Dual Channel VANC Modem

VANC modem applications:
- Multiplexes data such as camera platform and lens sensor data in virtual systems into video signals, or demultiplexes data from the video signals
- Program-related data and other information can be multiplexed in video signals for data transmission between broadcasting stations
- File transfer capability using a specialized application

Features

Ancillary transmission
Using the ancillary space of SDI data (as defined in BTA S-005B and STD-B6), multiplexes information from the serial port as data packets (as defined in ARIB TR-B22 or TR-B23). Two HD/SD-SDI lines are supported.

Ancillary reception
Data acquired from ancillary data packets supplied via SDI input are used in output from the serial port. Ancillary data packets used in transmission are replaced with dummy packets before SDI output. Two HD/SD-SDI lines are supported.

Transmit/receive switching
On the unit, operation can be switched between transmitting and receiving.

Selection of multiplexing packets
DID/S-DID values of ancillary data packets to multiplex can be freely set, as can the packet multiplexing line and packet position.

Up to two lines for one serial input/output port
Simultaneously transmits up to two lines of serial data from each of two SDI lines.

Multi-block function
Supports a high baud rate by creating packets from multiple blocks from one line.

Packet monitoring
Packets passing through can be checked in test mode, enabling monitoring of packet positions available for recorders or the transmission path.

SD/HD support
Supports both HD-SDI (1080/60i, 59.94i, 50i, 24PsF, 23.98PsF, 24p, 23.98p) and SD-SDI (480/59.94i).

Status indicators
Front LEDs show the status of SDI input and serial communication.

Display for communication status
Indicates the status of packets and lines used in transmission or reception. Settings can be viewed or adjusted in menu mode.

SDI pass-through
Pass-through of one line of SDI input is maintained during power outages.

Backward-compatible
Transmission in conjunction with EVM-2530T/2530R or EVM-2600 is supported.

Emergency data transfer
In emergencies that disable fax machines or other communication, documents or files can still be sent via video networks. Useful as an alternative means of file transfer.
Specifications

Video format
1920 x 1080/59.94i (60i), 50i
1920 x 1080/23.98PsF (24PsF)
1920 x 1080/23.98p (24p)
720 x 480/59.94i

Video input
HD-SDI: 1.5 Gbps or SD-SDI: 270 Mbps, 75Ω, BNC ×2

Video output
HD-SDI: 1.5 Gbps or SD-SDI: 270 Mbps, 75Ω, BNC ×2 (pass-through for one output)

Packet format
ARIB TR-B22 (UDW: 80)
ARIB TR-B23 (UDW: 255)

Multiplexed fields
ODD, EVEN, BOTH, SAFE

Packet multiplexing settings
The following settings can be configured for multiplexing packets.

Did value: 50h to 5Fh
S-DID value: 01h to FFh
1080i/1080PsF multiplexing line: 9 (572) to 20 (583) (line)
480i/480PsF multiplexing line: 9 to 41 (line)
480i multiplexing line: 11 (274) to 19 (282) (line)
Multiplexing packets: 1 to 4

Serial ports
Up to 4 lines

Data rate
Approx. 6 kB/sec per serial port, under the following serial settings
Baud rate: 115200 bps / Bits: 8-bit / Parity: none / Stop bit: 1-bit

LCD status screen
16 characters x 2 lines

LED indicators
SERIAL ACTIVITY 1–4, SDI IN, Tx/Rx, INS/EXT, ALARM

Interface
LAN: 10Base-T/100Base-TX, RJ-45 ×1

RS-232C or RS-422A*: D-sub 9-pin (male) x4
Start-stop synchronization, ASCII data transfer with XON-XOFF flow control, full duplex
Baud rate*: 115200, 38400, 19200, 9600, 4800, 2400, 1200 bps
Bit configuration:
Start: 1-bit
Data: 7- or 8-bits
Parity: 0 (none) or 1-bit (even, odd)
Stop: 1-bit, 2-bit
USB: 2.0 Type B x1

Temperature/humidity
5°C to 40°C/10% to 90% (no condensation)

Power/consumption
100 VAC to 240 VAC ±10%, 50/60 Hz / 20 W (at 100 VAC)

Dimensions/weight
215 (W) x 44 (H) x 400 (D) mm (not incl. projecting parts) / 2.8 kg

*1: Under default settings
*2: Depending on settings, less data can be sent continuously than indicated by the baud rate.