



ML1/K COUNTER INDUCTION LOOP KIT

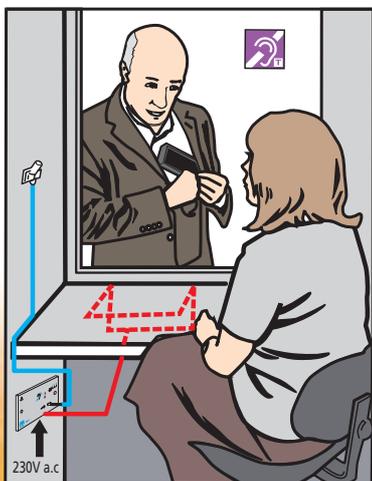
C-TEC's new ML1/K counter induction loop kit is ideal for use in post offices, banks, building societies, ticket offices and reception areas.

Comprising a compact wall-mounting double gang induction loop amplifier, a self-adhesive microphone and pre-formed counter loop, it can generate a loop listening field of 1.2m² approx. making it ideal for counters, desktops and tables.

In addition to its 3.5mm microphone input, the ML1 amplifier also features a balanced line input, loop strength, input peak and mains on indicators and a selection of user and engineer controls.

As well as being used as part of the ML1/K counter loop system, the ML1 is capable of covering rooms up to 20m² (approx. 4.5m x 4.5m) using a loop made from four core burglar alarm cable wired as four turns.

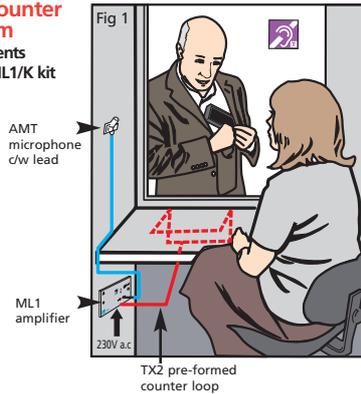
A typical ML1 Counter Loop System



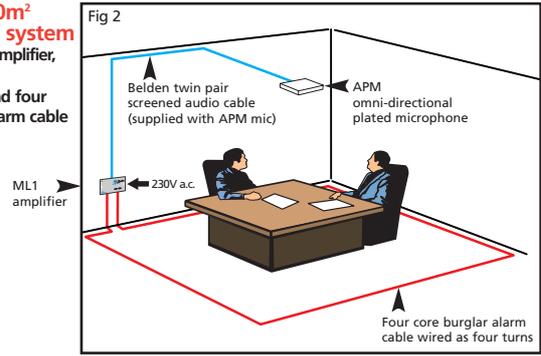
- Extremely cost-effective
- Generates a loop listening field of approx. 1.2m² dependent on loop position
- Attractively-packaged kit includes:-
 - 1 x ML1 wall-mounting induction loop amplifier
 - 1 x AMT self-adhesive microphone
 - 1 x TX2 pre-formed counter loop
 - 1 x TEAR 'loop fitted' sticker
- Double-gang wall-mounting ML1 amplifier fits standard UK 25mm back boxes and is ideal for mounting under desks, counters or table tops
- Omni-directional AMT microphone plugs directly into 3.5mm socket on amplifier front
- Balanced/unbalanced line level in and 12V d.c. out connectors offer full compatibility with C-TEC's unique outreach plate audio input extension system
- User-adjustable microphone sensitivity and engineer-adjustable loop drive and input level controls
- Input Peak, Mains On and Loop Strength indicators
- Automatic compressor limiter
- Fully compliant with EN60118-4 (formerly BS6083) and BS7594:1993
- Installer-friendly design requires no specialist audio experience or connectors - the ML1 can be fitted by any competent electrician
- Can be used to help building managers and service providers comply with BS8300, the Disability Discrimination Act and the Care Standards Act



A typical counter loop system using components included the ML1/K kit



A typical 20m² small room system using an ML1 amplifier, an APM plated microphone and four core burglar alarm cable



POWER REQUIREMENTS

Mains voltage	230V ac \pm 10%
Max. primary current	45mA
Fuses	A non-replaceable thermal fuse is located in the transformer

The ML1 requires fixed mains wiring fed from a 3A fuse spur located no more than 3m from the amplifier. The amplifier is designed to mount on a standard UK 25mm double gang back box.

INPUTS

MICROPHONE	
Input connector	3.5mm mono jack (located on the front of the ML1)
Input Impedance	600 Ω
Sensitivity	2-5mV (-46dB to -50dB)
Phantom	+9V
BALANCED LINE	
Input connector	Screw terminals (located on the rear of the ML1)
Input impedance	10k Ω
Sensitivity	0dB (300mV rms to 1.5V rms)

Should additional inputs be required, the ML1 is compatible with SigNET's 'outreach plate' input extension system. This allows up to 10 extra mic or line level inputs to be daisy-chained to the ML1's line input. See our separate datasheet for details.

OUTPUT

Type	Current mode
Loop connector	Screw terminals
Cable	For counter loops, use the pre-formed TX2 counter loop supplied in the ML1/K kit (see fig.1) For rooms up to 20m ² , use four core burglar alarm cable wired as four turns (see fig. 2)
Loop coverage (counter loops)	\leq 1.2m ² (using TX2 counter loop)
Loop coverage (small rooms)	Up to 20m ² i.e. 4.5m x 4.5m (using four core burglar alarm cable wired as four turns)
Loop drive current	250mA average, 600mA max.
Loop impedance	0.2 to 2 Ω

PERFORMANCE

Bandwidth	40Hz to 8kHz
Input stage dynamic range	33dB
Distortion	<0.5% THD

The ML1 includes an amplitude compression stage that limits overload and has a dynamically variable ratio from 1:1 to 10:1

INDICATORS & CONTROLS

LED indicators	Input signal (red); Loop current (green/orange/red); power on (green)
User controls	Microphone sensitivity control (fingertip/screwdriver adjustable).
Engineer controls	Line input level control (screwdriver adjustable). Loop drive current control (screwdriver adjustable)

DIMENSIONS & WEIGHT

W x H x D (ML1 amplifier only)	143 mm x 83 mm x 32 mm (requires a standard UK double gang back box of at least 25mm depth)
Weight	300g (amplifier only)