

TABLE OF CONTENTS

CHAPTER 1 ID LABEL/LOCATION INFO

1.1 Front Panel FCC Label	1-1
1.2 Rear Panel Manufacturer's Label	1-1
1.3 Rear view, complete Axcera-LU6000AL Translator w/FCC Label	1-2
1.4 Rear view, Axcera-LU6000AL Translator w/Manufacturer's Label.....	1-3

CHAPTER 2 EXTERNAL PHOTOS

2.1 Front view, complete Axcera-LU6000AL Translator.....	2-1
2.2 Rear view, complete Axcera-LU6000AL Translator	2-2
2.3 Rear view, Axcera-LU6000AL Translator (Bandpass Filter)	2-3

CHAPTER 3 SCHEMATICS

CHAPTER 4 TEST REPORT

4.1 RF Power Measurements	4-1
4.2 Modulation Characteristics	4-2
4.2.1 Video Modulation	4-2
4.2.2 Video Envelope Delay.....	4-3
4.2.3 Video Noise	4-3
4.2.4 Video Frequency Response	4-3
4.2.5 RF Sideband Response	4-4
4.2.6 Audio Modulation.....	4-6
4.2.7 AM and FM Noise.....	4-7
4.3 Occupied Bandwidth	4-7
4.4 Conducted Spurious Emissions	4-9
4.5 Radiated Emissions.....	4-10
4.6 Frequency Stability	4-12
4.7 Automatic Level Control Test	4-14
4.8 Test Equipment	4-15

CHAPTER 5 USER'S MANUAL

CHAPTER 6 INTERNAL PHOTOS

6.1 Front view, Chassis Assembly (Exciter)	6-1
6.2 Side view, Receiver Assembly (Exciter)	6-1
6.3 Side view, IF Processor Assembly (Exciter)	6-2
6.4 Side view, L.O. Upconverter Assembly (Exciter)	6-2
6.5 Side view, Control / Power Supply Assembly (Exciter)	6-3
6.6 Side view, Power Amplifier Assembly (Exciter)	6-3
6.7 Front view, Chassis Assembly (External Power Amplifier).....	6-4
6.8 Side view, Power Amplifier Assembly (External Power Amplifier)	6-4
6.9 Side view, Power Supply Assembly (External Power Amplifier)	6-5
6.10 Side view, 4-Way Combiner Assembly (External Power Amplifier)	6-5

CHAPTER 7 PARTS LIST/TUNE-UP INFO

7.1 Parts List	7-1
7.2 Tune-up Information	7-1
7.2.1 Exciter/Amplifier Chassis Assembly	7-1
7.2.2 Linearity Correction Adjustment	7-2
7.2.3 Frequency Response Delay Equalization Adjustment	7-2
7.2.4 Calibration of the Translator Forward Output Power Level	7-3
7.2.5 Calibration of the Translator Reflected Output Level	7-3
7.2.6 Band-pass Filter Assembly	7-4
7.2.7 UHF Trap Filter Assembly	7-4
7.2.8 The Effects of Tuning the Output Trap Filter	7-5

CHAPTER 8 OPERATIONAL DESCRIPTION - MODEL Axcera-LU6000AL

8.1 General Description	8-1
8.2 Technical Specifications.....	8-1
8.3 Performance Specifications	8-1
8.4 System Overview	8-2
8.4.1 Exciter Tray (Driver)/External Amplifier Tray	8-3
8.4.2.1 Receiver Module (Driver)	8-3
8.4.2.2 IF Processor Module (Driver)	8-3
8.4.2.3 L.O. /Upconverter Module (Driver)	8-4
8.4.2.4 Control & Monitoring / Power Supply Module (Driver)	8-5
8.4.2.5 Power Amplifier Module (Driver)	8-5
8.4.2.6 Power Amplifier Module (External Power Amplifier)	8-6
8.4.2.7 Power Supply Module (External Power Amplifier)	8-8
8.5 Control and Status	8-8
8.5.1 Exciter Tray	8-8
8.5.2 External Power Amplifier Tray	8-11
8.6 Input and Remote Connections	8-13
8.6.1 Remote Interface Connections (Exciter Tray)	8-13
8.6.2 Remote Interface Connections (External Power Amplifier Tray)	8-13
8.7 AC Input	8-14
8.7.1 Exciter Tray	8-14
8.7.2 External Power Amplifier Tray	8-14
8.8 System Operation	8-14
8.8.1 Principles of Operation	8-14

CHAPTER 9 CERTIFICATION OF TEST DATA

TRAK SYSTEMS MODEL 8821 DATASHEET	SHEET 1
TRAK SYSTEMS MODEL 8821 DATASHEET	SHEET 2