

THE LUNARSCAN PROJECT - MOONWATCH - TEAM REPORT

SEPTEMBER 18, 2011

TARGET:

SECTION 31

COPERNICUS

MISSION PLAN:

Camera 1 mini finder switchable to CCD camera
Camera 2 Internal
Camera 3 CMOS/LPI / Skyglobe graphics
Camera 4 CMOS/SSI / VMA graphics

CAMERAS:

On video switching

CAMERA ONE POSITION ON QUAD

* Finder: mini cam

* LPS Unit (NIS this date): CCD, GBC-200 (charge coupled device)

OPTICS

Celestron NexStar 80GT, 80 mm (3.1") 400 mm f/l f/5 focal ratio; aperture video data recorder on Quad VHS1 DVR1 Sony only. Camera used is optional but planned as GBC-200 with regular T-C adaptor and 25mm eyepiece.

CAMERA TWO POSITION

* Internal camera when HPS 1 not in use

* HPS Unit 1: CCD, GBC-400 (charge coupled device)

OPTICS

Celestron, 8" 2032 mm / 26 mm plossyl in adjustable T-C adaptor; aperture video data recorder on Quad VHS1 DVR1 Sony

CAMERA THREE POSITION

* HPS Unit 2: CMOS/LPI (Meade Lunar Planetary Imager / complementary metal oxide semiconductor)

OPTICS

Celestron, 8" 2032 mm/ prime focus equiv 6 mm, (90x (w/Barlow 150x)
VGA resolution (640x480) color CMOS chip
30 fps

Switchable to SKYGLOBE graphics

Digital to Analog Converter 2; TEP-100 Elite Pro II, aperture video VHS2

CAMERA FOUR POSITION

* HPS Unit 3:

CMOS/SSI Camera, (Celestron Neximage Solar System Imager / complementary metal oxide semiconductor)

OPTICS

Celestron, 8" 2032 mm/ prime focus (SSI equiv 5 mm, w/Barlow 150x)

VGA resolution (640x480) color ¼" CMOS chip

30 fps

Compression 1420

Digital to Analog Converter 1; TEP-100 Elite Pro, aperture video DVR2

Switchable to

* VMA (Virtual Moon Atlas) graphics

CONFIG

Celestron C-8, no diagonal, hand control, battery eliminator on drive

Resolution 0.68 arcsec / lunar target at 0.5 degree/2160 miles wide = 0.23 miles or 1214'.

REPORT NOTES

Section 31 Copernicus updated