



# MULTI-BAND DUAL CHANNEL TRUE DIVERSITY RECEIVER

MCR54 dual is a camera dual true diversity wireless microphone receiver system in a modular stand alone or slot in configuration.

Each receiver has a dedicated filter and then can be tuned independently.





Multi-BAND RF

Wideband just isn't enough anymore! Upgrade to a Multi-Band system with up 790 MHz tuning range to find your frequency, anywhere in the World.

**WISYC@M** 



High Density with NB filters

The combination of Narrowband and Linear transmitters allow you to tune every 200kHz and the reduced RX bandwidth gives 3dB uplift in sensitivity.



True Diversity Reliability

With eight internal receiver boards, the MCR54 boasts an unprecedented capacity for range and reliability.



Multi-Companding

DSP delivers ENC and ENR algorithms for perfect audio in any application with less than 1ms delay – with create and shape presets for the desired sound. It enables the use of third-party transmitters with Wisycom receivers



Bluetooth !

Monitor & control through USB-C/Bluetooth (Wisycom Manager software)



### OTHER FEATURES

- Modular configurations for stand-alone or slot-in formats
- Monitor & control through USB C or Bluetooth 5 on Wisycom Manager 3.2.1 (computer SW)
- High contrast OLED display and 4 buttons enable quick manual setup
- DSP Analogue & Digital Audio Output (AES3)
- Extreme low noise VCO with ultrafast spectrum scan for optimal quick & easy setup
- Wisycom exclusive digital sub-carrier telemetry technology enables:
  - » remote TX battery monitoring
  - » advanced tone-squelch operating
  - » Push-to-talk function (via optional back-panel module)
- · Rear antenna connectors and micro audio and power adapter



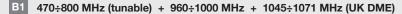




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# **CONFIGURATIONS**

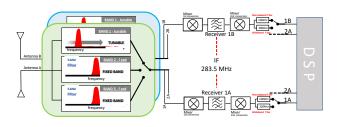
### FREQUENCY RANGE



B2 470÷800 MHz (tunable) + 823÷832 MHz + 941÷960 MHz (USA/EU)

3 470÷800 MHz (tunable) + 806÷810 MHz + 1240÷1260 MHz (JP)

B5 470÷800 MHz (tunable) + 459÷466 MHz + 806÷810 MHz (JP)



# **ACCESSORIES & RELATED**



#### Item: SL54-IK

"Slot-in" compatible with:

- Sound Device SuperSlot (4 audio outs in capable devices, i.e. Soundevices™ SL-2)
- MRK16 Multi Slot rack (4 audio out)
- Unislot (Ikegami, Panasonic cameras1)



### Item: BPA54

- "Stand alone" rear panel
- 2 mini XLR-5pin male outputs (for 4 analogue channels or 4 digital AES
- channels), only 2 ch for MCR54-DUAL 1 Hirose connector for external power



#### Item: CAM50-3

AF cable (50 cm), mini XLR-5F / 2 XLR-3M connectors



## Item: CDC34

External power feeding cable CDC34: hirose 4pin Male/raw wires (50 cm) CDC34HM: hirose 4pin Male/ hirose 4pin Male (50 cm)



## Item: CAUSBC1

USB Cable 1m USB B - USB C Male Black To monitor/control/power on MCR54 receiver



## Item: AWS-xx-RA

Whip antenna, SMA connector, Right angle AWS-BK-RA: 470-700 MHz, black cap AWS-GN-RA: 670-870 MHz, green cap AWS-BL-RA: 820-1160 MHz, blue cap



#### Item:SL54-SX2

"Slot-in" kit for Sony camera.

NOTE: not all Sony cameras has the internal double pin enable. CHECK IF YOUR

CAMERA SUPPORT 2 CH. ON SLOT-IN



#### Item: BCA54

Slot Wireless Module with lithim battery pack

- 2 mini XLR-5pin male audio outputs
- 1 Hirose connector for external power
- battery pack for RRC2040 33.2Whr



#### Item: CAM50-41

AF cable (50 cm), mini XLR-5F / 1 XLR-3M connector Line 1 feed XL3-M



## Item: PSP910-H

AC/DC Power Supply, Switch Mode with Hirose 4 pin connector (to use one "desktop" apparatus alone) Input:100 ÷ 240V ac Ouput:12V@700mA, 8W, Plug type: EU



## Item: MRK16

19" 1U rack with 4 slots for MCR54 16 true div. wireless (4 x MCR54)Analog & digital output (Dante/AES3) Ethernet & bluetooth controls RF over fiber input (optional)



#### Item: AWx

Whip antenna, SMA connector AWN42: 470-700 MHz, black cap AWS-GN: 670-870 MHz, green cap AWS-BL: 820-1160 MHz, blue cap AWS-RD: 1060-1300 MHz, red cap

# **CONFORMITY**







47 CFR 15 Subpart B CAN RSS-Gen/CNR-Gen







# **MULTI-BAND DUAL CHANNELS** TRUE DIVERSITY RECEIVER

# **TECHNICAL SPECIFICATIONS**

RF SPECIFICATIONS	Frequency ranges	MCR54-DUAL B1: 470 ÷ 800 + 961÷1000 + 1045÷1075 MHz (UK) MCR54-DUAL B2: 470 ÷ 800 + 823÷832 + 941÷960 MHz (USA/EU) MCR54-DUAL B3: 470 ÷ 800 + 806÷810 + 1240÷1260 MHz (JP) MCR54-DUAL B5: 470 ÷ 800 + 462÷465 + 806÷810 MHz (JP)
	Switchable channels	2400 user programmable frequencies, organized in 40 groups of 60 channels
	Switching-window	up 790 MHz
	Frequencies	microprocessor controlled frequency synthesizer circuit, with 5 kHz minimum step. The frequencies can be easily PC reprogrammed with USB C, Bluetooth 5 (long range)
	Frequency error	$<$ $\pm$ 2.5 ppm, in the rated temperature range
	Modulation	FM mono, wideband or narrowband IFB (SW selectable)
	Peak deviation	±54 kHz (WB wideband FM), ± 40 kHz (NB narrowband FM)
	Antenna input impedance	50 ohm sma type (SWR < 1:2; typ. 1:1.4)
	Sensitivity	2 $\mu V$ ( 6 dB $\mu V$ , -101 dBm), for SND/N > 58 dB; in the whole switching-window*
	Amplitude response	$< 0.5 \text{ dB (for RF input signal:6 dB}\mu\text{V} \div 100 \text{ dB}\mu\text{V})$
	Adjacent chan. selectivity	> 60 dB typical (for channel spacing ≥ 400 kHz in WB and ≥ 250 kHz in NB)
	Spurious emissions	< 2 nW (typical = 0.1 pW)
AUDIO SPECIFICATIONS	Noise Reduction system	ENR / ENR-1.2 (Wisycom Extended-NR), noise optimized ENC / ENC-1.2 (Wisycom Extended-NC), voice optimized & with reduced pre-emphasis ENS (for live application) Others, compatible with most systems, thru an internal DSP emulation of SA572, SA575 and Rms envelope compander chip set, fully user programmable
	AF bandwidth	30 Hz ÷ 20 kHz (WB), 30 Hz ÷ 17 kHz (NB)
	Frequency response	$\pm$ 1 dB in the 30 Hz $\div$ 20 kHz range (WB) $\pm$ 1 dB in the 30 Hz $\div$ 15 kHz (WB)
	Distortion	0.3 % typical
	SND/D ratio (Analogue)	120 dB typical*
	SND/D ratio (Digital)	> 125 dB typical
	Audio output	Electronically balanced on 5 pin mini-XLR Female connector analogue or digital (SW selectable)
	Digital sample rate	AES3 @ 48 kHz
	Monitor output	headphone 3.5 mm jack socket
OTHERS	Managing interface	USB C, Bluetooth 5
	LEDs	2 multicolour RGB LEDs to easy indicates Power & Bluetooth 2 multicolour RGB LEDs to easy indicates the audio status of the receivers
	Display	OLED 128x64 (white)
	Powering	- External = 6 ÷ 18 Vdc (3 W max) - Autonomous. = with optional BCA 54 Battery Module
	Power consumption	1,85 Watt max (with 2 active receivers), 1,5 Watt max (with 1 active receiver)
	Temperature range	-10 ÷ +55 °C
	Dimensions	104 x 87,6 x 25 mm (H x W x D)
	Weight	285g

