

# MOUNT SPECIFIC DATA

## For

### Vertex-RSI 1.2m QDMA

### Motorized Auto-Acquire Flyaway Antenna

Revision: 10 March 2011

This appendix describes RC4000 operations unique for the 1.2m QDMA antenna. This mount is denoted as VN. Differences between this version and the operation described in the "baseline" RC4000 manual are noted on a paragraph by paragraph basis.

#### 1.1 Manual Organization

This appendix is provided as a supplement to the baseline RC4000 manual.

#### 1.2 RC4000 Features

The following mount-specific features have been provided:

- No azimuth STOW limit switch is utilized
- An AUX DOWN limit switch is utilized to limit elevation movement to above 15 degrees when the azimuth axis is at angles beyond +/- 110 degrees.

#### 4.1.2 Elevation Calibration

The elevation reference voltage should be set when the reflector is at the 45-degree position, given the mount's prime focus configuration. The elevation angle indicated should be 45.0 degrees.

#### 3.3.1.3.1 Reset Defaults

The following table supplies the default configuration item values for this model of the RC4000.

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	VN							INSTALL VALUE
<b>SYSTEM DEFINITION</b>								
GPS Present	1							
Compass Present	2							
Initial Mode	2							
Serial Number	0							
Antenna Size	120							
Waveguide Switch Present	0							
<b>AZIMUTH CALIBRATION</b>								
Reference Voltage	2.50							
Offset	-90.0							
CCW Limit	-180.0							
CW Limit	180.0							
Scale Factor	86.20							
Initial Display	1							
<b>ELEVATION CALIBRATION</b>								
Reference Voltage	2.50							
Offset	0.0							
Up Limit	95.0							
Down Limit	0.0							
Scale Factor	50.00							
Look Configuration	1							
<b>POLARIZATION CALIBRATION</b>								
Reference Voltage	2.50							
Offset	0.0							
CW Limit	100.0							
CCW Limit	-100.0							
Scale Factor	60.17							
Type	1							
H/V Reference	1							
Band	1							
LNB LO Frequency	10750							
Locate Automove	1							
<b>RF SIG FACTORS</b>								
Lock Type	0							
Delay Time	1.0							
<b>SS1 SIG FACTORS</b>								
Lock Type	0							
Delay Time	1.0							
Threshold	100							
Polarity	1							
<b>SS2 SIG FACTORS</b>								
Lock Type	0							
Delay Time	1.0							
Threshold	100							
Polarity	1							
<b>AUTOPEAK</b>								
Autopeak Enabled	1							
Signal Source	4							
Spiral Search AZ Limit	3							
Spiral Search EL Limit	3							

Spiral Search Signal Threshold	200							
Scan Range Limit	8							
Scan Signal Threshold	400							
Pol Tilt Compensation	1							
<b>AZIMUTH POT DRIVE</b>								
Fast/Slow Threshold	2.5							
Maximum Position Error	0.20							
Coast Threshold	0.1							
Maximum Try Count	3							
<b>AZIMUTH PULSE DRIVE</b>								
Pulse Scale Factor	1526							
Divide Ratio	9							
CW Pulse Limit	64000							
CCW Pulse Limit	100							
Fast/Slow Threshold	50							
Maximum Position Error	1							
Coast Threshold	3							
Maximum Try Count	3							
<b>AZIMUTH DRIVE PARAMETERS</b>								
Fast Voltage	100							
Slow Voltage	50							
Current Limit	100							
Acceleration	50							
Deceleration	50							
IR Compensation	0							
Jam Slop	4							
Runaway Slop	200							
Fast Deadband	1000							
Slow Deadband	500							
<b>ELEVATION POT DRIVE</b>								
Fast/Slow Threshold	3.0							
Maximum Position Error	0.20							
Coast Threshold	0.4							
Maximum Try Count	3							
<b>ELEVATION PULSE DRIVE</b>								
Pulse Scale Factor	1038							
Divide Ratio	10							
Up Pulse Limit	64000							
Down Pulse Limit	100							
Fast/Slow Threshold	50							
Maximum Position Error	1							
Coast Threshold	3							
Maximum Try Count	3							
<b>ELEVATION DRIVE PARAMETERS</b>								
Fast Voltage	100							
Slow Voltage	50							
Current Limit	100							
Acceleration	50							
Deceleration	50							
IR Compensation	0							
Jam Slop	4							
Runaway Slop	200							

Fast Deadband	1000						
Slow Deadband	500						
<b>POLARIZATION POT DRIVE</b>							
Fast/Slow Threshold	2.0						
Maximum Position Error	0.5						
Coast Threshold	0.3						
Maximum Try Count	3						
<b>POLARIZATION PULSE DRIVE</b>							
Pulse Scale Factor	1000						
Divide Ratio	10						
CW Pulse Limit	64000						
CCW Pulse Limit	100						
Fast/Slow Threshold	50						
Maximum Position Error	0						
Coast Threshold	3						
Maximum Try Count	3						
<b>POLARIZATION DRIVE PARAMETERS</b>							
Fast Voltage	100						
Slow Voltage	50						
Current Limit	100						
Acceleration	50						
Deceleration	50						
IR Compensation	0						
Jam Slop	4						
Runaway Slop	200						
Fast Deadband	1000						
Slow Deadband	500						
<b>STOW / DEPLOY</b>							
Az Stow	0.0						
EI Stow	95.0						
Pol Stow	0.0						
Az Deploy	0.0						
EI Deploy	20.0						
Pol Deploy	0.0						
Pol Move	3						
Stow Timer	0						