

TABLE OF CONTENTS**CHAPTER 1 ID LABEL/LOCATION INFO**

1.1 Rear Panel FCC Label	1-1
1.2 Rear Panel Manufacturer's Label	1-1
1.3 Rear view, complete Axcera-LLV20AT Transmitter w/FCC & Manuf. Label ...	1-2

CHAPTER 2 EXTERNAL PHOTOS

2.1 Front view, complete Axcera-LLV20AT Transmitter	2-1
2.2 Rear view, complete Axcera-LLV20AT Transmitter	2-1
2.3 Top view, Output Bandpass Filter	2-2

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 FM Noise	4-7
4.3 Occupied Bandwidth	4-7
4.4 Conducted Spurious Emissions	4-8
4.5 Radiated Emissions	4-10
4.6 Frequency Stability	4-12
4.7 Test Equipment	4-14

CHAPTER 5 USER'S MANUAL**CHAPTER 6 INTERNAL PHOTOS**

6.1 Front view, Chassis Assembly	6-1
6.2 Side view, Modulator Module	6-1
6.3 Side view, IF Processor Module	6-2
6.4 Side view, VHF/UHF Upconverter Module	6-2
6.5 Side view, Control / Power Supply Module	6-3
6.6 Side view, Power Amplifier Module	6-3

CHAPTER 7 PARTS LIST/TUNE-UP INFO

7.1 Parts List	7-1
7.2 Tune-up Information	7-1
7.2.1 Transmitter Chassis Assembly	7-1
7.2.2 Modulator Module Assembly	7-1
7.2.3 IF Processor Module Assembly	7-2
7.2.4 VHF/UHF Upconverter Module Assembly	7-3
7.2.5 Setting Up the Drive Level of the Transmitter	7-3

7.2.6 Calibration of the Transmitter Forward Output Power Level	7-4
7.2.7 Calibration of the Transmitter Reflected Output Level	7-5
7.2.8 Linearity Correction Adjustment	7-5
7.2.9 Differential Phase and ICPM Corrector Adjustment	7-8
7.2.10 Bandpass Filter Assembly	7-8

CHAPTER 8 OPERATIONAL DESCRIPTION - MODEL Axcera-LLV20AT

8.1 General Description	8-1
8.2 Technical Specifications	8-1
8.3 Performance Specifications	8-1
8.4 System Overview	8-3
8.4.1 Transmitter Tray	8-3
8.4.1.1 Modulator Module	8-3
8.4.1.2 IF Processor Module	8-3
8.4.1.3 VHF/UHF Upconverter Module	8-4
8.4.1.4 Control & Monitoring / Power Supply Module	8-5
8.4.1.5 Power Amplifier Module	8-5
8.5 Control and Status	8-6
8.5.1 Transmitter Tray	8-6
8.6 Input and Remote Connections	8-11
8.6.1 Remote Interface Connections	8-11
8.7 AC Input	8-11
8.7.1 Transmitter Tray	8-11
8.8 System Operation	8-11
8.8.1 Principles of Operation	8-12

CHAPTER 9 CERTIFICATION OF TEST DATA

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