

BloodTrack® Kiosk V5

Installation Guide

CE 0123



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HAEMONETICS®
THE Blood Management Company®

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About This Guide

This guide provides information on how to safely mount, install and operate the BloodTrack® Kiosk V5, a component of the BloodTrack® Blood Management and Bedside Transfusion Solutions.

Training

Clinical users

A senior clinical/hospital staff member (for example, laboratory manager) is to undergo 10 minutes of practical training with a trained Haemonetics® representative on how to use the BloodTrack Kiosk V5 hardware and BloodTrack Courier Solution software. Once trained, the appointed senior clinical/hospital staff member is responsible to ensure all other appointed users of the BloodTrack Kiosk V5 are trained and are capable of using the device and BloodTrack Courier Solution software. The same 10-minute practical training is to be undertaken with users before the user details are added to the database, granting them access to the BloodTrack Courier Solution software via the BloodTrack Kiosk V5. The user gains access by scanning a valid identification badge barcode, using the barcode scanner on the BloodTrack Kiosk V5.

Training is only required to be undertaken once due to the intuitive design and on-screen and audio commands.

Technical users

Formal training is to be supplied by Haemonetics to its technical staff via a 1-day practical training course, which will cover the installation, removal and servicing of the BloodTrack Kiosk V5. Formal training is only undertaken once. Any minor modifications to the BloodTrack Kiosk V5 will be dealt with via the release of product updates (or other forms of documentation), which are distributed through the Haemonetics internal training systems.

Conventions

Symbols found in this document

The following symbols are used to emphasize certain details for the user:



Note: Provides useful information regarding a procedure or operating technique.



Caution: Advises the user against initiating an action or creating a situation which could result in damage to equipment or impair the quality of the products; personal injury is unlikely.



Warning: Advises the user against initiating an action or creating a situation which could result in damage to equipment and serious personal injury to a patient or the user.



Use protective clothing.



Symbol indicating “Not for general waste”.



CE mark.



Manufacturer.



Authorized representative in the European Community.

RxOnly

USA Federal law restricts the sale, distribution, or use of this device to, by, or on the order of a licensed healthcare practitioner.

The following bullet types are used in this manual to indicate lists and actions for the user:

- Text preceded by this bullet indicates an item on a list of information for the user.
1. Text preceded by a numbered step indicates an action for the user.

Symbols found on the BloodTrack Kiosk V5



Refer to instruction manual/booklet.

Symbols found on packaging



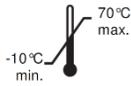
Top. The package must always be transported, handled and stored in such a way that the arrows always point upwards.



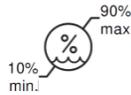
Fragile. Handle with care.



Keep dry.



Storage/transportation temperature.



Relative humidity RH.

Additional Resources

Document Name	Part Number
ASK Authentication Service User Guide	113690-IE
BloodTrack Software System:	
• BloodTrack Courier® User Guide	113463-IE
• BloodTrack® Emerge User Guide	117307-IE
• BloodTrack® Installation Guide	SB-SOF-000035
• BloodTrack® International Language Pack Installation Guide	SB-SOF-000042
• BloodTrack® Kiosk V5 Computer Module Hardware Guide	GBE: 2100-JNB0012 HAE: SM-BloodTrack-11
• BloodTrack® Kiosk V5 Message Reference Guide	GBE: 2002-JNB0012 HAE: SM-BloodTrack-10
• BloodTrack® Kiosk V5 Quick Start Reference Guide	GBE: 2001-JNB0012 HAE: SM-BloodTrack-09
• BloodTrack® Kiosk V5 Troubleshooting Guide	GBE: 7006-JNB0012 HAE: SM-BloodTrack-12
• BloodTrack Manager® User Guide	113462-IE
• BloodTrack® Setup Guide	113461-IE

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1.0 Introduction and Intended Use

The BloodTrack® Kiosk V5 is a custom-made computer kiosk, manufactured to Haemonetics' specifications to serve as a one of the hardware elements of the Haemonetics BloodTrack® Blood Management and Bedside Transfusion Solution. The BloodTrack Kiosk V5 provides a validated platform for the BloodTrack Courier software to run on. These combined elements, along with the Blood Establishment Computer Software (BECS), form part of the entire BloodTrack Blood Management and Bedside Transfusion Solution. The BECS is usually part of the healthcare institution infrastructure, and includes both the Blood Establishment Computer Software (BECS) and server hardware on which it runs.

The BloodTrack Blood Management and Bedside Transfusion Solutions and its component element parts are intended for use in healthcare facilities by trained healthcare professionals. It is designed to help prevent latent errors by monitoring the handling, transportation and transfusion of blood or blood products, so that complete audit trails are recorded.

The BloodTrack Courier software running on the BloodTrack Kiosk V5 is used for controlling access to blood products at managed storage locations. The BloodTrack Kiosk V5 is equipped with a touch-screen display/monitor and a barcode scanner so that a keyboard and mouse are unnecessary. Graphical instructions display on the touch-screen, and there is audio output for spoken prompts from the BloodTrack Courier software to help guide the user. The scanner supplied with the software is a 'presentation scanner' that is used by 'presenting' the barcode (for example, the barcode on a unit) to the scanner.

There is an optional connection to a printer to provide label and/or paper records for the user.

The BloodTrack Blood Management and Bedside Transfusion Solutions on its own does not directly reduce the risk of incorrect blood products being used, as this is controlled by separate processes implemented within the healthcare site. The BloodTrack Courier software running on the Kiosk V5 will aid the healthcare professionals in the process of allocating and storing blood products at the storage location, but does not perform the function of advising on patient treatment.

The operation of the BloodTrack Courier software running on the BloodTrack Kiosk V5 in restricting access to blood products can always be bypassed (by mechanical design). For example, emergency access to blood products—see [Section 8.3.8—Releasing Door Lock for Emergency Access](#).

The BloodTrack Courier software running on the Kiosk V5 is connected to the BECS via Ethernet network infrastructure. This is a Class A network/data coupling in that there are alternative arrangements within the healthcare site for managing the storage location should the system be unavailable.



The BloodTrack Courier software running on the Kiosk V5 controls access to the storage location via electromagnetic locks. The BloodTrack Kiosk V5 can drive a lock on one or more storage locations via independent relay outputs. These locks may be an electromagnet powered from the BloodTrack Kiosk V5, or an auxiliary input provided by the storage location.

The BloodTrack Kiosk V5 can be wall-mounted (or other suitable vertical surface), or located on a desk stand on a suitable flat surface, next to the storage location. It may also be integrated into a storage location cabinet.

⚠ WARNING!

If the BloodTrack Kiosk is mounted on a free-standing piece of equipment (for example, desktop or table top), it must *not* be mounted on an uneven or non-stationary surface. The BloodTrack Kiosk must *not* be mounted on any surface that has potential to move or shake. For example, **NEVER** mount the BloodTrack Kiosk on top of a refrigerator as the movement caused by the device door would quite likely cause the BloodTrack Kiosk to shift or to tip over. Failure to take this precaution may result in personal injury and equipment damage

The BloodTrack Kiosk V5 is installed (after a site survey) by trained professionals. The BloodTrack Kiosk V5 is used by authorized personnel and installation/servicing technicians. All users will be fully trained in the proper operation of the hardware by a system administrator who has been trained by Haemonetics (the reseller of the BloodTrack Kiosk V5). All users are recommended to have a certificate of competence in the use of the Haemonetics BloodTrack Courier software.

Access is only available to users fully trained, with the appropriate access rights. All authorized users of the BloodTrack software have a unique identification barcode—usually attached to their employee identification card. The user logs on to the software by scanning an identification badge barcode, using the barcode scanner on the BloodTrack Kiosk V5. When the barcode is scanned, the BloodTrack Courier software tests it for validity. If the barcode is a valid User ID barcode, the BloodTrack Courier software compares the barcode with the User ID codes in the valid user list.

The BloodTrack software is a modular blood management and bedside transfusion solution that combines software with hardware components to act as an extension of the blood bank transfusion management system.

Through integrated modules, the BloodTrack software provides the control, visibility, and traceability needed to safely and properly store, dispense, and transfuse blood products at the point-of-care and verify that the *right* blood is transfused to the *right* patient at the bedside, while helping achieve compliance.



2.0 Device Specifications

2.1 Compliance

.....

This section provides compliance standards and safety precautions to follow when installing a BloodTrack® Kiosk V5.

The BloodTrack Kiosk V5 is marked to indicate its compliance class.

EMC class B, standards:

EN 61326-1, EN 60601-1-2, EN 55022 and EN 55024 for EU
FCC CFR 47 Part 15B:2010 for US

This device complies with Part 15B of the FCC Rules. Operation is subject to the following two conditions (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

2.1.1 Device Classification

The BloodTrack Kiosk V5 is a Class I electrical equipment appliance. To avoid risk of electric shock, this equipment must only be connected to supply mains with protective earth.

2.1.2 Compliance Standards

The BloodTrack Kiosk V5 is constructed and tested for compliance with the following standards:

- For EU:
 - EN 55022:2010—radio disturbance characteristics - limits and methods of measurement emission standards for information technology equipment
 - EN 55024:2010—immunity characteristics - limits and methods of measurement for information technology equipment
 - EN 60601-1-2:2007—medical electrical equipment - Part 1-2: general requirements for safety - collateral standard: electromagnetic compatibility - requirements and tests
 - EN 61326-1:2013—electrical equipment for measurement, control and laboratory use – EMC requirements.



- For US:
 - FCC CFR 47 Part 15B:2010 for US.

2.1.3 Safety Standards

The following safety standards have been applied to the BloodTrack Kiosk V5:

- IEC 60950-1:2006 2nd edition
- IEC 60601-1:1995 2nd edition Safety Requirements For Medical Electrical Systems
- IEC 60601-1:2005 3rd edition Safety Requirements For Medical Electrical Systems
- CAN/CSA-C22.2 No. 60601-1:14.

The BloodTrack Kiosk V5 has been tested to these national variants of IEC 60950, Information technology equipment – Safety:

- UL 60950-1:2007/R:2014-10
- CAN/CSA C22.2 No. 60950-1:2007/A2:2014-10
- EN 60950-1/A12:2011.

2.2 Test Summary

.....

The BloodTrack Kiosk V5 was tested to:

- EN 60601-1-2 medical device standard for EMC emission and immunity
- EN55022 and EN 55024 emission and immunity standards for information technology equipment
- EN 61326 EMC emission and immunity for electrical equipment for measurement, control and laboratory use.



The BloodTrack Kiosk V5 met the following test requirements as called for in those standards.

Type	Port	Test Applied	Levels/Frequency Range
EMISSIONS 240 VAC / 110 VAC	Enclosure	Radiated Emissions	30 MHz to 6 GHz (EU & FCC)
	1 x AC Port	Conducted Emissions	150 kHz to 30 MHz
		Harmonics & flicker (EU only)	Refer to Standard
IMMUNITY	Enclosure	Electrostatic discharge	4 kV Contact, 8 kV Air
	1 x AC Power	Radiated RF Immunity	10 V/m; 80 MHz to 1 GHz 10 V/m; 1.4 to 2.0 GHz 1 V/m; 2.0 to 2.7 GHz
		Conducted RF Immunity	10 Vrms; 150 kHz to 80 MHz
		Fast transient bursts	2 kV
		Surges	L-L; 1 kV, L-E 2 kV
	Voltage dips and interruptions	>95%, 0.5 cyc; 30%, 25 cyc; 0%, 1 cyc, 705, 25 cyc, 70%, 30 cyc & 0%, 250 cyc	
	1 x Signal Conducted	RF Immunity	10 V/m; 150 kHz to 80 MHz
Fast transient bursts		1 kV	

2.3 Physical Specifications

The approximate dimensions and weight of the BloodTrack Kiosk V5 are:

Component	Specifications
Height	11.4 in. 290 mm
Width	12.4 in. 315 mm
Depth	7.6 in. 193 mm
Weight of BloodTrack Kiosk V5 with shelf	10.8 lbs. 4.9 kg
Height BloodTrack Kiosk V5 with shelf	19.2 in. 480 mm
Height of BloodTrack Kiosk V5 with adjustable desk stand	18.3 in. (max) 465 mm
Width of stand	16.7 in. 424 mm
Depth of stand	9.8 in. 250 mm
Weight of stand	10.6 lbs. 4.8 kg
Maximum loading on optional smart shelf	3.3 lbs. 1.5 kg

2.4 Environmental Specifications

The following environmental conditions should be respected pertaining to operation and storage of the BloodTrack Kiosk V5:

Conditions	Values
Ambient operating temperature	32° F to 104° F 0° C to 40° C
Storage/transportation temperature	-14° F to 158° F -10° C to 70° C
Relative humidity RH	10% ~ 90% @ 45°C, non-condensing
Atmospheric pressure range	Maximum a.s.l. 6562 ft. 2000 m
Vibration Loading During Operation	5Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 1 Oct./min, 1hr/axis
Shock During Operation	50G, IEC 60068-2-27, half size, 11ms duration

2.5 Electrical Specifications

⚠ CAUTIONS

- When replacing the fuse for the mains supply, use *only* the fuse referenced below.
- The BloodTrack Kiosk V5 utilizes double pole live/neutral fusing.

The electrical specifications for operating the BloodTrack Kiosk V5 are:

Item	Description
AC input	100-240 VAC
Current	1.3 A (rms) for 100 VAC 0.7 A (rms) for 240 VAC
Frequency	47-63 Hz
Earth leakage	150 uA max. @, 264 VAC, 63 Hz
Output	12V DC 0 - 5A
Fuses F1 and F2	Ceramic anti-surge T HBC fuse, 4A 250V rating, 5x20 mm size, marked T4AH250V

2.6 Mains Cordset Specification

The BloodTrack Kiosk V5 uses a locking type mains cordset and should only be used with these Haemonetics-approved mains cordset types. This table lists commonly supplied cordsets. For details on cordsets for use in countries outside of



the list below, please contact Haemonetics Technical Support—see [Appendix C—Product Support](#).

Schurter	6051.2087 6051.2037	IEC 60320-2-2 C13 IEC 60320-2-2 C14	H05VVF3G1.0 3 x 1 mm ² 2.0 black	Interconnection cordset for use with UPS
Schurter	6051.2003	IEC 60320-2-2 C13 Europlug EU CEE 7 / VII straight	H05VVF3G1.0 3 x 1 mm ² 2.0 black	European cordset
Schurter	6051.2008	IEC 60320-2-2 C13 BS 1363	H05VVF3G1.0 3 x 1 mm ² 2.0 black	UK cordset
Schurter	6051.2001	IEC 60320-2-2 C13 NEMA 5-15	SJT 3x18 AWG 3 x 18 AWG black	US cordset

2.7 Network Specification (Ethernet)

2.7.1 Required Characteristics Data Coupling Connection

The BloodTrack Kiosk V5 contains two RJ45 Ethernet network coupling endpoint connections, following the IEEE 802.3 standard. Supporting 10/100/1000 Mbps triple-speed and full/half-duplex capability at all speeds, the network connections, at the physical layer, are fully compliant to IEEE 802.3 (10BASE-T), 802.3u (100BASE-TX), and 802.3ab (1000BASE-T) standards.

2.7.2 Purpose and Information Flow

A permanent wired network connection, using one or both of the BloodTrack Kiosk V5 network data coupling endpoints, is required in order to allow the BloodTrack Courier software running on the Kiosk V5 to communicate with the Blood Establishment Computer Software System (BECS) to form the BloodTrack Blood Management and Bedside Transfusion Solutions). This is a Class A data coupling in that there are alternative arrangements within the healthcare site for managing the storage location should the system be unavailable.

The BECS acts as the server for the BloodTrack Courier client software that operates on the BloodTrack Kiosk V5. The BECS is the only device the BloodTrack Courier software communicates with in regards to the transaction data for the system.

The physical network connections are used to operate (at the software layer) a TCP/IP network protocol. The BloodTrack Kiosk V5 operating system has a full-featured IP networking stack for network communications and management. This supports ARP, Auto IP, DHCP, DNS, FTP, HTTP, HTTPS, ICMP, LDAP, POP3, SMTP, TCP, Telnet, TFTP and UDP.

At the higher application layer, this server/client relationship allows transaction data packets to be exchanged between the BloodTrack Courier software and BECS. This reflects both the status of the storage location (for example, door closed) and



operations carried out at that storage location (for example, removal of blood products by authorized users of the system).

All the configuration and data determining authorized users, blood products and their suitability for use is controlled by the BloodTrack Blood Management and Bedside Transfusion Solutions) hosted on the BECS. The BloodTrack Kiosk V5 is a terminal to that system via the network connection.

2.7.3 Required Configuration of IT Network

Connecting and configuring the BloodTrack Courier software running on the BloodTrack Kiosk V5 to the TCP/IP network should only be started subject to the site survey undertaken in conjunction with the healthcare site. The BloodTrack Courier software running on the BloodTrack Kiosk V5 only requires a point-to-point network connection from it to the BECS 'server', but this topology may be facilitated via a multi-access network, where other systems share the network infrastructure. This is the reason why a site survey is required in order to identify, analyze, evaluate and control the risks to patients, operators or other third parties, where the network connection is shared with other equipment.

The BloodTrack Kiosk V5 operating system is set up by default, to enable TCP/IP. The TCP/IP settings must be configured to suit the requirements of the healthcare site network infrastructure. This is to include IP address range, subnet mask, host name, default gateway(s) (routers) as well as IT-domain, so that the BloodTrack Courier software running on the BloodTrack Kiosk V5 can communicate with the BECS server. All further configuration is automatically assigned by the BECS issuing commands to the BloodTrack Kiosk V5 as part of the BloodTrack Blood Management and Bedside Transfusion Solution data exchange. This occurs during client boot, and periodically throughout operation of the system. The BECS is managed by the healthcare site to suit their requirements for the control of blood products and blood product storage.

The BloodTrack Courier software running on the BloodTrack Kiosk V5 follows the standard practice of TCP/IP over Ethernet implementation, in that the device requires a unique IP address to be assigned to it from those available on the TCP/IP network on which the device is to operate. The BloodTrack Kiosk V5 operating system supports either IPv4 or IPv6, but IPv4 is, at present, still the most common method used for local area network configuration.

TCP/IP implementing IPv4 uses 32-bit numbers known as IP addresses. These are usually expressed as 4 8-bit numbers in dotted-decimal format—for example, 192.168.10.1, to make the number human-readable. Each of the 4 numbers is within the range of 1 to 254. There is a restriction on using either 0 or 255.

Every device connected on the network requires a unique IP address, but there are techniques to allow separate local subnets using the same range of IP addresses to be connected together, so that each subnet appears as a separate remote network to another. These interconnects between subnets are handled by the router and gateway devices within the network.

The IP address assigned to clients, such as the BloodTrack Courier software running on the BloodTrack Kiosk V5, within the subnet must not be shared with another device on the same subnet.

The healthcare site will have a policy to determine the techniques used for configuring the network and the available pool of TCP/IP network addresses, subnets and routers/gateways which will be available for the BloodTrack Courier software running on the BloodTrack Kiosk V5 to use in order to communicate with the BECS.

There are four techniques to assign IP address. One is 'static', hereby the IP address assigned to the BloodTrack Kiosk V5 is fixed by a manual process.

The remaining three methods use 'Dynamic Host Configuration Protocol' (DHCP) which is a facility offered by a server to the BloodTrack Courier software running on the BloodTrack Kiosk V5 which is the client. The DHCP server may be the BECS or a supplementary device on the network such as a network router.

As the client boots a request is generated on the Local Area Network for a DHCP server to assign it an IP address. The DHCP server has a pool of available IP addresses and will issue one is response to the request.

The available pool of addresses available to the DHCP server can be managed in three ways; manual allocation, automatic allocation or dynamic allocation. How this is done is determined by the healthcare site's policy. Manual allocation will assign the same IP address to the client device on each boot. Automatic allocation will let the DHCP client automatically negotiate an IP address with the server as will dynamic allocation but the latter assigns a lease time whereby the IP address must be renegotiated once the lease has expired.

The methods used to determine the BloodTrack Kiosk V5 network address will be set by the Healthcare site's policy.

Any changes to the network connection after installation (changes to configuration/settings, connection of additional items, disconnection of the BloodTrack Courier software running on the BloodTrack Kiosk V5 or additional items, or an update/upgrade of equipment connected to the network connection), could introduce new risks and would require additional analysis.

2.7.4 Network Security and Performance

The BloodTrack Courier software that operates on the BloodTrack Kiosk V5 is a client for the Blood Establishment Computer Software System (BECS) server. Data, other than that being cached to allow proper functioning when reporting transactions to the server, is not retained on the BloodTrack Kiosk V5.

Any unauthorized access is restricted and controlled by the BloodTrack Courier software, which requires the user to log on to the BloodTrack Kiosk V5 to perform an operation at the storage location. This logon process uses the healthcare site's staff identification system.

Each healthcare site must provide training on the BloodTrack Kiosk V5 and BloodTrack Courier software. Only users who have satisfactorily completed the training and hold a certificate of competence will be authorized to use the system.

A PIN/password is required to access the underlying operating system on the BloodTrack Kiosk V5.

All security at the application level is controlled by the BECS server with the BloodTrack Kiosk V5 acting as the terminal for the server.

If the network connection fails, and the BloodTrack Kiosk V5 and the BloodTrack Courier software are unable to contact the BECS, the software will inform the user with a self-explanatory message, and restrict access to the storage location. Any events at the storage location will be stored in a local cache on the BloodTrack Kiosk V5 until the network connection is restored.

Loss of the network connection does not result in a hazardous situation as there are additional procedures at the healthcare site to manage the storage location while the system is not functioning.

The BloodTrack Kiosk V5 operating system provides a stateful host-based firewall that blocks incoming and outgoing connections based on its configuration. By default it will allow traffic for communication with the BECS.

The BloodTrack Kiosk V5 is an embedded system, and not a general purpose 'desktop' computer that restricts the use of the operating system to a single task. Therefore, as part of the site survey and risk analysis, the use and management of appropriate antivirus software must be considered. The healthcare site will have a policy regarding appropriate antivirus software, its deployment and upkeep on equipment, such as the BloodTrack Kiosk V5, that connects to the network at the site.

2.8 USB Connection Specification

The BloodTrack Kiosk V5 contains four USB 2.0 host ports compliant to the USB 2.0 standard.

The USB ports are individually controlled by the hardware inside the BloodTrack Kiosk V5 so that they can be disabled until they are required. Enabling the ports is done within the software.

The underside engineering port (see [Figure 3](#)) is not to be used for permanent connection to a third-party peripheral device.

On the underside of the BloodTrack Kiosk V5 (see [Figure 3](#)) one port is presented as a micro USB type A receptacle and is reserved for future peripheral expansion. Only Haemonetics supplied hardware is to be connected to this port.

Another USB port is presented on the underside (see [Figure 3](#)) as an engineering port and is a reversible USB type A receptacle. This reversible type connection is used so that it does not matter the orientation of the USB type A plug when connecting to the



USB type A receptacle. Although this is a standard USB type A port, it is only for use by support personnel to connect support peripherals—for example, a keyboard.

If a third-party peripheral device is required to be connected to the BloodTrack Kiosk V5, then one of the two ports on the left side (see [Figure 5](#)) should be used.

Connection and configuration of the BloodTrack Kiosk V5 to third-party USB peripherals should only be undertaken subject to the site survey, in conjunction with the healthcare site. This is required in order to identify, analyze, evaluate and control the risks to patients, operators or other third parties, where the USB connection is made with other equipment.

Any cables used to connect USB peripherals must be a type with integral molded ferrite at both ends of the cable where the USB connects to the peripheral device, and to the BloodTrack Kiosk V5 host USB port. This is unless the cable is integrated into the peripheral device.

Changes to the peripherals connected after installation (changes in configuration/settings, connection of additional items, disconnection of the BloodTrack Kiosk V5 or additional items, or an update/upgrade of equipment connected) could introduce new risks and would require additional analysis.

If the USB connection fails, the BloodTrack Courier software will inform the user as it will be unable to communicate with the USB device. Depending on the peripheral, it may restrict access to the storage location. Events will be generated and subsequent notifications given to the user at the BloodTrack Kiosk V5 as well as on the BECS. Loss of the USB connection does not result in a hazardous situation as there are additional procedures at the healthcare site to manage the storage location while the system is not functioning.

2.9 Barcode Imager Specification

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LED safety statement

LEDs have been tested and classified as “EXEMPT RISK GROUP” to the standard: IEC 62471:2006.

2.10 Battery Specification

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⚠ WARNINGS!

- The battery is not a user-replaceable part and should only be replaced by Haemonetics-approved service personnel.
- Replacement of the lithium battery by inadequately trained personnel could result in a hazard of excessive temperatures, fire or explosion.
- Only use the appropriate Haemonetics-approved CR2032H battery cell as per specifications on [page 12](#).



- Do not reuse, recharge, or reheat an old battery cell.
- Do not attempt to force open the battery cell.
- Do not discard used batteries with regular municipal/household waste—see [Appendix C.2—Disposing of Electrical/Electronic Equipment](#).
- Discard used batteries according with local waste regulations—for example, WEEE, EU battery directive).

The battery located within the computer module of the BloodTrack Kiosk V5 should only be replaced by Haemonetics personnel as required during part of servicing routine. Under normal operation where the BloodTrack Kiosk V5 remains powered, 24/7 battery replacement will be a time period measured in the lifetime of the battery, which is approximately 10 years.

The replacement battery should match the following specifications:

Vic-dawn Enterprise KTS	CR2032 BCR2032H13.0AM1UB	3.0V, 220mAh	Compliant with UL 1642	Compliant with IEC 80086-4	UL component file (MH20550)
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2.11 Relay Output Specification

The relay output is only for switching less than or equal to a 48V DC or 48V AC RMS signal up to 1A current.

If higher current, voltage or mains powered switching is required, contact Haemonetics Technical Support for advice.

2.12 Maintenance Specification

⚠ CAUTIONS

- Only qualified personnel (from the responsible healthcare site, Haemonetics representatives, or Haemonetics-approved representatives), should perform the Portable Appliance Testing (PAT) on the BloodTrack Kiosk V5.
- Only Haemonetics-approved service personnel and/or Haemonetics-approved representatives should perform any service or maintenance to the BloodTrack Kiosk V5.
- The BloodTrack Kiosk V5 should only be used with the cordsets listed in [Section 2.6—Mains Cordset Specification](#).
- Haemonetics is not responsible for regulatory compliance of a modified Haemonetics product.

The BloodTrack Kiosk V5 has no user-serviceable parts.



It is recommended that the PAT be performed on the BloodTrack Kiosk V5 at regular intervals. Usually the requirement for PAT will be dependent upon on the healthcare site's health and safety policy for fixed equipment, but the time period for the PAT should be determined in compliance with applicable health and safety legislation, and by a risk analysis, to take into account the environment in which the BloodTrack kiosk V5 is being used.

Operators of the BloodTrack Kiosk V5 should be aware of the requirements of [Section 3.0—Safety Precautions](#) within this document.

Upon request, Haemonetics may provide system diagrams, schematics, component part lists, descriptions, calibration instructions or other information that will assist with any servicing or repairs made to the BloodTrack Kiosk V5.

2.13 Cleaning Specification

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⚠ WARNING!

Never spray water or any liquid substance directly on any part of the exterior of the BloodTrack® Kiosk V5 as the electric insulation could become seriously damaged and cause a malfunction. Spray any cleaning fluid onto the cloth first, and then apply to the unit.

⚠ CAUTION

Do not touch, push or rub the touch-screen with glass, tweezers or anything harder than a finger.

The BloodTrack Kiosk V5 will need occasional cleaning. In particular, the touch-screen on the BloodTrack Kiosk V5 will need cleaning to remove finger marks and dust. Wipe off any moisture drops as soon as possible as their long-time contact with the touch-screen will cause deformations and color-fading.

It is recommended that the exterior of the device be cleaned monthly or earlier if obviously dirty.

Ambersil® Amberclens® Anti-Static Foaming Cleaner is recommended to clean the touch-screens, using a lint-free clean soft cloth. Amberclens is safe for use on the touch-screen, as well as the exterior surfaces of the BloodTrack Kiosk V5.

Amberclens is safe for use on all metals and plastics, if rinsed after application. After cleaning, wipe the surface with a clean cloth dampened with water.

Alternatively, a neutral detergent or isopropyl alcohol may be used.

Do *NOT* use any kind of chemical solvent, acidic or alkali solution.

Do *NOT* use cleaning sprays on the touch-screen as many cleaning solutions contain abrasive elements—such as Acetone or Toluene—that will cause chemical damage to the touch-screen.



When cleaning with Amberclens, take the following precautions:



When cleaning with Amberclens, take the following precautions:

- Avoid contact with skin and eyes—wear safety goggles **and** protective gloves.
- Do not breathe aerosols or vapors. In case of insufficient ventilation, wear suitable respiratory equipment.
- Read warning label on products before using.

3.0 Safety Precautions

Follow all cautions and instructions marked on the equipment and listed in this guide. Keep this guide available for future reference.

Observe the following safety precautions when setting up equipment:

WARNINGS

- **To avoid risk of electric shock, this equipment must only be connected to supply mains with protective earth.**
- **To avoid risk of electric shock during servicing/maintenance, the power to this equipment must be disconnected when accessing internal components.**
- The BloodTrack® Kiosk V5 is shipped with a grounding type (three-wire) power cord. To reduce the risk of electric shock, the cord **MUST** be plugged into a grounded power outlet that provides a protective earth.
- The BloodTrack Kiosk V5 is designed to work with single-phase power system having a grounded neutral conductor. To reduce the risk of electric shock, do not plug the BloodTrack Kiosk V5 into any other type of power system. Contact a facilities manager or a qualified electrician if unsure what type of power is supplied to the building.
- RF energy is used by the BloodTrack Kiosk V5 only for its internal function. The RF emissions of the BloodTrack Kiosk V5 are very low and are not likely to cause any interference in nearby electronic equipment. The BloodTrack Kiosk V5 should not be operated nearby other equipment susceptible to interference. See [Appendix B](#) for further guidance and advice on ways to avoid or minimize such interference.
- The BloodTrack Kiosk V5 should not be used adjacent to or stacked with other equipment. In case adjacent or stacked use is necessary, the BloodTrack Kiosk V5 should be observed to verify normal operation in the configuration in which it will be used.
- Do not operate the BloodTrack Kiosk V5 with the outer plastic cover removed. Failure to take this precaution may result in personal injury and system damage.
- Do not simultaneously touch a patient and any accessible contacts of connectors, contacts of fuse holders or accessible parts exposed by removal of a cover on the BloodTrack Kiosk V5.
- Never push objects of any kind through openings in the equipment. Dangerous voltages may be present. Conductive foreign objects could



produce a short circuit that could cause fire, electric shock, or damage to the equipment.

- The BloodTrack Kiosk V5 is not fit for operation outdoors or in environments that are not protected against atmospheric agents. The BloodTrack Kiosk V5 is only intended for use indoors.
- If the BloodTrack Kiosk is mounted on a free-standing piece of equipment (for example, desktop or table top), it must *not* be mounted on an uneven or non-stationary surface. The BloodTrack Kiosk must *not* be mounted on any surface that has potential to move or shake. For example, **NEVER** mount the BloodTrack Kiosk on top of a refrigerator as the movement caused by the device door would quite likely cause the BloodTrack Kiosk to shift or to tip over. Failure to take this precaution may result in personal injury and equipment damage.
- If any part of the BloodTrack Kiosk V5 is damaged or has obvious signs of breakage, or if any of the following situations occur DO NOT USE the BloodTrack Kiosk V5. Contact Haemonetics® support for assistance and repair by authorized service.
 - The power cord or plug is damaged
 - Liquid has penetrated into the equipment
 - The equipment has been exposed to excessive moisture
 - The equipment has malfunctioned and/or does not work according to the manuals
 - The equipment has been dropped and/or damaged
 - The equipment has obvious sign of breakage.

⚠ CAUTIONS

- Ensure that the voltage and frequency of the power source matches the voltage and frequency inscribed on the equipment's electrical rating label.
- Do not block or cover the openings of the BloodTrack Kiosk V5. Never place a BloodTrack Kiosk V5 near a radiator or heat register. Failure to follow these guidelines can cause overheating and affect the reliability of the BloodTrack Kiosk V5.
- Not all power cords and cordsets have the same current ratings. Household extension cords do not have overload protection and are not meant for use with computer systems. Do not use household extension cords with the BloodTrack Kiosk V5.
- Do not use power cordsets outside those listed in [Section 2.6—Mains Cordset Specification](#).
- Do not place anything over the power cord.

- The electrical power socket outlet used with the power cord for the BloodTrack Kiosk V5 shall be near to the BloodTrack Kiosk V5 and easily accessible to allow it to be disconnected in order to remove mains power.
- The BloodTrack Kiosk V5 shall not be installed with a permanent electrical supply feed that cannot be disconnected.
- In order to remove all power from this unit remove the IEC C13 cordset from the IEC C14 inlet on the BloodTrack Kiosk V5. Note that this is a latching type connector to avoid accidental disconnection.
- When replacing the fuse for the mains supply, use only the fuse referenced in [Section 2.5—Electrical Specifications](#). The BloodTrack Kiosk V5 utilizes double pole live/neutral fusing. Only replace the fuse with the mains cordset removed from the BloodTrack Kiosk V5 mains inlet.
- Never spray water or any liquid substance directly on any part of the exterior of the BloodTrack Kiosk V5 as the electric insulation could become seriously damaged and cause a malfunction.

3.1 Modifications to Equipment

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⚠ WARNING

Any accessories, cables and connections used in conjunction with the BloodTrack Kiosk V5 which are not approved for such use by Haemonetics may increase hazards and affect safety as well as influence compatibility with EMC requirements by increasing emissions, decreasing immunity or both. Non-approved accessories and cables must **not** be used, and no connections to other unspecified third-party equipment done.

Do not make mechanical or electrical modifications to any part of the equipment. Haemonetics is not responsible for regulatory compliance of a modified Haemonetics product.

The BloodTrack Kiosk V5 is a medical equipment system and reference shall be made to both 2nd and 3rd edition IEC 60601-1 for requirements applicable to medical equipment systems.

Use only Haemonetics-approved peripherals, cabling and specified connections when installing the BloodTrack Kiosk V5.

To ensure compliance to 2nd edition 60601-1, connections from the BloodTrack Kiosk V5 to both LAN and peripheral USB devices must only be to Haemonetics-approved accessory devices. A list of devices will be made available on request.

3.2 Power Input

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 **CAUTION**

A delay of 5 seconds **must** be observed between switch off and on when cycling the power input. Cycling the power is achieved either by disconnecting the DC-In Power Input Connector (see *Section 2.1.3—DC-In Power Input Connector* within the *BloodTrack Kiosk V5 Computer Module Hardware Guide*) or switching off the mains input supply to external power supply unit (PSU).

The power input to the computer module accepts a wide range of DC power input voltages from DC 9V to 32V. The power input is protected against under voltage (7.5V), over voltage ($\geq 35.5V$), over current and reverse voltage protection.



4.0 Product Overview

The BloodTrack® Kiosk V5 is a custom-made computer kiosk, manufactured to Haemonetics' specifications to serve as a one of the hardware elements of the Haemonetics® BloodTrack® Blood Management and Bedside Transfusion Solutions.

This guide provides instructions for mounting the BloodTrack Kiosk V5 on a wall or flat surface (desktop), as well general operating instructions regarding safety. This guide also provides information for mounting the optional Uninterruptible Power Supply (UPS) and the electromagnetic locks to control access to storage locations.

Prior to mounting the BloodTrack Kiosk V5, it will be necessary to survey each installation location to assess local variants such as construction materials of walls and storage location cabinets, routing of cables and trunking for lock wiring, power and data points.

CAUTIONS

- Only Haemonetics-approved service personnel are authorized to remove the external plastic casing and access the interior of the BloodTrack Kiosk V5.
- Only Haemonetics-approved service personnel should perform any service or maintenance to the BloodTrack Kiosk V5.

Haemonetics is not responsible for regulatory compliance of a modified Haemonetics product.

4.1 Description of the BloodTrack Kiosk V5

The BloodTrack Kiosk V5 is used to run (operate or serve as a conduit for) the BloodTrack Courier® software. The BloodTrack Courier software is used for controlling access to blood products at managed storage locations in a healthcare facility. End users operate the BloodTrack Kiosk V5 following on-screen and audio instructions from the BloodTrack Courier software. An integrated barcode imager facilitates scanning the relevant barcodes from blood products. The BloodTrack Kiosk V5 can drive a lock on one or more blood product storage locations (for example, refrigerator, room temperature storage device or freezer) via independent relay outputs in order to control access to the storage locations. This may be via a magnet powered from the BloodTrack Kiosk V5, or via an auxiliary input provided by the storage locations.

The BloodTrack Kiosk V5 component of the BloodTrack Blood Management and Bedside Transfusion Solutions, provides the Blood Bank with the control, visibility and traceability it needs to safely and properly store and dispense blood products in



clinical areas, improving access and enhancing patient safety. When used in conjunction with the BloodTrack Manager® software, the BloodTrack Solutions can:

- Control and monitor access
- Provide visibility and traceability
- Safely improve blood product availability
- Reduce blood waste
- Increase efficiencies and reduce workload.

A standard BloodTrack Kiosk V5 installation includes:

- An internal metal chassis with a two-part, anti-bacterial, rugged plastic outer casing—see [Figure 1](#).
- Computer module complete with touch-screen display with custom-made antibacterial protective layer on the front of the LCD:
 - LCD: 10.4" TFT LCD LED; 800 x 600 resolution, 230cd/m2 LED backlight
 - VIA 1.0 GHz dual core 64bit VIA Eden® X2 E-Series processor
 - 2 GB DDR3 MB RAM
 - 64 GB SSD SATA hard disk
 - Ports:
 - RJ45 10/100/1000 Ethernet ports: X2
 - Serial ports: X2
 - Relay Outputs: x1
 - USB ports: X3
 - Support for Gigabit Ethernet
 - Microsoft® Windows® Embedded 7 Operating system
- BloodTrack Courier Solution software
- Optional Uninterruptible Power Supply (UPS)
- Secure IEC mains inlet
- Integrated barcode scanner/imager
- Integrated audio amplifier and speaker
- Integrated microphone for audio support calls
- Custom-made internal storage location controller lock interface with emergency 'unlock' upon failure or loss of power
- Port protective guard
- Active shelf for optional features.

Optional features:

- Multiple storage location control: additional relay outputs X2
- Integrated smartcard reader
- Proximity card reader
- RFID transceiver

- Desk and label printer stand
- Integrated blood bag temperature sensor
- 3G/Wi-Fi Communication.



Figure 1 BloodTrack Kiosk V5—on optional desk stand

4.1.1 Medical Purpose

The function of the BloodTrack Courier software running on the BloodTrack Kiosk V5 is operational and economic (cutting down on unnecessary waste of blood products), and is not safety-related in terms of advising patient treatment. The BloodTrack Courier software running on the BloodTrack Kiosk V5 is used to monitor the storage of blood products inside the storage location and can help avoid incorrect blood products being removed, but ultimately does not prevent the wrong type of blood products being given to patients. Furthermore, at all times, by mechanical design, the operation of the BloodTrack Courier software running on the BloodTrack Kiosk V5 in restricting access to blood products can always be bypassed—for example, for emergency access to blood products. See [Section 8.3.8—Releasing Door Lock for Emergency Access](#).

4.1.2 Intended User Profile

Note:
The patient is *not* the user.

Users:

- Healthcare users
- Pathology/Blood Bank staff
- Phlebotomists
- Technical users
- IT personnel
- Installation/service technicians
- Age range:
 - 16+
- Level of education:
 - None specified other than being trained in use of device
- Linguistic/cultural background:
 - English or French speaking
- Potential disabilities:
 - None specified general use device not targeted at specific disabilities.

All users will be fully trained to use the BloodTrack Kiosk V5 by the system administrator, who will have been trained by Haemonetics (the reseller of the device). All users are recommended to have a certificate of competence in the use of the BloodTrack Courier software. Access is only available to those users fully trained and have a staff ID card registered with the BloodTrack software.

An Emergency Blood mode is available to access blood products in the occurrence of an emergency incident in the hospital, which does not require a registered ID. However, the use of this mode is monitored by the BloodTrack Courier software. Activation of the Emergency Blood mode follows strict hospital protocols.

4.1.3 Patient Profile

The BloodTrack Kiosk V5 is not intended to be used directly by a patient, and will only be used by a trained member of staff who has access to the system via use of a staff ID card.

4.1.4 Physical Specifications of the BloodTrack Kiosk V5

The dimensions and weight of the BloodTrack Kiosk V5 without the desk stand (Imperial and Metric):

Component	Specifications	
Height	11.4 in.	290 mm
Width	12.4 in.	315 mm
Depth	7.6 in.	193 mm
Weight of BloodTrack Kiosk V5 with shelf	10.8 lbs.	4.9 kg
Height BloodTrack Kiosk V5 with shelf	19.2 in.	480 mm

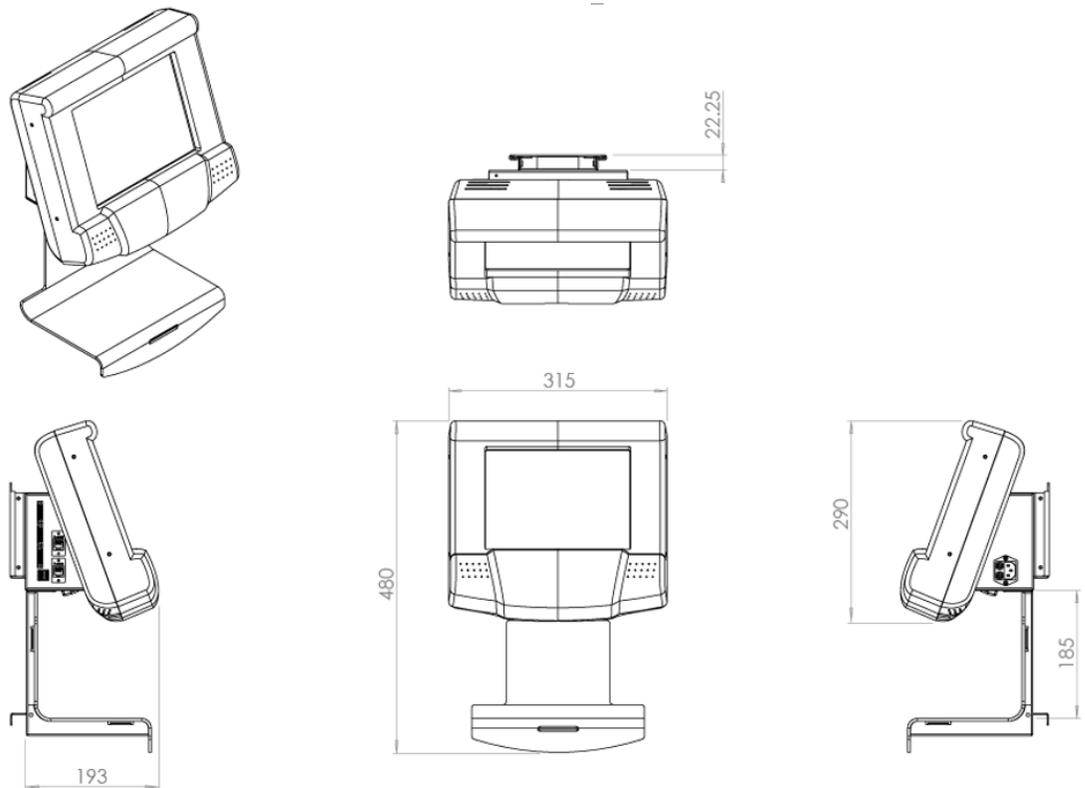


Figure 2 BloodTrack Kiosk V5 with active shelf—dimensions

The BloodTrack Kiosk V5 contains the touch-screen, PC, barcode scanner, lock power supply and switching relay.

Externally there is an IEC C14 inlet connection, for mains electricity power in.

Also accessible on the underside of the BloodTrack Kiosk V5 is a **Reset** button.



This is located beside the barcode scanner aperture in a recessed hole—see [Figure 3](#).

An emergency access switch  to release the door locks is also located on the underside of the BloodTrack Kiosk V5—see [Figure 3](#).

The Reset Button  can be depressed by inserting a narrow-ended object—such as a stylus—inside the recessed hole.

- To perform a system reset and turn off the power to the BloodTrack Kiosk V5, press **Reset** button  and hold for 4 seconds.
- To shut down the operating system, press and release **Reset** button 

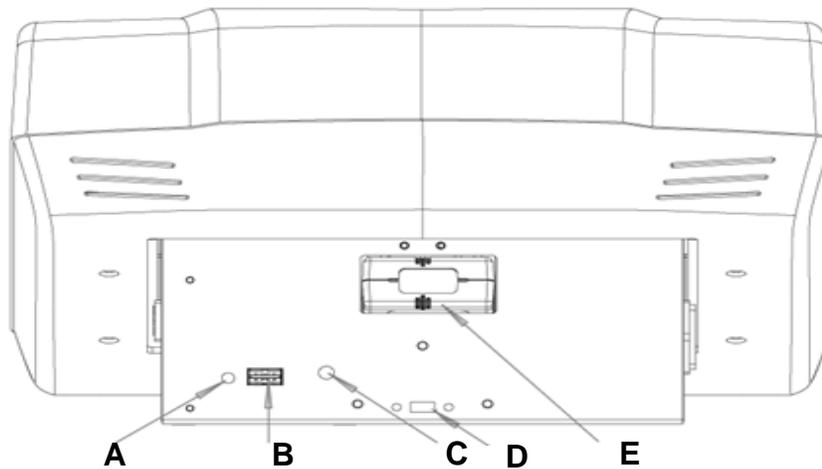


- To switch on the BloodTrack Kiosk V5 after a system reset or shutdown, press and release **Reset** button 

The **Emergency Access**  button can be depressed by inserting a narrow-ended object—such as a stylus—inside the recessed hole. This switch toggles and latches on or off.

- On = Emergency access activated, locks disabled.

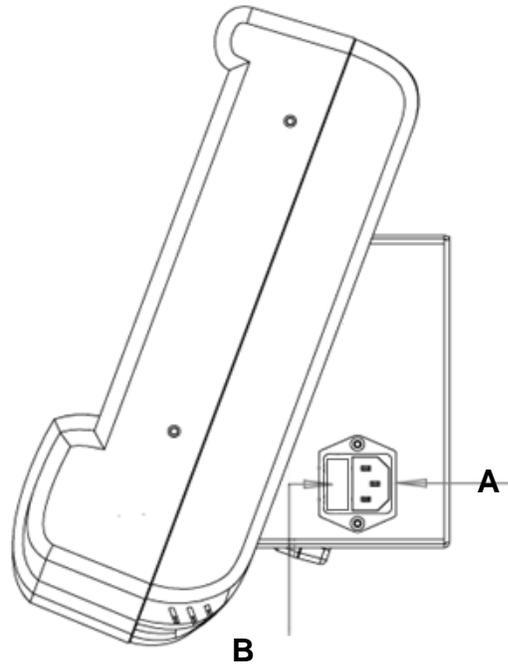
See [Section 8.3.8—Releasing Door Lock for Emergency Access](#).



A – Reset button **B** – Engineer USB port **C** – Emergency Access Switch
D – Ext USB (Active Shelf) **E** – Barcode Reader

Figure 3 **Features available on underside of BloodTrack Kiosk V5**

On the right side of the BloodTrack Kiosk V5 is the IEC C14 mains input, see [Figure 4](#).

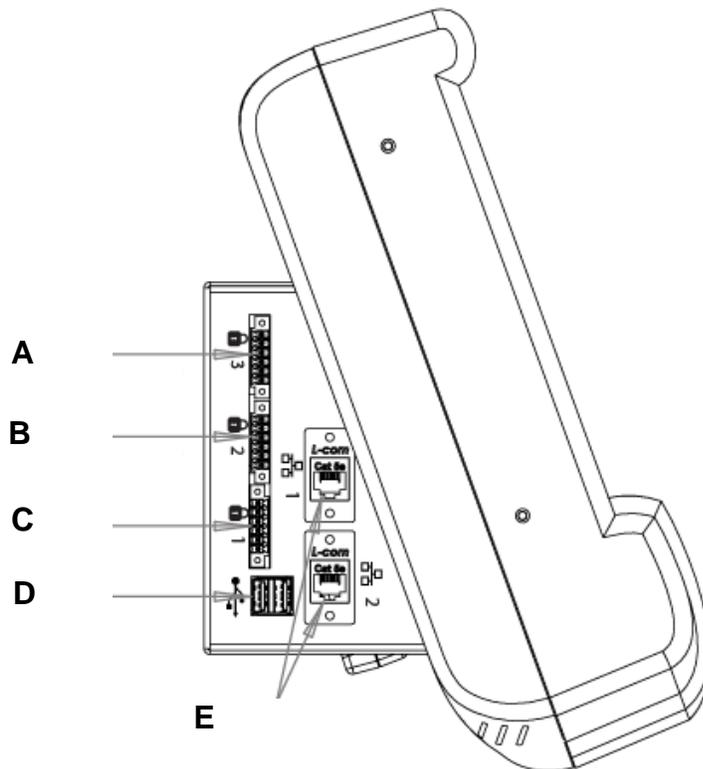


A – Latching Power Inlet B – Fuse Case

Figure 4 Features available on right side of BloodTrack Kiosk V5



On the left side of the BloodTrack Kiosk V5 there is a standard I/O connections coastline—see [Figure 5](#) for descriptions of each.

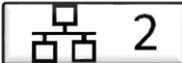


- A** – Serial Port (Optional Relay output) **B** – Serial Port (Optional Relay output)
C – Relay Output **D** – (2x) USB 2.0 Port **E** – (2x) Ethernet Port

Figure 5 Features available on left side of BloodTrack Kiosk V5



4.1.5 Label Key

Reset Button:	
Engineer USB Port:	
Emergency Access Switch:	
Relay Outputs 1, 2, 3:	 1  2  3
Serial Ports 1 & 2:	 IOIOI-1  IOIOI-2
Ethernet Ports 1 & 2:	 1  2
USB 2.0 Ports:	
Shelf Peripheral USB:	
Fuse Label ENGLISH:	<div style="border: 1px solid black; padding: 5px; width: fit-content;">F1 - Live F2 - Neutral CAUTION: Double pole live/neutral fusing WARNING: Fuses only to be replaced with ceramic anti-surge T HBC fuse 4A 250V rating, marked T4AH250V</div>
Fuse Label FRENCH:	<div style="border: 1px solid black; padding: 5px; width: fit-content;">F1 - Direct F2 - Neutre ATTENTION: Bipolaire fusion en direct/neture AVERTISSEMENT: Les fusibles ne doivent être remplacés avec de la céramique anti-pompage T HBC fusible 4A note de 250V, marquée T4AH250V</div>

4.2 Unpacking the BloodTrack Kiosk V5 and Parts

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CAUTIONS

- Only Haemonetics-approved service personnel are authorized to handle the BloodTrack Kiosk V5 during installation and commissioning.
- Lay the equipment on a reliable flat surface before, and during, the setup process.

Upon receipt of the BloodTrack Kiosk V5, inspect the shipping container(s) and note any signs of damage. Then unpack the container(s) and carefully inspect for damage to the contents. If the equipment has been damaged in transit, immediately report the extent of damage to the transportation company and to Haemonetics Technical Support.

Before mounting the BloodTrack Kiosk V5, verify that all parts have been received—see [Section 4.2.1—List of Parts](#). If there are any items missing or damaged, contact Haemonetics Technical Support for replacement parts—see [Appendix C—Product Support](#).

4.2.1 List of Parts for the BloodTrack Kiosk V5

Confirm the following parts have been received:

- BloodTrack Kiosk V5
- Active shelf chassis and cover, three M4 x 10mm screws and mushroom-lock tabs
- Latching power cable cordset
- UPS (including latching IEC extension lead)—optional
- Shielded CAT5e Ethernet cable (length: 6.6 ft. — 2 m)
- Data port protective guard, three M3 x 10mm screws
- Wall mount system: wall bracket, kiosk bracket, eight M4 x 10 screws
- Desk stand mount with screws—optional
- Electromagnetic locks and brackets (including detailed installation instructions)—optional.

4.3 Operating the BloodTrack Kiosk V5

.....

The BloodTrack Kiosk V5 is set to automatically start when mains power is applied. It will automatically load the BloodTrack Courier Solution, ready for use. Use of the BloodTrack Kiosk V5 varies from site-to-site and department location; however, a maximum frequency of use will be approximately once every 60-90 seconds, but can be as low as once a week.



i Notes:

- Refer to *BloodTrack Setup Guide* for information pertaining to the installation and configuration of the BloodTrack Courier software that interfaces to the BECS.
- Refer to the *BloodTrack Courier User Guide* for descriptions of all the operations that are carried out when using BloodTrack Kiosk V5, as well as relevant messages.
- Refer to the *BloodTrack Kiosk V5 Message Reference Guide* for a list of system error messages that can be generated by BloodTrack Kiosk V5.

4.4 Service Life

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The BloodTrack Kiosk V5 has a service life of five years and should be assessed for replacement after five years of use.



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5.0 Assembling and Mounting the BloodTrack Kiosk V5 and Accessories

5.1 Active Shelf Use

.....

⚠ CAUTIONS

- Maximum loading for the shelf is 3.3 lbs.—1.5 kg.
- Do not place heavy objects onto the active shelf.

The active shelf is only intended to provide a convenient space for placing blood products while operating the BloodTrack Courier® software running on the BloodTrack® Kiosk V5.

5.2 Assembling the Active Shelf

.....

If using the active shelf, it is recommended that the shelf be assembled prior to mounting the BloodTrack Kiosk V5 on a wall.

i Note:

The shelf should *not* be used with the desk mount option.

Active shelf parts:

- Metal scanning shelf
- M4 x 10 countersunk screws (x3)
- Plastic cover
- Double-sided adhesive tabs
- Optional features—Proximity card reader, RFID reader, Smartcard reader, etc.

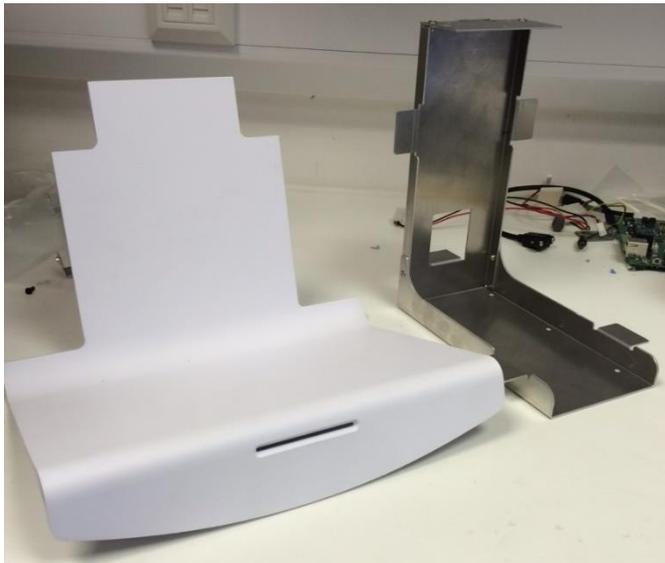


Figure 6 Active shelf chassis and cover

To assemble the active shelf:

1. Align metal chassis with the three holes at the rear of the bottom face of the BloodTrack Kiosk V5.



Figure 7 Assembling active shelf—aligning shelf with holes on BloodTrack Kiosk V5

2. Attach the shelf with three M4 x 10 screws.



Figure 8 **Assembling active shelf—affixing shelf chassis with screws to BloodTrack Kiosk V5**

3. After the shelf chassis is mounted to the BloodTrack Kiosk V5, the plastic shelf cover can be positioned, and the double-sided adhesive tabs used to fix the cover to the chassis. The four tabs should be squeezed until an audible click is heard. Ensure correct alignment when assembling.



Figure 9 Assembling active shelf—fixing shelf cover on to metal chassis



Note:

Any optional extras which are positioned in the active shelf are connected to the BloodTrack Kiosk V5 via the exposed micro USB port on the bottom face. This should be done *before* putting the cover on, although optional extras can be added after installation by carefully removing the shelf cover as the adhesive tabs are reusable.

5.3 Mounting the BloodTrack Kiosk V5 on a Wall

.....



CAUTIONS

- Installer must verify that the wall will safely support four times the combined weight of all attached equipment and hardware (44.1 lbs.—20 kg.).
- Choose hardware suitable for the type of wall construction and ensure it is capable of supporting 10.8 lbs.—4.9 kg.
- Make sure that mounting screws are anchored into the center of the stud. The use of an "edge-to-edge" stud finder is highly recommended.
- Ensure the wall mount is securely fixed to the wall and the kiosk bracket is securely fixed to the BloodTrack Kiosk V5 before sliding the kiosk bracket in to the wall mount.
- The two mounting parts must be secured together with a minimum of two M4 x 10 screws on one side—in other words, both top and bottom holes on an easy to access side. Both left and right sides can be used to secure the two parts together, but both top and bottom fixings must be secured.



- The BloodTrack Kiosk V5 should not have other equipment placed on top of it as this could impede air flow for cooling.

When choosing a wall for mounting the BloodTrack Kiosk V5, be sure to consider cable lengths and limitations, as well as wall structure.

Before beginning this procedure, verify that all parts were received—see [Section 4.2.1—List of Parts](#).

i Notes:

- If mounting the scanning shelf, it is advised that the active shelf be assembled prior to mounting the BloodTrack Kiosk V5—see [Section 5.1—Active Shelf Use](#).
- All necessary checks should be made before drilling for fixings—for example, hidden wiring.

To mount the BloodTrack Kiosk V5 on a wall:

1. It is recommended that the BloodTrack Kiosk V5 be mounted with the lowest wall mounting hole at a distance of 45.3 in. (1150 mm) above the floor—see [Figure 10](#). This is the best position to accommodate users of varying heights to make use of the touch-screen and barcode scanner.

Ensure hardware is affixed to a wall or plywood mounted on a wall.

2. Ensure adequate clearance for the safe opening and closing of the storage location door.
3. The wall mount requires a minimum of four secure fixings to the wall—see [Figure 10](#) for dimensions and height from ground.

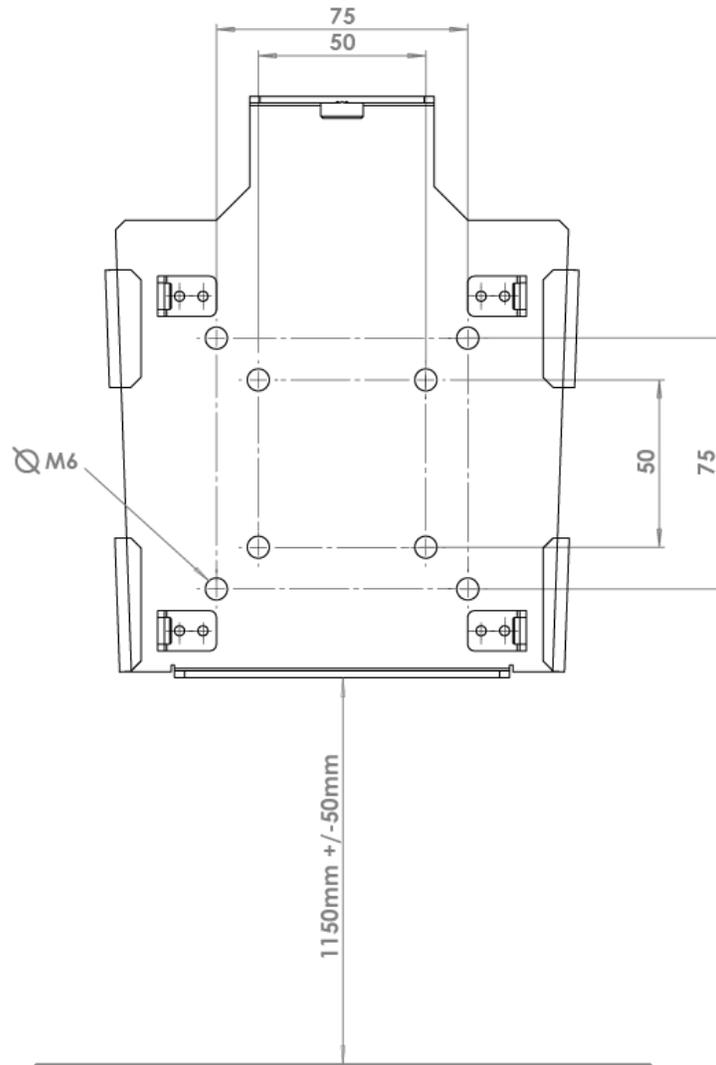


Figure 10 Wall mount fixing holes

4. Once the wall mount is secured appropriately, attach the kiosk bracket to the back of the BloodTrack Kiosk V5 using four M4 x 10 screws.

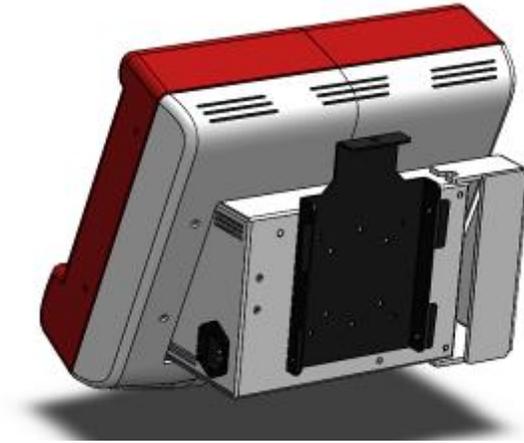


Figure 11 Kiosk wall mount bracket

5. Carefully slide the kiosk mount onto the secured wall mount. The stop will hold the weight of the BloodTrack Kiosk V5 to allow both hands to be used for securing the two mounting parts together.

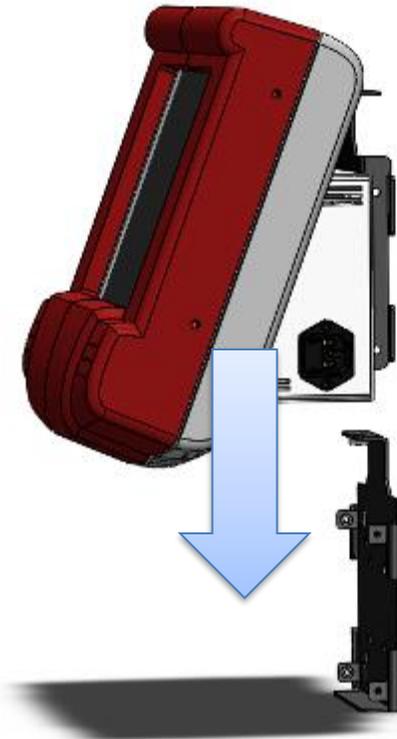


Figure 12 Sliding BloodTrack Kiosk V5 on to wall mount

6. Secure the BloodTrack Kiosk V5 to the wall mount with two M4 x 10 screws on either side. It is essential that both top and bottom holes are secured to stop any vibrations during use.



Figure 13 **Securing wall mount**

7. Once the BloodTrack Kiosk V5 is secure, connect all cabling.

5.4 Mounting the BloodTrack Kiosk V5 on a Flat Surface

⚠ CAUTIONS

- Only Haemonetics-approved service personnel are authorized to remove the external plastic casing and access the interior of the BloodTrack Kiosk V5.
- Haemonetics is not responsible for regulatory compliance of a modified Haemonetics product.
- The BloodTrack Kiosk V5 should not have other equipment placed on top of it as this could impede air flow for cooling.

Before beginning this procedure, verify that all parts were received—see [Section 4.2.1—List of Parts](#).

If the BloodTrack Kiosk V5 is going to be surface mounted—for example, on a desktop or bench adjacent to the storage location—the desk stand must be used. If the BloodTrack Kiosk V5 is to be used while users are standing, it is recommended that the BloodTrack Kiosk V5 and desk stand are positioned on a flat surface at a height of 35.4 in., +/- 2 in. (90 cm, +/- 5 cm) to accommodate the average height of users.



If necessary, the desk stand can be affixed to the horizontal surface via the two mounting holes and/or a steady bracket can be fitted between the BloodTrack Kiosk V5 and the adjacent wall for additional safety and security.

If the BloodTrack Kiosk V5 is going to be mounted on the optional desk stand, refer to [Figure 14](#) for illustrated instructions. Refer to [Figure 15](#) for a rear-view image of the BloodTrack Kiosk V5 mounted on the desk stand.

The BloodTrack Kiosk V5 cannot be mounted to the optional desk stand with the active shelf attached. The shelf must be removed if already in place.



Figure 14 BloodTrack Kiosk V5 on optional desk stand



Figure 15 BloodTrack Kiosk V5 on optional desk stand—rear view

Note:

It is recommended that the fittings securing the BloodTrack Kiosk V5 be inspected every six months.

6.0 Mounting the Electromagnetic Locks

6.1 Description

⚠ CAUTIONS

- When the BloodTrack[®] Kiosk V5 relay door lock interface is used to drive a magnetic lock, a diode must be fitted as per [Section 8.3.7](#), otherwise the BloodTrack Kiosk V5 may suffer from unpredictable behavior.
- Use only the Haemonetics-approved Xtra-Guard[®] cabling type noted below.
- Use *only* the Haemonetics-approved EcoWire[™] protective earth cable noted below.

Access to the storage location is controlled by the BloodTrack Courier[®] software driving the BloodTrack Kiosk V5 relay outputs. These relay outputs are used in conjunction with electromagnetic locks installed on the blood product storage location using various brackets.

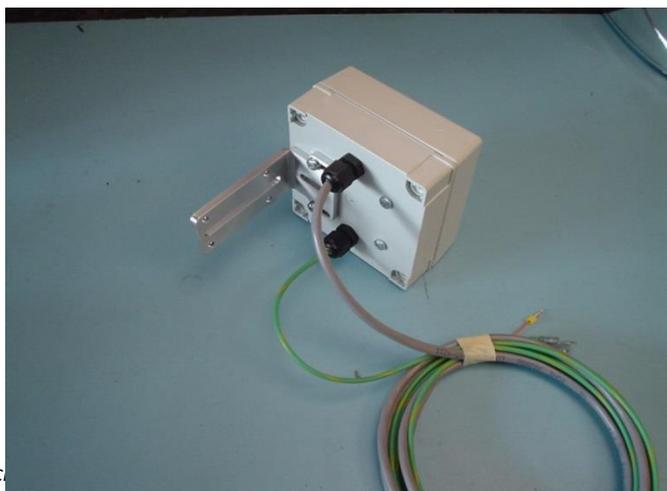
An electromagnetic lock (see [Figure 16](#)) encased in a plastic enclosure (BTR4 or BTR5 fridge door lock magnet) is optionally supplied with the BloodTrack Kiosk V5.

The signals are carried on this cable type which connects to the plug in terminal block which interfaces to the BloodTrack Kiosk V5:

- Alpha Wire EcoWire Part No. 6718 GY005.

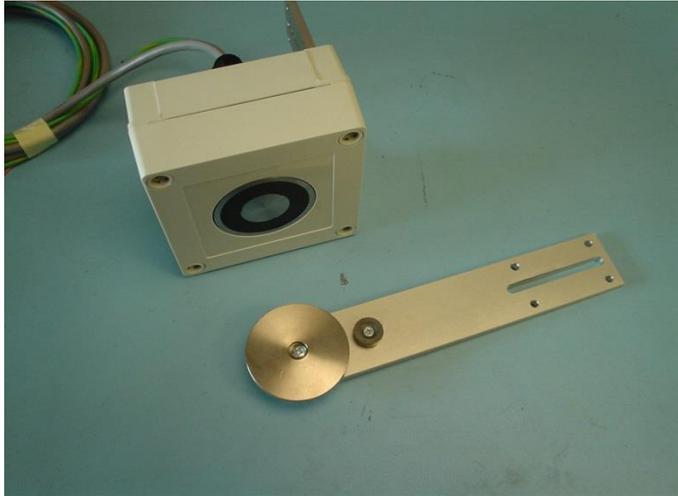
The safety protective earth wire can also be seen. The protective earth cable used with the door lock magnet must *only* be the following Haemonetics-approved cable type:

- Alpha Wire EcoWire 12 AWG E163869-DB RU AWM 11028 105C 600V VW-1---CRU AWM I A/B 105C 600V FT1.





Mounting bracket on rear of electromagnet and two cables—signal and protective earth



Door armature and door closed sensor activation magnet

Figure 16 Electromagnetic lock and armature

6.2 Connections



To connect the electromagnet lock to the terminal block socket on the left hand I/O coastline of the BloodTrack Kiosk V5, use *only* the following Haemonetics-approved screened four-core cable type:

- Alpha Wire 5104C 4C 22 AWG Xtra-Guard Shielded UL Type CM 105C.

Use *only* the following Haemonetics-approved connector:

- Würth Elektronik 691364100006 or Phoenix Contact MC 1,5/ 6-ST-3,81.

Refer to [Sections 6.2.1](#), [8.3.2](#) and [8.3.6](#) regarding connections to the BloodTrack Kiosk V5.

6.2.1 Safety Earth

⚠ WARNING!

To avoid risk of electric shock, this Haemonetics-approved magnetic lock must be reliably connected to a protective earth via the integrated green/yellow earth lead.

Connection to the earth point can be a suitable earth anchor on the chassis of the storage location.

The earth point should be attached as follows:

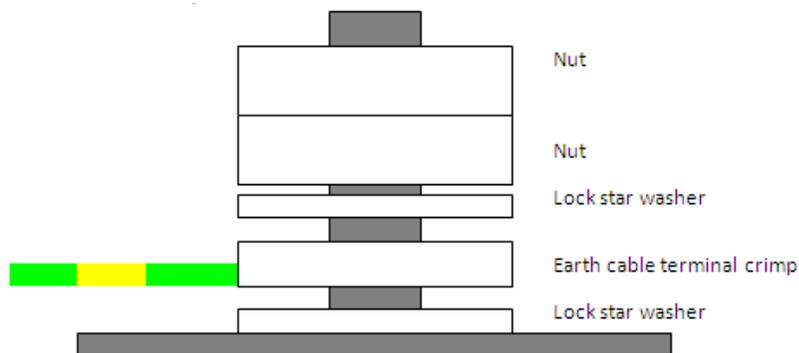


Figure 17 Electromagnetic lock—connection to earth point

6.2.2 Mounting the Electromagnetic Lock

⚠ CAUTION

Extreme care should be taken to avoid drilling into glass edges.

The type of mounting hardware used will be decided by the installer, dependent upon the construction of the storage location and any guidance given by the manufacturer of the storage location. Suitable guidance from the manufacturer must be obtained and followed.

Generally either self-tapping screws or .24 in. (6 mm) machine screws with drilled and tapped holes will be used. Another option is using .16 in. (4 mm) rivets. The 'L' bracket should use fixings that will allow positional adjustment to optimize closure of the storage location.

Wherever possible, the electromagnetic locks should be located as close as possible to the existing handle on the storage location, or "pull point" to minimize leverage.

Some modification of the brackets may be necessary. For example, shortening of the bracket may be necessary, depending on the type of storage location and available mounting position.

i Notes:

- Care should always be taken when drilling into cabinets and doors of the storage location.
- It is recommended that the bracket and fittings securing the magnetic lock be inspected every six months.

7.0 Mounting the Uninterruptable Power Supply (UPS)

The optional UPS provided is a slimline model, and a custom-built bracket and fittings are supplied to wall-mount the unit near the BloodTrack® Kiosk V5. A suitable patch mains cordset cable for the UPS mains outlet to the BloodTrack Kiosk V5 mains inlet is supplied with the BloodTrack Kiosk V5.



Figure 18 UPS mounted below BloodTrack Kiosk V5

Note:

It is recommended that the bracket and fittings securing the UPS be inspected on a regular basis to ensure the fitment remains secure—for example, every six months. The time period for inspection should be determined by suitable risk analysis undertaken by the responsible authority at the healthcare site.

7.1 UPS Internal Battery

.....

The UPS unit will require maintenance to replace its internal battery after it has been in service for a period of time. Typically it is recommended the battery is replaced after three years. This maintenance should be undertaken by a competent person in accordance with the specific UPS instruction and service manual. Contact Haemonetics® Technical Support if assistance is required—see [Appendix C—Product Support](#).



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8.0 Connecting Cable and Power

8.1 Cabling

.....

⚠ WARNINGS!

- Any accessories and cables not approved by Haemonetics® used in conjunction with the BloodTrack® Kiosk V5 may increase hazards and influence compatibility with EMC requirements. Non-approved accessories and cables must *not* be used.
- Connections to network points other than those approved by Haemonetics as part of the system may result in previously unidentified risks to patients, operators or third parties. These risks should be identified, analyzed, evaluated and controlled. Contact Haemonetics Technical Support for guidance—see [Appendix C—Product Support](#).
- The BloodTrack Kiosk V5 must only use a CAT5e/CAT6 shielded Ethernet cables length 9.8 ft. (3 m) or less to the network point from the BloodTrack Kiosk V5.

⚠ CAUTIONS

- Care should be taken to insulate all unused cores to prevent shorting.
- Use *only* Haemonetics-approved peripherals, cabling and connections when installing the BloodTrack Kiosk V5.

The cabling can be run with the BloodTrack Kiosk V5, locks and UPS mounted in the final position for the end-users.

The supplied shielded CAT5e network patch lead is connected from the BloodTrack Kiosk V5 to the network data point provided by the hospital.

The BloodTrack Kiosk V5 requires at least one CAT5e/CAT6 network connection to function. There is provision for a second CAT5e/CAT6 network connection for redundancy/backup network connection.

8.2 Power Cord

.....

The mains power supply may run via the optional UPS to the BloodTrack Kiosk V5.

⚠ WARNINGS!

- Any accessories and cables not approved by Haemonetics used in conjunction with the BloodTrack Kiosk V5 may increase hazards and



influence compatibility with EMC requirements. Non-approved accessories and cables must *not* be used.

- A power cord is supplied with the BloodTrack Kiosk V5. Do not replace the power cord with a substitute. If necessary, contact Haemonetics Technical Support—see [Appendix C—Product Support](#)—for a replacement. Use *only* Haemonetics-approved peripherals, cabling and connections when installing the BloodTrack Kiosk V5.

⚠ CAUTIONS

- The electrical power outlet used for the power cord for the BloodTrack Kiosk V5 should be easily accessible to allow it to be disconnected in order to remove mains power. The BloodTrack Kiosk V5 should not be installed with a permanent electronic supply feed.
- The power outlet used to connect to the BloodTrack Kiosk V5 may come from the optional UPS. Therefore the only certain method to disconnect the mains supply from the BloodTrack Kiosk V5 is to disconnect the IEC C13 cordset from the C14 inlet on the chassis. The UPS may still provide mains power to the BloodTrack Kiosk V5 if mains power input to the UPS itself is disconnected.

External cabling such as network cables, should run inside suitable trunking, where possible, to provide a neat installation.

8.3 Storage Location Door Locks

.....

⚠ CAUTION

When the BloodTrack Kiosk V5 relay door lock interface is used to drive a magnetic lock, a diode **must** be fitted as per [Section 8.3.7](#), otherwise the BloodTrack Kiosk V5 may suffer from unpredictable behavior.

8.3.1 Storage Location Interfaces

The BloodTrack Kiosk V5 has three ports available for interfacing to storage locations. These are available in two configurations:

1. One relay output and two serial port outputs.
2. Three relay outputs.

8.3.2 Interface Connector

The BloodTrack Kiosk V5 uses a detachable terminal block connector to provide either the relay output or the serial port output depending on the port configuration.

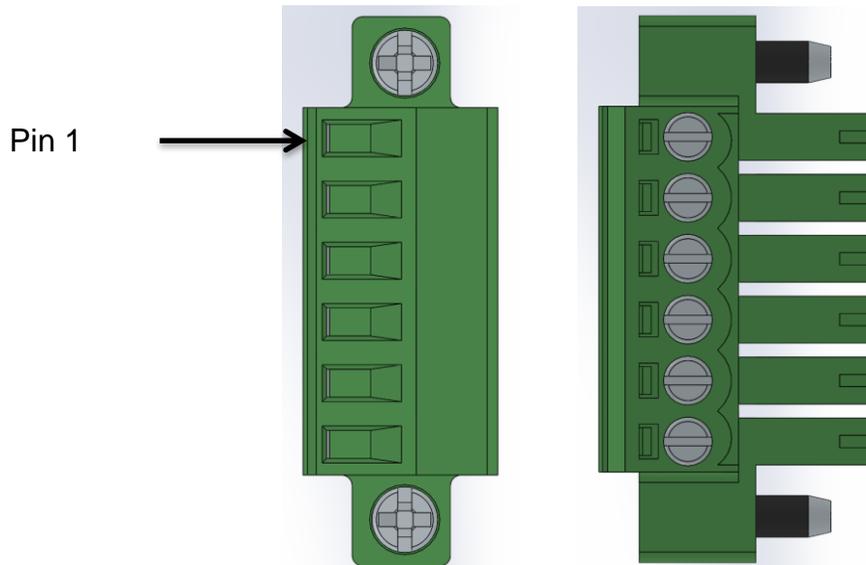


Figure 19 Lock connection—terminal block—pin 1 at top

8.3.3 Serial Port Interface

With reference to [Figure 19](#), the serial port connections are:

Pin	Function
1	12V DC supply
2	Receive data (RXD) to BloodTrack Kiosk V5 from peripheral (TXD on peripheral)
3	Transmit data (TXD) out from BloodTrack Kiosk V5 to peripheral (RXD on peripheral)
4	Request to send (RTS)
5	Clear to Send (CTS)
6	0V
Chassis	Shield via conductive P-clip

8.3.4 Relay Output Interface

The BloodTrack Kiosk V5 is available with one, two or three relay outputs for interfacing to the storage location door lock system on one, two or three separate storage locations.

Note:

The relay output is only for switching less than or equal to a 48V DC or 48V AC rms signal up to 1A current. If higher current, voltage or mains powered switching is required, contact Haemonetics Technical Support for advice—see [Appendix C—Product Support](#).



The pin details are:

Pin	Function
1	12V DC supply
2	Relay Common (RC)
3	Relay Normally Closed (NC)
4	Relay Normally Open (NO)
5	Input sensor
6	0V
Chassis	Shield via conductive P-clip

Table 1 Cabling—pin details

Note:

The Input sensor is used for the “door open” feature.

The BloodTrack Kiosk V5 emergency access button—when engaged—will interrupt the Relay Common (RC) connection. See [Section 8.3.8—Releasing Door Lock for Emergency Access](#).

The relay—when enabled/energized—will connect the common (RC) to NO. When the relay is off, the common (RC) will be connected to NC.

The 12V DC supply will be present all the time the BloodTrack Kiosk V5 is connected to the mains power supply.

8.3.5 Digital Locks with Existing Interface

For storage locations that provide an existing lock interface (typically those fitted with a digital lock access keypad), only the RC and NC or NO connections are used as appropriate to the logic of the lock interface controller of the storage location. The 12V power supply connections are not used and neither is the use of any additional diode (see below) required.

8.3.6 Powered Magnetic Lock Connections

A storage location fitted with a powered magnet lock—see [Section 6.0—Mounting the Electromagnetic Locks](#)—will be connected as follows:

Number	Function	Connection
1	12V DC supply	To pin 2
2	Relay Common (RC)	From pin 1
3	Relay Normally Closed (NC)	Not connected
4	Relay Normally Open (NO)	To magnet
5	Sense Input	Door sensor (option)



Number	Function	Connection
6	0V	To magnet
Chassis	Signal shield	To conductive P-clip

The 12V supply is linked to the relay common (RC), which then powers the magnetic lock when the relay is engaged, as this connects RC to the normally open (NO) connection. Power then goes through the magnet to 0V completing the circuit and energizing the coil of the electromagnet lock.

8.3.7 Fitting Diode to Powered Magnetic Lock

⚠ CAUTIONS

- The diode/TVS component must be insulated with suitable sleeving so no parts are exposed.
- Care should be taken so that the component legs of the diode cannot short to any part of the BloodTrack Kiosk V5 metalwork, or any other connections.
- A check should be done to ensure the diode is firmly connected.
- Do not touch any accessible part and a patient at the same time.

It is recommended that a 1N400x series diode (for example, 1N4006) or a TVS component is used in 'reversed' protective configuration. Diodes are polarized components with an anode and a cathode. The cathode is denoted by a band on the actual component. As the diode is 'reversed' in order to dissipate energy in the magnet when it is released, the cathode, denoted by the band, is connected to the positive side of the circuit. The anode is connected to 0V.



Figure 20 Fitting diode to powered magnetic lock

Therefore, the diode should be connected across the magnet connections so that the diode's cathode is on the positive side of the magnet. With the normal magnetic lock connection this will mean the cathode—banded—is connected to pin 4 and the anode to pin 6, 0V.

8.3.8 Releasing Door Lock for Emergency Access

i Note:

The emergency access switch will only release storage locations connected via the BloodTrack Kiosk V5 relay outputs. The emergency access switch **will not** release storage locations connected via serial ports.

The BloodTrack Kiosk V5 has an emergency access switch that can be used to interrupt the Relay Common (RC) connection and unlock the door to the storage location.

The switch is recessed to prevent accidentally triggering the emergency access to the storage location and requires use of a tool to be activated, such as a pencil, pen or stylus.

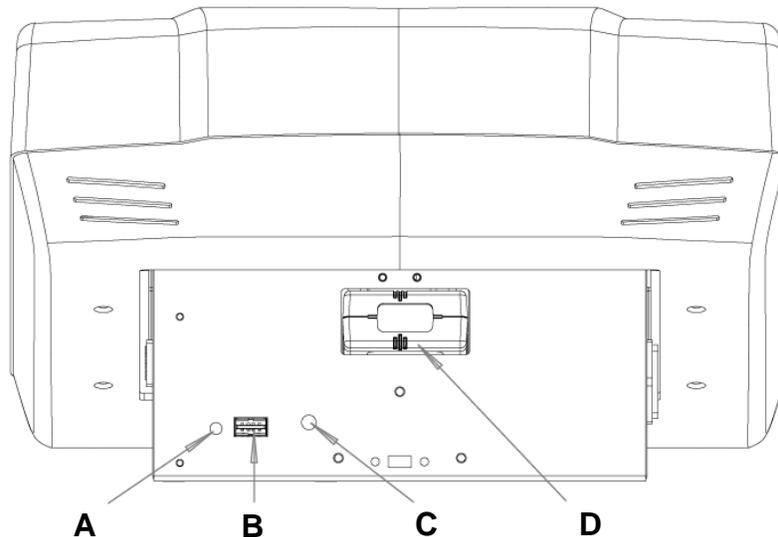
The switch is a latched toggle type and will remain in the on or off state until it is manipulated again.

To open the door to storage locations controlled by the BloodTrack Kiosk V5:

1. Obtain a suitable probe or pen/pencil to fit the switch hole.
2. Insert the tool in to the emergency access switch hole and push upwards until the switch clicks—and then remove the tool. The doors controlled by the BloodTrack Kiosk V5 will unlock.

Note:

Activating the emergency access switch on the BloodTrack Kiosk V5 will invoke the emergency access procedure within the BloodTrack Courier® software.



A - Reset Button

C - Emergency Access Switch

B - Engineer USB port

D - Barcode Reader

Figure 21 Emergency access switch location

Note:

The switch will remain in the emergency access position until repositioned.

3. Remove *only* the units needed.
4. Close the door to the storage location.



5. Repeat [Step 1](#) until the switch clicks. The switch will now be back to its original position and return the BloodTrack Kiosk V5 back to its normal-use state with the door locks activated.



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9.0 Windows Embedded Standard 7 Setup

The BloodTrack® Kiosk V5 is shipped with the Microsoft® Windows® Embedded Standard 7 (WES7) operating system installed. WES7 is a platform for the BloodTrack Courier® software to be installed, and run on the BloodTrack Kiosk V5. The BloodTrack Courier software is the only software interface the end-user interacts with once the BloodTrack Kiosk V5 is installed on-site. The Haemonetics® technical team are responsible for installing the BloodTrack Courier software onto the BloodTrack Kiosk V5 during the installation and commissioning of the device at the healthcare location.

9.1 Setup Process

.....

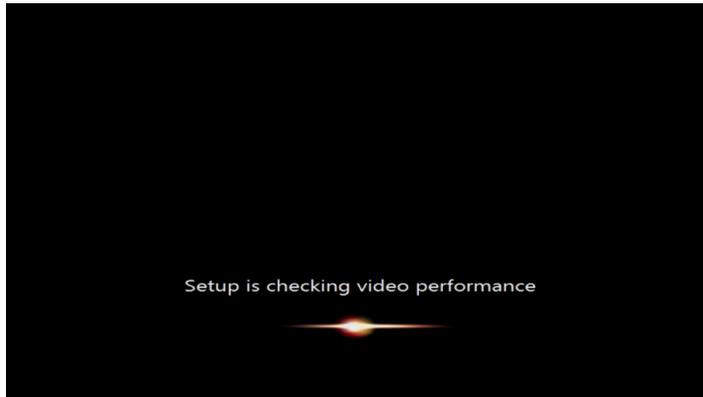
Upon powering the device, the BloodTrack Kiosk V5 will present the Windows “Out of Box Experience” (OOBE) that allows the installation technician to configure the operating system to suit the healthcare site requirements before the BloodTrack Courier software is installed. See [Section 2.7—Network Specification \(Ethernet\)](#) regarding the required risk analysis procedures and considerations when installing the BloodTrack Kiosk V5 at the healthcare site.

Note: The setup process requires a keyboard connected to the BloodTrack Kiosk V5 via one of the available USB ports—see [Section 2.8—USB Connection Specification](#).

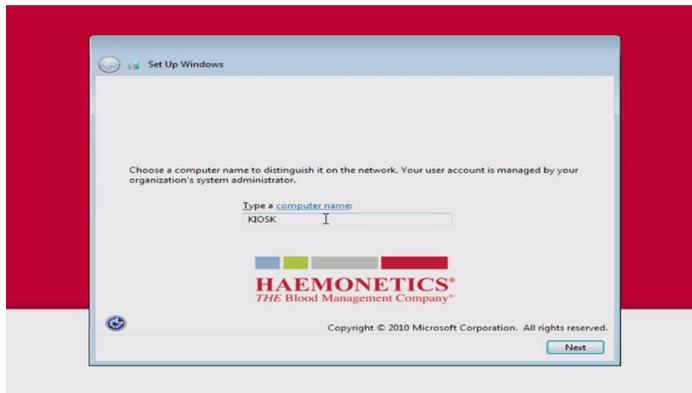
During the initial start-up, do not press any keys or buttons until [Step 2](#) of this process, and the “Set Up Windows” window appears.

To configure the WES7 operating system:

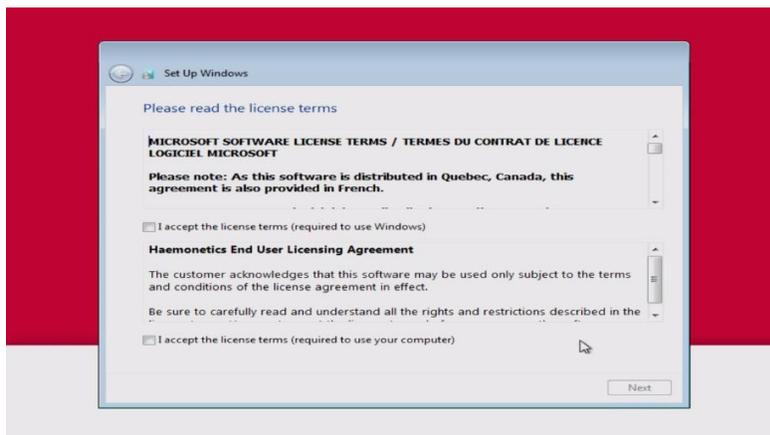
1. Power up the BloodTrack Kiosk V5. The following screen will display:



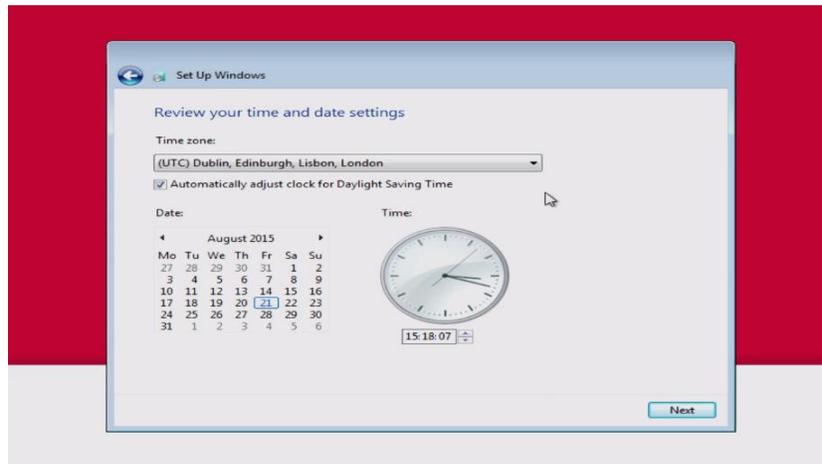
2. After a few moments the “Set Up Windows” window will appear. Please type a unique computer name—*this should be agreed upon with the healthcare site as they may have a specific naming convention.*



3. The license agreement will display. Read the agreement and click on each of the two “tick boxes” to accept the license terms. Click **Next**.



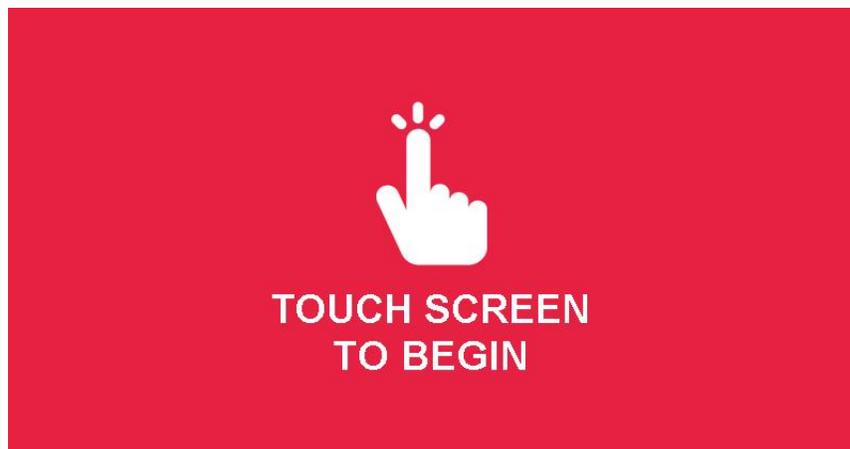
4. Review the time and date settings. These can be corrected by selecting one of the options from the drop-down box of time zones. After making any necessary changes, click **Next**.



The screen will then show that the desktop is being prepared.



Then a prompt to touch the screen will appear. Touch the screen to continue the setup process.





5. After a few moments the desktop will display, followed by a request to restart. Click OK on the restart dialogue, or wait, and the kiosk will reboot. On restart the kiosk will now boot straight to the desktop.



6. The desktop will then automatically log out and back in again to complete the setup of the operating system.

The BloodTrack Kiosk V5 is now ready for the BloodTrack Courier software to be installed. Refer to the *BloodTrack® Setup Guide* (listed in the section Additional Resources for instructions on installing the BloodTrack Courier software.

Note:

If there are any issues with setting up the operating system, contact Haemonetics Technical Support—see [Appendix C—Product Support](#).



A Tool Kit List

Part numbers prefixed RS are available via RS Components Ltd.:

<http://uk.rs-online.com/web/>

Part numbers prefixed SF are available via Screwfix®, a subsidiary of Kingfisher PLC:

<http://www.screwfix.com/>

A.1 Tools

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This section contains a list of suggested tools to use when installing a BloodTrack® Kiosk V5.

A.1.1 Diagnostic Tool

Digital or analogue multi-meter.

A.1.2 Screwdrivers

Required to assemble wall mount bracket or desk stand:

- Pozidriv® screwdriver No 1
- Pozidriv screwdriver No 2
- Flat blade 6 mm screwdriver.

Required to assemble cable into terminal block:

- Flat screwdriver 3 mm (or electrician's terminal screwdriver).

A.1.3 Wall Bracket Mounting

- Tape measure
- Mini spirit level.

A.1.4 Cable Manipulation and Management

- Side cutters
- Cable stripping tool
- Self-adhesive mini-trunking 16 x 16 mm (RS 619-222)
- Self-adhesive mini-trunking 16 x 25 mm (RS 619-238)
- Assorted mini-trunking angle, T pieces, etc.



A.1.5 Affixing Magnetic Lock

- 160 mm combination pliers
- Mini long nose pliers
- Junior hacksaw
- Small flat file
- Small half round file
- ½ inch hacksaw
- Stanley® knife
- Tape measure
- Mini spirit level
- Riveter
- 6 in. adjustable spanner
- Metric Allen® key set
- Steel rule
- Small hand tap wrench
- ¼ drive socket 'T' bar
- ¼ drive socket extension bar
- ¼ drive metric sockets—4, 4.5, 5, 5.5, 6, 7, 8, 10, 13 mm
- Metric combination spanners 8, 10 mm
- Drill stand vice
- M5, M6 tap sets
- 3M™ VHB™ Tape—1½ in. x 3 in. strips.

A.1.6 Affixing parts to vertical walls

- 24 v battery hammer drill
- Stud/metal detector
- Safety glasses
- Stud wall fixing setting tool (SF 12429)
- HSS drill bits, < 4 mm assorted for pilot holes
- HSS drill bits 4 mm
- HSS drill bits 4.2 mm
- HSS drill bits 5 mm
- HSS drill bits 6 mm
- HSS drill bits 8 mm
- HSS drill bits 10 mm
- Masonry bits 6 mm, 7 mm.

A.2 Consumables

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A.2.1 Zip Ties

- Zip ties 100 mm x 2.5 mm (RS 233-455 or equivalent) - <http://uk.rs-online.com/web/p/cable-ties/0233455/> (or equivalent)



- Zip ties 200 mm x 4.8 mm (RS 233-471 or equivalent) - <http://uk.rs-online.com/web/p/cable-ties/0233471/>
- RS natural self-adhesive cable tie mount (cable tie base) 19.5 mm x 19.5 mm (RS 227-996) - <http://uk.rs-online.com/web/p/cable-tie-mounts/0227996/> (or equivalent product).

A.2.2 Adhesive

- Double-sided adhesive pads—for example, Scotch® Brand
- Adhesive—Bondloc™ B3295
- Loctite® 243™ threadlocker (RS-693-848 or equivalent) - <http://uk.rs-online.com/web/p/pipe-thread-sealants/0693848/>

A.2.3 Hollow Wall Anchors

- Easyfix hollow wall anchors 8-16 mm M5 x 52 mm, (SF 12229) - <http://www.screwfix.com/p/hollow-wall-anchors-8-16mm-m5-x-52mm-pack-of-10/12229?requestid=296934>
- Easyfix hollow wall anchors 16-32 mm M5 x 72 mm, (SF 11143) - <http://www.screwfix.com/p/hollow-wall-anchors-16-32mm-m5-x-72mm-pack-of-10/11143?requestid=296233>.

A.2.4 Fixing Screws

<http://www.screwfix.com/cats/A231354/Screws/Interior-Wood-Screws>

- TurboGold® 5 x 60 mm screws (SF 14657) - <http://www.screwfix.com/p/turbogold-woodscrews-double-self-countersunk-5-x-60mm-pk100/14657?requestid=297265>
- TurboGold 4.5 x 40 mm screws (SF 18108) - <http://www.screwfix.com/p/turbogold-woodscrews-double-self-countersunk-4-5-x-40mm-pk200/18108?requestid=297428>
- TurboGold 4.5 x 30 mm screws (SF 11597) - <http://www.screwfix.com/p/turbogold-woodscrews-double-self-countersunk-4-5-x-30mm-pk200/11597>
- GoldScrew 4.5 x 40 mm screws (SF 12005) - <http://www.screwfix.com/p/goldscrew-woodscrews-double-self-countersunk-4-5-x-40mm-pk200/12005?requestid=297874>
- 3.9 x 40 mm MDF screws (SF 40376) – <http://www.screwfix.com/p/mdf-tite-mdf-screws-3-9-x-40mm-200-pack/40376>
- QuickSilver® Prodrive® roundhead 1 ½ in. x 10 screws (SF 19231) - <http://www.screwfix.com/p/quicksilver-woodscrews-roundhead-10ga-x-1-pk200/19231?requestid=298293>



- QuickSilver Prodrive countersunk 1 ½ in. x 10 screws (SF 13305) - <http://www.screwfix.com/p/quicksilver-zinc-plated-woodscrews-double-countersunk-10ga-x-1-pk200/13305?requestid=298507>
- QuickSilver Prodrive countersunk 1 ¼ in. x 8 screws (SF 19231) - <http://www.screwfix.com/p/quicksilver-woodscrews-roundhead-10ga-x-1-pk200/19231?requestid=249468>
- Rivet 4 x 12 mm screws (SF 48183) - <http://www.screwfix.com/p/quicksilver-woodscrews-roundhead-10ga-x-1-pk200/19231?requestid=298633>
- Easydrive self-drilling low profile pan head screws 4.8 x 16 mm (SF 5004H) - <http://www.screwfix.com/p/easydrive-self-drilling-low-profile-pan-head-screws-4-8-x-16-x-n-amm-200-pack/5004h>
- Self-tapping screw no. 8 x 12.7 mm screws (RS 521-614) - <http://uk.rs-online.com/web/p/self-tapping-self-drilling-thread-forming-screws/0521614/>
- Wall plugs 8-10 red screws (SF 13209) - <http://www.screwfix.com/p/easyfix-wall-plugs-red-4-5mm-pack-of-100/13209?requestid=298889>
- Wall plugs 10-14 brown screws (SF 18493) - <http://www.screwfix.com/p/easyfix-wall-plugs-brown-4-5-6mm-pack-of-100/18493?requestid=298981>.

A.2.5 Machine Screws for Lock Assembly

- Bright zinc-plated, clear passivated steel flat head machine screws M5 x 25 mm (RS 553-497) – <http://uk.rs-online.com/web/p/machine-screws/0553497/>
- Easyfix bright zinc-plated countersunk machine screws M5 x 40 mm (SF 7363J) - <http://www.screwfix.com/p/easyfix-bright-zinc-plated-countersunk-machine-screws-m5-x-40mm-25-pack/7363j>
- Easyfix bright zinc-plated countersunk machine screws M5 x 50 mm (SF 1136J) - <http://www.screwfix.com/p/easyfix-bright-zinc-plated-countersunk-machine-screws-m5-x-50mm-25-pack/1136j>
- Hex socket cap steel black, self-color socket screws M5 x 12 mm (RS 376-4713) - <http://uk.rs-online.com/web/p/socket-screws/3764713/>
- Hex socket button steel bright zinc-plated socket screws M5 x 10 mm (RS 483-9616) – <http://uk.rs-online.com/web/p/socket-screws/4839616/>.

A.2.6 Nuts

- M5 bright zinc-plated steel dome nuts (RS 293-072 or equivalent) – <http://uk.rs-online.com/web/p/dome-nuts/0293072/>
- Easyfix hex nuts BZP steel M5 (SF 17527) - <http://www.screwfix.com/p/easyfix-hex-nuts-bzp-steel-m5-pack-of-1000/17527?requestid=248669>
- Bright zinc plated steel nylon insert locking nuts, M5 (RS 524-310) - <http://uk.rs-online.com/web/p/locking-nuts/0524310/>



- Plain stainless steel nylon insert locking nuts, M5 (RS 767-826) - <http://uk.rs-online.com/web/p/locking-nuts/0767826/>.

A.2.7 Washers

- Easyfix large flat steel washers BZP M5 (SF 18648) - <http://www.screwfix.com/p/easyfix-large-flat-steel-washers-bzp-m5-10pcs/18648?requestid=249801>
- Bright zinc plated steel plain washer, 1 mm, M5 (RS 525-931) - <http://uk.rs-online.com/web/p/plain-washers/0525931/?searchTerm=525-931>

A.2.8 Heat Shrink Tubing (Black)

- Heat shrink tubing, 2.4 mm (RS 398-212) - <http://uk.rs-online.com/web/p/heat-shrink-cold-shrink-sleeves/0398212/>
- TE connectivity heat shrink tubing, 8 mm (RS 277-8070) - <http://uk.rs-online.com/web/p/heat-shrink-cold-shrink-sleeves/2778070/>
- Heat shrink tubing, 12.7 mm (RS 700-4661 or equivalent) – <http://uk.rs-online.com/web/p/heat-shrink-cold-shrink-sleeves/7004661/>
- Heat shrink tubing, 25.4 mm (RS 700-4668 or equivalent) – <http://uk.rs-online.com/web/p/heat-shrink-cold-shrink-sleeves/7004668/>
- Heat shrink tubing, 38 mm (RS 398-133) - <http://uk.rs-online.com/web/p/heat-shrink-cold-shrink-sleeves/0398133/>.

A.2.9 Nylon Spiral Wrapping

- Polyethylene (PE) spiral cable wrap 6 - 30 mm (RS 244-2995 or equivalent) – <http://uk.rs-online.com/web/p/cable-spiral-wrapping/8117686/>
- HellermannTyton PA 6 nylon spiral cable wrap, 10 – 100 mm (RS 215-322 or equivalent) – <http://uk.rs-online.com/web/p/cable-spiral-wrapping/0215322/>
- Polyethylene (PE) spiral cable wrap, 6 - 30 mm (RS 811-7686) – <http://uk.rs-online.com/web/p/cable-spiral-wrapping/8117686/>

B IEC: 60601-1-2:2007 Standard Requirements

⚠ CAUTION
The BloodTrack® Kiosk V5 must be operated in an environment compatible to the requirements of the IEC 60601-1-2 Standard, Medical Electrical Equipment Electromagnetic compatibility (EMC).

B.1 Operation Precautions

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- ⚠ WARNINGS!**
- To avoid risk of electric shock, this equipment must only be connected to supply mains with protective earth.
 - Any accessories and cables not approved by Haemonetics® used in conjunction with the BloodTrack Kiosk V5 may increase hazards and influence compatibility with EMC requirements. Therefore, non-approved accessories and cables must not be used.
 - A power cord is supplied with the BloodTrack Kiosk V5. Do not replace the power cord with a substitute. If necessary, contact the Haemonetics Technical Support—see [Appendix C—Product Support](#)—for a replacement. Use only Haemonetics-approved peripherals, cabling and connections when installing the BloodTrack Kiosk V5.

⚠ CAUTION
Grounding reliability can only be achieved when the equipment is connected to a properly grounded outlet.

B.2 Electromagnetic Immunity

The BloodTrack Kiosk V5 is intended for use in the electromagnetic environment specified below. The customer or operator of the BloodTrack Kiosk V5 should ensure that it is used in such an environment.

B.2.1 IEC 60601-1-2, Table 201

IEC 60601-1-2:1990, Table 201 Guidance and manufacturer's declaration—electromagnetic emissions		
Emissions test	Compliance	Electromagnetic environment – guidance
RF emissions CISPR 11	Group 1	The BloodTrack Kiosk V5 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment. The BloodTrack Kiosk V5 is suitable for use in all establishments including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
RF emissions CISPR 11	Class B	
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/flicker emissions IEC 61000-3-3	Complies	

FCC CFR 47 Part 15B: 2010 Class B		
Spec Clause	Test Description	Base Standard
15.107	Emissions (AC Power Port)	ANSI 63.4
15.109	Radiated Emissions (Enclosure Port)	ANSI 63.4

B.2.2 IEC 60601-1-2, Table 202

The BloodTrack Kiosk V5 is intended for use in the electromagnetic environment specified below. The customer or operator of the BloodTrack Kiosk V5 should ensure that it is used in such an environment.

IEC 60601-1-2, Table 202			
Guidance and manufacturer's declaration—electromagnetic immunity			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast Transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines ±1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV line(s) to line(s) ±2 kV line(s) to earth	±1 kV line(s) to line(s) ±2 kV line(s) to earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	< 5% U_T (>95% dip in U_T) for 0,5 cycle 40% U_T (60% dip in U_T) for 5 cycle 70% U_T (30% dip in U_T) for 25 cycle < 5% U_T (>95% dip in U_T) for 5 s	< 5% U_T (>95% dip in U_T) for 0,5 cycle 40% U_T (60% dip in U_T) for 5 cycle 70% U_T (30% dip in U_T) for 25 cycle < 5% U_T (>95% dip in U_T) for 5 s	Mains power quality should be that of a typical commercial or hospital environment. If the user of the BloodTrack Kiosk V5 requires continued operation during power mains interruptions, it is recommended that the BloodTrack Kiosk V5 be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) Magnetic field IEC 61000-4-8	3 A/m	30 A/m	Power frequency magnetic field should be at levels characteristic of a typical location in a typical commercial or hospital environment.
<p>❖ NOTE: U_T is the AC mains voltage prior to application of the level.</p>			

B.2.3 IEC 60601-1-2, Table 204

The BloodTrack Kiosk V5 is intended for use in the electromagnetic environment specified below. The customer or operator of the BloodTrack Kiosk V5 should ensure that it is used in such an environment.

IEC 60601-1-2, Table 204 Guidance and manufacturer's declaration—electromagnetic immunity			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
Conducted RF IEC 61000-4-6	3 Vrms 0,15 to 80 MHz	10 Vrms 0,15 to 80 MHz	Portable and mobile RF communications equipment should be used no closer to any part of the BloodTrack Kiosk V5, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance: $d = 0,35\sqrt{P}$
Radiated RF IEC 61000-4-3	3 V/m 0,08 to 2,7 GHz	10 V/m 0,08 to 2,7 GHz	Recommended separation distance: $d = 0,35\sqrt{P}$ from 80 to 800 MHz $d = 0,7\sqrt{P}$ from 0,8 to 2,7 GHz Where P is the maximum output power rating of the transmitter in Watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey ^a , should be less than the compliance level in each frequency range ^b . Interference may occur in the vicinity of equipment marked with the following symbol: 
❖ NOTE: At 80 and 800 MHz, the higher frequency range applies. These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			



IEC 60601-1-2, Table 204			
Guidance and manufacturer's declaration—electromagnetic immunity			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
<p>^a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the BloodTrack Kiosk V5 is used exceeds the applicable RF compliance level above, the BloodTrack Kiosk V5 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the BloodTrack Kiosk V5.</p> <p>^b Over the frequency range 150kHz to 80 MHz, field strengths should be less than 10 V/m.</p>			

B.2.4 IEC 60601-1-2, Table 206

The BloodTrack Kiosk V5 is intended for use in the electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the BloodTrack Kiosk V5 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the BloodTrack Kiosk V5 as recommended below, according to the maximum output power of the communications equipment.

IEC 60601-1-2, Table 206			
Recommended separation distances between portable and mobile RF communications equipment and the BloodTrack Kiosk V5 - for equipment and systems that are not life-supporting			
	Separation distance according to frequency of transmitter (m)		
Rated maximum output power of transmitter (W)	150 kHz to 80 MHz	80 MHz to 800 MHz	800 MHz to 2,5 GHz
	$d = 0,35\sqrt{P}$	$d = 0,35\sqrt{P}$	$d = 0,7\sqrt{P}$
0,01	0,035	0,035	0,07
0,1	0,11	0,11	0,22
1	0,35	0,35	0,7
10	1,1	1,1	2,2
100	3,5	3,5	7
<p>For transmitters rated at a maximum output power not listed above, the recommended separation distance in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in Watts (W) according to the transmitter manufacturer.</p> <p>❖ NOTE: At 80 and 800 MHz, the separation distance for the higher frequency range applies. These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.</p>			



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C Product Support

Haemonetics® distributes and supports the BloodTrack® Blood Management and Bedside Solutions, of which the BloodTrack Courier® software and the BloodTrack® Kiosk V5 are components. If there are any problems using the BloodTrack Courier software or any associated devices, please contact Technical Support.

C.1 Technical Support Contact Information

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C.1.1 North America

Haemonetics Corporation

Telephone: 1.877.996.7877, Option 7

Email: BloodTrackSupport@haemonetics.com

Website: www.haemonetics.com

C.1.2 United Kingdom

Haemonetics Ltd.

Telephone: +44.(0).845.017.5004

Email: BloodTrackEUsupport@haemonetics.com

Website: www.haemonetics.com

C.1.3 Ireland

Accuscience Support Centre for BloodTrack

Telephone: 1890.929.044

Email: info@accuscience.ie

Website: <http://accuscience.ie>

C.1.4 Europe (Other European Countries)

Haemonetics S.A.

Telephone: 0808.234.4817

Email: tsadmin.uk@haemonetics.com

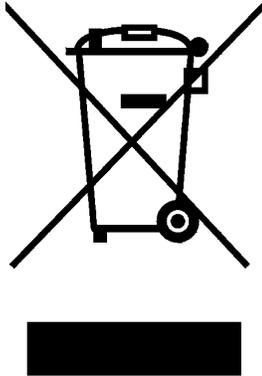
Website: www.haemonetics.com



C.2 Disposing of Electrical/Electronic Equipment

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Disposal of waste equipment by users in private households in the European Union



Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)

This symbol on the product(s) and / or accompanying documents means that used electrical and electronic products should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product(s) to designated collection points where it will be accepted free of charge.

Alternatively, in some countries you may be able to return your products to your local retailer upon purchase of an equivalent new product.

Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling.

Please contact your local authority for further details of your nearest designated collection point.

Penalties may be applicable for incorrect disposal of this waste, in accordance with your national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union. If you wish to discard this product please contact your local authorities or dealer and ask for the correct method of disposal.