

LA400 MAGNETIC LOOP ANTENNA



10KHZ-500MHZ

Since the invention of this revolutionary concept by KOLSTER in 1915, loop antennas, especially of the active type, have also been widely used by the military in the 70's, before becoming very popular among hobby listeners.

In recent years, the increase in man-made local noise (typical city noise) poses a problem for the reception of distant signals in the long wave, medium wave and shortwave bands. LA400 is our latest product based on the technology we developed since the original LA320 loop antenna. In addition to its exceptional directivity in order to

minimize the effects of local noise, the revolutionary LA400 offers, with its **REMOTE TUNING SYSTEM**, the perfect solution to keep the antenna away from noise sources by setting it up in quiet areas!

While the control (tuning) box stays at hand's reach, the loop element can be set away by using simple LAN and BNC coaxial cables.

10kHz to 500MHz, 5 position band switch to peak only on the wanted signal. Small size 30.5cm diameter loop with exceptional 20dB gain.





FEATURES

Ultra-wide reception range 10kHz $\sim 500 \text{MHz}$. Four band selectable between 150kHz $\sim 30 \text{MHz}$ and precisely tunable for best receiving experience. Sharp alignment characteristics by electronic tuning. Exceptional 20dB gain thanks to built-in low noise amplifier.

Shield loop antennas have the advantage, over non shielded ones, to be very robust against local noise from electrical devices such as televisions, PCs, fluorescent lightening, switching power supplies, etc...

Remote tuning – Unlike previous amplified indoor loop antennas, the band switching and fine tuning controls are not tied anymore to the loop element. With these controls now on the control box and by using the optional LA400-RCK extension cables, it is now possible to tune the antenna while the loop element is setup at the most reception friendly location possible (window, *covered* balcony, etc...). Compatible with 3rd party cables. Maximum length: 20m.

A relay system is used for band switching, providing excellent isolation characteristics. The relay is efficiently placed inside the loop element, while you can operate it through the control box via the control cable.

Electronic tuning from 150kHz~30MHz allows very sharp tuning to the desired frequency. Shift the aligning point slightly to attenuate unwanted signals while amplifying the wanted signal.

Any type of receiver - LA400 can accommodate not only any kind of communications receiver between 10kHz and 500MHz, but also your beloved antique vacuum tube receivers, especially with option MC-600 described on the right side. Can also be used as an antenna for portable FM radios, while improving tuner performance (selectivity).



SPECIFICATIONS

LA400 Magnetic loop antenna		
Frequency range	10kHz ∼ 500MHz	
Aligned range	150kHz \sim 30MHz 4 band selectable	
Unaligned range	10kHz \sim 150kHz, 30MHz \sim 500MHz	
Gain	20dB min.	
Operating temp.	-10℃ ~ +60℃	
Power req.	9∼15V DC, 80mA @ 12VDC	
Impedance	50Ω	
	Loop	305mm diameter
Sizes (mm)	Loop element	305(W)x367(H)x38(D)
projections incl.	Control box	118(W)x59(H)x112(D)
	All assembled	300(W)x425(H)x110(D)
Maight	Loop element	220g
Weight	Control box	300g
	Control cable (LAN type) 30cm	
Supplied	AC power supply	
accessories	BNC (F)/BNC (F) RG-58U coaxial cable (1m)	
	Printed user manual	
LA400 is NOT intended for transmit purposed		

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Not waterproof, use only indoors.

OPTIONAL ACCESSORIES

LA400-RCK Extension cables (10m each)

This set of cables allows you to separate the control (tuning) box from the loop element, by up to 10m. Conveniently place the loop element as closely as possible to an open space, such as window, covered balcony, etc...away from local electrical noise, for a quieter reception experience.



MC-600 Impedance matching transformer

Passive impedance matching transformer interface which allows your LA400 to be connected to any antique receiver with a 600Ω antenna terminal. Supported frequency range: 10kHz to 30MHz. MC-600 has the same isolation feature than the GT-1 accessory described below.



GT-1 Galvanic isolation transformer

To be connected between the receiver and the LA400 antenna. Does greatly reduce local noise by breaking the ground loop effect between antenna and receiver, especially when the LA400-RCK 10m separation cables are used. Supported frequency range: 40kHz to 30MHz



Product specifications and design subject to change without prior notice

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