

# WRU-806B

Plug-in UHF synthesised diversity receiver modules



## Overview

### **Freedom from the messy cables**

Effective communication requires clean and intelligible audio, free from drop-outs and bursts of noise. The Freedom series WRU-806B series receiver modules were designed as professional receivers, while focusing on the needs of a business operation. Maximum channels in minimum space, with uncompromising quality and reliability, are offered when WRU-806B series modules are housed within the MB-806A rack mounting frame. The modules can also be inserted into a powered audio/video mixer such as the SRP-X351P or SRP-X700P.

### **Rack mounting and integration with Sony products**

The MB-806A 19inch 1RU rack mountable receiver frame will accept a staggering WRU-806 modules.

### **Convenient auto channel assignment function**

When used with the MB-806A rack mounting frame, the operating group can be set on the first of the installed WRU-806 receivers. Channels within the same group are then automatically assigned for all the mounted WRU's. Unusable channels, with RF noise or other WL transmitters transmitting on that frequency, will be automatically detected and skipped. This enables instant and automatic multi-channel setting of an entire rack of receivers.

### **Intermodulation free operation of multi-channel systems**

Optimum combinations of specially calculated, and practically, tested intermodulation-free frequencies are stored in the modules CPU making it easy to choose the correct frequencies for simultaneous multi-channel operation. These frequencies are arranged in groups, with each group pre-programmed to be free from internal interference. Up to 10 intermodulation-free channels can be used simultaneously within an 8MHz European TV channel.

### **Informative LCD display and LED's**

The informative display gives the operator a complete status of important information such as selected channel or frequency, AF level, received RF level, and status of the battery reserves of the transmitter. (applicable to all Sony transmitters, except WRT-867A). An extra warning LED is provided to show when the transmitters battery needs changing.

### **Eliminating drop-outs and improving practical noise floor through Space Diversity**

Using the two antennae, positioned so that they "see" the same environment, it is statistically unlikely that the RF field strength will drop under a critical level at the same time at both antennae. Receiving both signals and selecting the best of them will not

only reduce the likelihood of a total drop out, but also improve the practical audio noise floor.

**Interference free reception with the Pilot Tone squelch function**

A Pilot Tone muting squelch function minimises the risk and effects of a drop out. This creates a transition free from bursts of noise often found in systems not incorporating the Pilot Tone.

**Comprehensive squelch functions for RF noise free operation**

The Pilot Tone Squelch, Low RF Muting and Excessive White Noise Muting functions ensure optimum noise free and seamless performance.

**Exceptional rejection of unwanted signals**

While maintaining optimum integrity of the desired signal, exceptional rejection and seamless muting is achieved through the use of SAW filters and the Pilot Tone.

**The WRU is a space saver!**

Using 6 WRU-806s in one MB-806A saves as much as 3U of rack space compared with normal dual channel receivers including antenna distribution system.

**Easy identification of all 6 channels in a MB-806A frame**

A colour strip sheet is supplied co-ordinated with similar identification supplied with the WRT-805A and WRT-807A transmitters.

Features

**For use with various frames or hosts**

Dedicated plug-in diversity receiver module for MB-806A rack mounting frame (or WRR-801A) and SRP-X351P audio mixer/video selector.

**Auto channel assignment**

Auto channel assignment for extra receiver modules with self-detection and skip of unusable channels

**Pre-programmed, multi-channel groups**

Pre-programmed groups stored in CPU for intermodulation free operation of multi-channel systems

**Easy-to-read LCD display**

Easy-to-read LCD display showing the selected channel and IM free group, frequency, RF level, AF level and battery level status of the associated transmitter.

**Advanced filtering of RF signal**

Use of SAW filters for exceptional rejection of unwanted signals while maintaining the best possible signal integrity of the wanted signal.

**Diversity Reception**

Space diversity reception for dependable RF reception

**Large number of pre-programmed frequencies**

Up to 320 spot frequencies are available in one TV channel, with a maximum of 560 spot frequencies available depending upon the version.

Specifications

Type	
Frequency Code	CE38, CE62

**Receiving Section**

Receiver Type	Tuner module 110KF3E
Circuit System	Dual conversion superheterodyne
Local Oscillators Type	2nd: Crystal oscillator 1st: Crystal-controlled PLL synthesizer
Receiving Frequencies	CE38: 606.025 MHz to 630.000 MHz, 25 kHz steps CE62: 798.025 MHz to 822.000 MHz, 25 kHz steps
RF Squelch Level	30 dB $\mu$
Reference Deviation	$\pm$ 5 kHz deviation at 1 kHz modulation (Maximum deviation: $\pm$ 40 kHz deviation at 1 kHz modulation)
De-emphasis	50 $\mu$ s

**Audio Section**

Frequency Response	100 Hz to 15 kHz $\pm$ 3 dB
Signal-to-Noise Ratio	60 dB or more at 60 dB $\mu$ RF input 40 dB or more at 20 dB $\mu$ RF input ( $\pm$ 5 kHz deviation at 1 kHz modulation, A-weighted)
Distortion (T.H.D)	1 % or less ( $\pm$ 40 kHz deviation at 1 kHz modulation)
Analog Output	Multi-connector (10-pin) -28 dBu ( $\pm$ 5 kHz deviation at 1 kHz modulation) (0 dBu = 0.775 Vrms)

**General**

Power Requirements	9 V DC (supplied from MB-X6)
Power Consumption	Approx. 225 mA
Operating Temperature	32°F to 104°F 0°C to 40°C
Storage/Transport Temperature	-4°F to +131°F -20°C to +55°C
Dimensions *[1]	57 x 26 x 122 mm (W x H x D) 2 1/4 x 1 1/16 x 4 7/8 inches (W x H x D)
Mass	Approx. 5.7 oz Approx. 160 g
Supplied Accessories	Operating Instructions (1)

## Notes

Note

\*[1] The values for dimensions are approximate.

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## Gallery

