

APPENDIX B - MOUNT SPECIFIC DATA

For AVL Technologies 1.8 m. Mounts

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Software: 1.56

This appendix describes RC3000 operations unique for the AVL 1.8 meter mounts. 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 Models

DESIGNATION	MODEL
AY	1.8 m. / 400 deg. azimuth / Gamma-F C-band
AK	1.8 m. / 400 deg. azimuth / 2-P Wideband Feed
AH	1.8 m. models 1878K , 1800C

1.3.2 System Interface Requirements

These mounts from the AVL 1.8 m. 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, AK & AH	1.69	22.3

3.3.1.2 Reset Defaults

The following table supplies the default configuration item values for this model of mounts. **Most default values are the same for all versions. Only the unique values for the AK and AH versions are listed.**

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	AK	AH					INSTALL VALUE
SYSTEM DEFINITION								
antenna_size_cm	180							
AZIMUTH CALIBRATION								
Zero Voltage	2.50							
Azim_offset	0.0							
ccw_azim_limit	192							
Cw_azim_limit	192							
Azim_Scale_Factor	80.0		83.3					
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	95.0	92.0						
CCW Polarization Limit	95.0	92.0						
Pol_Scale_Factor	39.33	38.54	39.58					
Polarization_type	2							
H/V_Reference	1							
Default Horizontal Position	-45.0							
Default Vertical Position	45.0							
Pol_Automove_Enable	1							
SIGNAL PARAMETERS								
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								
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							

CONFIGURATION ITEM	AY	AK	AH					INSTALL VALUE
AZIMUTH POT DRIVE								
Fast/Slow Threshold	1.5							
Maximum Position Error	0.20							
Coast Threshold	0.1							
Maximum Retry Count	3							
AZIMUTH PULSE DRIVE								
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							
AZIM DRIVE MONITORING								
Jam Slop	1							
Runaway Slop	400							
Fast Deadband	1000							
Slow Deadband	500							
ELEV POT DRIVE								
Fast/Slow Threshold	1.5							
Maximum Position Error	0.2							
Coast Threshold	0.1							
Maximum Retry Count	3							
ELEV PULSE DRIVE								
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							
ELEV DRIVE MONITORING								
Jam Slop	1							
Runaway Slop	500							
Fast Deadband	1000							
Slow Deadband	500							
POL POT DRIVE								
Fast/Slow Threshold	1.5							
Maximum Position Error	0.3							
Coast Threshold	0.1							
Maximum Retry Count	3							
POL DRIVE MONITORING								
Jam Slop	1							
Runaway Slop	200							
Fast Deadband	1000							
Slow Deadband	500							

