APPENDIX B - MOUNT SPECIFIC DATA
For
Samyak Infotech 2.4m mobile antenna

Revision: 19 Sept. 2006 Software Version: 1.57

1.2 Mount Models

This appendix describes the RC3000 variation built for use by the Samyak Infotech 2.4 m. mobile antenna. This model is known as "B5".

1.3.2 System Interface Requirements

The B5 mount follows standard RC3000 interface requirements with the following notable options:
- resolvers present for azimuth and elevation
- azimuth clockwise and counterclockwise limit switches (see 2.2.7)

2.1.4 Inclinometer Orientation

The inclinometer should be rigged with the reflector vertical.

2.2.7 Accessories

The azimuth CW limit switch is implemented via pins 12 and 25 of the J5 Accessories DB-25 connector. The azimuth CCW limit switch is implemented via pins 2 and 14 of the same J5 connnector.

2.3.2 Elevation Calibration

Elevation Reference Position

From the reflector vertical position, the elevation reference voltage should be close to 1.69 V. The elevation displayed at this voltage will be 20.0 reflecting the RF offset of the antenna.

Elevation Resolver Reference

In order to characterize platform tilt, it is critical that the elevation resolver be calibrated with the platform level. With the reflector vertical, adjust the elevation resolver offset to yield a resolver derived angle of 20.0 shown on the Analog to Digital Voltage maintenance screen (3.2.2.1).

3.3.1.2 Reset Defaults

The following table supplies the default configuration item values for this model of the RC3000.

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	B5 Default					INSTALL VALUE
SYSTEM DEFINITION						
GPS	1					
COMPASS MOUNT	2					
COMPASS TYPE	1					
MODE	2					
antenna_size_cm	240					
Waveguide	0					
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					
Resolver offset	-160.00					
Resolver direction	0					
AZIMUTH CALIBRATION						
Zero Voltage	2.50					
Fluxgate_offset	0.0					
ccw_azim_limit	90					
Cw_azim_limit	90					
Resolver offset	-180.00					
Resolver direction	0					
POLARIZATION CAL						
Zero Voltage	2.50					
Polarization_Offset	0.0					
CW Polarization Limit	120.0					
CCW Polarization Limit	120.0					
Pol_Scale_Factor	50.00					
Polarization_type	2					
H/V_Reference	1					
Default Horizontal Position	90.0					
Default Vertical Position	0.0					
Pol_Automove_Enable	0					

CONFIGURATION ITEM	B5 Default					INSTALL VALUE
SIGNAL PARAMETERS						
RF Lock Type	0					
RF Delay	0.1					
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	3					
Spiral Search EL Limit	3					
Spiral Signal Threshold	200					
Scan Range Limit	8					
Scan Signal Threshold	200					
Tilt Compensation	0					

CONFIGURATION ITEM	B5 Default					INSTALL VALUE
AZIMUTH POT DRIVE						
Fast/Slow Threshold	2.5					
Maximum Position Error	0.20					
Coast Threshold	0.1					
Maximum Retry Count	3					
AZIMUTH PULSE DRIVE						
Pulse Scale Factor	10431					
CW Pulse Limit	50000					
CCW Pulse Limit	16000					
Fast/Slow Threshold	50					
Maximum Position Error	1					
Coast Threshold	3					
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	10431					
UP Pulse Limit	64000					
Down Pulse Limit	100					
Fast/Slow Threshold	50					
Maximum Position Error	1					
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	**B5 Default**					**INSTALL VALUE**
TRACK						
Search Enable	0					
Max Track Error	3					
Search Width	4					
Peakup Holdoff Time	120					
Track Signal Source	2					
Signal Sample Time	2					
REMOTE CONTROL						
Remote Enabled	1					
Bus Address	50					
Baud Rate	6					
Jog Duration	20					
STOW / DEPLOY						
AZ STOW	0.0					
EL STOW	-70.0					
PL STOW	0.0					
AZ DEPLOY	0.0					
EL DEPLOY	20.0					
PL DEPLOY	0.0					
PL ENABLED	0					
EL_TIME	0					
SHAKE						
AZ1	-40.0					
EL1	30.0					
PL1	-10.0					
AZ2	50.0					
EL2	40.0					
PL2	10.0					
AZ3	0.0					
EL3	-70.0					
PL3	0.0					
CYCLES	5					
DELAY	1					