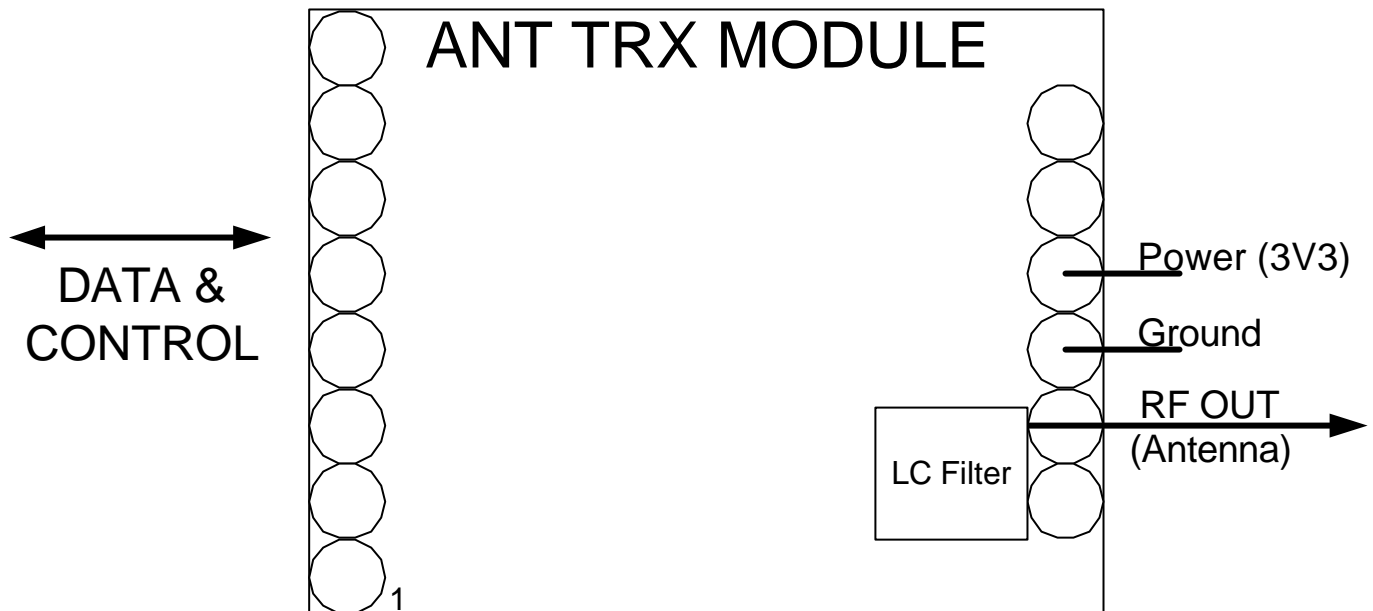


# ANT Technical Datasheet & Diagram

## 4 CH / USA Configuration

Rev 5  
Digital Driven Solutions  
10 February 2002  
JD



### **ANT Theory of Operation**

UHF Transceiver operating in FSK mode (Half Duplex)  
Operating in 902 - 928MHz Band  
Power Output: 0dBm  
Operating Voltage: 3.3V

The reference oscillator is external, however there is facility for an onboard crystal. This reference source is then used internally by an onboard synthesizer which selects the relevant transmission frequencies. The RF output stage is locked by an onboard VCO which is set using an external inductor. Harmonic filtering is controlled by an external LC band-pass filter. This consists of two capacitors and an inductor, located next to the RF OUT pin as illustrated above.

One of the 4 transmission frequencies (channels) is selected using the 4 position channel switch.  
Channel 1 : 906 MHz; Channel 2 : 926.5 MHz;  
Channel 3 : 920 MHz; Channel 4 : 913 MHz.

### **Product Theory of Operation**

The Remote Unit acts as the master and transmits for ~4ms every ~10ms when the Remote Peripheral is being used. When no buttons etc. are being used on the peripheral then the Remote Unit only transmits approx every 45ms, saving TX time and power.

The Host (Console) Unit is the slave and is always in receive mode, only transmitting (for ~3ms) when the Remote Unit requests information, which is done as required.