







4

© 2012 Whitham D. Reeve

<u>O</u>bservatory













	/
·1	10

















	• For extending the upper frequency range of CALLISTO Receiver to above 870 MHz
. Reeve	CALLISTO Receiver and associated software provide basic hardware/software platform for up- and down-
Whitham D	converters
© 2012	18













Receiver Specifications

value
45 to 870 MHz +
62.5 kHz
300 kHz
50 ohms
–120 to –10 dBm (typical)
40 dB
10 dB (typical)
800 channels/second
Up to 400
25.4 mV/dB
10 bit (North American version)
· · · · · ·

Parameter	Value
ıterfaces	RF input Video output External clock EIA-232 I/O Focal plane unit control Power input jack
Clock	Internal or external (1 MHz TTL*)
Auxiliary output control	Focal Plane Unit *
Control method	Windows software (2000, Vista, XP & 7)
Software output	Data (.fit) Activity log (.txt) Light-curve (.txt) Spectral overview (.prn)

Receiver Specifications Cont'd

Input voltage12 Vdc nominal (9 to 15 V)Input current255 mA nominalWeight0.9 kg
Input current255 mA nominalWeight0.9 kg
Weight 0.9 kg
Dimensions 200 mm long x 110 mm wide x 82 mm

27



	Software
• Callisto	↓ e-Callisto Radiospectrometer REEVE ↓ ↓ Edit Help ↓ ↓ Receiver connected 11/15/2011 00:07:36, \$HST:Enable data transfer ▲ 00:07:36, \$HST:Continuous measurement ▲ 00:07:36, \$HST:Started ▲ 00:07:36, \$HST:Start new FITS-file ▲ 00:07:36, \$HST:Continuous measurement ↓ 00:07:36, \$HST:Start new FITS-file ↓ 00:07:37, \$HST:XY plot selected ↓ 00:08:04, \$HST:Info panel opened ▼
© 2012 Whitham D. Reeve	Load = 22% Next sched.: 01:00:00 Time: 00:09:25 Main functions Select frequencyfile Lightcurve y(t) Start measurement Spectrum y(f) Stop measurement Spectrum y(f, t) Save spectral overview © Manual

		Software
equency Ge	enie	
🚾 Generate CALLISTO frequency (programm out of a spectral overvie	···· X
Frequency range to exclude: from to Channel selection method: © Minimum Detection © Equally Spaced Type of converter: © Direct RX if=if © Downconverter if=if-if (USB) © Downconverter if=if-if (USB) © Upconverter if=if+io Sweeplength 10400: 200 rf-startfrequency (MHz): 45 rf-stopfrequency (MHz): 870	Graph: Max: 2500 Redraw Autoscale Min: 500 C:\ C:\ C:\ C:\ C:\ C:\ C:\ C:\	File(s): Help Integrate Delete Save Program Exit OVS_ALASKA_REEVE_8b_20110401_120000 pm Exit Exit OVS_ALASKA_REEVE_8b_20110401_120000 pm OVS_ALASKA_REEVE_8b_20110402_120000 pm Image: State
L0 (converter) [MHz]:		

Software
• AutoScheduler & WWW Genie
Generator->Scheduler ETH, 2011-06-03/cm
Date: 31-10-2011 Local time: 13:30:24
Sunrise=17:24:45 -> scheduler.start 17:15:00 Transit=21:43:28 -> scheduler.restart 21:30:00 Sunset=02:03:59 -> scheduler.stop 02:00:00 Monitor=02:33:59 -> scheduler.ovs 02:30:00
PNG plotter Callisto REEVE_8b
10/1/2011 17:35:43 Wait C:\CALLIST0114_8\LC\LC20111001_ADU_REEVE_8b.txt C:\CALLIST0114_8\LCPlotter\Plots\LightcurvesREEVE_8b.png Fast
www.geni.exe, V1.10 2011-04-04/cm





Prices (not including	shipping)
Description	Price (US\$)
CALLISTO Receiver, complete kit	325.00
CALLISTO Receiver, partially-built	425.00
CALLISTO Receiver, ready-built	475.00

LNA power coupler (LPC)	995.00
AC power adapter (North America only)	20.00

