a Current Report on Form 8-K or other applicable report filed with the SEC and incorporated herein by reference.

** Previously filed.

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Item 17. Undertakings

The undersigned Registrant hereby undertakes:

(a) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(i), (ii) and (iii) do not apply if the registration statement is on Form S-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(b) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(d) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) If the Registrant is relying on Rule 430B:

(A) Each prospectus filed by the Registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(e) If the Registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(f) That, for the purpose of determining liability of a Registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned Registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

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The undersigned registrant further undertakes:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Farmingdale, State of New York, on the 24th day of April, 2018.

MISONIX, INC.

By: /s/ Stavros G. Vizirgianakis
 Stavros G. Vizirgianakis
 President and Chief Executive Officer

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

<u>Name</u>	<u>Title</u>	<u>Date</u>
/s/ Stavros G. Vizirgianakis Stavros G. Vizirgianakis	President and Chief Executive Officer (Principal Executive Officer)	April 24, 2018
/s/ Joseph P. Dwyer Joseph P. Dwyer	Chief Financial Officer (Principal Financial and Accounting Officer)	April 24, 2018
/s/ John W. Gildea* John W. Gildea	Director	April 24, 2018
/s/ Charles Miner III* Charles Miner III	Director	April 24, 2018
/s/ Patrick A. McBrayer* Patrick A. McBrayer	Director	April 24, 2018
/s/ Thomas M. Patton* Thomas M. Patton	Director	April 24, 2018
/s/ Stavros G. Vizirgianakis Stavros G. Vizirgianakis	Director	April 24, 2018

* By: /s/ Joseph P. Dwyer
Joseph P. Dwyer, Attorney-in-Fact