

Radio Direction Finding Mapping Software

HuntMASTER provides a coherent situation awareness picture based on a multitude of sensors, while filtering out noise sources found during real world missions



Typical mobile DF setup

Training mission playback. Target's Heat Map can be seen overlaid to map

HuntMASTER at a glance

- Mission critical design concept for unattended remote site operation with self healing capabilities
- Fully integrated solution with hardware DF sensors from [RDF Products](#)
- Simple operation, one button target lat/lon position estimation
- Unattended DF operation capable
- Works with locality stored map datasets for offline missions
- Flexible HuntNET IP communication protocol for wired or wireless DF site interconnection
- Full DF mission recording and playback capabilities
- Flexible GUI control: touch screen compatible, mouse based control or mouse free operation by means of keyboard shortcuts
- Optional MapMaker maps download tool. Users can download multi-resolution map datasets of mission areas in minutes
- More than 15 years of experience supplying DF Mapping software to top government agencies around the world

HuntMASTER is a very sophisticated DF digital mapping and location software package intended to transform a radio *direction* finding system into a true radio *location* system. It has been specifically written to accommodate the demanding dynamic requirements of mobile DF operation and has evolved over the years based on continuous feedback from hard-edge public safety, law enforcement, and national security users.

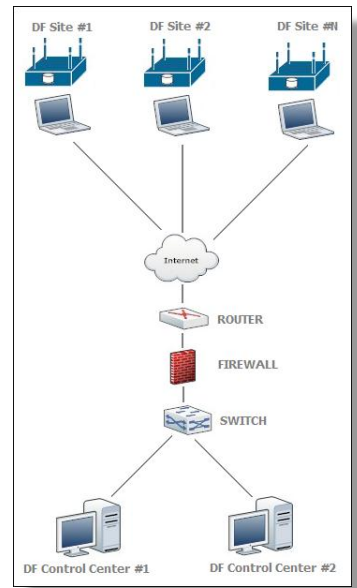
HuntMASTER Radio Direction Finding software suit integrates in an intuitive to use graphic user interface all the necessary features to efficiently track down a target in record time. All mission information is recorded for later analysis and further processing.

HuntMASTER is user friendly and an easy to operate PC based software. Has build-in seamless integration to [RDF Products](#) series of DF Processor hardware, most GPS receivers, digital compasses and selected radio receivers are also supported. DF capabilities expand from HF to well into the microwave bands. Deployment of these next level DF systems is a simple task even for non-technical personnel. Well documented manuals and setup procedures are available. System interconnection is done using one USB cable to host computer.

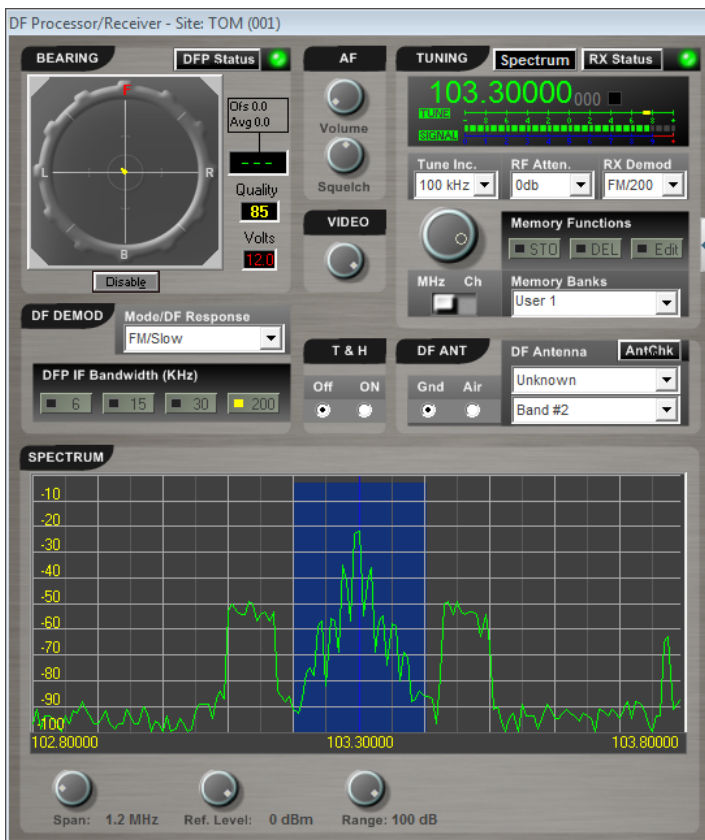
HuntMASTER SS (Single Site) software has different software modules to fulfill both civilian and military requirements. As a PC based software solution, HuntMASTER SS can be customized to operate on desktop computers, or on rugged laptop devices for mobile DF applications.

HuntMASTER NET implements HuntNET communication protocol. This is a TCP/IP based link layer to provide seamless multi-site DF sensors control. Simultaneous visualization of remote DF sites (either mobile, fixed or a mix) is possible from a HuntMASTER command and control center. All DF data collected by the multiple remote sensors is clearly overlaid onto a situational awareness map.

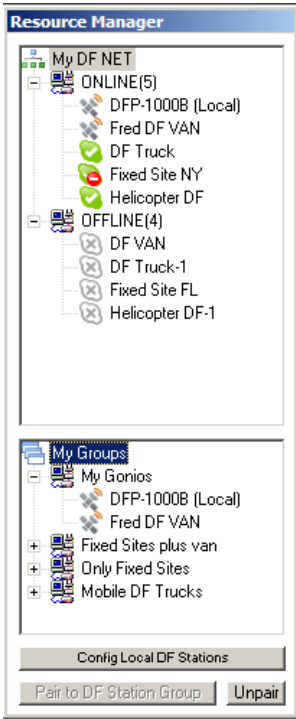
Mission controllers can assign different targets to the pool of DF sites available in any given HuntNET network. Therefore, a HuntNET can handle multiple missions simultaneously. Each mission can be initiated from an independent command and control workstation. Any HuntMASTER workstation in the network can be used as a mission control station. DF assets in the network can be reassigned on the go based on mission requirements under total software control. Mission specific DF asset groups (profiles) can be created to easily connect to the proper remote DF sites



Network topology for 3 DF sites with dual control centers



Integrated control of DF Processor & SDR receiver with spectrum view



HuntNET DF resources (top).
User defined groups (bottom)

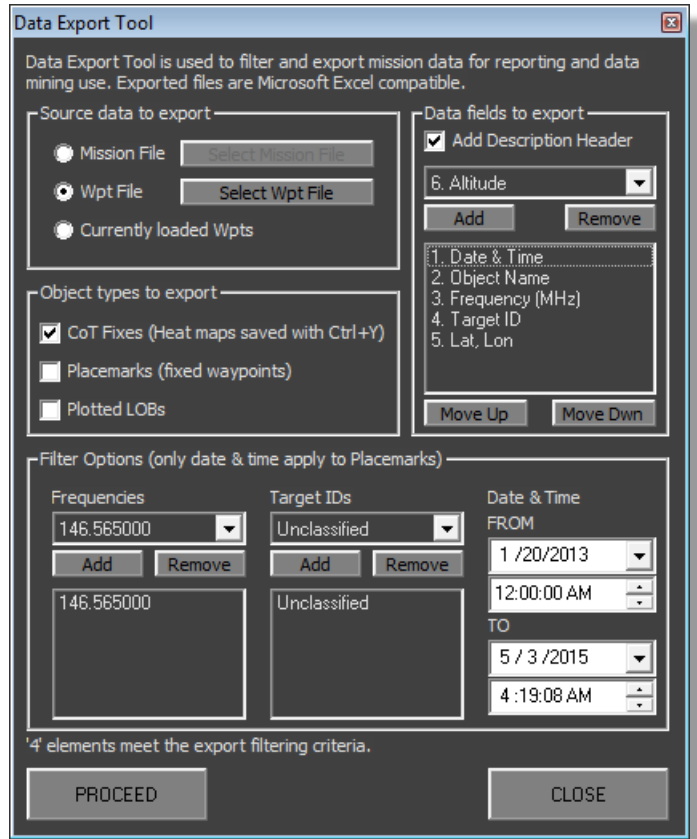
necessary for each specific type of mission. Up to 223 DF sites can be networked together in each HuntNET network.

HuntMASTER's NET DF operators can be located either at any of the DF sites, or at a remote command and control workstation. Only TCP/IP connectivity is required between all of the DF sites and the command and control centers. HuntNET protocol transfers as little information as possible to be able to use bandwidth constrained data links between sites.

To help DF operators estimate the most probable location for any given target, HuntMASTER provides an advanced filtering algorithm with is the results of more than a decade of R&D in the field. DF bearing lines may have multi-path induced errors, and other types of bearing errors

that must be filtered out to obtain accurate triangulation results. The DF operator can activate HuntMASTER's Heat Map overlay to have a reliably estimation of the hottest spot on the map. This sophisticated algorithm displays the area where the target emitter is located with a 95% confidence level.

The Heat Map algorithm allows target tagging. Therefore, multiple transmissions from different targets operating at the same frequency can be tracked down independently.



Filtered DF data is easily exported in Excel compatible format

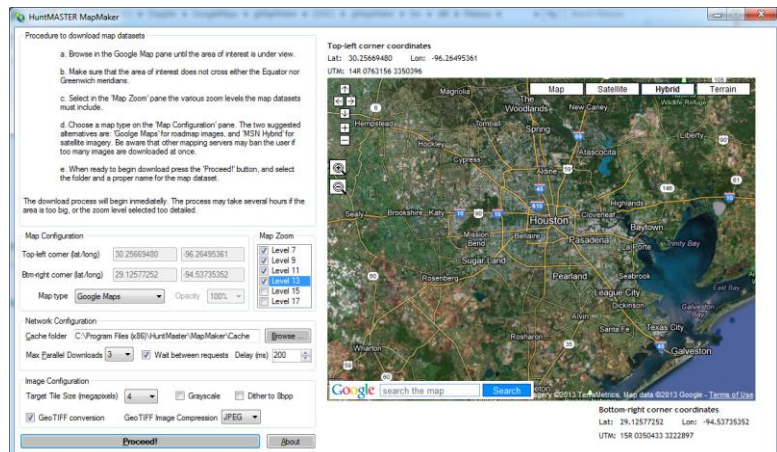
| # | Name | Type | Latitude | Longitude | Altitude | LOB | Time | Date | Freq | Mode/BW | TargetID |
|-----|-----------|--------|------------------|------------------|----------|------|------------|----------|------------|---------|-----------|
| 98 | GAS ST... | Fix | 28° 20' 41.61" N | 82° 21' 16.56" W | ---- | ---- | 7:28:16 PM | 12/12/12 | ----- | ----- | ----- |
| 99 | TEST RPT | Fix | 28° 2' 39.95" N | 81° 58' 48.97" W | ---- | ---- | 7:28:18 PM | 12/12/12 | ----- | ----- | ----- |
| 100 | Pager_CoT | CoTfix | 28° 42' 53.53" N | 82° 6' 26.20" W | ---- | ---- | 7:28:24 PM | 12/12/12 | ----- | ----- | ----- |
| 101 | First LOB | Mobile | 27° 57' 15.01" N | 82° 30' 33.81" W | 0 ft | 153° | 7:18:14 PM | 11/02/13 | 850.000000 | FM/15 | Target #1 |
| 102 | Test Name | Mobile | 27° 57' 15.01" N | 82° 30' 33.81" W | 0 ft | 195° | 7:18:59 PM | 11/02/13 | 849.150000 | FM/30 | Target #3 |
| 103 | Last Test | Mobile | 27° 52' 07.00" N | 82° 21' 04.99" W | 0 ft | 280° | 7:21:13 PM | 11/02/13 | 850.000000 | FM/30 | Target #3 |
| 104 | None | Mobile | 29° 23' 20.02" N | 98° 35' 18.58" W | ---- | 045° | 7:56:51 PM | 11/02/13 | 155.510000 | FM/30 | Target #2 |
| 105 | None | Mobile | 29° 23' 20.00" N | 98° 35' 18.60" W | ---- | 052° | 7:57:09 PM | 11/02/13 | 165.250000 | FM/30 | Target #6 |
| 106 | None | Mobile | 29° 23' 20.00" N | 98° 35' 18.60" W | ---- | 012° | 7:57:33 PM | 11/02/13 | 118.600000 | AM/30 | Target #6 |

Intercepts database view. Each LOB is recorded together with 15+ signal parameters

Need additional info?

Contact us by [email](#). Interested users may also wish to view the following HuntMASTER [mission playback video](#)

Several project specific plug-ins are available for HuntMASTER. Some of these are: encrypted data links between DF sites, decentralized mission data logging when DF sites are in conflict zones, Cursor-on-Target (CoT) support to provide DF information to a unified command and control center, and more. For application specific plug-ins contact one of our support engineers. We will be happy to assist you with your project requirements.



MapMaker configured to download a Houston area map dataset