

# Specifications — YCS 100 Decoder/Encoder

---

**NOTE** The YCS 100 includes a built-in S-video decoder and a composite video encoder. The encoder portion and the decoder portion are independent and may be used *simultaneously*.

## Video — encoder portion

Gain ..... Unity  
Standards ..... NTSC 3.58, NTSC 4.43, PAL (B, G, H, I, D, N, M), SECAM (B, G, H, D, K, K1, L); autodetected

## Video input and loop-through — encoder portion

Number/signal type ..... 1 S-video, 1 S-video loop-through  
Connectors ..... 1 female 4-pin mini DIN (input), 1 female 4-pin mini DIN (loop-through)  
Nominal level ..... 1 V<sub>p-p</sub> for Y of S-video (including sync)  
0.3 V<sub>p-p</sub> for C of S-video  
Minimum/maximum levels ..... Analog: 0.3 V to 1.5 V<sub>p-p</sub> for Y with no offset at unity gain  
Impedance ..... 75 ohms  
Return loss ..... -27 dB for Y, -31 dB for C @ 5 MHz  
Input coupling ..... AC coupled

## Video processing— encoder portion

Signal processing type ..... Analog encoding

## Video output — encoder portion

Number/signal type ..... 1 composite video  
Connectors ..... 1 female BNC for composite video  
Nominal level ..... 1 V<sub>p-p</sub> for composite video  
Minimum/maximum levels ..... 0.3 V to 1.5 V<sub>p-p</sub> for composite video, follows input  
Impedance ..... 75 ohms  
Return loss ..... -40 dB @ 3.58 MHz  
DC offset ..... ±300 mV with input at 0 offset

## Video input and loop-through — decoder portion

Number/signal type ..... 1 composite video input, 1 composite video loop-through  
Connectors ..... 1 female BNC (input), 1 female BNC (loop-through)  
Nominal level ..... 1 V<sub>p-p</sub> for composite video (including sync)  
Minimum/maximum levels ..... Analog: 0.3 V to 1.5 V<sub>p-p</sub> for composite video with no offset at unity gain  
Impedance ..... 75 ohms  
Return loss ..... -34 dB for composite video @ 5 MHz  
Input coupling ..... Decoder input: AC coupled  
Loop-through input: DC coupled

## Video — decoder portion

Gain ..... Unity  
Standards ..... NTSC 3.58, NTSC 4.43, PAL (B, G, H, I, D, N), SECAM (B, G, H, D, K, K1, L); autodetected

## Video processing — decoder portion

Signal processing type ..... Digital decoding  
Digital sampling ..... 10 bits per color, 30 bits total; 14.3 MHz sampling frequency  
Colors ..... 1 billion  
Decoder type ..... Adaptive 2D, 5-line digital comb filter

---

## Video output — decoder portion

Number/signal type .....	1 S-video
Connectors .....	2 female BNC and/or 1 female 4-pin mini DIN for S-video
Nominal level .....	1 Vp-p for Y of S-video (including sync) 0.3 Vp-p for C of S-video
Minimum/maximum levels .....	0.3 V to 1.5 Vp-p for Y, follows input
Impedance .....	75 ohms
Return loss .....	-40 dB @ 3.58 MHz
DC offset .....	Y: $\pm 300$ mV with input at 0 offset C: $\pm 600$ mV

## General

External power supply .....	100 VAC to 240 VAC, 50/60 Hz, external, autoswitchable; to 12 VDC, 1 A max., regulated
Power input requirements .....	12 VDC, 0.3 A
Temperature/humidity .....	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Rack mount .....	Yes, with optional 1U rack shelf, part #60-190-01 or 60-604-01; 1U, 6" deep rack shelf, part #60-190-10 or 60-604-10; or VersaTools® rack shelf, part #60-190-20 or 60-604-20. Above-projector mountable with optional Multi-Product Projector Mounting Kit #70-217-01. Also furniture mountable with optional Mini Under-Desk Mounting Kit, #70-212-01.
Enclosure type .....	Metal
Enclosure dimensions .....	1.7" H x 4.3" W x 3.0" D (1U high, quarter rack wide) 4.3 cm H x 10.9 cm W x 7.6 cm D (Depth excludes connectors.)
Product weight .....	0.4 lbs (0.2 kg)
Shipping weight .....	3 lbs (2 kg)
Vibration .....	ISTA 1A in carton (International Safe Transit Association)
Listings .....	UL, CUL
Compliances .....	CE, FCC Class A, VCCI, AS/NZS, ICES
Warranty .....	3 years parts and labor

**NOTE** All nominal levels are at  $\pm 10\%$ .

**NOTE** Specifications are subject to change without notice.

(7.52-050506-D1)-112012