

PICOCEPTOR™ NARROWBAND SURVEILLANCE RECEIVER SOFTWARE



MEETING TODAY'S CHALLENGES TO PROVIDE A SECURE FUTURE

The Picoceptor Narrowband Surveillance Receiver Software Package provides all necessary software loads to allow a Picoceptor software definable receiver (SDR) hardware platform to operate as a conventional narrowband surveillance receiver.

This software load allows the Picoceptor to perform AM, FM, CW, USB, LSB, and PM demodulation with user selectable digital signal bandwidths of 2, 5, 10, 20, 50, 100 and 200 kHz. The user may choose to download standard digital-drop receiver (DDR) functionality or receiver functionality with the VITA-49 data streaming capability. The standard receiver load has the ability to stream digital data, including audio, through the remote interface port while the VITA-49 provides additional precision time-stamping information that complies with the standard VITA-49 format. The digital I&Q data with time-stamping information can be used in applications such as time difference of arrival (TDOA) or direction finding (DF).

In addition to the embedded software load for the Picoceptor, the package includes a Picoceptor Surveillance Rx Control

Application. The application allows the user to control and monitor various features of the Picoceptor via a simple and easy to use GUI. This application allows the user to adjust receiver parameters graphically by pointing and clicking with a mouse or keyboard entry. Wideband IF data is displayed along with a corresponding waterfall, narrowband display and demodulated baseband display. The Picoceptor Surveillance Rx Control Application operates on any standard PC or notebook PC running a Windows operating system.



A snapshot RF pan is displayed along with realtime wideband IF data (pre-filter) and narrowband IF data (user-selected filter).

A quick reference guide and detailed interface control document is also included in this software package. The documentation provides a general description of the package's functionality, the directions to load the software and firmware onto the Picoceptor and the procedures to load and operate the GUI on an external controlling device.

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HIGHLIGHTS

- Base receiver functionality
- Easy installation to restore factory default code
- Simple tool to validate receiver functions
- Seven bandwidths from 2 kHz to 200 kHz
- AM, FM, CW, SSB, PM demodulation
- Carrier operated relay (COR) and squelch
- Digital audio stream for remote listening
- Waterfall display for signal history
- Pre- and post-demodulation displays
- IF display may be used as a tuning aid

FUNCTIONALITY

See specific Picoceptor model datasheet

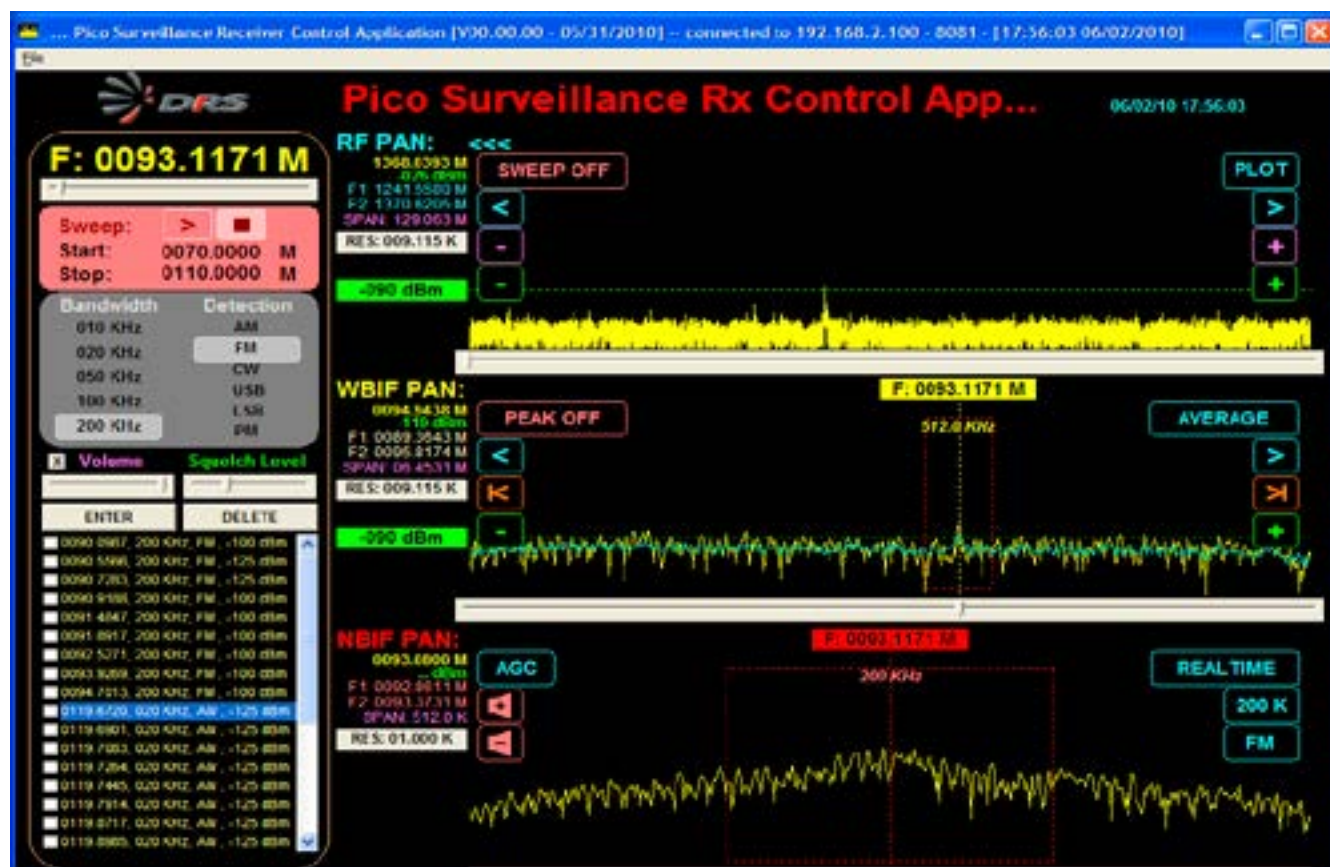
COMPATIBILITY

All Picoceptor models

ORDERING INFORMATION

8649A/SW/NBRCVR

Picoceptor Narrowband Surveillance Receiver Software Package



Picoceptor Narrowband Surveillance Application Graphical User Interface

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