

# CXiR Diversity Receiver

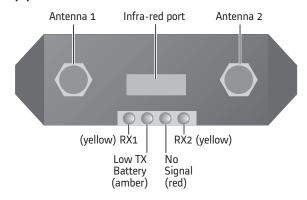


The CXiR is a multi-frequency UHF diversity receiver, designed with a range of modular adapters to allow it to be mounted internally in the latest camcorders from Sony, Philips, and Ikegami. Alternatively, a universal adapter fitted with the sixpin Lemo socket is available allowing the CXiR to be used externally with camcorders that do not provide a built-in wireless microphone receiver slot.

Also, the CXiR can be used as a portable documentary or ENG receiver. All settings can be read or changed via infra-red control using the SwitchiR.

# Controls, display and connections

# Top panel



#### Antenna 1/Antenna 2

SMA sockets to which the antennae are connected.

# Infra-red port

Receives commands from, and transmits status information back to the SwitchiR infra-red controller.

# RX1/RX2 indicators (yellow)

Indicates which of the unit's two built-in receivers is active at any time.

# Low TX Battery indicator (amber)

Indicates when the transmitter battery is low and needs replacing.

## No Signal indicator (red)

Indicates that no carrier signal is being received from the transmitter, such as when the transmitter is switched off or set to an incorrect frequency.

# Setting up the CXiR

To set up the CX*iR* in conjunction with a suitable transmitter, such as the TX*iR*:

- Fit the receiver into the camera.
- Connect the RX1 and RX2 antennae.
- Set the audio input selector switch to the appropriate position on the camcorder.
- Select the operating frequency.
- Set the output level.
- Check the power status.
- Check that one of the RX1 and RX2 indicators (yellow) is illuminated, and that the No Signal indicator (red) is not illuminated.

These steps are explained below:

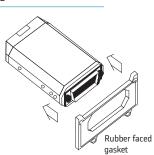
# Mounting the receiver into the camera

To mount the CXiR receiver in the wireless microphone receiver slot on the camcorder:

- Remove the plate covering the receiver slot on the camcorder.
- Fit the appropriate cover plate on the CX*iR* receiver:
- Ensure that the plate is oriented correctly.
- Slide the cover plate gently towards the top of the receiver:
- Ensure the receiver has the correct interface connector for the camcorder you are using.
- Fit the receiver assembly into the slot and press it gently into place until it is firmly seated.
- Slide the cover plate into position and secure it into place with the screws provided.

# Connecting the antennae

Connect the antennae to the SMA connectors marked RX1 and RX2. Connect the straight antenna to one socket and the right-angled antenna to the other socket.





# User Guide

# CXiR Diversity Receiver

# Selecting the operating frequency

You can check or change the operating frequency of the CXiR receiver via infra-red control using the SwitchiR.

# To check the CXiR frequency:

• Press **MENU**. The display shows:



 Align the front of the SwitchiR with the infra-red window on the receiver and press OK. Optimum operating range is between 5 and 15cm. The SwitchiR will display the receiver frequency; for example:



## To change the CXiR frequency:

 Press **OK** again. The display will alternately flash between frequency and channel number. For example:



• Press 🕥 or 💟 to scroll through the 32 frequencies read from the receiver until the required channel or frequency is displayed. For example:



 Align the front of the SwitchiR with the infra-red port on the receiver and press **OK**. If the command was received correctly the display will show the new frequency. For example:



Otherwise the display will show:



Repeat the above steps if an error message is displayed, moving the SwitchiR closer to the infra-red port.

## Setting the output level

The CXiR should be set to the correct level as required by the camcorder. The output level is attenuated in 1dB steps over a 32dB range. The 0dB reference level is -25dBu.

## To check the CXiR output level:

- Press MENU.
- Press once until the display shows:



 Align the front of the SwitchiR with the infra-red port on the receiver and press **OK**. The display will show the current output level setting; for example:



#### To change the receiver output level:

- Press the **OK** button. The AF level display will flash.
- Press the 🕥 or 👽 button to step between the available output level settings until the required output level is displayed. For example:

 Align the front of the SwitchiR with the infra-red port on the receiver and press **OK**. If the command was received correctly the new level will be displayed. For example:

Otherwise the display will show:



• Repeat the above steps if an error message is displayed, moving the SwitchiR closer to the infra-red port.

#### Checking the DC power status

To check the status of the receiver's DC power:

- Press MENU.
- Press three times until the display shows:



 Align the front of the SwitchiR with the infra-red port on the receiver and press **OK**. The display will show the DC voltage:



If the associated transmitter is on while the DC status is being checked the display will alternate between the receiver's DC status and the received transmitter DC status. For example:



The transmitter status is shown as one of the following options:

Option	Description
H (high)	Indicates good.
L (low)	Indicates low. Replace as soon as possible.
F (failed)	Transmitter will not function correctly.

## Indicators during operation

The CXiR should switch between the RX1 and RX2 receivers for best reception, as indicated by the yellow RX1 and RX2 indicators on the top of the unit.

The red No Signal indicator will be lit if the corresponding TXiR transmitter is not switched on, or is set to the incorrect frequency.

The amber Low TX Battery indicator will be lit if the TX battery goes low.

#### External powering

A number of different cables and accessories are available from Audio Limited to allow the CX*iR* receiver to be externally powered.

The maximum external DC supply must not exceed 18V. Exceeding this voltage will result in damage to the receiver.

Audio Limited recommend the use of their regulated cables to prevent damage to the CXiR.

# Mounting options

The CXiR can be supplied already fitted with the appropriate adapter for a specific camcorder. Alternatively it can be supplied with a Lemo adapter for applications where the CXiR is to be used with a mixer, or a camcorder without an integral wireless microphone receiver slot. In this case the receiver can be mounted onto the camera with an appropriate bracket available from Audio Limited.

Adapters are available separately to allow you to modify a CXiR for use with a different camcorder. To change the adapter unscrew the four screws on the side of the unit at the base with a slotted screwdriver. Slide out the adapter and replace it with the appropriate replacement adapter: Do not remove the screws at the base of the unit.

# Technical specification

Frequency range	470MHz-1000MHz
Number of frequencies	32 pre-programmed
Switching bandwidth	24MHz
Sensitivity	-98dBm for 40dB SINAD
Frequency response	50Hz to 18kHz ±1dB
THD	<0.2% typical
Signal to noise ratio	96dB to over 104dB
External power	7-18V DC 150-55mA
Antenna connector	2xSMA
Output connector	6 pin LEMO™
Interchangeable module	15 pin D-type (Sony) 25 pin D-type (Ikegami) 44 pin D-type (Philips)
Size	98 x 60 x 18mm
Weight	150g
Operating temperature range	-20C°to +55°C
Compliant to	ETS 300422 EN 300445(CE) FCC