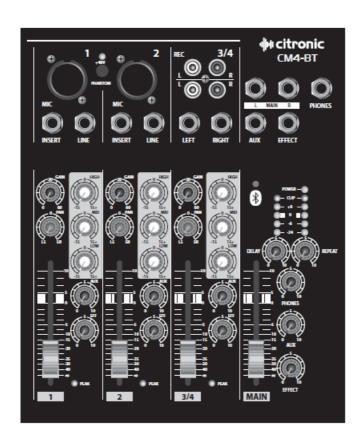
# **₩ citronic**

# CM4-BT

Compact Mixer with Bluetooth® 170.804UK
User Manual





Caution: Please read this manual carefully before operating Damage caused by misuse is not covered by the warranty

#### **Introduction:**

Thank you for choosing the Citronic CM4-BT mixer. This product has been designed to offer reliable, high quality mixing for stage and/or studio applications. In order to gain the best results from this equipment and avoid damage through misuse, please read and follow these instructions and retain for future reference.

#### Warning:

To prevent the risk of fire or electric shock, do not expose any of the components to rain or moisture. If liquids are spilled on the surface, stop using immediately, allow unit to dry out and have checked by qualified personnel before further use.

Avoid impact, extreme pressure or heavy vibration to the unit.

There are no user serviceable parts inside the mixer – refer all servicing to qualified service personnel.

### Safety

- Check that the supplied adapter and connectors are in good condition and the mains supply voltage is correct.
- Ensure signal leads are of good condition without shorted connections (especially with phantom power)
- Do not allow any foreign particles to enter the console through connectors or control apertures

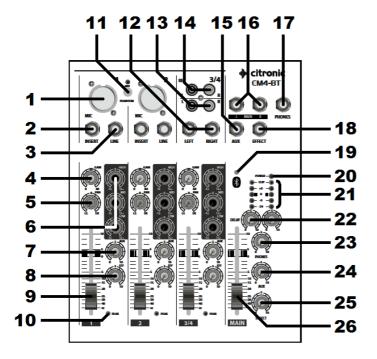
#### **Placement**

- Keep out of direct sunlight and away from heat sources.
- Keep away from damp or dusty environments.
- Ensure adequate access to controls and connections

#### **Cleaning**

- Use a soft cloth with a neutral detergent to clean the casing as required
- Use a soft brush to clear debris from the control surface
- Do not use strong solvents for cleaning the unit.

# **Control panel**



## Rear panel



- 1. XLR MIC input
- 2. Channel INSERT TRS 6.3mm jack
- 3. LINE input 6.3mm jack
- 4. Channel GAIN rotary
- 5. PAN (L-R balance) control
- 6. 3-band EQ (HIGH/MID/LOW) controls
- 7. Channel AUX output level
- 8. EFF rotary internal delay or EFFECT out
- 9. Channel volume fader
- 10. Channel PEAK LED
- 11. +48V phantom power switch
- 12. Stereo channel line input 2 x 6.3mm jack
- 13. Stereo channel line input 2 x RCA
- 14. REC output record out on 2 x RCA
- 15. AUX output 6.3mm jack
- 16. L + R main output (2 x 6.3mm jack, bal/unbal)
- 17. PHONES output stereo 6.3mm jack
- 18. EFFECT output 6.3mm jack (overrides Delay effect)
- 19. Bluetooth LED
- 20. Power LED
- 21. VU and CLIP LEDs for L + R output
- 22. DELAY and REPEAT controls
- 23. PHONES output level
- 24. AUX output level
- 25. EFFECT output level
- 26. MAIN fader master volume control
- 27. 12Vac Power Input

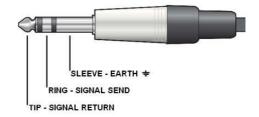
#### **Connection**

Before connecting to amplifier or other equipment, turn down all volume controls to avoid loud noises which may cause damage to other equipment. Always switch amplifier power on last in line with volume levels down.

Using good quality 6.3mm jack leads (balanced or unbalanced), connect L + R outputs from the mixer to the amplifier, recorder or whichever equipment is to receive the main mix output. If phantom power is to be used, press the "+48V" switch in. This enables phantom power on both XLR inputs.

Connect microphones, DI boxes or other balanced low impedance audio inputs to the mono channels using good quality XLR leads. Connect high impedance and line level signals to mono inputs using 6.3mm jack leads. For the stereo channel, connect left and right line level signals via 6.3mm jack or RCA leads (unbalanced).

Channel inserts may be connected to external processing equipment like EQ or compressors. These connections completely interrupt the signal flow and divert to the external processor before returning to the channel for volume adjustment via the channel fader. This requires a stereo to 2 x mono jack lead – the 2 mono ends are send and return connections; the stereo connection is wired as shown opposite.



Recording equipment can be connected via the "REC" outputs using a twin RCA lead and the 6.3mm jack AUX output can be connected to monitoring or external processing equipment if required. Individual levels can be adjusted to the AUX output via the individual channel AUX controls.

If the internal delay effect is not required, a send can be connected from the "EFFECT" jack output to and external effect unit, whereby the EFF channel controls act as individual level controls to the EFFECT output (same as for AUX output)

With all faders down, connect the supplied AC adapter to the 12Vac input and to the mains supply (ensure correct supply voltage) – the power LED will illuminate (if phantom power is selected, this LED should light)

# **Checking**

Test each channel's gain level by making the loudest expected sound into it and increasing the GAIN control until the red PEAK LED starts to light. Then back the GAIN off slightly until the PEAK LED hardly lights at all.

Test the main mix output by increasing the MAIN fader and selected channel faders whilst making sound through the channel(s) – the L+R output LED ladders should begin to show the output as it varies up and down.

Connecting a pair of headphones to the PHONES stereo 6.3mm jack is a good way of checking the mix output, remembering to gradually increase the PHONES level control.

Turn down all faders and then switch power on to connected equipment (amplifier last in line) and increase volume levels. Gradually increase MAIN and channel faders again and the sound should be heard through the speakers or be indicated on the recording equipment.

# **Operation**

Each channel has a 3-band EQ (LOW/MID/HIGH), which can be used to balance the mix of frequencies and emphasize certain tonal characteristics of the signal. Adjust these as required, noting that an overall increase may require an equivalent reduction of the GAIN control to compensate (otherwise clipping may occur)

Use the PAN control to position the channel input either to the left or right side of the stereo field. This can be useful to help separate and define sounds within a mix but be aware that extreme settings can be counterproductive by removing the channel from certain listening positions.

Use the AUX control to feed the correct amount of the channel signal to the AUX output. This routing is "Prefader" and is independent from the channel fader setting.

Each channel has an EFF control, which feeds a part of the signal to the internal delay effect. Overall controls for DELAY (time between repeats) and REPEAT (number of repeats) are on the right-hand side of the control surface - these can be adjusted as required. An EFFECT control adjusts the overall level of the delay effect.

If external effects are to be used, plugging a jack lead into the EFFECT output defeats the internal delay effect and acts as a mono line level "send" to the external effect unit. The output(s) from the external unit will need to be "returned" via a mono or stereo channel and added to the mix, whereby the channel fader takes the place of the overall EFFECT level control.

The CM4-BT has a built-in Bluetooth receiver which is available to pair at initial power on (the blue LED will flash). Pair a smartphone or other Bluetooth device to the CM4-BT receiver, which is named "BLUETOOTH" by default (this can be changed in some smart devices). When pairing is successful, the LED will flash slowly and playback from the paired device will be enabled through the main stereo buss of the CM4-BT.

Channel faders should be used to adjust the individual levels in the mix and the MAIN fader is for overall level. Turn down amplifier levels when changing any connections or powering down the mixer to avoid speaker damage.

# **Specifications**

Power supply	12Vac 1000mA (included)
Phantom power	Switchable +48V (XLR inputs)
Bluetooth version	2.1
Frequency response : inputs	20Hz-20kHz
Stereo input	6.3mm jack/RCA (-8 to +15dB / +13 to +60 parallel)
Mic/line channel inputs	2 x balanced XLR/jack
SNR: mic inputs	120dB E.I.N.
SNR: line inputs	95dB E.I.N.
SNR: stereo input	96dB E.I.N. (or 104dB E.I.N. in parallel)
EQ: high	10kHz, ±15dB
EQ: mid	700Hz, ±15dB
EQ: low	50Hz, ±15dB
Outputs : main (L+R)	6.3mm jack (+28dBu balanced / +22dBu unbalanced)
Phones output	+15dBu stereo 6.3mm jack
Dimensions	230 x 190 x 60mm
Weight	2.09kg

# **Troubleshooting**

	Ensure power adapter is working and connected properly
No power LED on control panel	Ensure mains outlet voltage is as stated on adapter
Power LED is on but no other LEDs and no output	Check input signals and condition of connection leads
	Check jack is connected to input and not channel insert
	Check GAIN is not too low on channel input
	Check channel fader is not fully down
	Check MAIN fader is not fully down
	Disconnect channel insert (if used) and check for correct wiring
	For condenser mics, turn down MAIN fader and check phantom is on
Power light and output LEDs	Check output connections to amplifier or recorder
lighting but no output	Check amplifier or recorder levels are not turned fully down
No output from Plustooth	Check that sending device is paired correctly and output level is turned up on the device
No output from Bluetooth	Check that main output level is turned up
	Check level of input signal is not too high
	Reduce channel GAIN and EQ settings
Output is very loud or distorted	Reduce channel and MAIN faders levels
	Ensure Hi-Z line level input(s) not connected via XLR
	Check output levels of equipment connected via channel inserts
	Check AUX and EFFECT level controls and reduce if necessary
	Check input gain level on recorder or recording software
Output is working but at very low level	Check input audio source level is not too low
	Ensure low impedance line or mic signal is not connected via jack
	Increase channel GAIN control and EQ settings if turned down
	Increase channel and MAIN faders levels
	Check output levels of equipment connected via channel inserts
	Check input gain level on recorder or recording software
· · · · · · · · · · · · · · · · · · ·	Face microphone away from speakers and monitors
Feedback (loud squealing or	Reduce channel GAIN level and EQ level(s)
howling from mics)	Reduce AUX and/or EFFECT levels
	Reduce channel and/or MAIN fader levels



**Disposal:** The "Crossed Wheelie Bin" symbol on the product means that the product is classed as Electrical or Electronic equipment and should not be disposed with other household or commercial waste at the end of its useful life. The goods must be disposed of according to your local council guidelines.