

# Explorer100 Series

## Small Diversity Receivers

Micron wireless microphone and communication systems have been setting industry standards in broadcast and location recording for some four decades. The company's design focus is on applying sophisticated electronic engineering to achieve the optimum balance of performance and cost.

The Explorer 100 Series combines the legendary Micron qualities of sonic integrity, long-term reliability and rock-solid construction at a new and highly affordable price point.



Micron Explorer SDR receivers are true space diversity designs comprising two independent receiver sections fed from separate antennae. A combining circuit automatically rejects the output from the receiver with the weakest signal, giving a dramatic improvement to dead spot (signal dropout) problems when compared to a conventional non-diversity or an antennae design. If signals of similar strength are received, the audio outputs are mixed to improve the signal to noise ratio still further.

Explorer 100 receivers are designed for use in situations where receiver size and weight are at a premium, they maintain absolute integrity in terms of overall quality, performance and reliability, and are small and light enough for easy to fit in a sound bag or mounting on DV camcorders.

Offering excellent standards of RF performance, Explorer 100 receivers feature multiple RF stages to give outstanding sensitivity and selectivity, while the digitally controlled circuitry achieves optimum mobile operation. The receiver's unique noise reduction system provides trouble-free operation in low RF signal situations, and even in hostile RF environments.

The variable high-level audio output can be used for feeding line or mic inputs to match the input signal requirements of mixers, camcorders and ancillary systems. Depending up on the model of the receiver there are 3 types of LED displays on the top panel, which provide continuous information on received signal strength, battery condition and TX battery condition.

Powering can be from an internal battery or from an external source via the 4-pin Hirose input connector using a Micron AOCPH-HR4 cable or via the antenna connector by phantom power.

Explorer 100 diversity receivers use the unique Micron battery compartment design, which enables quick and simple battery replacement, together with the Explorer's overall strength and durability, is focused on withstanding the heavy demands of location use.

Portable 2-way (DDH2-A) and multi-channel system cases (SDRQH-A, SQDC-A) are available to carry up to 4-SDR receivers or can be cascaded to 6 or 8 channels.

- Very small, high quality receiver
- Multi-purpose design
- ENG/EFP and location sound
- Ideal for compact DV camcorders
- Affordable high performance systems
- Signal strength, battery voltage and TX low battery indicators
- Up to 32MHz switching bandwidth with 256 switchable frequencies
- Variable-line output
- Rugged, lightweight metal construction
- Internal or external powering
- Unique easy to operate battery compartment

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SERIES

	SDR116	SDR256	SDR550
<b>RF Transmission System</b>			
Carrier Range (to order)	470 to 870MHz	470 to 870MHz	470 to 870MHz
Channels	16	256	256
Switching Range	24 or 25.6MHz	25.6 or 32MHz	25.6 or 32MHz
Modulation System	F3EGN	F3EGN	F3EGN
Minimum Channel Spacing	200kHz	200kHz	200kHz
Reference Deviation	40kHz	40kHz	40kHz
Adjacent Channel Rejection	>80dB	>80dB	>80dB
Muting Level (nom.)	1 $\mu$ V	1 $\mu$ V	1 $\mu$ V
<b>Audio</b>			
System S/N Ratio (@ ref.dev)	>100dB	>100dB	>100dB
Frequency Response	80Hz to 20kHz, $\pm$ 2dB	80Hz to 20kHz, $\pm$ 2dB	80Hz to 20kHz, $\pm$ 2dB
Distortion (@ ref.dev)	<0.2% THD	<0.2% THD	<0.2% THD
<b>Indicators</b>			
Signal Strength Indicator	Active A and Active B Green: signal >1 $\mu$ V No light: MUTED	Active A and Active B Green: signal >25 $\mu$ V Amber: signal >5 $\mu$ V Red: signal <5 $\mu$ V No light: MUTED	Active A and Active B Green: signal >25 $\mu$ V Amber: signal >5 $\mu$ V Red: signal <5 $\mu$ V No light: MUTED
TX Low Battery Indicator	-	-	RED LED lights when TX battery < 6.5V
Battery Condition Indicator	Green: >7.0V Amber: >6.5V Red: <6.5V No light: Battery Flat	Green: >7.0V Amber: >6.5V Red: <6.5V No light: Battery Flat	Green: >7.0V Amber: >6.5V Red: <6.5V No light: Battery Flat
<b>Controls</b>			
Level Control	Balanced variable output -42dBV to 0dBV	Balanced variable output -42dBV to 0dBV	Balanced variable output -42dBV to 0dBV
Frequency Control	Screwdriver pre-set 16-way BCD Switch	Screwdriver pre-set 2 x 16-way BCD Switch	Screwdriver pre-set 2 x 16-way BCD Switch
<b>Power</b>			
Battery Type	IEC 6LR61 (MN1604) 9V PP3 size	IEC 6LR61 (MN1604) 9V PP3 size	IEC 6LR61 (MN1604) 9V PP3 size
Current Consumption	80mA $\pm$ 10%	85mA $\pm$ 10%	85mA $\pm$ 10%
Battery Life	Aprox. 5 hours with alkaline battery	Aprox. 5 hours with alkaline battery	Aprox. 5 hours with alkaline battery
External Power	7.5 to 16V dc (with 'AOC PH-HR4' cables)	7.5 to 16V dc (with 'AOC PH-HR4' cables)	7.5 to 16V dc (with 'AOC PH-HR4' cables)
Dimensions	W: 63mm D: 22mm H: 121mm Weight: 200g with battery	W: 63mm D: 22mm H: 121mm Weight: 200g with battery	W: 63mm D: 22mm H: 121mm Weight: 200g with battery
Accessories Supplied	2 Antennas Audio output cable Instruction Manual (CD)	2 Antennas Audio output cable Instruction Manual (CD)	2 Antennas Audio output cable Instruction Manual (CD)

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