

PRODUCT DOCUMENTATION


DVST Alarm Box Owners Operating & Installation Guide



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Important Safeguards

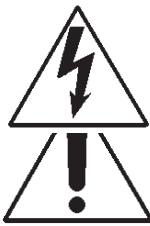
| | |
|----------------------------|---|
| Read Instructions | All the safety and operating instructions should be read before the unit is operated. |
| Retain instructions | The safety and operating instructions should be retained for future reference. |
| Heed warnings | All warnings on the unit and in the operating instructions should be adhered to. |
| Follow instructions | All operating and user instructions should be followed. |
| Cleaning | Unplug the unit from the outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning. |
| Attachments | Do not use attachments not recommended by the product manufacturer as they may cause hazards. |
| Water and Moisture | Do not use this unit near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, near a swimming pool, in an unprotected outdoor installation, or any area which is classified as a wet location. |
| Accessories | <div></div> Do not place this unit on an unstable stand, tripod, bracket, or mount. The unit may fall, causing serious injury to a person and serious damage to the unit. Use only with a stand, tripod, bracket or mount recommended by the manufacturer, or sold with the product. Any mounting of the unit should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn. |
| Ventilation | Openings in the enclosure are provided for ventilation and to ensure reliable operation of the unit and to protect it from overheating. These openings must not be blocked or covered. This unit should not be placed in a built-in installation unless proper ventilation is provided. |
| Power Sources | This unit should be operated only from the type of power source indicated on the manufacturer's label. If you are not sure of the type of the power supply you plan to use consult your appliance dealer or local power company. For units intended to operate from battery power, or other sources, refer to operating instructions. |

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| | |
|----------------------------------|---|
| Grounding or Polarization | <p>This unit may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.</p> <p>Alternately this unit may be equipped with a 3-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.</p> |
| Power-Cord Protection | <p>Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.</p> |
| Overloading | <p>Do not overload outlets and extension cords as this can result in a fire or electric shock.</p> |
| Object and Liquid Entry | <p>Never push objects of any kind into this unit through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the unit.</p> |
| Servicing | <p>Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage of other hazards. Refer all servicing to qualified service personnel.</p> |
| Damage Requiring Service | <p>Unplug the unit from the outlet and refer servicing to qualified service personnel under the following conditions:</p> <ul style="list-style-type: none">(a)When the power-supply cord or plug is damaged.(b)If liquid has been spilled, or objects have fallen into the unit.(c)If the unit has been exposed to rain or water.(d)If the unit does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the unit to its normal operation.(e)If the unit has been dropped or the cabinet has been damaged.(f)When the unit exhibits a distinct change in performance this indicates a need for service. |

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- Replacement Parts** When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer. A replacement lithium battery is available from Dedicated Micros Ltd.
- Safety Check** Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.
- Coax Grounding** If an outside cable system is connected to the unit, be sure the cable system is grounded, U.S.A. models only. Section 810 of the National Electrical Code. ANS/NFPA No. 70 1981, provide information with respect to proper grounding of the mount/supporting structure. The grounding of the coax a discharge unit, the size of grounding conductors location of discharge unit. The wires and the connection of ground wires.
- UNPACKING** The shipping carton is the safest container in which the unit may be transported. Save it for possible future use.
- WARNING** TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user of this equipment that there are dangerous voltages within the enclosure which may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

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Regulatory Notes

FCC AND DOC INFORMATION

(U.S.A. and Canadian Models Only)

WARNING This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

If necessary, the user should consult the dealer or an experienced radio/television technician for corrective action. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC20402, Stock No. 004-000-00345-4.

This reminder is provided to call the CATV system installer's attention to Art. 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

CE Mark This product is marked with the CE symbol and indicates compliance with the European Community EMC directive 89/336/EEC.

This mark indicates that this product meets the following technical standards.

- * EN 55022 1987 - "Limits and Methods of Measurement of Radio Interference Characteristics of information Technology Equipment".
- * BSEN 50082-1 - "Electromagnetic compatibility - Generic immunity standard Part 1: Residential, commercial and light industry".

- * IEC 801-2 1984, IEC 801-2 1991 - "Electromagnetic compatibility for industrial process measurement and control equipment Part 2: Electrostatic discharge requirements".
- * IEC 801-3 1984 - "Electromagnetic compatibility for industrial-process measurement and control equipment Part 3: Radiated electromagnetic field requirements".
- * IEC 801-4 1988 - "Electromagnetic compatibility for industrial-process measurement and control equipment Part 4: Electrical fast transient/burst requirements".

A "Declaration of Conformity" in accordance with the above standards has been made and is reached at: Dedicated Micros Ltd., Pendlebury, Manchester, England.

Alarm Box Options

This manual details information on the Light Duty and the Heavy Duty Alarm boxes that are used with Dedicated Micros DVST units.

DVST Programming

When using alarms the DVST must be programmed as follows.

Note: As the programming varies with the DVST units, this section must be used in conjunction with the DVST Installation Guide.

ASYS= Set alarm system **ON** or **OFF**
(default, OFF)

The alarm system is dormant until activated by the ASYS=ON command.

When an alarm is detected the DVST transmitter dials stored number TEL0 from the dial menu. If a connection cannot be made to this number the unit dials stored number TEL1 from the dial menu. The transmitter will continue calling until a connection is made and the alarm is acknowledged from the receiver.

AON=n Enable alarm contact *n*

AOFF=n Disable alarm contact *n*
(default, all alarm contacts enabled)

By default all contacts are ON, or able to respond to contact closures on the alarm input.

Alarm inputs that are not used should be set to off.

Each input can respond to a contact closure or a contact opening, or respond to both.

ANOnn Set contact *nn* normally open

ANCnn Set contact *nn* normally closed

Images transmitted on alarm

The action taken on detection of on alarm is for the DVST unit to store a point of alarm image, dial the telephone number stored in dial menu number 0 and transmit the image.

The resolution of alarm images, and the screen mode in which they are transmitted can be selected with the following command:

ATYPEn= ***HI** Selects a high resolution alarm image*
 ***LO** Selects a low resolution alarm image*

The alarm settings are displayed in the view mode as follows, (type VIEW <ENTER> and press a key until the following display appears).

| Alarm Number | Input | Status | Type | Contacts |
|--------------|-------|--------|--------|----------|
| 01:ALARM | 01 | On | FULLHI | N/O |
| 02:ALARM | 02 | On | FULLLO | N/O |
| 03:ALARM | 03 | On | FULLHI | N/C |
| 04:ALARM | 04 | On | FULLLO | N/C |
| 05:ALARM | 05 | Off | | |
| 06:ALARM | 06 | Off | | |
| 07:ALARM | 07 | On | FULLHI | N/O |
| 08:ALARM | 08 | On | FULLLO | N/O |
| 09:ALARM | 09 | On | FULLHI | N/O |
| 10:ALARM | 10 | On | FULLLO | N/O |
| 11:ALARM | 11 | On | FULLHI | N/O |
| 12:ALARM | 12 | On | FULLLO | N/O |
| 13:ALARM | 13 | On | FULLHI | N/O |
| 14:ALARM | 14 | On | FULLLO | N/O |
| 15:ALARM | 15 | On | FULLHI | N/O |
| 16:ALARM | 16 | On | FULLLO | N/O |

AOUT= *Set alarm outputs **AUTO/MANUAL***
 (default is AUTO)

The two alarm contacts can be configured for automatic or manual operation.

AUTO

In automatic mode relay 1 acts as a line indicator and close whenever the DVST is on line.

MANUAL

- 1 In manual mode the AUX 1 key on the local unit controls relay on the remote unit, this works as a momentary contact. AUX 2 on the local unit controls relay 2, which works as a toggle on/off (latching) control.

ALMODE= ...Set Alarm operation mode
NORFRZ/OLNFRZ/FRZALL/TRKLST
(default, OLNFRZ)

NOFRZ

No freeze mode - No frozen images are sent. If several alarms occur to trigger the machine to dial, one shot from each will be sent in quick succession without any operator control. Any alarms present whilst on line will be indicated on the receiver unit display baseline.

OLNFRZ

Off-line alarm freeze - Only freezes the first alarm image and then transmits this image to the receiver. Subsequent alarms incoming while the unit is transmitting to a receiver are flagged on the baseline but are not frozen, nor do they need to be acknowledged.

FRZALL

Freeze all alarm images - All alarm images are frozen. All must be acknowledged by the receiving station before the alarm can be cleared.

TRKLST

Track last alarm - No frozen images are sent. If several alarms occur to trigger the machine to dial, one shot from each will be sent in quick succession without any operator control, following an intruder. Any alarms present whilst on line will be displayed full screen and unfrozen.

ADIAL=n Set number of telephone entries to use in alarm
condition 1/2/3/4
(default, 2)

By default DVST transmitter dials stored number TEL0, if a connection cannot be made to this number the unit dials stored number TEL1 on the menu. With ADIAL=3 the DVST transmitter dials the stored numbers TEL0, TEL1, TEL2 until a line answers.

Light Duty Alarm Box

The add on light duty alarm box allows the unit to freeze pictures from cameras corresponding to alarm inputs and transmit them to a designated receiving station, where they can be acknowledged and action taken.

Alarm inputs can be set to normally open or normally closed.

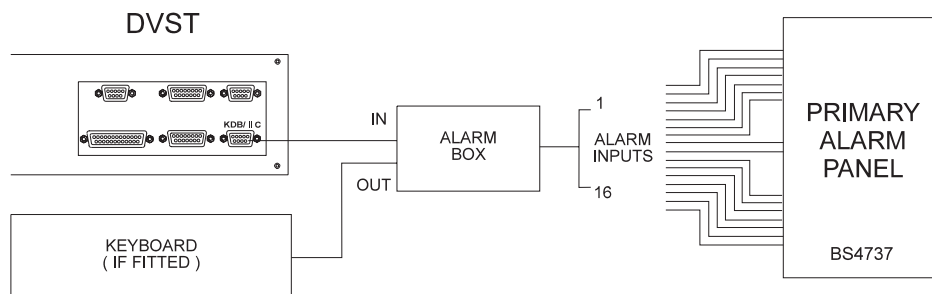


Fig. 1: Alarm box connections

Alarm box connections

The alarm box is supplied with a cable, complete with 9 way D type connectors, for connection to the DVST unit.

Note: Disconnect power to the DVST unit before connecting the alarm box. When connected and powered up the DVST unit will recognise that an alarm box is present in the system.

Alarm inputs to the DVST must be via a primary alarm panel as specified under BS4737 and all non Dedicated Micros alarm equipment attached to the DVST must also follow this standard.

Alarm connections

The alarm connector is a 37 way D type female connector and is located on the end panel.

Warning : Alarms must be connected to the light duty alarm box through a 37 pin D type male plug.

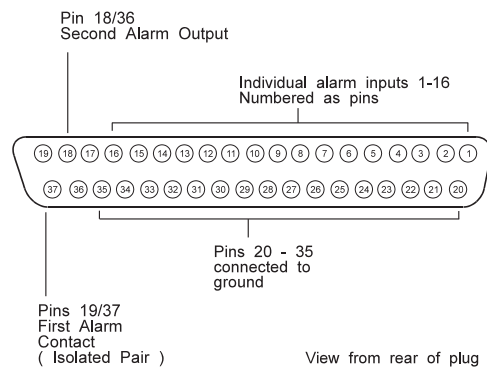


Fig. 2: Alarm input/output connections

Warning: Both alarm outputs are light duty reed relay types (500 mA) and should not be used for switching heavy loads.

Alarm inputs are fully protected against transient voltages and will respond to free contact and logic level operation.

The two output relays (pins 19/37 and 18/36) can be manually controlled via the DVST keyboard.

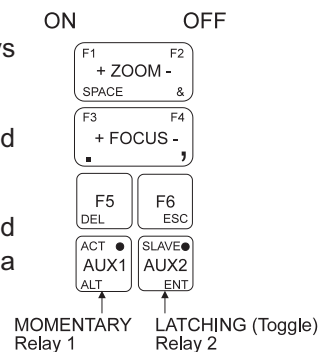
For manual operation set the DVST to:

AOUT=MANUAL

Using the AUX keys on the keyboard the relays can be controlled.

Relay 1 (pins 19/37) is controlled by AUX1 and is a momentary contact.

Relay 2 (pins 18/36) is controlled by AUX2 and is a latching contact, therefore AUX2 acts as a toggle switch.



Heavy Duty Alarm Box

Alarm box connections

The Alarm box is supplied with a cable, complete with 9 way D type connectors, for connection to the DVST unit,

The Heavy Duty alarm box is powered by 12V DC.

One end panel is blank and may be cut for entry of alarm cable.

Alarm Relay Operating

Figure 4 details the operating of alarm relays using the keys located on the DVST keyboard.

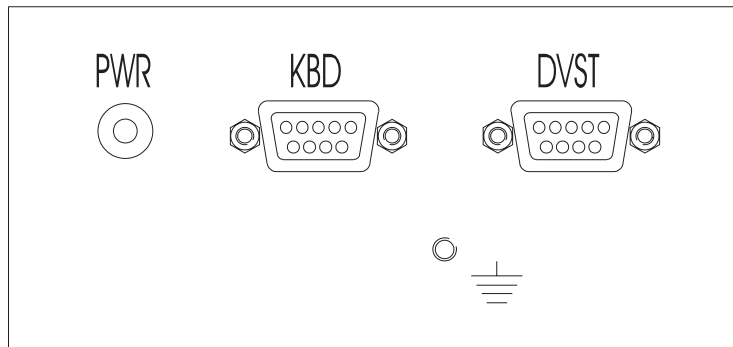


Fig. 3 Heavy duty alarm panel connections

Relay Rate

Relay 1 to Relay 6 are 8 Amp relays.

Relays RL1 and RL2 are 500mA reed relays.

Note: Alarm inputs to the DVST must be via a primary alarm panel as specified under BS4737 and all non Dedicated Micros alarm equipment attached to the DVST must also follow this standard.

| Con. | Pin(s) | Ident | Con. | Pin(s) | Ident |
|---------|--------|-------------------|------|--------|-----------------------|
| P1 | 1-4 | Alarm Input 1-4 | P9 | 1 | Relay 4 N/C |
| P2 | 1-4 | Alarm Input 5-8 | P9 | 2 | Relay 4 N/O |
| P3 | 1-4 | Alarm Input 9-12 | P9 | 3 | Relay 4 Common |
| P4 | 1-4 | Alarm Input 13-16 | P9 | 4 | Relay 3 N/C |
| | | | P9 | 5 | Relay 3 N/O |
| P5 | 1-4 | N/A | P9 | 6 | Relay 3 Common |
| P6 & P7 | 1-8 | Ground | P13 | 1 | Relay 6 N/C |
| | | | P13 | 2 | Relay 6 N/O |
| P8 | 1 | Relay 2 N/C | P13 | 3 | Relay 6 Common |
| | 2 | Relay 2 N/O | P13 | 4 | Relay 5 N/C |
| | 3 | Relay 2 Common | P13 | 5 | Relay 5 N/O |
| | 4 | Relay 1 N/C | P13 | 6 | Relay 5 Common |
| | 5 | Relay 1 N/O | P10 | | I2C Header |
| | 6 | Relay 1 Common | P11 | | HTLM PCB Porta Header |
| | | | P14 | 1 | Ground |
| | | | P14 | 2 | +12V |

Note: Relay 6 is an on line relay

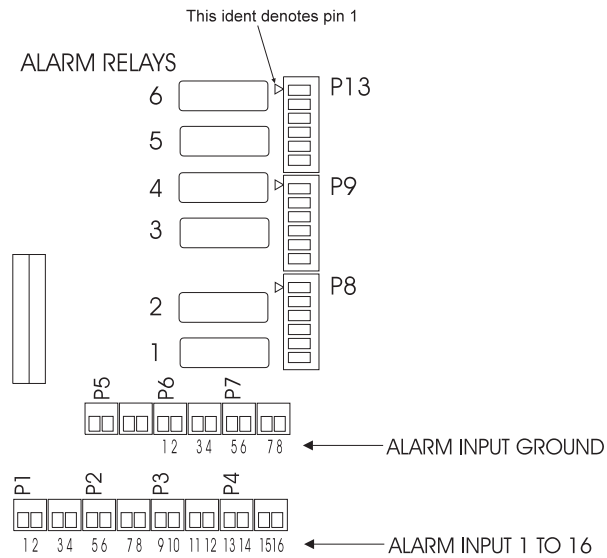


Fig. 4 Heavy duty alarm board

DVST Control Keys

Figure. 5 details how to operate the alarm relays of the heavy duty alarm box through the DVST keyboard.

Note: The telemetry key must be extinguished when controlling Relays 1 -5 on the Alarm Board.

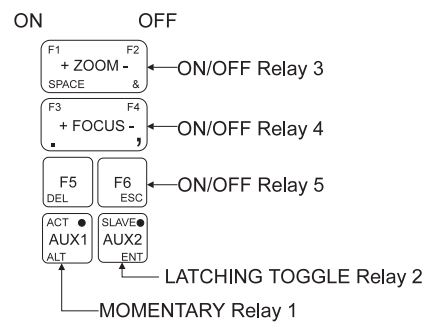


Fig. 5 Alarm Relay Key Function

Returns Procedure

In the Event of Difficulty

Multiplexer technology is reliable and faults are rare. Most user problems are concerned with installation and set up. If you are in difficulty first approach your dealer or distributor. Dedicated Micros operates a Technical Support Group where most technical problems can be solved over the telephone, however it is important that this manual has been followed before calling the Technical Support Group, the direct telephone number for Technical Support is 0161 727 3241.

Note This manual must be available when contacting Dedicated Micros as reference will be made to it.

If, for whatever reason, this is not possible, the unit can be returned directly to a Dedicated Micros Repairs Department. In this event please follow the returns procedure as detailed below to avoid any delay.

Photocopy the EQUIPMENT RETURN ADVICE. Contact the Customer Services Department to obtain a returns number.

The following information must be available to give to the Customer Services Department when requesting a returns number.

- * Model type
- * Serial number
- * Full Account/Invoice address or Return Address if different
- * Contact name
- * Fax number and Telephone number
- * Customer order number - for repair cost not exceeding £100
- * Full description of the fault
- * Previous returns number(s) (if applicable)

If the unit is rack mounted, the rack mount kit must be removed before the unit is packed. Wrap the unit in the original polythene bag. Fit preformed end pieces at either side of the unit.

If the unit is not returned in it's original packing, Dedicated Micros Repair Department will automatically re-box the unit, and there will be a charge of £11.75 inc VAT.

Returns Procedure DVST Alarm Box Owners Operating & Installation Guide

Mark the return number, obtained from the Customer Services Department, clearly on the outside of the box. Return the unit to the address on the rear cover of this manual, a completed copy of the EQUIPMENT RETURN ADVICE must be sent with the unit.

If the unit crosses a national boarder, enter the Airway Bill number on the copy of the EQUIPMENT RETURN ADVICE and fax to Dedicated Micros for the attention of the Despatch Department. This will avoid any delays in returning the unit after it has been repaired.

Notes:

Dedicated Micros tries to maintain a fast turnaround procedure for repairing equipment, incomplete or inaccurate documentation may result in delay.

If the unit is not under warranty a charge will be made for the repair.

If the unit has it's warranty void, due to misuse or damage, the Repairs Department will contact the account customer to advise the cost.

Upon examination of the unit if the repair cost is likely to exceed £100, the Repairs Department will contact the account customer for authorisation before work is undertaken.

Repairs not exceeding £100 will automatically be carried out and invoiced on the official order number stated by the account customer on the EQUIPMENT RETURN ADVICE.

| EQUIPMENT RETURN ADVICE | |
|--|------------------------|
| Company Name: | |
| Contact Name: | |
| Invoice Address: | |
| Tel. No.: | |
| Fax No.: | |
| Model/Type of Equipment Returned: | Serial No.: |
| Returns Number: | Official Order Number: |
| Master Airway Bill Number: | |
| Previous Returns Number: (if applicable) | |
| Details of Reported Fault: | |
| Returns Address for Unit: | |

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