

UCR100

TECHNICAL DATA

UHF Compact Receiver

- Ideal for compact DV camcorders
- 256 selectable UHF frequencies
- High sensitivity for extended range
- Dual-band compandor
- Ultra rugged tempered alloy antenna
- 9 Volt battery powered
- Machined aluminum construction
- Electrostatic powder coated and anodized finish



The Lectrosonics 100 system was designed to operate with the new generation of DV camcorders, offering an ultra-compact receiver and modest cost, yet preserving the performance that has become the hallmark of Lectrosonics.

The system offers 256 selectable frequencies over a 25.6 MHz band to avoid interference from local RF sources. The UCR100 receiver is highly sensitive and the matching transmitters provide a full 100mW of output power. The result is exceptional operating range and freedom from drop outs.

The audio signal processing circuitry and audio quality of the 100 Series system rivals much more expensive wireless systems. Wide range input limiting in the transmitters prevents overload distortion from high audio input levels. The result is extremely low noise and distortion, and audio quality that is at home with the finest microphones and post-production facilities.

The audio output level is controlled by a front panel knob that is easy to reach in most mounting situations. The knob is used to adjust the output level of the receiver to optimally match the input levels of camcorders, mixers and other sound system components. The output is nominally at 0dBv (line level), but will also match microphone level inputs on camcorders by using an adapter cable of-

fered by Lectrosonics. Two front panel LEDs indicate the level of the audio signal.

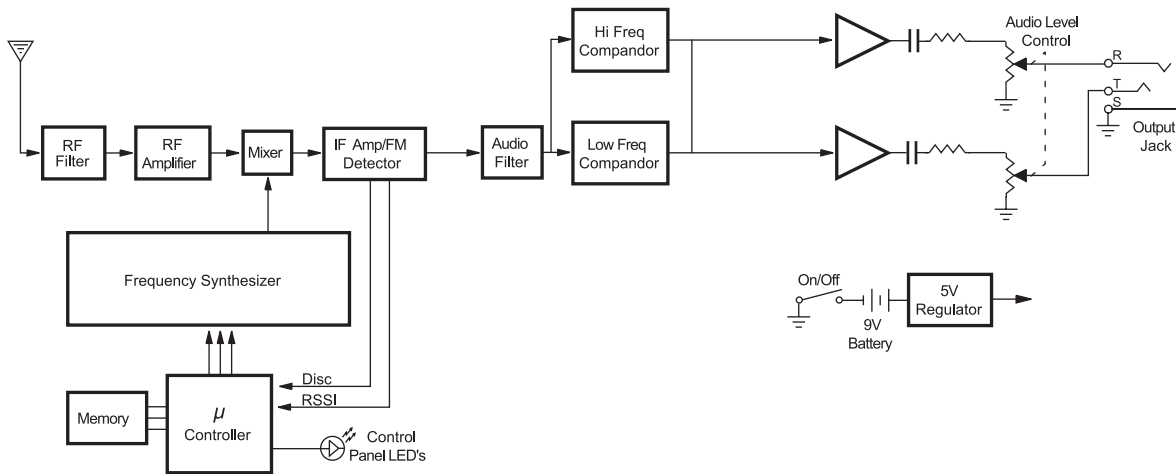
An extremely durable, tempered alloy 1/4 wavelength antenna is ideally matched to the tuning range of the receiver. A special insulation on the antenna keeps it semi-rigid and oriented away from the housing to maximize reception.

The UCR100 Receiver is housed in an rugged, lightweight, compact, machined aluminum package for lasting performance in abusive environments. Floating battery contacts compensate for the wide variety of different brands of 9 Volt batteries. The attached, aluminum battery door rotates to open, but cannot be opened accidentally.



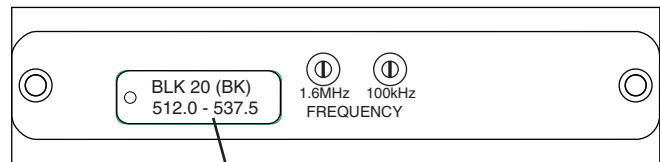
The frequency can be changed easily with the rotary switches on the side of the unit. A sliding cover protects the switches during operation.

UCR100 Block Diagram



Specifications

Operating frequencies:	537.6 to 608 MHz, 614 to 767.9 MHz (Blocks 21 through 29)
Number of frequencies:	256 (transmitter covers one frequency block)
Channel spacing:	100 kHz
Frequency control:	Crystal Controlled Phase Locked Loop
Sensitivity:	1 μ V (20 dB SINAD)
Signal/Noise ratio:	105 dB (overall system)
Squelch quieting:	90 dB
AM rejection:	50 dB, 10 μ V to 100 mV
Modulation acceptance:	+/-20 kHz
Spurious rejection:	Greater than 70 dB
Third order intercept:	0 dBm
Frequency response:	50 Hz to 18 kHz, (\pm 2db)
Distortion:	1% max at 50% modulation (system)
Audio output:	0 dBv (1 Vrms) UNBALANCED into 600 Ohms
Antenna:	1/4 wave vertical (fixed)
Front panel controls:	Single knob controls Audio Output Level
LED Indicators:	Power (red); RF (green); Level (green); Audio Limiter (red)
Power requirement:	8 Hours with 9V alkaline battery, 15 Hours with 9V lithium
Power consumption:	60 mA
Weight:	7.3 oz with battery
Size:	3.6 x 2.4 x 0.8 inches (housing only, belt clip and knob extend beyond the housing)



Frequency adjustment is made using a small screwdriver supplied with the system. Two rotary selection switches are located behind a sliding cover on the side of the unit.



1.6MHz



100kHz



The battery compartment in the UCR100 receiver rotates to open and close. The door stays attached to the housing and applies pressure to the battery to provide a solid contact.

