

TSC 100

TRANSCODING STANDARDS CONVERTER

- NTSC and PAL standards converter
- S-video to composite video encoder
- Composite video to S-video decoder
- Quad standard compatible
- Picture controls
- Buffered loop-through for each input
- Four line adaptive comb filter
- RS-232 control
- Rack-mountable



The Extron TSC 100 is a transcoder and standards converter that allows worldwide compatibility with video standards such as NTSC 3.58, NTSC 4.43, SECAM, and PAL. As a transcoder, it is able to take one video format, such as an analog composite signal, and transcode it into another video format, such as an S-video signal. It provides picture adjustment capability as well as RS-232 control.



Extron® Electronics

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DESCRIPTION

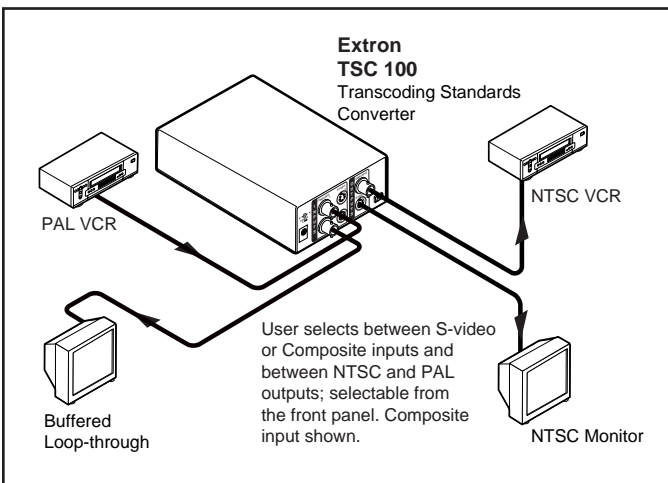
The Extron **TSC 100** is a transcoder and standards converter that accepts NTSC 3.58, NTSC 4.43, PAL, or SECAM composite video or S-video signals and converts them to either NTSC 3.58 or PAL composite video or S-video. An incoming video standard is autodetected and an output standard (NTSC or PAL) is selected using the front panel buttons. A high performance four-line adaptive comb filter performs the Y/C separation, virtually eliminating chroma noise.

Inputs, standards, and picture controls are selectable on the front panel of the TSC 100. Autoswitching is another feature that allows any input to be selected automatically when a video sync signal is detected, making it ideal for automatic routing and unattended operation. RS-232 allows the user to select a black screen or a color bars output when no input is present after being selected. It also enables users to select three factory set sizing options for scaling between NTSC and PAL video signals. The TSC 100 includes an external power supply, and is housed in a quarter rack width, 1U high metal enclosure.

FEATURES

- **Inputs** – Composite video input on a single BNC connector and S-video input on a single 4-pin mini DIN connector.
- **Video input formats** – NTSC 3.58, NTSC 4.43, PAL, or SECAM (quad standard).
- **Video output formats** – NTSC 3.58 and PAL
- **Composite video to S-video decoder**– The TSC 100's decoder function decodes (separates) composite video to S-video, and outputs the S-video and a buffered loop of the composite video input.
- **S-video to composite video encoder** – The TSC 100's encoder function encodes S-video to composite video, and outputs the composite video and a buffered loop of the S-video input.
- **Picture controls** – The TSC 100 offers adjustable color, tint, brightness and contrast for each input.
- **Sizing presets** – Three factory sizing presets for converting between NTSC and PAL.
- **Executive mode** – Executive mode prevents accidental changes by locking out all front panel functions except for input selection.
- **Rack-mountable** – With optional 1U, 19 inch (48cm) rack shelf.

APPLICATION DIAGRAM



SPECIFICATIONS

VIDEO

Gain.....	Unity
Bandwidth.....	10 MHz (-3dB)
Differential phase error.....	0.3°, 0 to 10 MHz
Differential gain error.....	0.36%, 0 to 10 MHz
Crosstalk.....	-60dB @ 3.58 MHz

VIDEO INPUT

Number/signal type.....	1 NTSC/PAL S-video 1 NTSC/PAL composite video
Connectors.....	1 female 4-pin mini DIN 1 female BNC
Minimum/maximum level(s).....	S-video: luma: 2V p-p chroma: 0.6V p-p Composite video: 2V p-p with no offset
Impedance.....	75 ohms
Return loss.....	-30dB @ 5 MHz
Maximum DC offset.....	1.5V

VIDEO PROCESSING

Decoder.....	9 bit digital
Encoder.....	10 bit digital
Digital sampling.....	24 bit, 8 bits per color
Colors.....	16.78 million

VIDEO OUTPUT

Number/signal type.....	2 S-video and composite video (one buffered loop-through in the same format as the input, one converted output in the other format)
Connectors.....	2 female 4-pin mini DIN 2 female BNC
Minimum/maximum levels.....	0V to 2.0V p-p
Impedance.....	75 ohms
Return loss.....	-30dB @ 5 MHz
DC offset.....	±5mV maximum

SYNC

Standards.....	NTSC 3.58, NTSC 4.43, PAL
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CONTROL/REMOTE — TRANSCODER/CONVERTER

Serial control port.....	RS-232, 9-pin female D connector
Baud rate and protocol.....	9600, 8-bit, 1 stop bit, no parity
Serial control pin configurations.....	2 = TX, 3 = RX, 5 = GND
Program control.....	Extron's control program for Windows® Extron's Simple Instruction Set™ – SIS™

GENERAL

Power.....	100VAC to 240VAC, 50/60 Hz, 12 watts, external, autoswitchable; to 12VDC, 1 A power supply.
Rack mount.....	Yes, with optional rack shelf, part #60-190-01
Enclosure type.....	Metal
Enclosure dimensions.....	1.75" H x 4.4" W x 6.5" D (1U high, quarter rack width) 4.4 cm H x 11.1 cm W x 16.5 cm D (Depth excludes connectors and knobs.)
Product weight.....	0.8 lbs (0.4 kg)
Shipping weight.....	3 lbs (1.4 kg)
Listings.....	UL, CUL
Compliances.....	CE, FCC Class A, VCCI, AS/NZS, ICES

Model	Part Number
TSC 100.....	60-451-01



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