

EXHIBIT 1

THEORY OF OPERATION

INTRODUCTION - The "System" is comprised of a transmitter and a receiver. It transmits real-time video information (frequency modulated) on a carrier in the 2450-2483.5 MHz band.

TECHNICAL DESCRIPTION - The technical description will be explained in the following paragraphs.

TRANSMITTER - Figure 1 illustrates a simplified block diagram of the "System" transmitter. The transmitter is composed of an antenna, VCO (voltage controlled oscillator), RF power amplifier, RF lowpass filter, phase-locked loop, baseband circuitry, and a regulated power supply.

The antenna is a monofilar axial-mode helical design with circular polarization. The antenna radiation pattern is a main lobe in the axis of the helix with a 3 dB beam width of 25 degrees. The gain of the antenna is 17 dB relative to an isotropic source. A number of minor lobes exist. These lobes are attenuated by more than 15 dB with respect to the main lobe.

The VCO tunes over the 2450-2483.5 MHz band and is amplified to an output level of 2 Watts. All spurious signals (if any) that are generated by the VCO are -80 dBc or less. The additionally required rejection of harmonically related frequency components is provided by an elliptic-function low pass filter that attenuates all related products by greater than 45 dB.

The phase-locked loop consists of a high speed frequency divider, a phase-lock frequency synthesizer and the VCO. The frequency stability of the VCO is directly proportional to the stability of the crystal controlled oscillator that is part of the phase-locked synthesizer support circuitry. The carrier frequency of the VCO is held within .005% over the temperature range of 0 to 70 degrees Centigrade.

The baseband circuitry conditions the video signal for optimum FM performance, then adds in the audio subcarrier generated signal (which is also crystal controlled). This composite baseband signal is summed with the phase-locked loop error voltage which in turn is applied to the VCO. Therefore, the VCO is FM modulated and frequency stabilized.

An integral power supply circuit provides the required regulated voltages to the transmitter. The input to the power supply can be any source that provides a DC voltage in the range of 9 to 14 volts with adequate supply current capability.

RECEIVER - The simplified block diagram of the "System" receiver is shown in Figure 2. The receiver is composed of an antenna, low-noise amplifier (LNA), mixer, VCO, IF amplifier, phase-locked loop demodulator, audio subcarrier demodulator, video amplifiers, audio amplifiers and a power supply.

The antenna is a monofilar axial mode helical, identical to the transmitter antenna.

The LNA provides approximately 12 dB of gain and sets the noise figure for the receiver. The LNA is preceded by a pre-selection filter. The filter provides rejection to unwanted signals and also attenuates the receiver LO.

The VCO and phase-locked loop are similar to the ones in the transmitter. (Please see the transmitter section for a description of these items.) The mixer down converts the received signal frequency to a 510 MHz intermediate frequency (IF). The local oscillator input is provided by the phase-locked VCO.

The IF signal is amplified and filtered in the IF amplifier. This signal is demodulated and amplified in the Threshold Extension Demodulator (TED) section.

The TED is configured as a third order phase-locked loop to extract the composite baseband signal. The composite baseband signal is amplified and then the audio subcarrier signal is filtered from the composite signal and demodulated. The resultant audio signal is amplified to an appropriate output level. The video signal is filtered out of the composite baseband signal and then amplified to a level of 1 volt peak-to-peak.

The power supply is similar to the one used in the transmitter, supplying regulated voltages to the various circuits within the receiver. As in the case of the transmitter, the input voltage requirement is in the range of 9 to 14 volts DC.

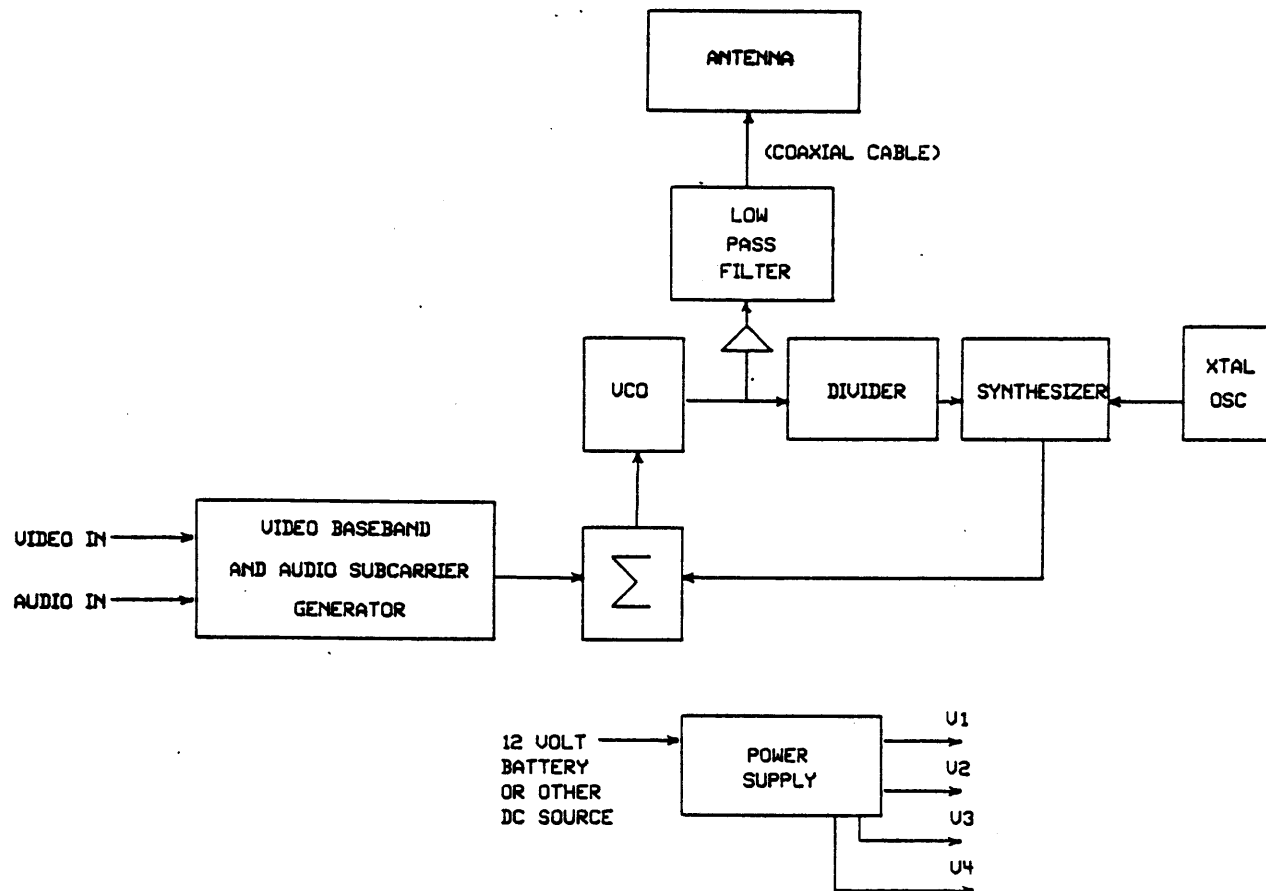


FIGURE 1.

PROGRAM: WIRELESS			WIRELESS TECHNOLOGY, INC		
prepared			BLOCK DIAGRAM:		
checked			VIDEO TRANSMITTER SYSTEM		
engineer			size	code id	drawing no.
MAY 12, 1993			no.		2000725
			scale		sheet

THIS DOCUMENT AND THE INFORMATION DISCLOSED HEREIN IS PROPRIETARY TO WIRELESS TECHNOLOGY, INC. AND UNLESS SPECIFIED UNDER A WRITTEN AGREEMENT; MAY NEITHER BE REPRODUCED OR COPIED IN WHOLE OR IN PART OR DISCLOSED TO OTHERS, NOR EMPLOYED FOR DESIGN PROCUREMENT, OR MANUFACTURING PURPOSES WITHOUT THE WRITTEN PERMISSION OF WIRELESS TECHNOLOGY, INC.

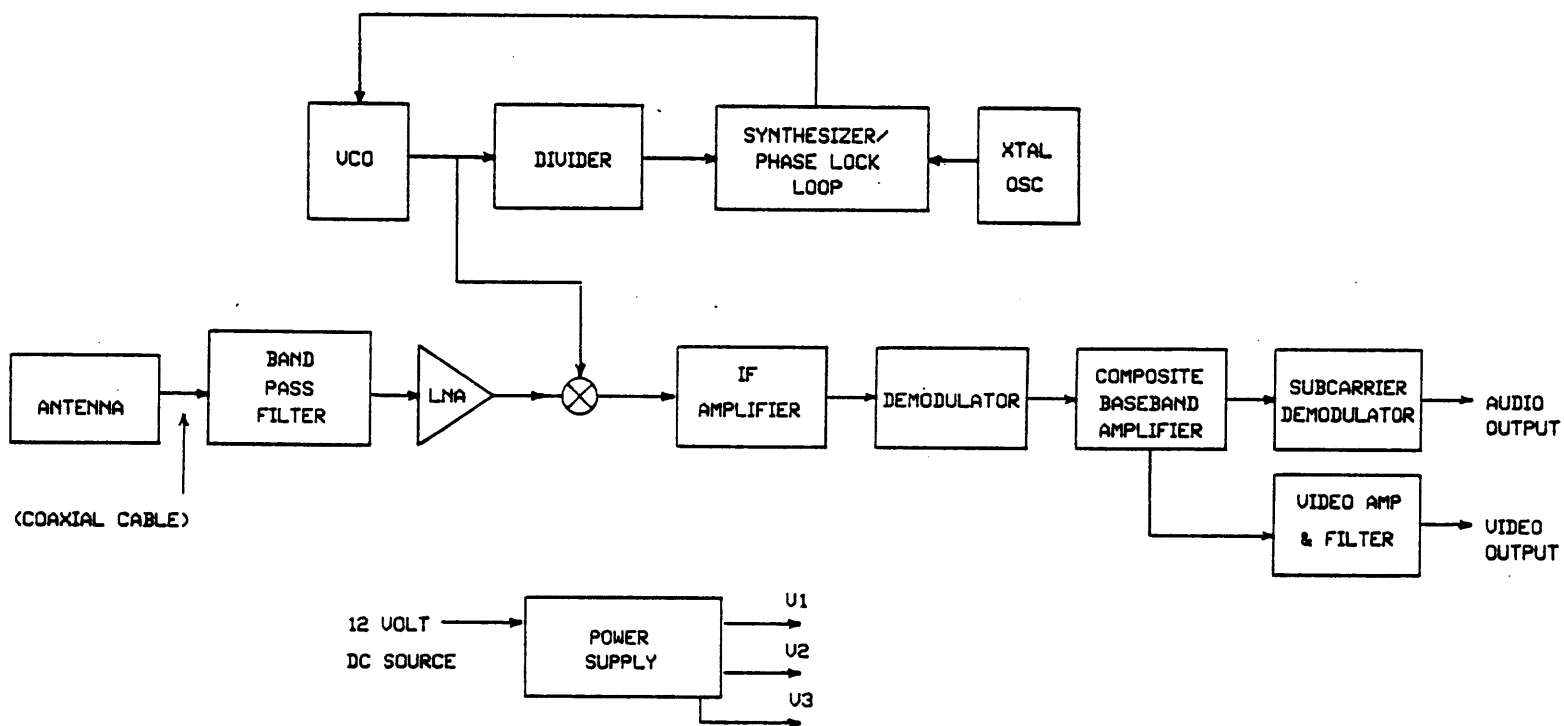


FIGURE 2.

PROGRAM: WIRELESS		WIRELESS TECHNOLOGY, INC.	
BLOCK DIAGRAM:		VIDEO RECEIVER SYSTEM	
prepared	WLF		
checked	WLF		
engineer	WLF	size code id drawing no.	
MAY 14, 1993		no. 2000671	
scale		sheet	

THIS DOCUMENT AND THE INFORMATION DISCLOSED HEREIN IS PROPRIETARY TO WIRELESS TECHNOLOGY, INC. AND UNLESS SPECIFIED UNDER A WRITTEN AGREEMENT; MAY NEITHER BE REPRODUCED OR COPIED IN WHOLE OR IN PART OR DISCLOSED TO OTHERS, NOR EMPLOYED FOR DESIGN PROCUREMENT, OR MANUFACTURING PURPOSES WITHOUT THE WRITTEN PERMISSION OF WIRELESS TECHNOLOGY, INC.

EXHIBIT 2

WIRELESS REALTIME VIDEO INTENTIONAL RADIATION EXPERIMENTS

PRODUCT SCOPE EVALUATION

PREDICATION:

For a number of years various Military and Federal Government Agencies have utilized wireless video transmission and receiving systems in their performance of National defense and service functions. During this same period, the commercial public and private sector has expanded it's use of covert and overt closed circuit television (CCTV) systems in pursuit of crime prevention and detection. Experience in the application of CCTV has generated interest and need for a less cumbersome and restrictive system similar to that used by the Military and Government Agencies. This need has been enhanced by the increasing skill and complexity of present day offenders and their criminal activity.

In the interest of protection and preservation, the Federal Communication Commission has established stringent requirements for commercial use of wireless video systems in both the public and private sector. This has resulted in the absence of any regularly licensed wireless video transmission system available and affordable to commercial public and private law enforcement in the United States today.

FEDERAL COMMUNICATIONS COMMISSION /
WIRELESS TECHNOLOGY, INC.
Application for Experimental License
EXHIBIT 2, Page No. 2

SPECIFIC NEED:

The enforcement segment of the criminal justice system has been restricted in covert investigations of crime against the public, business, industry and the personnel employed or served by these industries.

Existing technology and available CCTV systems are as functional as the ability of the user to extend cable between transmission and reception points. So-called hard-wire video installations results in:

- 1.) Time consuming installation processes, when time may be a critical factor;
- 2.) Expensive system installations due to various complicated cable routing requirements;
- 3.) Transmission range limited to the length of the cable and it's routing location; and,
- 4.) Difficulty in maintaining a covert surveillance due to the cable installation.

The sale, distribution and use of drugs in the community and in the workplace have added tremendously to the number of crimes against the public, against business, and against society in general. The collection and corroboration of evidence and the identification of suspects has become even more complex than other historic incidents of crime.

To that end, the security industry representing both public and

FEDERAL COMMUNICATIONS COMMISSION /
WIRELESS TECHNOLOGY, INC.
Application for Experimental License
EXHIBIT 2, Page No. 3

private interests have expressed a need for a discreet, reliable, high quality and affordable wireless [radio frequency (RF)] realtime video transmission system. To adequately provide this law enforcement service, such a wireless video system must be capable of functioning in all environments - in office and industrial buildings; hospitals; retail shops; grocery and drug stores; warehouses; city, county and state facilities; schools and universities; and, facilities throughout the transportation industry.

RESOLUTION:

Wireless Technology, Inc., a Nevada Corporation, has resolved to design and develop and FCC approved Wireless Realtime Video System ("System") that will be marketed to the public law enforcement agencies and to the security and law enforcement segments of business and industry. Therefore, Wireless Technology, Inc. is requesting an Experimental License authorization to determine if the proposed "System" will function as expected in actual user locations under normal operating conditions of equipment performance and interference potential. Such authority is requested pursuant to Part 5, Sections 5.202(d) and 5.202(i) [§§5.202(d), 5.202(i)] of the Commission's Rules and Regulations.

In addition to such equipment tests, in accordance with Part 5, Section 5.202(j) [§5.202(j)], limited market studies of the "System" will be conducted pursuant to Part 5, Section 5.206 [§5.206] of the Commission's Rules and Regulations. Wireless Technology, Inc. confirms that the conditions applicable to these limited market studies will include:

- 1.) All transmitting and receiving equipment used

FEDERAL COMMUNICATIONS COMMISSION /
WIRELESS TECHNOLOGY, INC.
Application for Experimental License
EXHIBIT 2, Page No. 4

in the study shall be owned by Wireless
Technology, Inc.;

- 2.) Wireless Technology, Inc. will inform anyone participating in the experiment that the "System" is granted under an Experimental authorization and is strictly temporary; and,
- 3.) the size and scope of the "System" market study may be subject to limitations on a case-by-case basis as the Commission shall determine.

Once "System" performance expectations are achieved, Wireless Technology, Inc. will submit an application for formal FCC Type Acceptance of the "System" under Part 90, Section 90.203 [\$90.203] and Part 94, Section 94.81 [\$94.81] of the Commission's Rules and Regulations.

TECHNOLOGY:

Details are provided concerning the technical performance characteristics of the Wireless Technology, Inc. "System" in the accompanying EXHIBIT 1, hereto.