



Novra S75-Pro DVB-S Data Receiver/Router



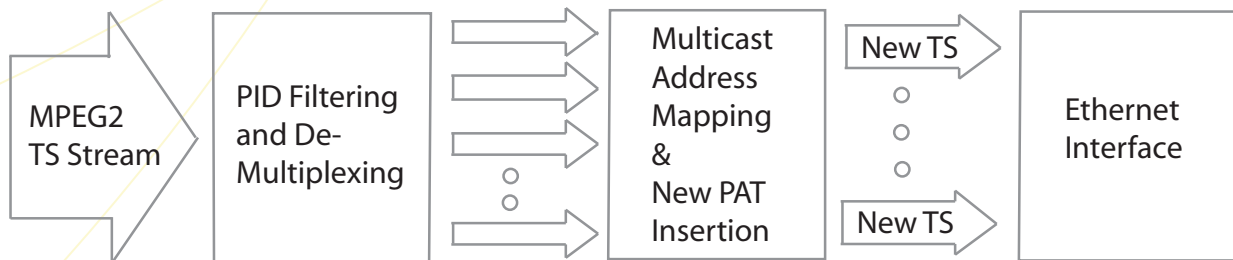
Overview

Based on the very successful S75+ DVB Data Receiver, the S75-Pro DVB receiver augments IP delivery with enhanced MPEG content aggregation and distribution capabilities that make it ideally suited for the reception of MPEG-2 programs feeding your IPTV or cable TV head-end. The S75-Pro enables the reception of MPEG-2 elementary stream signals and passes the PID's directly onto the host LAN for redistribution or viewing. Processing of the incoming stream enables the operator to set up multiple programs each with its own internally generated mini-PAT (see Functional Block Diagram below).

As with all S75-based receivers, the RJ45 Ethernet connection provides powerful and distinct installation, performance, and maintenance advantages over other form factors. Installation of the S75-Pro is easy and non-invasive, as the host machine does not need to be opened, nor are any drivers required. The S75-Pro works with any operating system and makes the received data available to any host on the LAN.

Applications

The S75-Pro may be used to deliver IP-based applications, but is ideally suited to applications that involve the aggregation and distribution of MPEG-2 programming. Typical applications include: hotel or cruise ship entertainment, IPTV head-ends, corporate LAN's and cable network head-ends.



S75 Pro MPEG Reception Functional Block Diagram

Features

- Compatible with TCP/IP Protocol Suite
 - DVB-S Compliant
 - Downloadable Firmware
 - 70 Mbps Sustained Throughput
 - RJ45 10/100 Base-T Ethernet Interface
 - Exceptional Flexibility - Delivery of IP or MPEG Services
 - IGMP
- MPEG Features
 - Raw Transport Stream Forwarding
 - SPTS/MPTS
 - Multi-PID Mapping to a Single IP Address
 - Single-PID Mapping to Multi-IP Addresses
 - Forward Original PAT, or Generation of Single Program Mini-PAT's
 - Multicast full DVB Multiplex onto LAN

Technical Specifications **Novra** S75-Pro Receiver/Router

RF Tuner

- Receiving Frequency: 950 to 2150 MHz
- Frequency Acquisition: $\pm 50\%$ Symbol Rate up to ± 10 MHz
- Input Signal Level: -65 dBm to -25 dBm

QPSK

- Symbol Rate: 1.5 to 45 Msps
- Data Rate: 70 Mbps
- Root-Raise Cosine Filter with Roll-off 0.35
- DVB Signalling

FEC

- Decoding: Viterbi/Reed-Solomon
- Viterbi Inner Code: K=7, R=1/2, 2/3, 3/4, 5/6, 7/8 (Auto Detection)
- Reed-Solomon Decoding: 204, 188, T=8
- Deinterleaving: Interleaving Depth=12

LNB Power and Control

- LNB Supply Voltage: Selectable 13/18V, 11/15V or off
- LNB Supply with selectable long line compensation
- LNB Control: Selectable 22 kHz, 44 kHz or off
- LNB Supply Current: 400 mA with Short Circuit and Surge Protection

Configuration

- IP Address Configuration
- PID Selection
- LNB Power
- Transponder Settings: Symbol Rate, Frequency, Polarization, Band, Power
- Management Console Application Available as an Executable for MS Windows
- Static and Dynamic Library available for OEM Configuration Console

Status Monitoring

- Signal Strength
- Signal Lock, Data Lock
- Error status: Viterbi BER, Uncorrectable Errors

Operating Systems

- Once Configured, is OS Independent

Status Indicators

- Power: Red LED
- Signal: Green LED
- Lock: Green LED
- Ethernet Link and Transmit

Hardware Capabilities

- Multiprotocol Encapsulation (MPE)
- PID Filters: 16
- Internal Hardware Watchdog
- Non-Volatile Configuration Storage
- Remote firmware download

Physical Interfaces

- RF Input Connector: F-Type, 75 ohms
- Ethernet 10/100 Base-T LAN Interface: RJ-45

Physical/Environmental

- Height: 1.41 in (3.58 cm)
- Width: 5.22 in (13.27 cm)
- Depth: 4.10 in (10.41 cm)
- Weight: 0.38 Kg
- Operating Temperature: 0C to 40C
- Storage Temperature: -55C to 85C
- Operating Humidity: 10 to 90% Non-Condensing

Standards/Regulatory

- UDP/TCP/IP Protocol
- IP Multicast
- IGMP: V1.0, V2.0
- ETSI 301.192 DVB
- ISO/IEC 13818-1
- ISO/IEC 13818-6
- IEEE 802.3
- FCC/Industry Canada
- CE
- Emission EN 55022
- Immunity EN 55024
- Safety EN 60950

Other S75 Models

- S75+: DVB-S IP Data Receiver
- S75CA: DVB-S IP/MPEG Data Receiver with CI Slot

