

## APPENDIX B - MOUNT SPECIFIC DATA

### For

### AVL Technologies 1888 Mount

Date: 12 June 2005

Software: 1.53

This appendix describes RC3000 operations unique for the AVL 1888 mount. Differences between this version 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 Model

DESIGNATION	MODEL
AY	1.8 m. / 400 deg. azimuth / Gamma-F C-band

#### 1.3.2 System Interface Requirements

All mounts in the AVL family follow the standard RC3000 interface requirements.

#### 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
AY	1.69	22.3

#### 3.3.1.2 Reset Defaults

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

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	AY							INSTALL VALUE
<b>SYSTEM DEFINITION</b>								
antenna_size_cm	180							
<b>AZIMUTH CALIBRATION</b>								
Zero Voltage	2.50							
Azim_offset	0.0							
ccw_azim_limit	192							
Cw_azim_limit	192							
Azim_Scale_Factor	80.0							
<b>ELEVATION CALIBRATION</b>								
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							
<b>POLARIZATION CAL</b>								
Zero Voltage	2.50							
Polarization_Offset	0.0							
CW Polarization Limit	95.0							
CCW Polarization Limit	95.0							
Pol_Scale_Factor	39.33							
Polarization_type	2							
H/V_Reference	1							
Default Horizontal Position	-45.0							
Default Vertical Position	45.0							
Pol_Automove_Enable	1							
<b>SIGNAL PARAMETERS</b>								
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							
<b>AUTOPEAK</b>								
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							

<b>CONFIGURATION ITEM</b>	<b>AY</b>						<b>INSTALL VALUE</b>
<b>AZIMUTH POT DRIVE</b>							
Fast/Slow Threshold	1.5						
Maximum Position Error	0.20						
Coast Threshold	0.1						
Maximum Retry Count	3						
<b>AZIMUTH PULSE DRIVE</b>							
Pulse Scale Factor	2000						
CW Pulse Limit	64000						
CCW Pulse Limit	100						
Fast/Slow Threshold	50						
Maximum Position Error	1						
Coast Threshold	5						
Maximum Retry Count	3						
<b>AZIM DRIVE MONITORING</b>							
Jam Slop	1						
Runaway Slop	400						
Fast Deadband	1000						
Slow Deadband	500						
<b>ELEV POT DRIVE</b>							
Fast/Slow Threshold	1.5						
Maximum Position Error	0.2						
Coast Threshold	0.1						
Maximum Retry Count	3						
<b>ELEV PULSE DRIVE</b>							
Pulse Scale Factor	2050						
UP Pulse Limit	64000						
Down Pulse Limit	100						
Fast/Slow Threshold	50						
Maximum Position Error	0						
Coast Threshold	3						
Maximum Retry Count	3						
<b>ELEV DRIVE MONITORING</b>							
Jam Slop	1						
Runaway Slop	500						
Fast Deadband	1000						
Slow Deadband	500						
<b>POL POT DRIVE</b>							
Fast/Slow Threshold	1.5						
Maximum Position Error	0.3						
Coast Threshold	0.1						
Maximum Retry Count	3						
<b>POL DRIVE MONITORING</b>							
Jam Slop	1						
Runaway Slop	200						
Fast Deadband	1000						
Slow Deadband	500						

