



47827 Halyard Drive  
Plymouth, Michigan 48170-2461  
(734) 414-6100 Facsimile: (734) 414-4700

October 2, 2009

Dear Perceptron Shareholder:

You are cordially invited to attend the 2009 Annual Meeting of Shareholders of Perceptron, Inc. ("Company") to be held on Tuesday, November 17, 2009, at 9:00 a.m., local time, at 47827 Halyard Drive, Plymouth, Michigan 48170.

The attached notice of the meeting and Proxy Statement describe the items of business to be transacted:

- (a) The election of eight directors,
- (b) The ratification of the selection of Grant Thornton LLP as the Company's independent registered public accounting firm for fiscal 2010, and
- (c) Such other business as may properly come before the meeting or any adjournment thereof.

The Board of Directors encourages you to read the Proxy Statement carefully. We have also made available a copy of our Annual Report for fiscal year 2009. We encourage you to read the Annual Report, which includes information about our business and products, as well as our audited financial statements.

After the formal business session at the Annual Meeting of Shareholders, there will be a report to the shareholders on the progress of the Company along with a discussion period. I look forward to seeing you at the Annual Meeting and hope you will make plans to attend. Whether or not you plan to attend the meeting, I urge you to sign, date and return the accompanying proxy in the enclosed postage-paid envelope enclosed for your convenience so that as many shares as possible may be represented at the meeting. No postage is required if the envelope is mailed in the United States.

Sincerely,

Harry T. Rittenour  
President and Chief Executive Officer





47827 Halyard Drive  
Plymouth, Michigan 48170

**NOTICE OF THE 2009 ANNUAL MEETING OF SHAREHOLDERS**

TIME AND DATE	9:00 a.m., Eastern Time, on Tuesday, November 17, 2009
PLACE	Perceptron Corporate Headquarters 47827 Halyard Drive Plymouth, MI 48170
ITEMS OF BUSINESS	1. To elect eight directors to serve until the 2010 Annual Meeting of Shareholders and until their successors are elected and qualified. 2. To ratify the selection of Grant Thornton LLP as the Company's independent registered public accounting firm for fiscal 2010, and 3. To transact such other business as may properly come before the meeting or any adjournments thereof.
RECORD DATE	In order to vote, you must have been a shareholder at the close of business on September 25, 2009.
PROXY VOTING	It is important that your shares be represented and voted at the Annual Meeting. If you hold your shares beneficially in street name with a broker, you can vote your shares electronically via the Internet or by telephone or if you are a record shareholder by completing and returning the proxy card or voting instruction card. Voting instructions are printed on your proxy card and included in the accompanying proxy statement. You can revoke a proxy at any time prior to its exercise at the Annual Meeting by following the instructions in the proxy statement.

A certified list of shareholders entitled to vote at the meeting will be available for examination by any shareholder during the meeting at the corporate offices at 47827 Halyard Drive, Plymouth, Michigan 48170.

A copy of the 2009 Annual Report for the fiscal year ended June 30, 2009 and Proxy Statement accompanies this notice.

By the Order of the Board of Directors

David W. Geiss  
Vice President, General Counsel & Secretary  
October 2, 2009

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**The vote of every shareholder is important, and your cooperation in promptly voting via the Internet, by phone or by returning your marked, dated and signed proxy will be appreciated. The proxy is revocable and will not affect your right to vote in person if you attend the meeting. Your proxy will, however, help to assure a quorum and to avoid added proxy solicitation costs.**

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PERCEPTRON, INC.

2009 ANNUAL MEETING OF SHAREHOLDERS  
PROXY STATEMENT

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## PROXY STATEMENT

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**PERCEPTRON, INC.**  
**2009 ANNUAL MEETING OF SHAREHOLDERS**  
**TO BE HELD AT 9:00 A.M. ON NOVEMBER 17, 2009**

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### INTRODUCTION

This Proxy Statement and the accompanying Notice of the 2009 Annual Meeting of Shareholders, 2009 Annual Report and proxy card are furnished in connection with the solicitation of proxies by the Board of Directors (“Board”) of Perceptron, Inc., a Michigan corporation (“Company”). The proxies are being solicited for use at the 2009 Annual Meeting of Shareholders (“Annual Meeting”) of the Company to be held at the corporate offices of the Company on Tuesday, November 17, 2009, at 9:00 a.m., local time, and at any adjournment of that meeting. The corporate offices of the Company are located at 47827 Halyard Drive, Plymouth, Michigan 48170, and the Company’s telephone number is (734) 414-6100. The Company expects that this Proxy Statement and the accompanying materials will be first sent or given to shareholders on or about October 8, 2009.

Only shareholders of record of the Company’s Common Stock, \$0.01 par value (“Common Stock”) at the close of business on September 25, 2009 (“Record Date”) will be entitled to notice of and to vote at the Annual Meeting or any adjournments thereof. Shareholders of record on the Record Date are entitled to one vote per share on any matter that may properly come before the Annual Meeting. As of the Record Date, there were 8,901,463 shares of Common Stock outstanding and entitled to vote. The Company has no other class of stock outstanding. The presence, either in person or by properly executed proxy, of the holders of a majority of the outstanding shares of Common Stock is necessary to constitute a quorum at the Annual Meeting. See “Share Ownership of Management and Certain Shareholders” for a description of the beneficial ownership of the Common Stock.

**Important Notice Regarding the Availability of Proxy Materials for the Shareholder Meeting to be Held on November 17, 2009.**

- **The Notice of the 2009 Annual Meeting of Shareholders, Proxy Statement and our 2009 Annual Report are available at <http://www.amstock.com/proxyservices/viewmaterial.asp?CoNumber=05067>.** The Notice of the 2009 Annual Meeting of Shareholders, Proxy Statement, our 2009 Annual Report and form of proxy were distributed via mail and made available via the Internet to shareholders on or about October 8, 2009.

Directors, officers and other employees of the Company may solicit, without additional compensation, proxies by any appropriate means, including personal interview, mail, telephone, courier service and facsimile transmissions. Although the Company does not anticipate retaining a proxy solicitation firm to aid in solicitation of Proxies from its shareholders, if such a firm is retained, it would be paid customary fees and would be reimbursed for out-of-pocket expenses. Arrangements will also be made with brokerage houses and other custodians, nominees and fiduciaries which are record holders of the Company’s Common Stock to forward proxy soliciting material to the beneficial owners of such shares and the Company will reimburse such record holders for their reasonable expenses incurred in connection therewith. The cost of soliciting proxies, including the preparation, assembling and mailing of the Notice of the 2009 Annual Meeting of Shareholders, the Proxy Statement, the 2009 Annual Report and the accompanying proxy card, as well as the cost of forwarding such material to the beneficial owners of Common Stock, will be borne by the Company. Only one Notice of the 2009 Annual Meeting of Shareholders, Proxy Statement and Annual Report, as applicable, will be delivered to multiple shareholders sharing an address unless the Company has received contrary instructions from one or more of the shareholders. Upon written or oral request from a shareholder who shares an address with another shareholder, the Company shall deliver a separate copy of the Notice of the 2009 Annual Meeting of Shareholders, Proxy Statement and Annual Report. In the future, shareholders can call or write the Company for a separate notice, annual report or proxy statement at (734) 414-6100 or 47827 Halyard Drive, Plymouth, MI 48170-2461. Similarly, those shareholders who share an address and wish to

receive only one copy of the notice, annual report or proxy statement when they are receiving multiple copies can also call or write the Company at the number and address given above.

Shares may be voted by record holders in two separate ways as follows: (i) by completing and mailing the proxy, or (ii) by ballot at the Annual Meeting. Shares represented by a duly executed proxy, unless previously revoked, will be voted at the Annual Meeting in accordance with the instructions of the shareholder thereon if the proxy is received by the Company before the close of business on November 16, 2009. Shares represented by a proxy received after this time will be voted if the proxy is received by the Company in sufficient time to permit the necessary examination and tabulation of the proxy before the vote of shareholders is taken. **IF NO INSTRUCTIONS ARE MADE, SUCH SHARES WILL BE VOTED "FOR" THE ELECTION OF DIRECTORS NAMED IN THIS PROXY STATEMENT AND "FOR" THE RATIFICATION OF THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM DESCRIBED IN THIS PROXY STATEMENT.** A proxy also gives Messrs. Harry T. Rittenour, John H. Lowry, III and David W. Geiss discretionary authority, to the extent permitted by law, to vote all shares of Common Stock represented by the proxy on any other matter that is properly presented for action at the meeting; however, the Board does not intend to present any other matters at the Annual Meeting. Any proxy given pursuant to this solicitation may be revoked by the person giving it at any time before it is voted. Proxies may be revoked by (i) filing with the Secretary of the Company, at or before the Annual Meeting, a written notice of revocation bearing a later date than the proxy, (ii) duly executing a subsequent proxy relating to the same shares and delivering it to the Secretary of the Company at the Company's corporate offices at or before the Annual Meeting, or (iii) attending the Annual Meeting and voting in person, if the shareholder is a shareholder of record (although attendance at the Annual Meeting will not in and of itself constitute a revocation of a proxy).

If a shareholder owns shares through a bank or broker in street name, the shareholder may instruct his or her bank or broker how to vote such shares. "Broker non-votes" occur when a bank, broker or other nominee holder has not received voting instructions with respect to a particular matter and the nominee holder does not have discretionary power to vote on that matter. The election of directors and ratification of the Company's independent auditors are considered routine matters, so a bank or broker will have discretionary authority to vote such shares held in street name on those proposals. A broker non-vote may also occur if a broker fails to vote shares for any reason.

Abstentions, and withheld votes with respect to the election of directors, are counted only for purposes of determining whether a quorum is present at the 2009 Annual Meeting. Withheld votes will be excluded entirely from the vote on the election of directors and will therefore have no effect on the election. Directors are elected by a plurality of the votes cast, so that only votes cast "for" directors are counted in determining which directors are elected. Approval of the ratification of the Company's independent auditors requires a majority of the votes cast on the matter. For purposes of determining the number of votes cast with respect to the ratification of the Company's independent auditors, only those cast "for" or "against" are included, and abstentions and broker non-votes are not counted for this purpose.

**MATTERS TO COME BEFORE THE MEETING**

**PROPOSAL 1 — ELECTION OF DIRECTORS**

At the Annual Meeting, Shareholders will be asked to elect a Board of eight directors to hold office, in accordance with the Bylaws of the Company, until the 2010 annual meeting and until the election and qualification of their successors, or until their resignation or removal. The following table sets forth information regarding the nominees for election to the Company's Board. The Board recommends a vote **FOR** each of the nominees for election. The shares represented by properly executed proxies will be voted in accordance with the specifications made therein. **PROXIES WILL BE VOTED "FOR" THE ELECTION OF SUCH NOMINEES UNLESS THE SPECIFICATION IS MARKED ON THE PROXY INDICATING THAT AUTHORITY TO DO SO IS WITHHELD.** If a nominee is unable to serve or, for good cause, will not serve, the proxy confers discretionary authority to vote with respect to the election of any person to the Board. The nominees receiving a plurality of votes cast at the Annual Meeting will be elected to the Board. Shares may not be voted cumulatively for the election of directors.

The nominees named below have been selected by the Board of the Company. Each of the nominees is currently a director of the Company. The following information with regard to business experience has been furnished by the respective nominees for director.

Name and Age	Position, Principal Occupations and Other Directorships
W. Richard Marz, 66	Director since 2000 and Chairman of the Board since January 2008. Mr. Marz is President of MMW Group, a private technology consulting group he founded in 2006. From August 2005 to August 2006, he was a technical consultant to LSI Corporation ("LSI"), and prior to that time he was Executive Vice President, Worldwide Strategic Marketing (December 2003 to August 2005) and Executive Vice President, Communications and ASIC Technology (February 2002 to December 2003), of LSI. LSI is a semiconductor manufacturer. Mr. Marz also serves as a director of Lattice Semiconductor, Inc.
David J. Beattie, 67	Director since 1997. Mr. Beattie was President of McNaughton - McKay Electric Company ("MME") from February 2001 to December 2004. MME is a distributor of industrial automation products and services.
Kenneth R. Dabrowski, 66	Director since 1999. Mr. Dabrowski has been President of the Durant Group, L.L.C., a management consulting firm, since December 2000, and a partner with American Industrial Partners, a New York based private equity firm. He was a member of the faculty at Massachusetts Institute of Technology from June 1999 to June 2004. Mr. Dabrowski was Vice President, Quality and Process Leadership, Ford Automotive Operations of Ford Motor Company from September 1996 to January 1999.
Philip J. DeCocco, 71	Director since 1996. Mr. DeCocco has been President of Sturges House, Inc., a company founded by Mr. DeCocco, since 1983. Sturges House, Inc. offers executive recruiting and management consulting services in human resources, strategic planning, executive development and organization design and development to various companies.
Robert S. Oswald, 68	Director since 1996. Mr. Oswald has been Chairman, Bendix Commercial Vehicle Systems, LLC, a manufacturer of air brakes and other safety systems, since October 2003 and served as Chairman and Chief Executive Officer from March 2002 to September 2003. Mr. Oswald is also Chief Executive Officer and a director of Paice, LLC, which is in the business of developing hybrid electric power train technology. Mr. Oswald was Chairman, President and Chief Executive Officer of Robert Bosch Corporation, a manufacturer of automotive components and systems, and a member of the Board of Management of Robert Bosch, GmbH from July 1996 to December 2000. Mr. Oswald also serves as a director of Dura Automotive Systems, Inc..

Name and Age	Position, Principal Occupations and Other Directorships
James A. Ratigan, 61	Director since 2003. Since May 2006, Mr. Ratigan has served as Vice President and Chief Financial Officer of Nitric BioTherapeutics, Inc., a privately held specialty pharmaceutical, drug delivery systems and biotechnology company. From August 2003 to April 2006, Mr. Ratigan was an independent consultant providing consultative services to two specialty pharmaceutical companies, a biotechnology company and a private equity firm. From June 1997 to August 2003, Mr. Ratigan was Executive Vice President, Chief Financial Officer and Secretary of Orapharma, Inc., a specialty pharmaceutical company that was acquired by Johnson and Johnson, Inc. Mr. Ratigan was a director of Perceptron from 1989 to 1996 and served as Perceptron's Chief Operating Officer from May 1994 to April 1996 and Chief Financial Officer from December 1993 to June 1996.
Harry T. Rittenour, 63	Director since 2008. Since January 2008, Mr. Rittenour has been President and Chief Executive Officer of the Company. Prior to that he was Senior Vice President - Product Production and Quality of the Company from May 2001 to January 2008.
Terryll R. Smith, 59	Director since 1996. Mr. Smith has been President and Chief Executive Officer of Water Security Corp., an early stage technology start-up focused on drinking water applications, since January 2007. He was President and Chief Executive Officer of Novation Environmental Technologies Inc., a water purification company, from January 2000 to January 2007.

#### Director Compensation for Fiscal 2009

The following table provides information as to compensation paid by Perceptron for services rendered in all capacities to the Company and its subsidiaries during the fiscal year ended June 30, 2009 by the members of our Board of Directors, other than Mr. Rittenour, whose compensation is described under "Compensation of Executive Officers". All payments to members of the Board of Directors set forth in the table are made pursuant to the standard director compensation arrangements described under "Standard Director Compensation Arrangements."

#### DIRECTOR COMPENSATION FOR FISCAL 2009

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$) <sup>(1)(2)</sup>	All Other Compensation (\$)	Total (\$)
W. Richard Marz <sup>(3)</sup>	102,500 <sup>(4)</sup>	55,209	0	157,709
David J. Beattie <sup>(3)</sup>	34,000	15,789	0	49,789
Kenneth R. Dabrowski <sup>(3)</sup>	39,000 <sup>(5)</sup>	15,789	0	54,789
Philip J. DeCocco <sup>(3)</sup>	36,750 <sup>(6)</sup>	15,789	0	52,539
Robert S. Oswald <sup>(3)</sup>	31,250 <sup>(7)</sup>	15,789	0	47,039
James A. Ratigan <sup>(3)</sup>	41,750	15,789	0	57,539
Terryll R. Smith <sup>(3)</sup>	32,500	15,789	0	48,289

- (1) Represents the compensation cost incurred during fiscal year ended June 30, 2009 ("fiscal 2009") associated with stock options awarded prior to June 30, 2009 under the 2004 Stock Incentive Plan (the "2004 Stock Plan"), calculated in accordance with Financial Accounting Standards Board Statement of Financial Accounting Standards No. 123R, "Share-Based Payment," ("FAS 123R"). These amounts relate to options granted during the fiscal years ended June 30, 2009, 2008, and 2007. No options were granted during fiscal 2006. These amounts are based on the grant date fair value of such awards expensed over the requisite vesting period, excluding any forfeiture reserves recorded for these awards. There can be no assurance that the FAS 123R option award amounts shown above will ever be realized. The assumptions we used to calculate stock option expense under FAS 123R are included in Note 9 to our audited consolidated financial statements included in our Annual Reports on Form 10-K for the fiscal years ended June 30, 2009, 2008 and 2007.

