

VALIANT COMMUNICATIONS LIMITED



VCL-SR-MUX

G.703, 64Kbps Sub-Rate Multiplexer

Description:

G.703, SR Mux 64Kbps Sub-Rate Multiplexer:



Valiant G.703, Sub-Rate Multiplexer multiplexes six 9.6Kbps RS232

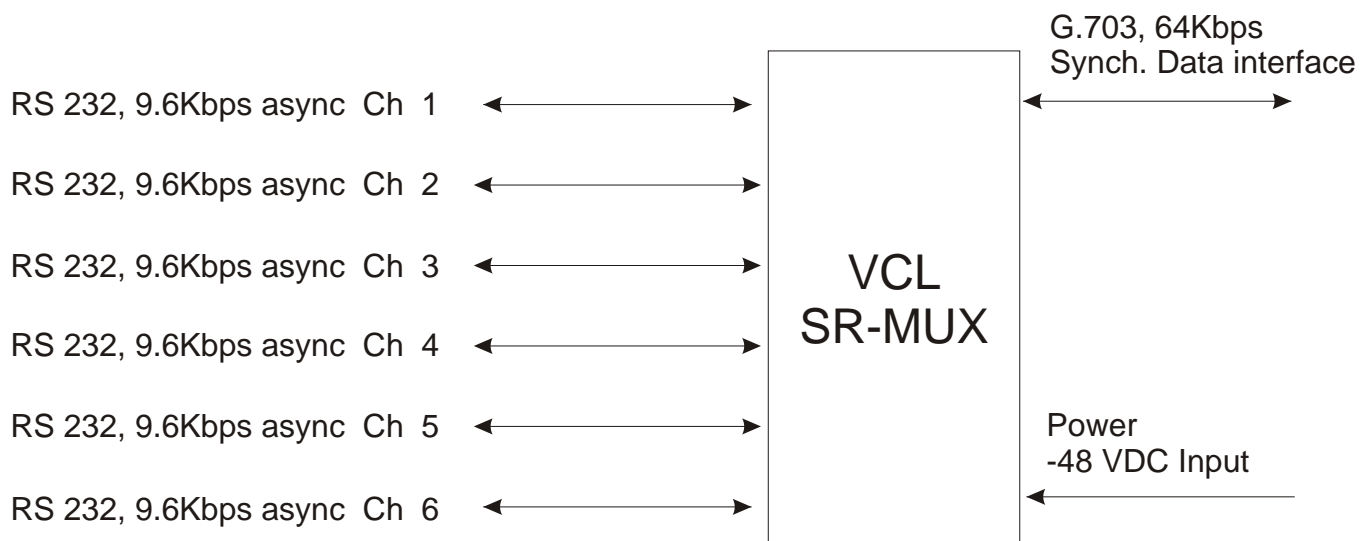
asynchronous data channels to a 64Kbps, G.703 co-directional, 4 wire synchronous data channel.

The front panel has six, RS232 data ports into which upto six, RS232 asynchronous data channels @ 9.6Kbps each may be connected. The six RS232 asynchronous data channels @ 9.6Kbps are multiplexed into a 64Kbps, G.703 co-directional, 4 wire synchronous data channel, which is accessed from the system backpanel (rear).

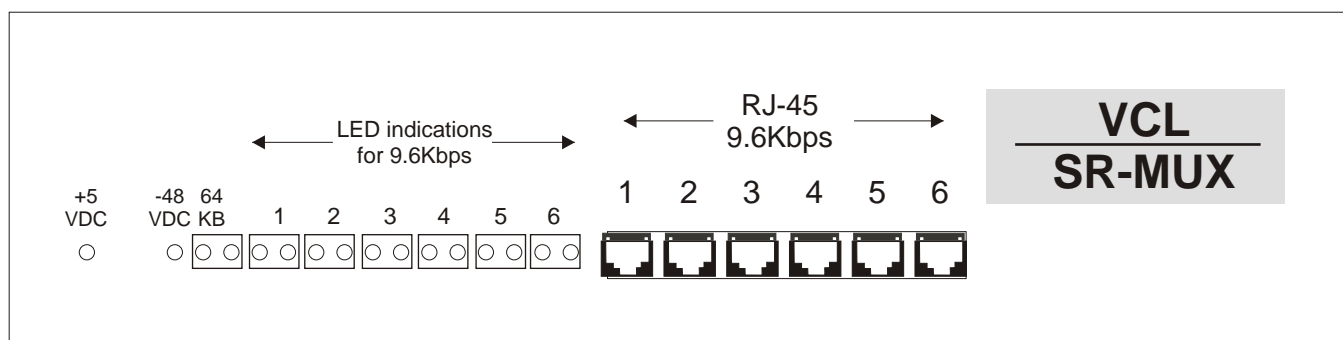
The equipment uses data buffering and phase-lock-loop techniques to ensure error free multiplexing and demultiplexing between the synchronous and asynchronous data ports. Front panel LED indicators indicate presence of Transmit and Receive data signal on each of the data ports.

The equipment operates on a nominal -48VDC Input (-40VDC to 60VDC Input). The system also provides two dry-contact relay alarm outputs (normally open) on the backpanel (rear) which close to indicate the presence of a system alarm.

Block Diagram of VCL Sub-Rate Multiplexer



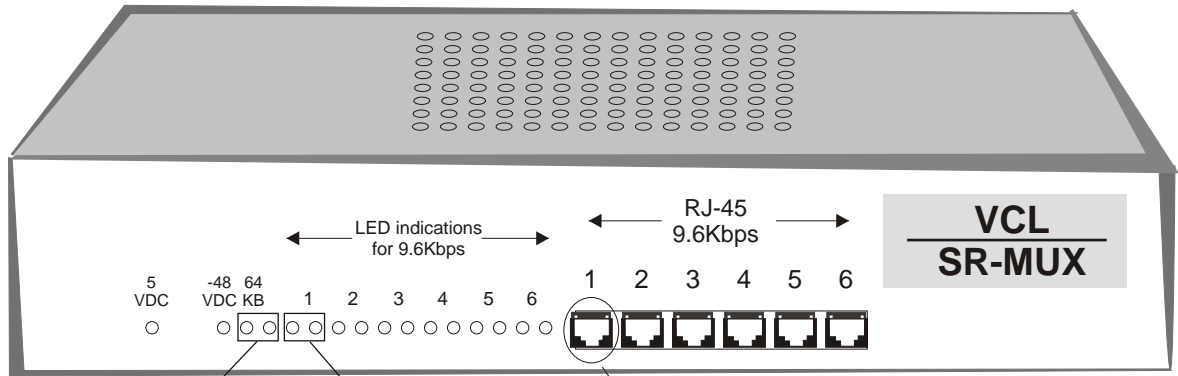
Front View of VCL- G.703 SR-MUX



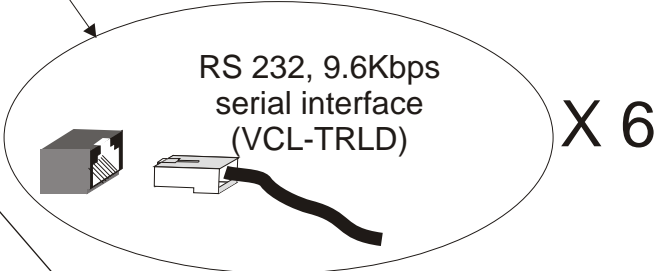
LED Description of VCL- G.703 SR MUX

- 1 +5 VDC present (Green LED)
- 2 -48 VDC present (Green LED)
- 3 Yellow LED presence of 64Kbps Transmit Signal
- 4 Green LED presence of 64Kbps Receive Signal
- 5 Yellow LED presence of 9.6Kbps (port 1) Transmit Signal
- 6 Green LED presence of 9.6Kbps (port 1) Receive Signal
- 7 Yellow LED presence of 9.6Kbps (port 2) Transmit Signal
- 8 Green LED presence of 9.6Kbps (port 2) Receive Signal
- 9 Yellow LED presence of 9.6Kbps (port 3) Transmit Signal
- 10 Green LED presence of 9.6Kbps (port 3) Receive Signal
- 11 Yellow LED presence of 9.6Kbps (port 4) Transmit Signal
- 12 Green LED presence of 9.6Kbps (port 4) Receive Signal
- 13 Yellow LED presence of 9.6Kbps (port 5) Transmit Signal
- 14 Green LED presence of 9.6Kbps (port 5) Receive Signal
- 15 Yellow LED presence of 9.6Kbps (port 6) Transmit Signal
- 16 Green LED presence of 9.6Kbps (port 6) Receive Signal

External Connection to / from VCL-G.703 SR-MUX



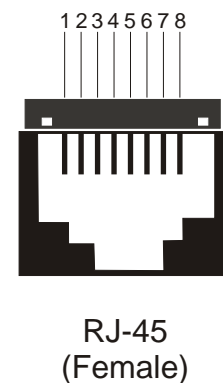
Note : When the 64Kbps, G.703 co-directional signal is present (connected), then both LEDs of 64kbps data port shall be lit. The yellow LED indicates the presence of the 64kbps “transmit” signal and green LED indicates 64kbps “receive” signal.



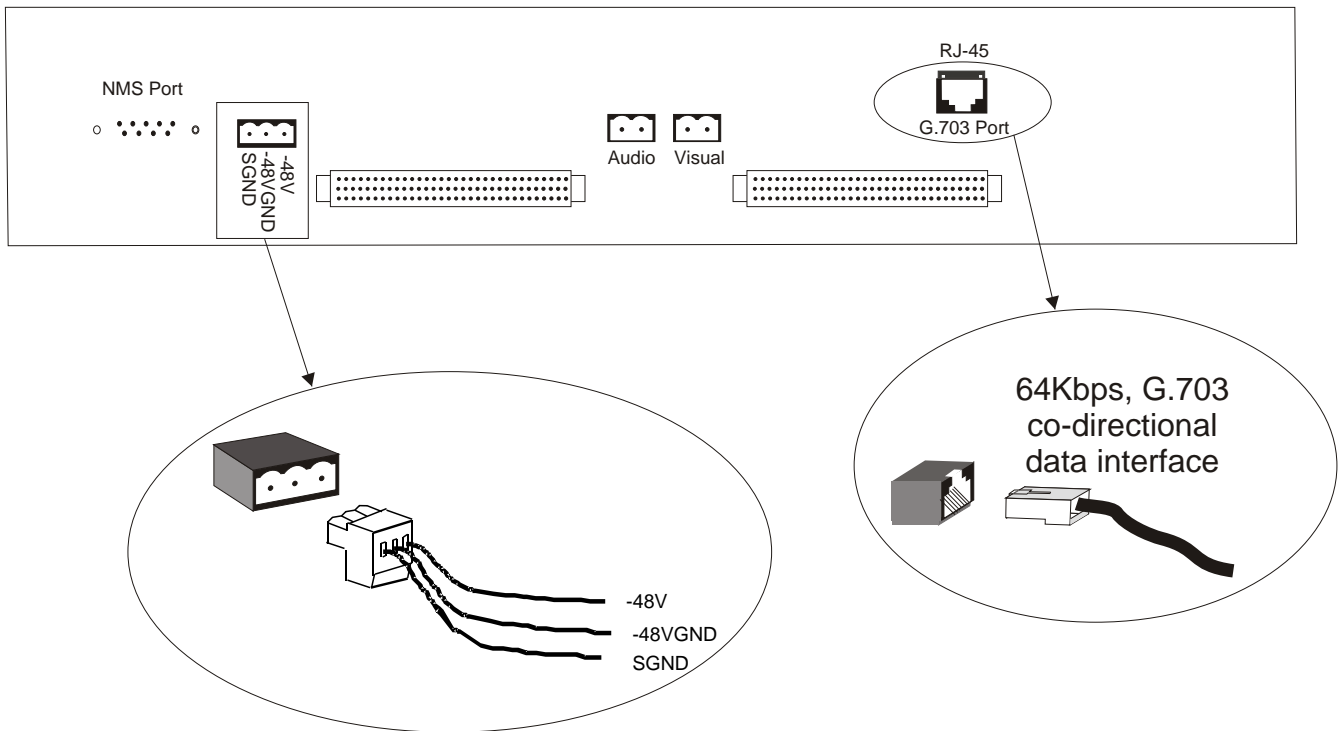
When the data connection is made on the RJ-45 (RS232) (9.6Kbps) **serial data port*, the corresponding Transmit and Receive LED indicators of that port shall light up indicating the presence of the Transmit and Receive signal.
 Note : When the 9.6kbps signal is present, then both LEDs on serial data (9.6Kbps) port shall be lit. The yellow LED indicates the presence of the 9.6kbps “Transmit” signal and green LED indicates 9.6kbps “Receive” signal.
**Any of the serial data ports # 1 thru 6.*

Pinouts of RS 232, asynchronous 9.6Kbps serial data port

RJ - 45 Pin #	Signal in RJ - 45F (RJ-45 - Female)	Will connect to
3	Data In - To SR-Mux	Data Out
6	Data Out - From SR-Mux	Data In
4	Ground	SG

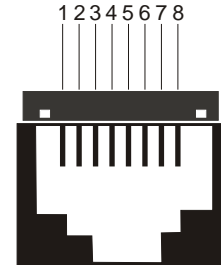


Back Panel of VCL-G.703 SR-MUX



Pinouts of G.703 @ 64kbps, Synchronous Data Interface Port

Signal on RJ - 45 (female)	RJ - 45 Pin #
RJ - 45 (1) - I/P data	5
RJ - 45 (1) + I/P data	4
RJ - 45 (1) - O/P data	2
RJ - 45 (1) + O/P data	1



RJ-45 (Female)

Technical Specifications are subject to change without notice.

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