

## NSI-RF-7020

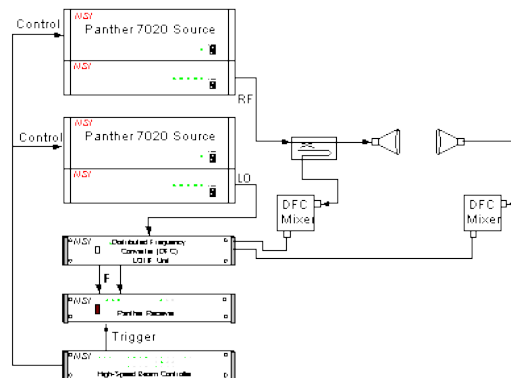
### High Speed Synthesizer



#### DESCRIPTION

The NSI 7020 Panther High Speed Microwave Synthesizer was designed specifically to address the demanding needs of the antenna test community. The Panther 7020 is a high performance synthesizer designed for high-speed frequency switching applications. The 7020 is compatible with a wide variety of receivers, including the NSI Panther 6000 and the Agilent PNA.

#### SYSTEM BLOCK DIAGRAM



#### FEATURES

- Up to 10,000 frequencies per second (100  $\mu$ sec/pt.) - reducing antenna test time and improving range productivity
- 0.1 to 20.0 GHz
- Power output +8 dBm typical
- Compatible with a variety of receivers
- Built-in pulse modulator with TTL modulation input
- Remote operation with 30m (100 ft.) control cable
- Fully integrated with NSI 2000 antenna measurement software
- Stand-alone applications, or NSI driver provided if part of Panther 6000 receiver system with high speed beam controller
- Resolution: 100 Hz
- Parallel BCD interface

SPECIFICATIONS	
Power Out	+8 dBm typical
Frequency Range Speed	10,000 frequencies per second (100 µsec/pt.)
Frequency Switching	10,000 Freq/sec.
Frequency Resolution	100 Hz
Harmonics	-18 dBc, typical
Phase Noise	-90 dBc/Hz at 1 kHz offset
Software Interface	Support for NSI Antenna Measurement Software and Panther 6000 Receiver/HSBC
Computer Interface	Differential BCD
RF Outputs	SMA female
Size (HxWxD)	8.75" x 17.0" x 18.0"
Controls and Indicators	DC power indicator, Band selection: x1, x2, x4, off indicator, pulse mode enabled, input pulses
Frequency Reference In	10 MHz, BNC connector
Frequency Reference Out	10 MHz, BNC connector

### CONSISTS OF THE FOLLOWING COMPONENTS

- NSI-RF-7020 synthesizer unit
- Driver for integration with NSI Antenna Measurement Software
- Driver for integration with NSI Panther 6000 Receiver with HSBC
- Power supply cord
- Installation and operation manual
- One year warranty

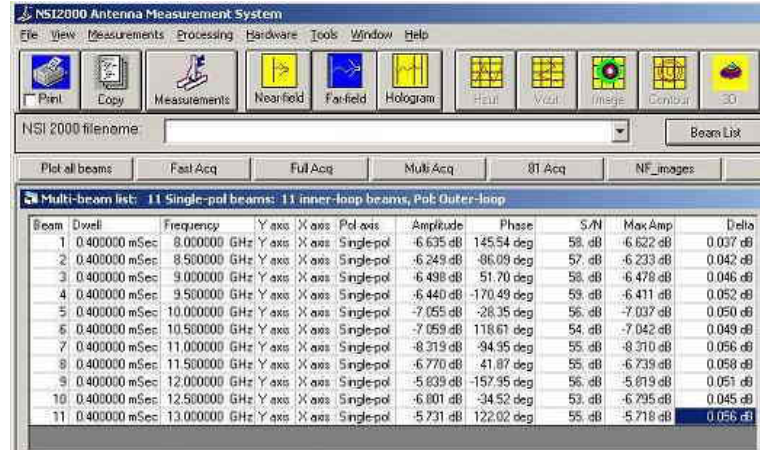
### OPERATION

The Panther 7020 Synthesizer has a parallel BCD interface to set the frequency. The frequency list is loaded into the beam controller (NSI High Speed Beam Controller - HSBC, or NSI Standard Beam Controller - SBC). During a measurement, the beam controller sets the frequency of the 7020 synthesizer.

NSI provides full program support for the Panther 7020 with its NSI 2000 Antenna Measurement Software. For other applications, NSI provides the drivers required for integration with the Panther 6000 receiver with High Speed Beam Controller (HSBC). For stand-alone applications, NSI provides the differential BCD control interface definition.

### ORDERING INFORMATION

Please contact the NSI Sales department to order this product.



### Nearfield Systems, Incorporated

19730 Magellan Drive, Torrance, CA 90502, USA, Tel: 310.525.7000, Fax: 310.525.7100  
 Email: sales@nearfield.com. Visit our website: www.nearfield.com