ACOM L-PROT 2000

Lightning Protector

for 1.8-54 MHz, 2 kW antennas with coaxial cabling

OUTSTANDING HF POWER PRODUCTS

www.acom-bg.com

MAIN FEATURES

APPLICATION AREA

ACOM L-PROT 2000 is a lightning protection device of TX/RX equipment in the range of 1.8-54 MHz / 2 kW with coaxial cable not used for (DC) power supply.

PROTECTIVE ACTION

L-PROT 2000 provides excellent protection against static electricity accumulation in the antenna and eliminates white noise in the receiver during wind, rain, or snow. It also prevents any DC current flow between the input and output.

Besides, the two chokes DC short-circuit the ports and prevent charges from accumulating. The air spark gaps limit the back EMF.

EASY USE

The device is bi-directional and works equally in both directions. The coaxial connectors of both ports are marked the same: "IN/OUT" since they are mirror-identical and interchangeable by design.

The device is equipped with a grounding stud and wing nut which must be grounded.

HOW IT WORKS

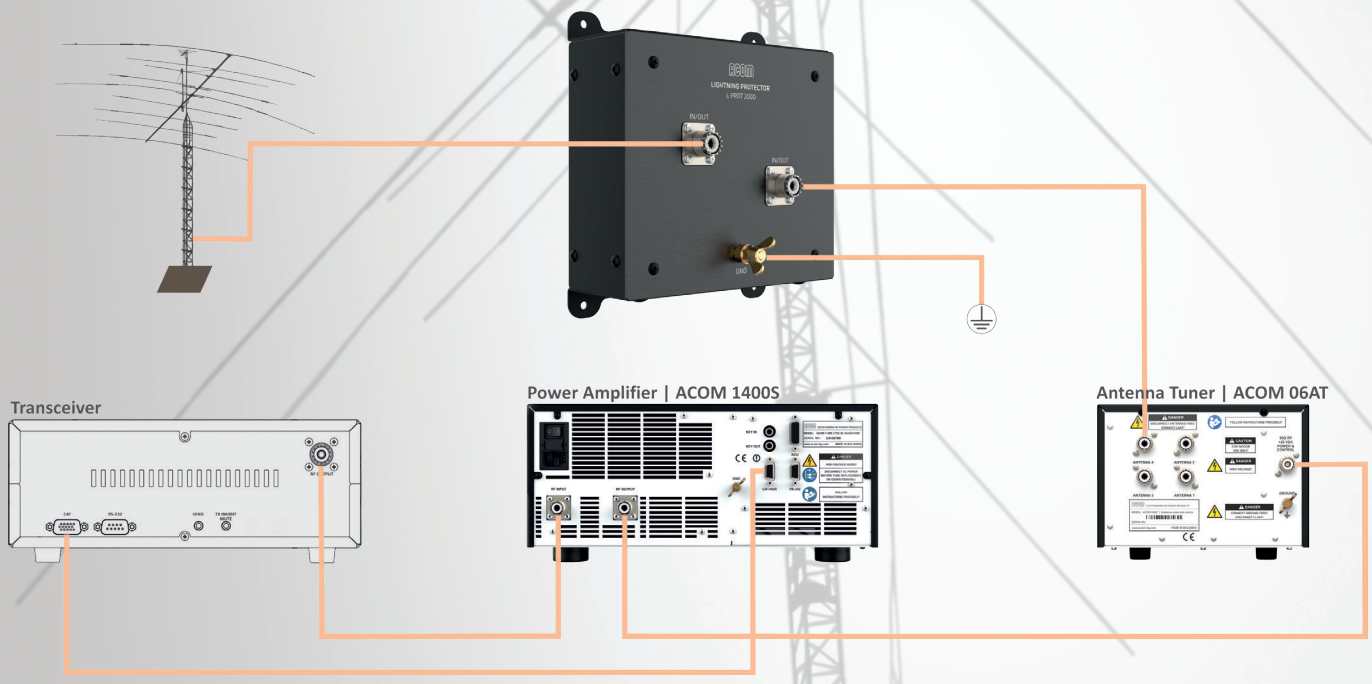
The main energy amount of electromagnetic pulses induced by a lightning strike is spread in the frequency spectrum below 100 kHz (LW/VLF band), approaching DC.

Suppression of LW/VLF components effectively attenuates the strike energy and completely blocks the pulse DC component.

In the rare event of a very close strike, the pulse voltage is limited by the two massive hemispherical air spark gaps. These voltage limiters withstand greater surge current and multiple strikes, and last much longer, than commonly used GDT arresters.

INSTALLATION

L-PROT 2000 is designed primarily for installation in an electrical cabinet or on the wall, outside the radio shack. It should be installed low at the building foundation, close to the building's lightning protection grounding system.



General connection diagram based on ACOM solid-state amplifier and automatic antenna tuner

⚠ DANGER

NEVER underestimate the danger of lightning!
The use of lightning protection devices is highly recommended.

SPECIFICATIONS

OPERATING FREQUENCY RANGE
From 1.8 to 54 MHz

IN/OUT PORTS
Two 50 Ω nominal-impedance coaxial RF ports with SO-239A connectors

POWER HANDLING
Maximum input RF power, PEP or continuous carrier, at antenna SWR up to 3: 2000 W

DC RESISTANCE FROM EACH PORT TO THE GROUNDING STUD
12 mΩ maximum

RATED DISCHARGE PULSE
20 kA, 8/20 µs, 100 shots

MAXIMUM DISCHARGE PULSE
500 A, 10 µs / 1 µs, 1000 shots

MAXIMUM DC OR AC CURRENT, 0 TO 60 Hz
25 A rms

FREQUENCY RESPONCE SLOPE IN THE LW/VLF RANGE
60 dB/dec typ

FREQUENCY RESPONCE SLOPE IN THE VHF/UHF RANGE
-40 dB/dec typ

SIZE & WEIGHT
- Operating (excluding connected cables) WxDxH: 175x66x193 mm, Approx. 0.8 kg (6.9x2.6x7.6 inches, Approx. 1.8 lbs.)

OPERATING ENVIRONMENTS
- Temperature range: -40...+60 °C (-40 °F to 140 °F)
- Relative air humidity: up to 98% @ +35 °C (95 °F)
- Height above sea level: up to 3050 m (10000 ft)

Dealer/Partner's address:

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