Now with Ultricon II, Newvicon or Vidicon

# closed-circuit video equipment Cameras TC1500 Series

# **Low Cost CCTV Cameras**

with the Quality and Features you've come to expect from RCA

24 V, 60 Hz 24 V, 50 Hz 120 V, 60 Hz 220 V, 50 Hz



Versatility

Ideal for those low-cost single or multiple camera applications in small businesses, home surveillance, apartment security, video equipment leasing, etc.

Sensitivity

Usable pictures at only 0.035 fc scene illumination with Ultricon II, 0.05 fc with Newvicon or 0.45 fc with Vidicon.

**Resolution Capability** 

To 550 lines.

**Dynamic Range** 

Better than 660,000:1 Light Range with Ultricon II and Newvicon, 200,000:1 with Vidicon.

**EIA RS-170 or CCIR Sync** 

2:1 interlace. Phase locked to power line zero crossing for smooth switching and Time Lapse Video Tape Recording.

**Low Voltage Operation** 

Mount 24 V Model up to 1000 ft. from a class 2 transformer using only No.18 copper "zip cord" for economical installation.

plus

Short-Proof Low Voltage Power Supply, Automatic Focus Tracking, Controlled Filament Voltage, Ten Step Grey Scale, Auto Black plus Keyed Clamp, White Clipper, Horizontal Drive Loss Protection, Top and Bottom Mount Holes, Balanced Camera Mounting. Two fixed focal length lens options with Vidicon. Five Auto Iris lens options with Newvicon. High Reliability Large Scale Integration (LSI) technology incorporates the majority of circuit functions on two IC's.



# TC1500 Series Cameras Specifications

Camera Tube 2/3" (18 mm) separate mesh, electrostatic focus, magnetic deflection.

Model Number Camera Tube RCA Tube Type		TC1501 Vidicon 4848		TC1501/N Newvicon 4904		TC1501/U Ultricon 4875/U	
Sensitivity (2856 K)		Usable Picture	Full Video	Usable Picture	Full Video	Usable Picture	Full Video
Scene illum.★	fc lx	<b>0.45</b> 4.84	<b>4.5</b> 48.4	<b>0.050</b> 0.538	<b>0.570</b> 6.136	<b>0.036</b> 0.388	<b>0.40</b> 4.306
Scene brightness★		0.33 1.13	3.3 11.3	<b>0.040</b> 0.137	<b>0.430</b> 1.473	<b>0.029</b> 0.099	<b>0.300</b> 1.027
Faceplate illum.	fc lx	0.03 0.32	0.3 3.2	0.004 0.043	<b>0.043</b> 0.463	<b>0.0029</b> 0.0312	0.030 3.229

★ f/1.4 lens, 75% highlight reflectance 1.0 lux (lx) = 0.0929 footcandle (fc) 1.0 nit (nt) = 0.2919 foot Lambert (fL)

Resolution to 550 lines.

Amplitude Response 50% at 240 TVL.

Signal-to-Noise better than 43 dB. FET input amplifier.

#### **Light Range:**

Vidicon Cameras - 200,000:1.

Ultricon/Newvicon Cameras — Greater than 660,000:1 with f/1.4 to f/360 auto-iris lens. Depends on lens.

Grey Scale 10 steps.

Video Output 1.0 or 1.4 V p-p composite. Internal jumper selectable.

White Clipper keeps highlights within preset level to avoid monitor or VTR overdrive.

**Auto Black** plus keyed clamp maintain constant pedestal setup over entire operating range.

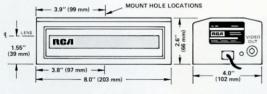
Sync 2:1 interlace. Phase locked loop synchronizes camera to power line zero-crossing.

60 Hz Models - EIA RS-170.

50 Hz Models - CCIR.

Sweep Loss Protection Camera tube shutdown if horizontal sweep is lost.

## Power-On Indicator Red LED.



LS-7062

#### Supply Voltage:

24 V, 50 or 60 Hz Models — 21 to 28 volts. 120 V, 60 Hz Models — 105 to 130 volts. 220 V, 50 Hz Models — 198 to 264 volts.

## Power:

24 V, 50 or 60 Hz Models — 9 watts nominal. 120 V, 60 Hz Models — 8 watts nominal. 220 V, 50 Hz Models — 9 watts nominal

Lens Options:	Model No. ▲		
Fixed Lenses Without Iris	Vidicon Cameras		
8.5 mm, Wide Angle f/1.6	TC1501/8		
16 mm, Standard f/1.6	TC1501/16		
Less lens	TC1501		

#### ES Type Auto Iris Lenses to f/360

ES Type Auto Ins Lenses to 1/300						
	Newvicon	Ultricon II				
8.5 mm, f/1.5	TC1501/N8	TC1501/U8				
12.5 mm, f/1.4	TC1501/N12	TC1501/U12				
16 mm, f/1.6	TC1501/N16	TC1501/U16				
25 mm, f/1.4	TC1501/N24	TC1501/U24				
50 mm, f/1.8	TC1501/N49	TC1501/U49				
75 mm, f/1.8	TC1501/N74	TC1501/U74				
Less lens	TC1501/N	TC1501/U				

▲ 120 V, 60 Hz Models shown.
for 24 V, 60 Hz replace '1501' with '1502'.
for 220 V, 50 Hz replace '1501' with '1504' and add suffix 'X'.
for 24 V, 50 Hz replace '1501' with '1502' and add suffix 'X'.

Lens Mount Standard "C".

Camera Mounts Both bottom and top. 1/4"-20 tapped.

Video Connector BNC.

Case Metal.

Finish Non-reflecting light & dark beige.

Weight 2.8 lbs. (1.3 kG) less lens.

**Dimensions**  $2.6 \times 4.0 \times 8.0$  inches less lens  $(66 \times 102 \times 203 \text{ mm})$ .

## **Environment:**

Temperature - 0 to 130° F (-18 to 54° C). Humidity - 0 to 95% relative.

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