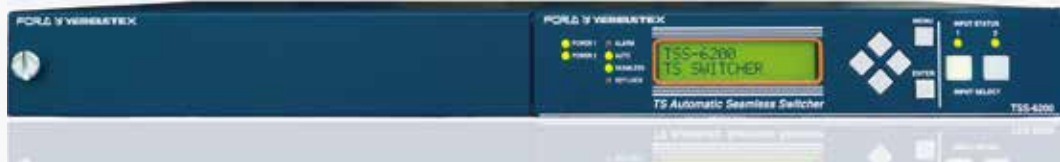# Shockless
Increasing
TS circuit reliability

TSS-6200

TS Seamless Switcher (Dual Input)

Constantly monitors TS signals on a redundant circuit, and switches the output swiftly to the normal line when an error occurs without disrupting output to achieve automatic seamless switching.

This TS automatic seamless switcher constantly monitors two TS signals output from the same encoder on a redundant circuit for errors, and switches the output automatically and seamlessly to the normal line when an error occurs in the selected line. This protects the signal from errors occurring in the transmission path, and further increases the reliability of duplex transmission.

Features

Auto and manual switching

When an error occurs in the input signal of the selected line, the TSS-6200 automatically switches to the normal line. Manual switching is also possible using the selector buttons on the front panel.

Delay adjustment function

The delay difference between different lines is absorbed quickly and both phase inputs are automatically aligned to achieve seamless switching that does not disrupt the output. The delay adjustment range is ±500 ms.

Error detection

In addition to TR101 290, the TSS-6200 monitors the error content occurring in the transmission path, and performs error detection with an emphasis on achieving seamless switching. This helps protect transmission signals from SYNC errors, CC errors, packet loss, NULL only, and other errors that can fatally damage signal quality.

Seamless/Non-seamless mode

Input sources from different transmission sources cannot be seamlessly switched, but Non-seamless mode enables use as a TS automatic switcher when errors occur and in cases where automatic switching or signal management is required.

LCD panel

Various settings can be entered and simple input signal status displays shown using the front LCD panel. Log information is also displayed in real-time when errors and switching occur.

Log function

Error content and switching events are saved together with time information in the unit memory (non-volatile) as a log. The time information uses the time information from the unit internal clock, but connection with an NTP server is also possible.
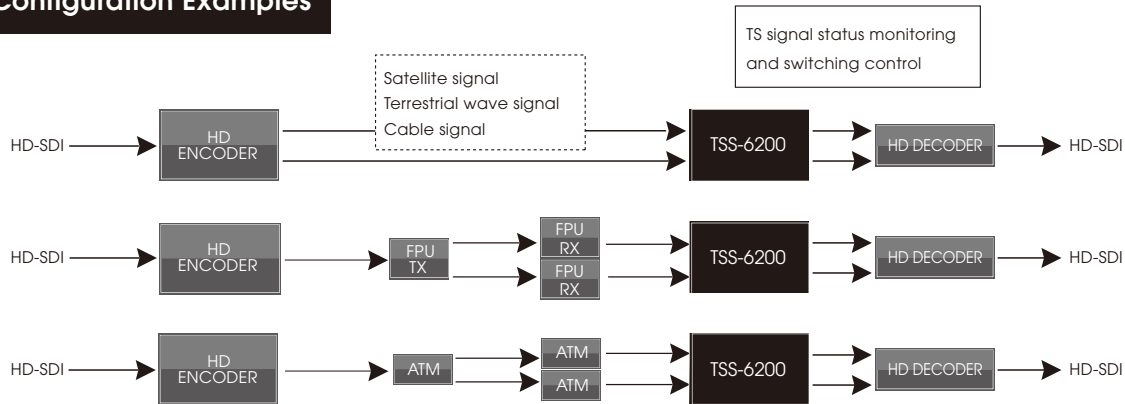
Bypass function

The input signal of the selected line is bypassed (high-frequency relay) to OUTPUT1-1 when the power is off.

External control functions

External control functions such as a dedicated GUI, SNMP (option) and programmable GPIO are equipped as standard, enabling a wide range of remote monitoring and control according to the operation format. The dedicated GUI can be used to make settings and graphically display error monitoring contents. An event log viewer, automatic CSV file generation, and other functions are also provided to facilitate signal management requiring historical condition data.

YEMELETEX

FOR-A
INNOVATIONS IN VIDEO AND
AUDIO TECHNOLOGY.

System Configuration Examples

TS signal status monitoring and switching control

HD-SDI → HD ENCODER → [Satellite signal / Terrestrial wave signal / Cable signal] → TSS-6200 → HD DECODER → HD-SDI

HD-SDI → HD ENCODER → FPU TX → FPU RX / FPU RX → TSS-6200 → HD DECODER → HD-SDI

HD-SDI → HD ENCODER → ATM → ATM / ATM → TSS-6200 → HD DECODER → HD-SDI

External View

Front panel

Back panel

Specifications

Input signal	Signal Standard	DVB-ASI (EN50083-9) compliant
	Format	Data Packet, Burst, 188 bytes/204 bytes
	Effective bit rate	1 to 160 Mbps
	Connector	75 Ω unbalanced BNC x 2
Output signal	Signal standard	DVB-ASI (EN50083-9) compliant
	Format	Data Packet. Packet size can be set to INPUT/188 fixed/204 fixed. (Burst input is converted to Packet output.)
	Effective bit rate	1 to 160 Mbps
	Connector	75 Ω unbalanced BNC x dual distribution x 2 (Selected input signal is bypassed (high-frequency relay) to OUTPUT1-1 when powered OFF.)
Control system	Delay adjustment range	Input signal phase difference within ±500 ms
	System delay	Standard 50 ms (2 to 1000 ms according to set offset value)
	Error detection item (ON/OFF settable)	Packet loss (including illegal code error), SYNC byte/loss error, Transport error indicator, Continuity error (CC error (first PMT series only, error detection ON/OFF setting for each PID)), NULL only error, etc.
	Operating modes	Seamless/Non-seamless mode • Non-seamless mode also supports different input sources as an automatic switcher. (Seamless switching is not possible, but packets can be guaranteed when switching.)
External control	CONTROL 15-pin D-sub (female)	Programmable assignment from GPIO-compatible LCD menu, D-Sub 15-pin (socket) • Over 20 different parameters including IN/OUT settings can be set for each of 13 ports, such as input selection monitoring and control, signal status monitoring for each input, operating mode control, output signal status monitoring, etc. • Input: Photo coupler (7 mA or higher control current 50 ms or longer short-circuit protection time) • Output: Open collector (40 V max voltage, 100 mA max current)
	ETHERNET	10BASE-T / 100BASE-TX RJ-45 • Remote control by dedicated GUI: Main unit control / Signal status display / Event log viewer / Log CSV file auto-save function, etc. • SNMP support: Main unit control and status output, notification of errors and event traps for up to four different IP addresses • For maintenance: Firmware updates
Other	Power supply voltage	100 to 240 V AC ±10% (50/60 Hz) Redundant power supply
	Power consumption	22 W (during dual power supply operation)
	Dimensions	430 (W) x 44 (H) x 450 (D) mm, EIA rack mount (excluding protrusions)
	Weight	7.0 kg
	Operating temperature/humidity	0 to 40°C/ 85% or less (no condensation)

FOR-A YEM ELETEX Co., Ltd.