APPENDIX B - MOUNT SPECIFIC DATA For Sat-Comm 1.2m & 1.6m

Date: 8 Jan 2010 Software: 1.60

This appendix describes RC3000 operations unique for two Sat-Comm mounts. Differences between these versions and the operation described in the "baseline" RC3000 manual are noted on a paragraph by paragraph basis.

1.1 Manual Organization

This appendix is provided as a supplement to the baseline RC3000 manual.

1.2 Mount Models

DESIGNATION	Sat-Comm MODEL
B8	1.2 m.
B9	1.6 m.

1.3.2 System Interface Requirements

The Sat-Comm mounts follow the standard RC3000 interface requirements with a few exceptions:

- 1) A software polarization "switch" will be mechanized at the -90 (+/- 2 degrees) position
- 2) No Elevation Up limit switch is present

2.1.4 Inclinometer Orientation

The inclinometer should be rigged with the face of the reflector vertical.

2.3.2 Elevation Reference Position

MODEL	VOLTAGE	OFFSET ANGLE
B8	1.69	14.65
B9	1.69	18.0

2.3.4 Polarization Calibration

A software polarization limit switch will be mechanized at the -90 (+/- 2 degrees) position. Interlock logic will require that this "switch" be active in order for elevation to be allowed to move below the DOWN limit.

NOTE: Care in centering the polarization potentiometer must be taken to ensure that a severed (open) polarization line will not be perceived as a polarization STOW condition. Damage to the mount may occur if the elevation axis is allowed to move towards the stow position without the polarization mechanism in a physically safe stow position. As part of calibration, confirm that an open potentiometer only appears as a CCW limit and not as a STOW (-90 +/- 2 degrees) limit.

3.3.1.2 Reset Defaults

The following table supplies the default configuration item values for each model of mount. Values are common between mounts except for the unique items shown.

Space has also been provided to record installation specific changes to the configuration items. Note: recording of installation specific changes to defaults may prove valuable when trying to restore system configuration.

CONFIGURATION ITEM	B8	В9					INSTALL
							VALUE
SYSTEM DEFINITION					ı	1	
antenna_size_cm	120	160					
AZIMUTH CALIBRATION							
Zero Voltage	2.50						
Azim_offset	0.0						
ccw_azim_limit	200						
Cw_azim_limit	200						
Azim_Scale_Factor	77.5						
ELEVATION CALIBRATION							_
Zero Voltage	1.69						
Elev_offset	0.0						
Up_elev_limit	90						
Down_elev_limit	0						
Elevation_Scale_Factor	50.00						
Elevation_look_configuration	1						
POLARIZATION CAL			•				
Zero Voltage	2.50						
Polarization_Offset	0.0						
CW Polarization Limit	90.0						
CCW Polarization Limit	90.0						
Pol_Scale_Factor	41.67						
Polarization_type	2						
H/V_Reference	1						
Default Horizontal Position	-45.0						
Default Vertical Position	45.0						
Pol_Automove_Enable	1						
SIGNAL PARAMETERS	I.		•	<u> </u>	ı	ı	
Channel 1 Polarity	1						
Channel 1 Threshold	100						
Channel 1 Delay	0.1						
Channel 1 Lock Type	0						
Channel 2 Polarity	1						
Channel 2 Threshold	100						
Channel 2 Delay	0.1						
Channel 2 Lock Type	0						
AUTOPEAK	٧_	l.			l		
Autopeak Enabled	0						
Signal Source	1						
RF Band	1		+				
Spiral Search AZ Limit	5						
Spiral Search EL Limit	5						
Spiral Signal Threshold	200		+				
Scan Range Limit	10						
Scan Signal Threshold	200						
ocan olynai miesholu	200				<u> </u>		

CONFIGURATION ITEM	В8	В9						INSTALL VALUE
AZIMUTH POT DRIVE		l.	l l	<u> </u>		I		
Fast/Slow Threshold	2.5							
Maximum Position Error	0.20							
Coast Threshold	0.1							
Maximum Retry Count	3							
AZIMUTH PUĹSE DRIVE		l.	u .					I.
Pulse Scale Factor	4092							
CW Pulse Limit	64000							
CCW Pulse Limit	100							
Fast/Slow Threshold	50							
Maximum Position Error	1							
Coast Threshold	1							
Maximum Retry Count	3							
AZIM DRIVE MONITORING				•		•	•	•
Jam Slop	1							
Runaway Slop	200							
Fast Deadband	1000							
Slow Deadband	500							
ELEV POT DRIVE		•	•		•	•	•	•
Fast/Slow Threshold	3.0							
Maximum Position Error	0.2							
Coast Threshold	0.4							
Maximum Retry Count	3							
ELEV PULSE DRIVE				•	•	•		
Pulse Scale Factor	1197							
UP Pulse Limit	64000							
Down Pulse Limit	100							
Fast/Slow Threshold	50							
Maximum Position Error	0							
Coast Threshold	3							
Maximum Retry Count	3							
ELEV DRIVE MONITORING								•
Jam Slop	1							
Runaway Slop	200							
Fast Deadband	1000							
Slow Deadband	500							
POL POT DRIVE								•
Fast/Slow Threshold	2.0							
Maximum Position Error	0.5							
Coast Threshold	0.3							
Maximum Retry Count	3							
POL DRIVE MONITORING								
Jam Slop	1							
Runaway Slop	200							
Fast Deadband	1000							
Slow Deadband	500							

CONFIGURATION ITEM	B8	В9				INSTALL VALUE
TRACK						
Search Enable	0					
Max Track Error	3					
Search Width	4					
Peakup Holdoff Time	120					
Track Signal Source	SS1					
Signal Sample Time	2					
REMOTE CONTROL						
Remote Enabled	1					
Bus Address	50					
Baud Rate	6					
STOW / DEPLOY						
AZ STOW	0.0					
EL STOW	-67.5					
PL STOW	-90.0					
AZ DEPLOY	0.0					
EL DEPLOY	14.65	18.0				
PL DEPLOY	0.0					
PL ENABLED	3					