



TRIO

DATECOM

Stream Router

MSR/9 Port Router

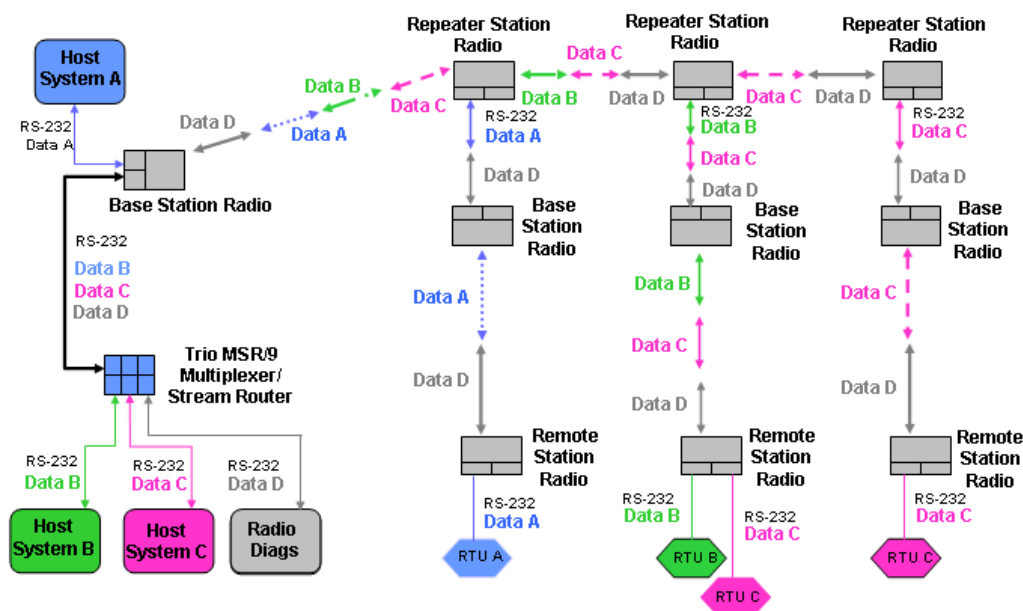
Trio DataCom's stream router facilitates the channeling of many data streams, from different applications, to nominated locations.

The stream router is ideal for large scale applications where data can be 'directed' down certain paths, minimising traffic loading on other parts of the system.

Based on an industrial grade PC, the stream router supports up to 9 serial I/O ports.

Features:

- ❖ Supports 9 RS232 I/O ports
- ❖ Based on an industrial grade PC
- ❖ Enhances the multi data stream (protocols) capabilities of the **E Series** of data radio modems
- ❖ Full matrix routing defined by the user. Any stream, incident on any port, is routable to any other port or ports
- ❖ RS 232 ports programmable up to 19,200 baud
- ❖ Routing throughput =>200 kb continuous
- ❖ Comes with fully functional Windows(tm) Programming Software



Description

The stream router provides extended facilities for systems using the stream routing capabilities of the **E series** radio modem products by providing a means of channeling many streams of data from different applications around large or complex network structures.

The stream router is a multi-port packet switch, which routes incoming packets on any given port to another port (or ports) dependent upon their stream headers, and the routing configuration table.

The stream router is supplied in a rugged case which houses an industrial standard PC. The router is normally pre-configured by Trio with the various driver modules and configuration in the Disk on Chip for a predetermined application, however it can also be configured externally using a Windows(tm) based programmer.

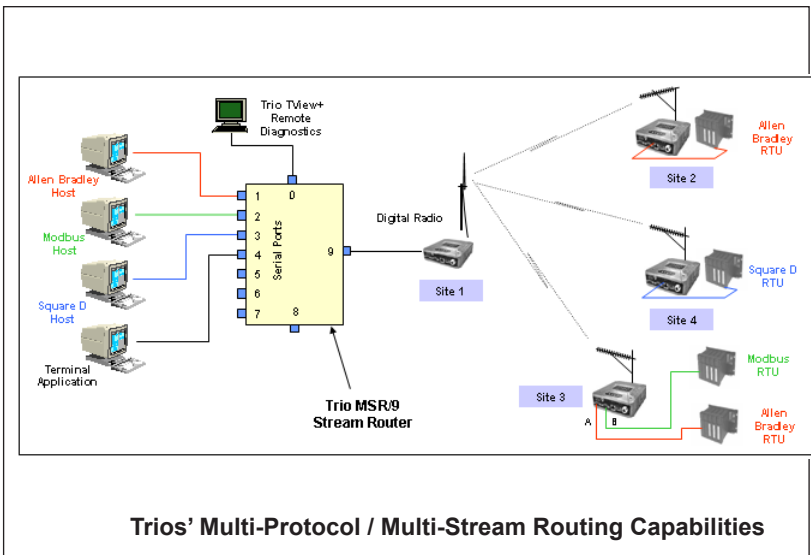
Stream Router

Stream Routing - with E Series Data Radios

The **E Series** of data radio modems employ a synchronous HDLC data transport mechanism at the radio transport level, which allows for the inclusion of embedded packet addressing headers. These radio modems have internal HDLC packet addressing routers and port multiplexers which will steer addressed packets to either of the two external ports.

The **E Series** data radio modems can form a modestly complex network providing multiple virtual circuit data connections each of which is independent to, and separate from the others. The limiting factor when using the **E Series** data radio modems, without a stream router, is in the level of network complexity with the standard 2 ports on these radios.

The stream router is designed to (optionally) route an **E Series** stream addressed packet and hence can be used for much more complex addressing and interconnection schemes than can be accommodated by data radio modem products alone. By incorporating the stream router, system designers can extend the range of applications for data radio modem products and use available bandwidth more effectively.



Specifications:

PHYSICAL	
Dimensions	Length: 245 mm Height: 197 mm Width: 114 mm
Weight	3.5 kg
Temperature	0 to 50°C Cel (32 - 122°F)
Processor	Intel® 386 8 Mbyte DISK on Chip

ELECTRICAL	
Power Supply Approvals	60W AC 90v to 264v FCC, UL

PORTS	
Number of Ports	9
Type	DB9 Male RS232
Protocols	SLIP, MODBUS or Custom (per port)
Speed	300-19,200 bps
Buffering	8 kbyte in both directions
Routing Capacity	200 kbaud continuous throughput

As the stream address headers are included *only at the beginning* of each packet of data, it is necessary to use a *packet* communication protocol between the radio modem and the external stream router to ensure that packets are conveyed intact and unbroken. The well known Serial Line Interface Protocol (**SLIP**, as used in Unix and TCP/IP networks) is recommended, as it is a standard interface option on the **E Series** products, and also the stream router.

Interfaces between the stream router and external applications are varied depending on their operational requirements and in addition to the SLIP driver. Trio provide a general purpose Packet Assembler / Disassembler interface with the stream router which is similar in operation to the **E Series** radio modem PAD facility.

When used with the Trio **E Series** data radio modems, the stream router can be configured to provide a direct connection between external physical ports and the radio modems internal stream routed data transport mechanisms. It can also route streams between two or more radio links at a hilltop repeater or distribution node.

Related Products

- ❖ E Series - Data Radio Modems (ER450)
- Hot Standby Base Station (EH450)
- Base Stations (EB450)
- Network Management and Diagnostic Software (TView™)

designs products & *solutions*

Local regulatory conditions may determine the suitability of individual versions in different countries. It is the responsibility of the buyer to confirm these regulatory conditions.

Performance data indicates typical values related to the described unit. Information subject to change without notice.

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