SeaKing PC System (WIN 3.11 / 9x only)

Operator Manual

Supplied by

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WARRANTY STATEMENT

Tritech International Limited herein after referred to as **TIL**

TIL warrants that at the time of shipment all products shall be free from defects in material and workmanship and suitable for the purpose specified in the product literature.

The unit/system warranty commences immediately from the date of customer acceptance and runs for a period of 365 days. Customer acceptance will always be deemed to have occurred within 72 hours of delivery.

Note: Any customer acceptance testing (if applicable) must be performed at either TIL premises or at one of their approved distributors unless mutually agreed in writing prior to despatch.

Conditions:

These include, but are not limited to, the following:

1   The warranty is only deemed to be valid if the equipment was sold through TIL or one of its approved distributors.

2   The equipment must have been installed and commissioned in strict accordance with approved technical standards and specifications and for the purpose that the system was designed.

3   The warranty is not transferable, except or as applies to Purchaser first then to client.

4   TIL must be notified immediately (in writing) of any suspected defect and if advised by TIL, the equipment subject to the defect shall be returned by the customer to TIL, via a suitable mode of transportation and shall be freight paid.

5   The warranty does not apply to defects that have been caused by failure to follow the recommended installation or maintenance procedures. Or defects resulting from normal wear & tear, incorrect operation, fire, water ingress, lightning damage or fluctuations in vehicles supply voltages, or from any other circumstances that may arise after delivery that is outwith the control of TIL.
         (**Note:** The warranty does not apply in the event where a defect has been caused by isolation incompatibilities.)

6   The warranty does not cover the transportation of personnel and per diem allowances relating to any repair or replacement.

7   The warranty does not cover any direct, indirect, punitive, special consequential damages or any damages whatsoever arising out of or connected with misuse of this product.

8   Any equipment or parts returned under warranty provisions will be returned to the customer freight prepaid by TIL

9   The warranty shall become invalid if the customer attempts to repair or modify the equipment without appropriate written authority being first received from TIL.

10   TIL retains the sole right to accept or reject any warranty claim.

11   Each product is carefully examined and checked before it is shipped. It should therefore be visually and operationally checked as soon as it is received. If it is damaged in anyway, a claim should be filed with the courier and TIL notified of the damage.

Note: TIL reserve the right to change specifications at any time without notice and without any obligation to incorporate new features in instruments previously sold.

Note: If the instrument is not covered by warranty, or if it is determined that the fault is caused by misuse, repair will be billed to the customer, and an estimate submitted for customer approval before the commencement of repairs.

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TECHNICAL SUPPORT

Contact your local agent or Tritech International Ltd

✉	Mail	***Tritech International Ltd.*** Peregrine Road, Westhill Business Park, Westhill, Aberdeen, AB32 6JL, UK
☎	Telephone	++44 (0)1224 744111
	Fax	++44 (0)1224 741771
💻	Email	support@tritech.co.uk
	Web	www.tritech.co.uk

An out-of-hours emergency number is available by
calling the above telephone number

If you have cause to use our Technical Support service, please ensure that you have the following details at hand **prior** to calling:

- System Serial Number (if applicable)
- Fault Description
- Any remedial action implemented

Due to the expansion of equipment capabilities and the fact that new sub-modules are continually being introduced, this manual cannot detail every aspect of the operation.

INTRODUCTION

All Seaking Systems are controlled by a PC based Surface Control Unit as described in the Seaking Systems Operators Manual.

It is possible for a customer to configure their own system using a standard PC unit.

The minimum requirement is as follows.

Pentium specification required (P233 or above recommended for future expansion)
16MB RAM (32MB recommended)
Windows 3.11/ 95/ 98 (not fully validated under 2000)
Runs on most graphics cards (Note: may need to disable/reduce hardware acceleration if this causes hang-ups)
5MB free Hard Disk space (plus additional for logging)
1.44Mbyte floppy drive
Minimum 1 spare full size AT slot
2 serial ports (1 for pointing device)
Available IRQ10 ** for AIF card interrupt control.
*** See 'Win 9x Install of AIF card'*

In its simplest form the system can be entirely mouse or trackball driven, but the user has the option to include the Tritech purpose built Remote Access Terminal (RAT) which provides a more intuitive user interface for acoustic devices.

The system will run Tritech SONV3 software under Microsoft Windows™. While it is possible to run other programs at the same time Tritech does not guarantee compatibility. It is particularly important to note that Sonar graphics are plotted directly bypassing the normal Windows drivers which can cause over-plotting of other applications, and may also give rise to colour conflicts.

INSTALLATION

Installation is quite simple.

Parts supplied :-

AIF interface card
9 way ribbon cable set * (for 'AT' and 'ATX' PC interfacing)
Head communications lead (1m tail)
Optional RAT & RAT extension lead
Set of 3 installation disks

The AIF card is installed in a spare AT slot (refer to Appendix 1 of SCU Systems Manual). If the RAT is to be used it will require a ribbon cable* connection to be made to the PC COM2 port. This connection should be made from the COM2 serial port to either J10 (IDC format) or J11 (PIN format) on the AIF card. Otherwise the system can be fully mouse driven using Windows mouse driver settings.

The SVGA display should be set to a recommended resolution of 800x600. The system will run on either 640x480 or 1024x768 resolutions if necessary. The selected graphics driver MUST be a 256 color driver with a SMALL FONT size selected (where applicable).

SeaKing Software installation and operation is then carried out as described in the SCU Systems Manual.

RAT INTERFACE CABLING

The RAT connects to the 9-way 'D' connector at the rear of the AIF card. Cabling has been provided for linking through the serial I/O used by the RAT, this is from AIF card J10/J11 to PC COM2 port.

How this is achieved depends on the age and type of motherboard fitted to the PC. Latest Pentium motherboards are largely ATX type, this replaces the earlier AT type form factor. Cabling has been provided for both motherboard types…

1. AT Type Interface Cabling

There is a **10-pin IDC header** for COM2 (SERIAL2) located on AT type motherboards. Locate this and connect the 10-pin IDC to 10-pin IDC ribbon cable between this COM2 IDC header and either J10 ('PIN') or J11 ('IDC') on the AIF card.

Note: Motherboards have 2 different pin configurations for this COM2 IDC header although the 'PIN' configuration is most common in this case.

2. ATX Type Interface Cabling

ATX motherboards do not have a 10-pin IDC header for COM2. The only connection point for COM2 is the **Male 9-way 'D'** on the backplane of the PC. This must be connected to J10 ('PIN') or J11 ('IDC) on the AIF card. Two interconnect cables have been provided for this purpose;

1) Ribbon cable from AIF J10/J11 to Female 9-pin 'D' (which would mount on backplane of ATX PC case). <u>**N.B.**</u> J11 ('IDC') on AIF is more common with ATX interfacing.
2) Ribbon cable to connect from this Female 9-pin 'D' to the Male 9-pin 'D' COM2 port.

Note: it is possible to use only Cable **1)** *to connect directly from J10/J11 on the AIF card to the Male*
9-pin 'D' COM2 port.

WIN 9x INSTALL OF AIF CARD
(For Windows 95/98 based systems)

Interrupt ReQuest level 10 (IRQ 10) needs to be reserved.
I/O Address Range 330-35F needs to be reserved.

1. Within the PC BIOS program, ensure that IRQ10 is not allocated to Plug 'n' Play used for PCI devices. There will normally be a PCI & Onboard I/O Setup section within the BIOS program that will include PnP setup. If there is any PCI PnP Bios Auto-Configuration then disable this and ensure that IRQ10 is not in the list of available IRQs that will be allocated to PnP devices on system startup.

2. Within the WIN'95 Device Manager, Interrupt 10 and I/O Address Range 330H-35FH should be reserved. To access the Device Manager in WIN'95;

   Start -> Settings -> Control_Panel -> System -> Device_Manager

   In the **System Properties** dialog box that appears, **Computer** will be highlighted as default.
   Click on the **Properties** button and then click on the **Reserve Resources** tab in the dialog box that appears.

   A) With the **Interrupt Request** radio button switched on, click on **Add** and enter the value **10**. If a dialog appears informing this resource to be in use, then another device will be using this Interrupt. Ensure that Item-1 above has been followed and click on the **View Resources** tab instead of the 'Reserve Resources' tab to view where the conflict is and establish what device is conflicting. Then, try removing/disabling any network cards, multi-I/O cards or CD-ROM units from the PC until the conflict is removed. If there is a conflicting device/card then it's Interrupt level will need to be altered from IRQ10. Remember that the AIF card is intended to be installed in a dedicated processor unit and it's IRQ should not be changed from 10.

   B) Click on (switch on) the **Input/Output** radio button and click on **Add**. Enter a **Start value** of **330** and an **End value** of **35F**. Again, if there are any dialog boxes informing of resource conflicts, the same procedure as with reserving the Interrupt Request should be followed.

   … When both resources are successfully reserved, a dialog prompt will appear informing to restart Windows 95/98 to affect the changes.