

KAY LAB

BROADCAST CAMERA CHAIN



TELEVISION
STUDIO
CONSOLE

KAY-LAB BROADCAST CAMERA CHAINS

KAY-LAB Broadcast Vidicon Camera Chains are designed to provide the ultimate in high performance at moderate cost. The system is ideally suited for film pick-up, studio and remote operations. The use of KAY-LAB accessories allows complete remote camera control of pan and tilt and lens iris and focus. KAY-LAB Camera Chains can be added to present station facilities without requiring additional personnel. The camera is designed to use economical 16mm lenses.

The Broadcast Unit consists of a Camera and Camera Control. The small compact camera contains a double cascode video pre-amplifier and vidicon pick-up tube. Electro-magnetic focusing and electrical centering are incorporated. The output from the Camera is fed to the Camera Control unit which includes the video line amplifier, deflection chassis and electronically regulated power supply. These three sections are fabricated from removable modular sub-assemblies. Keyed clamps, and adjustable black level clamps are combined in the video amplifier strip. In addition, amplitude and phase aperture correction circuits are used. This video line amplifier has an overall band width in excess of eight megacycles.

The deflection chassis is operated from standard negative horizontal and vertical driving pulses and negative mixed blanking. The dynamic focus unit is also housed on this chassis. The electronically regulated power supply affords stable operation regardless of line and load variations.

KAY-LAB's small cameras allow for direct pick-up from a group of projectors providing separate preview of each film chain. Small light weight design results in the ideal system for field pick-up use. The high quality of the system makes it an excellent unit for studio live and slide pick-up. The low cost makes it the perfect system for standby video originating equipment at remote transmitter sites.

KAY-LAB Studio Consoles make one man operation possible. These units provide full remote control of studio cameras including pan, tilt, lens iris and focus control from a single position. All electrical adjustments to the camera are performed from the Camera Control unit.

Studio Consoles contain.....High Resolution Monitor....."A" Scope.....
Camera Control Unit.....Switcher Fader Unit.....Remote Pan and Tilt Unit
.....Remote Lens Iris and Focus Control Unit.....Audio Control Unit.

KAY-LAB has combined high performance and low cost. KAY-LAB's years of engineering experience in the field of precision laboratory instruments results in this optimum combination of laboratory quality with rugged durability.



BROADCAST
CAMERA SYSTEM



VIEWFINDER CAMERA
ON TRIPOD DOLLY

KAY-LAB BROADCAST CAMERA CHAIN SPECIFICATIONS

GENERAL SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

Camera:

Double cascode video amplifier
 8 megacycle band width
 Electro-magnetic focusing
 Deflection reversing switch
 Tally Light
 Inter-communication circuit

Input Power:

Line voltage. . . 105 to 125 volts,
 single phase
 Line frequency. 60 cycles, single
 phase
 Line current. . . 3 amp.
 Power 300 watts

Camera Control:

Video Line Amplifier

8 megacycle band width
 Aperture Correction
 Keyed Clamps
 Adjustable black level clamps

Deflection Chassis

Horizontal and Vertical Deflection
 Chassis
 Horizontal and Vertical Blanking
 Amplifiers
 Dynamic Focusing Circuit

Electronically Regulated Power
 Supplies

High gain amplifier
 Series tube stabilized
 Low DC and AC output impedance

Operative Controls

Pedestal
 Target
 Beam
 Video Gain

Non-Operative Controls
 (Accessible through removable
 front Plate)

Focus
 Dynamic Focus
 Horizontal Linearity
 Horizontal Size
 Vertical Size
 Vertical Linearity
 Vertical and Horizontal Centering

Input Signal:

	Volts (Peak to Peak)	Frequency In Cycles Per Second
Horizontal Drive - 4 volts (Negative)	4	15,750
Vertical Drive - 4 volts (Negative)	4	60 cycles

Mixed Blanking - 4 volts Standard RMA
 (Negative)

Output Signal:

Picture Components . . . 1 volt
 Blanking set-up. 0 to 100%

Frequency Response:

Camera in excess of 8 megacycles
 Line amplifier in excess of 8 megacycles

Horizontal Resolution:

In excess of 600 lines (with
 6326 Vidicon)

Spectral Response:

Similar to that of the human eye.

Sensitivity:

50 to 100 ft. candles normally required.

Impedances:

Input synchronization . high impedance
 Output Picture. 75 ohms (can be
 terminated at camera
 control or end of line)

Lens Mount. 16mm Type C
 (Can be used without lens for direct
 attachment to projector)

Camera Dimensions . . . 9-1/2"L x 3-1/2"W
 x 5-1/4"A

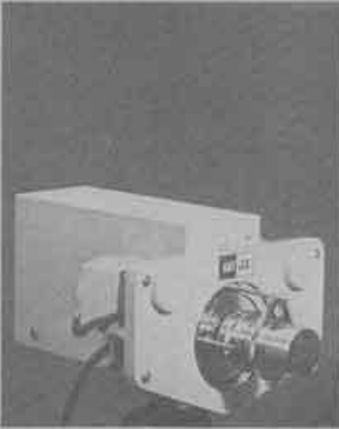
Camera Control Dimensions

19"W x 8-3/4"H
 x 13-1/4"D

KAY-LAB, 1090 Morena Blvd., San Diego 10, Calif.
 Representatives in all major cities



REMOTE
PAN-TILT
HEAD



REMOTE
LENS
CONTROL



REMOTE
PAN-TILT
AND LENS
CONTROL

KAY-LAB TELEVISION CAMERA ACCESSORIES

KAY-LAB manufactures a complete line of specially designed accessories for use with camera chains. These units are designed to increase system flexibility at moderate cost. .

REMOTE MONITORS: Ten, seventeen and twenty-one inch.....8 megacycle video amplifiers.....linear deflection systems.....aluminized tubes operated at maximum voltage for optimum brightness and contrast.

REMOTE CONTROL UNITS -

Remote Pan and Tilt.....290° remote panning.....90° remote tilt
.....110 volt 60 cycle input

Remote Lens Iris and Focus.....controls both iris and focus.....
no permanent attachment to lens.....rapid lens interchange

ELECTRONIC VIEW FINDERS -

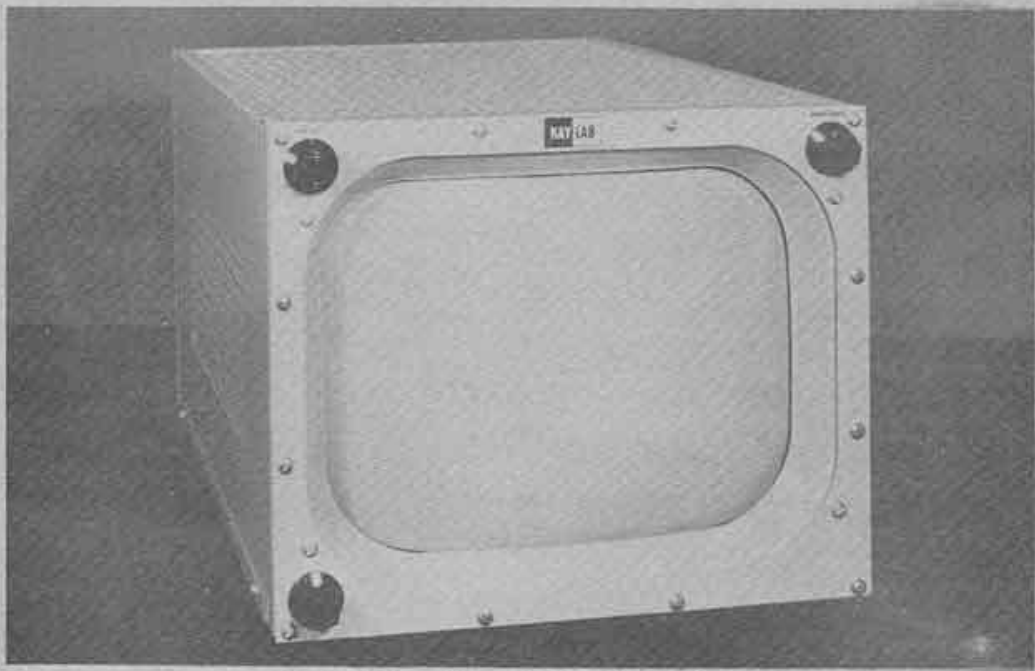
THREE INCH VIEW FINDER: Mounts on camera.....overscan switch
effectively produces 6 inch scan for center optical focus.....

FIVE INCH VIEW FINDER: Camera "slips" inside.....provides side
focus "knob".....4 lens turret.....turret handle on back of view
finder.....wide band video amplifiers

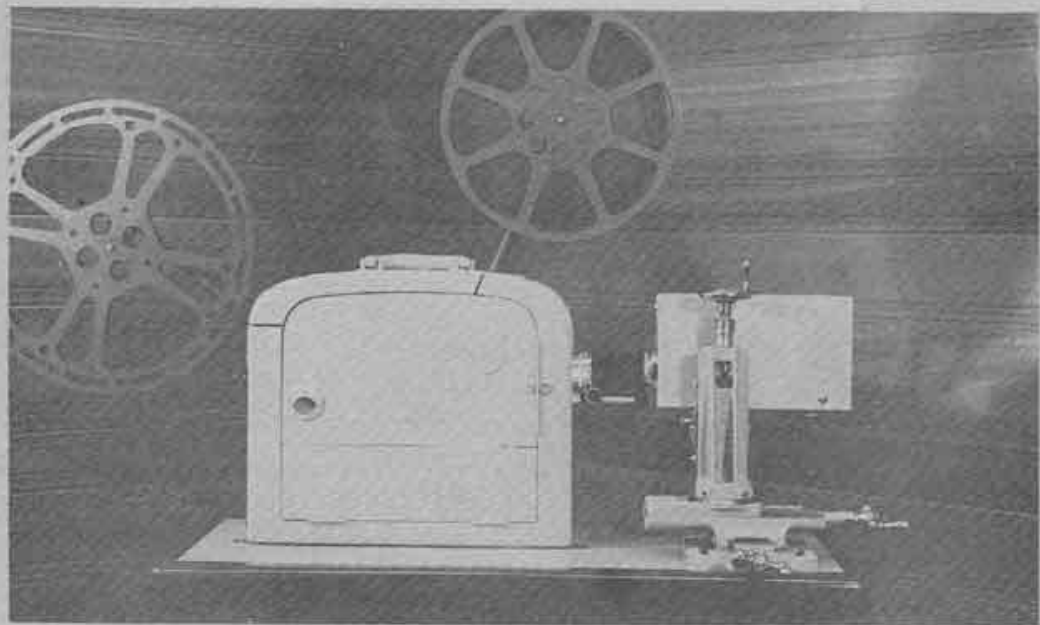
RF MODULATORS: Convert video output to RF frequency of commercial TV
channels.....small unit attaches to camera control.....rack mounted
units provide audio-video mixing as well as RF modulation.

LENS: Wide variety of inexpensive high quality 16 mm lens available
.....including 20 mm to 60 mm variable focal length zoom type.

TRIPODS, DOLLIES, CABLES and all other necessary camera
accessories.



17 INCH VIDEO MONITOR



FILM PICK-UP UNIT

KAY-LAB TELEVISION SYSTEM

Broadcast System:

Camera, Camera Control including aperture correction and dynamic focusing, 25' of Control Cable with a 6198 Vidicon. \$2200.00

Camera, Camera Control including aperture correction and dynamic focusing, 25' of Control Cable with a 6326 Vidicon. 2450.00

Accessories:

Ten inch remote video monitor 350.00
 Seventeen inch remote video monitor 425.00
 Twenty-one inch remote video monitor. 550.00
 Modulator for any one Low Band TV Channel (2-6) 100.00
 Audio-Video mixer and modulator for any TV Channel (2-13) 600.00
 Tripod. 50.00
 Turret for three lens operation 150.00
 Remote control for lens iris and focus. 250.00
 Remote control for camera vertical and horizontal positioning 250.00
 Two channel switcher fader. 500.00
 A Scope (3") 350.00
 Dolly 75.00
 Pulse generator (provides driving and mixed blanking pulses). 500.00

Lens:

1/2" F1.5 Coated Lens. 110.60
 1" F1.5 Coated Lens. 146.00
 1" F1.9 Coated Lens. 61.30
 2" F1.5 Coated Lens. 130.00
 2" F2.5 Coated Lens. 74.50
 3" F2.5 Coated Lens. 87.50
 4" F4.5 Coated Lens. 72.50
 6" F4.5 Coated Lens. 98.50
 20 to 60 mm Zoomar Type Lens 332.00

Vidicon Tubes (6198). 345.00

Vidicon Tubes (6326). 595.00

Camera Control Cables:

When extra cable is ordered with initial purchase and it is to be in one continuous length, the additional charge is based on the price per foot listed below. If additional cables with separate connectors on either end are desired, add \$25.00 to the prices per foot below.

Heavy Duty Industrial and Broadcast Cable: Includes all wires necessary for use of dynamic focusing system and extra shielded pair for intercom circuit. Entire cable has shield and is covered by phenolic jacket - 75¢ per ft.

