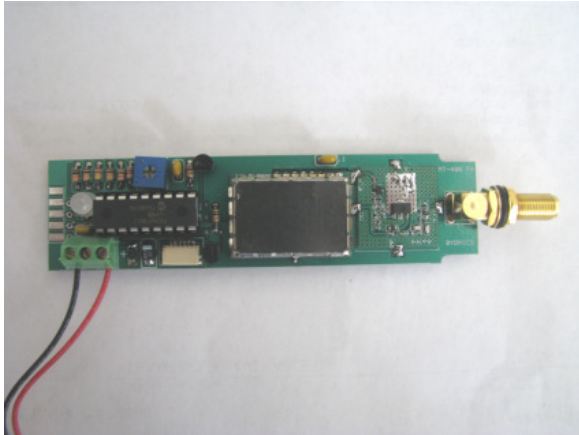


MT-400 Preliminary Data Sheet



The MT-400 is a frequency agile (144-148 MHz) transmitter with greater than of 400 milliwatts power output. The MT-400 was designed to fill the gap left by the discontinuation of our older, fixed frequency MT-300, but is significantly more advanced. The MT-400 is expected to be primarily of interest to those operating in airborne and high altitude environments. The MT-400 has single user control allowing 0 to approximately 4.5 KHZ deviation, and is factor pre-set to 3.5 KHZ. Byonics will program your transmitter free of charge prior to shipping

Features

Dimensions	3.925 X 1 inches (Not including SMA RF connector or optional DB-9)
Weight	Less than 1 Ounce, without optional DB-9 (Included but not installed)
Serial input	DB-9, with +5 power for external GPS, and pads for direct wiring
GPS Input	6 pin, 1mm connector for Byonics GPS 4 OEM receiver. This port offers switched DC power output to provide power to the GPS prior to a scheduled transmission, which will increase operational time in tracking mode with any given battery power source significantly.
Power input	Three terminal screw connector to provide DC power input of between 9 and 15 Volts, as well as an input (center screw) that when brought to ground using an external switch, will cause the unit to operate in its secondary configuration.
Current	The transmitter draws several milliamperes in standby mode between transmissions, and approximately 250 mA during transmissions to produce full power output, this figure includes the <40 mA draw of the Byonics high altitude GPS , rated to operate to 85 KM altitude.
Firmware	The MT-400 utilizes the newest generation Byonics hardware and software, and new versions of tracking software or other software compatible with the basic design are available free for download and installation from the Byonics website. These include the TinyPack, WxTrak, Fox software. Care should be taken when utilizing the FOX software not to transmit with excessive duty cycle and intervals to avoid over-heating. Installation of any Byonics firmware will require connection to the device via the DB-9 , which may be wedged on temporarily or soldered in place permanently.
Configuration	Configuration software for all Byonics firmware is available free for download from the Byonics website. The TT3 family of products are programmed via RS-232 serial data. Byonics offers programming cables in standard serial and USB varieties.
Antenna	The MT-400 will work with virtually any 2 meter antenna. Byonics offers various whip antennae for use in operation in line of sight ground modes, (i.e. Fox Hunting, etc) Byonics offers the V6 ½ wave center fed dipole and recommends this antenna for high altitude operations, since it offers negligible weight and significant gain over whip antennae
Batteries	Although the unit is provided with a standard 9 Volt battery style power connector, few 9 Volt “transistor Radio” batteries will provide the 250 pulsed power requirements required for full power operation. (Typically, you may expect about 100 mW output power with a 9 Volt “transistor radio” battery, which is just fine for a Fox hunt transmitter) For airborne or more mission critical applications, we recommend either a 6 or 8 pack of Energizer “Ultimate Lithium” batteries, which are cold weather tolerant, have significantly higher energy density than batteries of other chemistry, and are roughly 1/3 the weight of Alkaline batteries.
Packaging	Plastic “tooth brush tube” contained with end plugs.

www.Byonics.com/mt-400