



JOHNSON-SEA-LINK Video System

for 2003 Operating Season

Camera – Three $\frac{2}{3}$ " CCD digital processing camera head, with 16:9 or 4:3 aspect ratio
4:3 mode - 850 TV lines (center) horizontal resolution (High Band Detail ON)
16:9 mode - 800 TV lines (center) horizontal resolution (High Band Detail ON)
62 dB signal to noise ratio (High Band Detail OFF)
4:2:2 component serial digital output, 10 bit (SMPTE 259M-C)
Sensitivity 2,000 lux @ f11 with 3,200° K light source
Water correcting optics, diopter & dome port in titanium housing

Lens - Canon J8x6KRS, 6-48mm focal length, 8:1 zoom ratio
Remote zoom & focus, auto or manual iris
Angular field of view = 72.51 x 57.62° (85.02° diag.) @ 6mm
(in decimal degrees) = 10.47 x 7.86° (13.04° diag.) @48mm
0.3 meter (1 foot) minimum object distance (M.O.D.) from front of lens,
Full remote focus control from 0.3 meter to infinity

Main Recorder – JVC model BR-B40U Digital-S operated as a standalone recorder
SMPTE D9 standard, NTSC format, 4:2:2 component input
>550 lines resolution, 55 dB signal to noise ratio
SMPTE Linear Time Code in/out, 16 bit PCM digital audio, 2 channels

Backup Recorder – Consumer type miniDV, NTSC

Monitor - Color LCD monitor.

Pilot's Controls;

Camera and Arc Light pan & tilt
4 camera mounted 200W flood lights - 3200° K
2 extra 28VDC, 15 amp outputs
- usually two 360W lights 3200° K
White Balance, Black Balance set
Auto/manual iris
Zoom & Focus
Record Start/Stop

0 dB, +9dB, & +18dB camera gain
3200° K, Auto white balance & color bars select
Data Overlay On/off

Observer's Handheld Controls;

Zoom & focus
Camera pan & tilt
Optional remote paint box

Arc Light - Xenon short arc lamp, 1000W. 30,000 lumen output @ 6,000° Kelvin.

HMI Lights - Up to four 400W HMI lights, @ 5,600° K

Notes

Data overlay can be recorded as Closed Captioned information in the vertical blanking interval and contains the depth, temperature, & salinity information from the Seabird Electronics SBE-19 CTD datalogger.

Shipboard editing will include a Digital-S player/recorder with dubbing to miniDV, Hi8, and VHS machines.