MALVERN INSTRUMENTS LIMITED

Company Registration No1020602

COMPANIES ACT, 1985 (as amended)

SPECIAL RESOLUTION

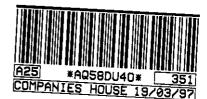
PASSED 25TH FEBRUARY 1997

THAT the revised Memorandum and Articles of Association, of which a copy is attached to this resolution and signed for identification purposes on behalf of the sole member, be and is hereby adopted as the Memorandum and Articles of Association of the Company with immediate effect.

G J Parsons Company Secretary

Dated this 25th February 1997

Registered Office: Spring Road South Malvern Worcester WR14 1AQ



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THE COMPANIES ACTS 1948 TO 1967

COMPANY LIMITED BY SHARES

MEMORANDUM OF ASSOCIATION

OF

MALVERN INSTRUMENTS LIMITED

- 1. The Name of the Company is "MALVERN INSTRUMENTS LIMITED".
- 2. The Registered Office of the Company will be situate in England.
- 3. The Objects for which the Company is established are:-
 - To carry on all or any of the businesses of manufacturers, designers, (A) assemblers, marketers, importers, exporters, repairers, installers, maintainers, hirers, letters on hire, distributors and agents for the sale of, and dealers in technological, scientific and precision instruments of all descriptions as well as engineering equipment, plant, machinery, components, accessories, tools, jigs, dies and fixtures of all kinds, instrument makers, optical engineers, engineering consultants, protection planners, prototype designers, draughtsmen and technicians, designers, distributors, factors, manufacturers and merchants of, and dealers in mouldings, shapings, weldings, pressings, assemblies, repetition work and machined castings, metal founders, converters and moulders, millwrights, metallurgists, boilermakers, smiths and fitters, wiredrawers, tube makers, tin-plate workers, sheet metal manufacturers, workers and dealers, tinners, galvanises, platers, annealers and enamellers, plastic workers and moulders, motor, mechanical, electrical and civil engineers, garage and petrol filling station proprietors, haulage and transport contracts, railway, forwarding, passenger and freight agents, insurance and general commission agents and general merchants.
 - (B) To buy, sell, manufacture, repair, alter, manipulate and otherwise deal in vehicles, plant, machinery, fittings, furnishings and implements, tools, materials, products, articles and things capable of being used for the purpose of the foregoing businesses or any of them or likely to be required by customers of or persons having dealings with the Company.
 - (C) To carry on any other business (whether manufacturing or otherwise) which may seem to the Company capable of being conveniently carried on in connection with the above objects, or calculated directly or indirectly to enhance the value of or render more profitable any of the Company's property.

- (D) To purchase or by any other means acquire any freehold, leasehold, or other property for any estate or interest whatever, and any rights, privileges, or easements over or in respect of any property, and any buildings, offices, factories, mills, works, wharves, roads, railways, tramways, machinery, engines, rolling stock, vehicles, plant, live and dead stock, barges, vessels, or things, and any real or personal property or rights whatsoever which may be necessary for, or may be conveniently used with, or may enhance the value of any other property of the Company.
- (E) The build, construct, maintain, alter, enlarge, pull down, and remove or replace any buildings, offices, factories, mills, works, wharves, roads, railways, tramways, machinery, engines, walls, fences, banks, dams, sluices, or watercourses and to clear sites for the same, or to join with any person, firm, or company in doing any of the things aforesaid, and to work, manage, and control the same or join with others in so doing.
- (F) To apply for, register, purchase, or by other means acquire and protect, prolong and renew, whether in the United Kingdom or elsewhere, any patents, patent rights, brevets d'invention, licences, trade marks, designs, protections, and concessions which may appear likely to be advantageous or useful to the Company, and to use and turn to account and to manufacture under or grant licences or privileges in respect of the same, and to expend money in experimenting upon and testing and in improving or seeking to improve any patents, inventions, or rights which the Company may acquire or propose to acquire.
- (G) To acquire and undertake the whole or any part of the business, goodwill, and assets of any person, firm, or company carrying on or proposing to carry on any of the businesses which this Company is authorised to carry on, and as part of the consideration for such acquisition to undertake all or any of the liabilities of such person, firm, or company, or to acquire an interest in, amalgamate with, or enter into partnership or into any arrangement for sharing profits, or for cooperation, or for limiting competition, or for mutual assistance with any such person, firm, or company, or for subsidising or otherwise assisting any such person, firm or company, and to give or accept, by way of consideration for any of the acts or things aforesaid or property acquired, any Shares, Debentures, Debenture Stock, or securities that may be agreed upon, and to hold and retain, or sell, mortgage, and deal with any shares, debentures, debenture stock, or securities so received.
- (H) To improve, manage, cultivate, develop, exchange, let on lease or otherwise, mortgage, charge, sell, dispose of, turn to account, grant rights and privileges in respect of, or otherwise deal with all or any part of the property and rights of the Company.

- (I) To invest and deal with the moneys of the Company not immediately required in such shares or upon such securities and in such manner as may from time to time be determined.
- (J) To lend and advance money or give credit to such persons, firms or companies and on such term as may seem expedient, and in particular to customers of and others having dealings with the Company, and to give guarantees or become security for any such persons, firms, or companies.
- (K) To borrow or raise money in such manner, as the Company shall think fit, and in particular by the issue of Debentures or Debenture Stock (perpetual or otherwise), and to secure the repayment of any money borrowed, raised, or owing, by mortgage, charge, or lien upon the whole or any part of the Company's property or assets (whether present or future), including its uncalled Capital, and also by a similar mortgage, charge, or lien to secure and guarantee the performance by the Company of any obligation or liability it may undertake.
- (L) To draw, make, accept, endorse, discount, execute, and issue promissory notes, bills of exchange, bills of lading, warrants, debentures, and other negotiable or transferable instruments.
- (M) To apply for, promote, and obtain any Act of Parliament, Provisional Order, or Licence of the Board of Trade or other authority for enabling the Company to carry any of its objects into effect, or for effecting any modification of the Company's constitution, or for any other purpose which may seem expedient, and to oppose any proceedings or applications which may seem calculated directly or indirectly to prejudice the Company's interests.
- (N) To enter into any arrangements with any Governments or authorities (supreme, municipal, local, or otherwise), or any companies, firms, or persons that may seem conductive to the attainment of the Company's objects or any of them, and to obtain from any such Government, authority, company, firm, or person, any charters, contracts, decrees, rights, privileges, and concessions which the Company may think desirable, and to carry out, exercise, and comply with any such charters, contracts, decrees, rights, privileges, and concessions.
- (O) To subscribe for, take, purchase, or otherwise acquire and hold shares or other interests in or securities of any other company having objects altogether or in part similar to those of this Company or carrying on any business capable of being carried on so as directly or indirectly to benefit this Company.

- (P) To act as agents or brokers and as trustees for any person, firm, or company, and to undertake and perform sub-contracts, and also to act in any of the businesses of the Company through or by means of agents, brokers, sub-contractors, or others.
- (Q) To remunerate any person, firm, or company rendering services to this Company, either by cash payment or by the allotment to him or them of Shares or securities of the Company credited as paid up in full or in part or otherwise as may be thought expedient.
- (R) To pay all or any expenses incurred in connection with the promotion, formation, and incorporation of the Company, or to contract with any person, firm, or company to pay the same, and to pay commissions to brokers and others for underwriting, placing selling, or guaranteeing the subscription of any Shares, Debentures, Debenture Stock, or securities of this Company.
- (S) To support and subscribe to any charitable or public object, and any institution, society, or club which may be for the benefit of the Company or its employees, or may be connected with any town or place where the Company carries on business; to give or award pensions, annuities, gratuities, and superannuation or other allowances or benefits or charitable aid to any persons who are or have been Directors of, or who are or have been employed by, or who are serving or have served the Company, and to the wives, widows, children, and other relatives and dependants of such persons; to make payments towards insurance; and to set up, establish, support, and maintain superannuation and other funds or schemes (whether contributory or non-contributory) for the benefit of any of such persons and of their wives, widows, children, and other relatives and dependants.
- (T) To promote any other company for the purpose of acquiring the whole or any part of the business or property and undertaking any of the liabilities of this Company, or of undertaking any business or operations which may appear likely to assist or benefit this Company or to enhance the value of any property or business of this Company, and to place or guarantee the placing of, underwrite, subscribe for, or otherwise acquire all or any part of the shares or securities of any such company as aforesaid.
- (U) To sell or otherwise dispose of the whole or any part of the business or property of the Company, either together or in portions, for such consideration as the Company may think fit, and in particular for shares, debentures, or securities of any company purchasing the same.

- (V) To distribute among the Members of the Company in kind any property of the Company, and in particular any shares, debentures, or securities of other companies belonging to this Company or of which this Company may have the power of disposing.
- (W) To procure the Company to be registered or recognised in any part of the world.
- (X) To do all such other things as may be deemed incidental or conducive to the attainment of the above objects or any of them.

It is hereby expressly declared that each Sub-Clause of this Clause shall be construed independently of the other Sub-Clauses hereof, and that none of the objects mentioned in any Sub-Clause shall be deemed to be merely subsidiary to the objects mentioned n any other Sub-Clause.

- 4. The Liability of the Members is Limited.
- 5. The Share Capital of the Company is £500,000 divided into 500,000 shares of £1 each.

ARTICLES OF ASSOCIATION

of

The Malvern Instruments Limited

(Articles adopted on 25th February 1997)

1. Adoption of Table A

In these articles "Table A" means Table A scheduled to the Companies (Tables A to F) Regulations 1985 as amended prior to the date of adoption of these articles. The regulations contained in Table A shall, except where they are excluded or modified by these articles, apply to the company and, together with these articles, shall constitute the articles of the company. No other regulations set out in any statute concerning companies, or in any statutory instrument or other subordinate legislation made under any statute, shall apply as the regulations or articles of the company.

2. Interpretation

Words and expressions which bear particular meanings in Table A shall bear the same meanings in these articles. References in these articles to writing include references to any method of representing or reproducing words in a legible and non-transitory form. Headings are for convenience only and shall not affect construction. If, and for so long as, the company has only one member, these articles shall (in the absence of any express provision to the contrary) apply with such modification as may be necessary in relation to such a company.

3. Rights Attached to Shares

Subject to the provisions of the Act and to any rights conferred on the holders of any other shares, any share may be issued with or have attached to it such rights and restrictions as the company may by ordinary resolution decide or, if no such resolution has been passed or so far as the resolution does not make specific provision, as the directors may decide. Regulation 2 of Table A shall not apply.

4. Unissued Shares

Subject to the provisions of the Act and to these articles, any unissued shares of the company (whether forming part of the original or any increased capital) shall be at the disposal of the directors who may offer, allot, grant options over or otherwise dispose of them to such persons at such times and for such consideration and upon such terms and conditions as they may determine.

5. Initial Authority to Issue Relevant Securities

Subject to any direction to the contrary which may be given by the company in general meeting, the directors are unconditionally authorised to exercise all powers of the company to allot relevant securities. The maximum nominal amount of relevant securities that may be allotted under this authority shall be the nominal amount of the unissued share capital at the date of adoption of this article or such other amount as may from time to time be authorised by the company in general meeting. The authority conferred on the directors by this article shall remain in force for a period of five years from the date of adoption of this article but may be revoked varied or renewed from time to time by the company in general meeting in accordance with the Act.

6. Exclusion of Rights to Offers on a Pre-emptive Basis

Section 89(1) of the Act shall not apply to the allotment by the company of any equity security.

7. Transfer of Shares

The directors may, in their absolute discretion and without giving any reason for so doing, decline to register any transfer of any share, whether or not it is a fully paid share. Regulation 24 of Table A shall be modified accordingly.

8. Notice of General Meetings

Notice of every general meeting shall be given to all members other than any who, under the provisions of these articles or the terms of issue of the shares they hold, are not entitled to receive such notices from the company, and also to the auditors or, if more than one, each of them. The last sentence of Regulation 38 of Table A shall not apply.

9. Proceedings at General Meetings

For all purposes of these articles apart from when the company has only one member, a general meeting of the company or of the holders of any class of its shares shall be valid and effective for all purposes if one person being a duly authorised representative of two or more corporations each of which is a member entitled to vote upon the business to be transacted is present. Regulation 40 of Table A shall be modified accordingly. If, and for so long as, the company has only one member, that member or the proxy for that member or, where that member is a corporation, its duly authorised representative shall be a quorum at any general meeting of the company or of the holders of any class of shares. Regulation 40 of Table A shall be modified accordingly.

10. Votes of Members

At a general meeting, but subject to any rights or restrictions attached to any shares, on a show of hands every member who (being an individual) is present in person or (being a corporation) is present by a duly authorised representative and every proxy for any member (regardless of the number or the holdings of the members for whom he is a proxy) shall have one vote, and on a poll every member who is present in person or by proxy shall have one vote for every share of which he is the holder. Regulation 54 of Table A shall not apply.

11. Members may Vote When Money Payable by Them

Regulation 57 of Table A shall not apply.

12. Delivery of Proxies

The instrument appointing a proxy and (if required by the directors) any authority under which it is executed or a copy of the authority, certified notarially or in some other manner approved by the directors, may be delivered to the office (or to such other place or to such person as may be specified or agreed by the directors) before the time for holding the meeting or adjourned meeting at which the person named in the instrument proposes to act or, in case of a poll taken subsequently to the date of the meeting or adjourned meeting, before the time appointed for the taking of the poll, and an instrument of proxy which is not so delivered shall be invalid. The directors may at their discretion treat a faxed or other machine made copy of an instrument appointing a proxy as such an instrument for the purpose of this article. Regulation 62 of Table A shall not apply.

13. Alternate Directors

Any director (other than an alternate director) may appoint any other director, or any other person who is willing to act, to be an alternate director and may remove from office an alternate director so appointed by him. Regulation 65 of Table A shall not apply.

14. Power to Provide for Employees

The directors may by resolution exercise any power conferred by the Act to make provision for the benefit of persons employed or formerly employed by the company or any of its subsidiaries in connection with the cessation or the transfer to any person of the whole or part of the undertaking of the company or that subsidiary.

15. Power to Receive Uncalled Moneys

The directors may, if they think fit, receive from any member willing to advance the same all or any part of the moneys uncalled and remaining unpaid on any shares held by him.

16. Delegation of Directors' Powers

The directors may delegate any of their powers (with power to sub-delegate) to committees consisting of such person or persons (whether directors or not) as they think fit. Regulation 72 of Table A shall be modified accordingly and references in Table A to a committee of directors or to a director as a member of such a committee shall include a committee established under this article or such person or persons.

17. Appointment and Removal of Directors by Majority Shareholders

Any member holding, or any members holding in aggregate, a majority in nominal value of such of the issued share capital for the time being of the company as carries the right of attending and voting at general meetings of the company may by memorandum in writing signed by or on behalf of him or them and delivered to the office or tendered at a meeting of the directors or at a general meeting of the company at any time and from time to time appoint any person to be a director (either to fill a vacancy or as an additional director) or remove any director from office (no matter how he was appointed).

18. Appointment of Directors by Board

Without prejudice to the powers conferred by any other article, any person may be appointed a director by the directors, either to fill a vacancy or as an additional director.

19. No Age Limit or Share Qualification

No director shall be required to retire or vacate his office, and no person shall be ineligible for appointment as a director, by reason of his having attained any particular age. No shareholding qualification for directors shall be required.

20. Exclusion of Rotation Requirements and Other Provisions

Regulations 73 to 80 (inclusive) and the last sentence of Regulation 84 of Table A shall not apply.

21. Disqualification and Removal of Directors

The office of a director shall be vacated not only upon the happening of any of the events mentioned in Regulation 81 of Table A but also if he is removed from office pursuant to these articles. Regulation 81 of Table A shall be modified accordingly.

22. Directors' Gratuities and Pensions

The directors may exercise all the powers of the company to provide benefits, either by the payment of gratuities or pensions or by insurance or in any other manner whether similar to the foregoing or not, for any director or former director or the relations, connections or dependants of any director or former director who holds or has held any executive office or employment with the company or with any body corporate which is or has been a subsidiary of the company or with a predecessor in business of the company or of any such body corporate and may contribute to any fund and pay premiums for the purchase or provision of any such benefit. No director or former director shall be accountable to the company or the members for any benefit provided pursuant to this article and the receipt of any such benefit shall not disqualify any person from being or becoming a director of the company. Regulation 87 of Table A shall not apply.

23. Notice of Board Meetings

Notice of a meeting of the directors shall be deemed to be properly given to a director if it is given to him personally or by word of mouth or sent in writing to him at his last known address or any other address given by him to the company for this purpose, or by any other means authorised in writing by the director concerned. Notice shall be given in this manner to all directors including any director who is for the time being absent from the United Kingdom. A director may waive notice of any meeting either prospectively or retrospectively. Regulation 88 of Table A shall be modified accordingly.

24. Participation in Board Meetings by Telephone

All or any of the members of the board or any committee of the board may participate in a meeting of the board or that committee by means of a conference telephone or any communication equipment which allows all persons participating in the meeting to hear each other. A person so participating shall be deemed to be present in person at the meeting and shall be entitled to vote or be counted in a quorum accordingly. Such a meeting shall be deemed to take place where the largest group of those participating is assembled, or, if there is no such group, where the chairman of the meeting then is.

25. Resolution in Writing

A resolution in writing executed by all the directors for the time being entitled to receive notice of a meeting of the board (if that number is sufficient to constitute a quorum) or by all the members of a committee for the time being shall be as valid and effectual as a resolution passed at a meeting of the board or, as the case may be, of the committee properly called and constituted. The resolution may be contained in one document or in several documents in like form each executed by one or more of the directors or members of the committee concerned. A resolution signed by an alternate director need not also be signed by his appointor and, if it is signed by a director who has appointed an alternate director, it need not be signed by the alternate director in that capacity. Regulation 93 of Table A shall not apply.

26. Directors May Vote When Interested

A director who to his knowledge is in any way, whether directly or indirectly, interested in a contract or proposed contract with the company shall declare the nature of his interest at a meeting of the directors in accordance with the Act. Subject where applicable to such disclosure, a director shall be entitled to vote in respect of any contract or proposed contract in which he is interested and if he shall do so his vote shall be counted and he shall be taken into account in ascertaining whether a quorum is present. Regulations 94 and 95 of Table A shall not apply.

27. Official Seal

The company may exercise all the powers conferred by the Act with regard to having any official seal and such powers shall be vested in the directors. Subject to the provisions of the Act, any instrument to which an official seal is affixed shall be signed by such persons, if any, as the directors may from time to time determine.

28. Notices

Any notice or other document may be served on or delivered to any member by the company either personally, or by sending it by post addressed to the member at his registered address or by fax or telex to a number provided by the member for this purpose, or by leaving it at his registered address addressed to the member, or by any other means authorised in writing by the member concerned. In the case of joint holders of a share, service or delivery of any notice or other document on or to one of the joint holders shall for all purposes be deemed a sufficient service on or delivery to all the joint holders. Regulation 112 of Table A shall not apply.

29. Time of Service

Any notice or other document, if sent by the company by post, shall be deemed to have been served or delivered twenty four hours after posting and, in proving such service or delivery, it shall be sufficient to prove that the notice or document was properly addressed, stamped and put in the post. Any notice or other document left by the company at a registered address otherwise than by post, or sent by fax or telex or other instantaneous means of transmission, shall be deemed to have been served or delivered when it was so left or sent. Regulation 115 of Table A shall not apply.

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