

InterferenceHunter™

Handheld Direction Finding System

MA2700A

Includes GPS and Electronic Compass

Introduction

Simplify your interference hunting tasks with the Handheld InterferenceHunter™ from Anritsu Company.

This broadband, easy-to-use handheld direction finding antenna system includes everything you need to find the sources of signals. With a broadband preamplifier, the system is sensitive. With a GPS receiver, it knows where it is. With the electronic compass it knows where it is aimed. With an antenna attached, the InterferenceHunter captures a direction and signal level when the user presses the trigger on the ergonomic handle.

The included adjustable shoulder strap conveniently holds the MA2700A when out in the field. The ergonomic handle can be used with antennas having a female Type-N connector located at the back of the antenna. The included coupling nut allows for easy antenna connection. Compatible antennas in many cellular bands are available from Anritsu. For details on these antennas including frequency range, gain, and pattern information, refer to the Directional Antennas Technical Data Sheet (11410-00376) available for download from the Anritsu web site.

Combined with Interference Analysis (Option 25) on Anritsu's instruments, the captured location and bearing data is displayed on the instrument.



InterferenceHunter MA2700A Handheld Direction Finding System
 Compact Size: 303 mm x 220 mm x 70 mm (11.9 in x 8.7 in x 2.76 in), Lightweight: < 1 kg (2.2 lb)

Specifications

All specifications and characteristics apply to Revision 1 instruments. All published specifications are typical.

Power Consumption

Preamplifier On	0.6 Watts
Preamplifier Off	0.5 Watts

Preamplifier

Bandwidth	10 MHz to 6 GHz
Gain	≥ 8 dB: 10 MHz to 2.4 GHz ≥ 5 dB: > 2.4 GHz to 4 GHz ≥ 3 dB: > 4 GHz to 6 GHz

Electronic Compass

Power	Powered from USB
Accuracy	≤ 5°
Interface	USB

GPS Receiver

Satellites Tracked	12 (maximum)
GPS Locking Time	Cold start: 30 s, typical, with a clear view of the sky Warm start: 2 s, typical, with a clear view of the sky
Position Uncertainty	± 2 meter, typical

Cables

USB cable terminated with a USB Type A Female Plug, 1.5 meters
 Coaxial cable with Type-N male connector, 1.5 meters

Tripod Mount

1/4 - 20 UNC x 7 mm

Electromagnetic Compatibility

European Union	CE Mark, EMC Directive 2004/108/EC and Low Voltage Directive 2006/95/EC
Interference	EN 61326-1
Emissions	EN 55011
Immunity	EN 61000-4-2/-4-3/-4-4/-4-5/-4-6/-4-11
Australia and New Zealand	C-tick N274

Safety

Safety Class	EN 61010-1 Class 1
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Environmental

Operating Temperature	-10°C to +55°C
Maximum Humidity	95 % non-condensing
Altitude	4600 meters
Shock	MIL-PRF-28800F Class 2
Storage	-40°C to 71°C

Size and Weight

Size	303 mm x 220 mm x 70 mm (11.9 in x 8.7 in x 2.76 in)
Weight	< 1 kg (2.2 lb)

How to Use the MA2700A

Connections

- Connect an antenna to the male N-connector (inside the coupling nut).
- Connect USB cable between the MA2700A and the instrument. Connect coaxial cable between the MA2700A and the instrument's RF Input connector.

Instrument Setup

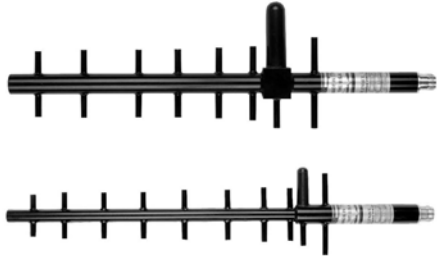
- Confirm that the instrument has SPA module V6.00 or higher.
- Select the Interference Analysis (Option 25) mode on the instrument, then select Interference Mapping measurement.
- The instrument will detect the connected MA2700A and display the message **MA2700 detected -- Device is ready to use**. After GPS lock, the instrument will use GPS data from the MA2700A.
 - To manually select the MA2700A: In the Measurements menu, press Interference Mapping twice. Choose the Direction Finding submenu then Direction Finding Antenna Selection, and select MA2700 Handheld.

Mapping

- Anritsu easyMap Tools is used to create maps that are displayed on the Anritsu instrument. The software is available from the Anritsu web site.

Standard Accessories (included with instrument)

Part Number	Description
2000-1729-R	Shoulder Strap

Optional Accessories**Directional Antennas**

Part Number	Description
2000-1411-R	822 MHz to 900 MHz, N(f), 10 dBd, Yagi
2000-1412-R	885 MHz to 975 MHz, N(f), 10 dBd, Yagi
2000-1413-R	1710 MHz to 1880 MHz, N(f), 10 dBd, Yagi
2000-1414-R	1850 MHz to 1990 MHz, N(f), 9.3 dBd, Yagi
2000-1415-R	2400 MHz to 2500 MHz, N(f), 10 dBd, Yagi
2000-1416-R	1920 MHz to 2170 MHz, N(f), 10 dBd, Yagi
2000-1659-R	698 MHz to 787 MHz, N(f), 8 dBd, Yagi
2000-1660-R	1425 MHz to 1535 MHz, N(f), 12 dBd, Yagi
2000-1427	Monopod

MA2700A Transit Case

Part Number	Description
760-261-R	Transit Case, space for MA2700A, antennas, filters, instrument inside softcase, and other interference hunting accessories/tools.

Additional Documents and Software

- Spectrum Analyzer Measurement Guide applicable for your Anritsu Instrument. The Interference Analysis chapter will include a section on "Interference Mapping" with information on setup and selecting the MA2700A as the Direction Finding Antenna.
- Anritsu easyMap Tools software creates Geo-enabled maps which are viewed on the Anritsu instruments during interference hunting.
- Directional Antennas Technical Data Sheet (11410-00376) lists compatible antennas in many frequency bands.
- The User Guide for your Anritsu instrument.

These documents and programs along with additional applications notes, white papers, and videos covering interference analysis are available from the Anritsu web site (www.anritsu.com).



The Master Users Group is an organization dedicated to providing training, technical support, networking opportunities and links to Master product development teams. As a member you will receive the Insite Quarterly Newsletter with user stories, measurement tips, new product news and more.

Visit us to register today: www.anritsu.com/mug



To receive a quote to purchase a product or order accessories visit our online ordering site: www.ShopAnritsu.com

Training at Anritsu

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This Technical Data Sheet applies to Revision 1 of the MA2700A Interference Hunter. Instruments not indicating a revision level are Revision 1 instruments.



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