



Microcom Design, Inc.

Desktop *DigiTrakIV*

Direct Satellite Reception for
GOES, METEOSAT & GMS
Data Collection Systems

P/N: DT-101



The Microcom Desktop *DigiTrakIV* receiver system enables users to receive DCP data signals directly from GOES satellites. Optional configurations will demodulate METEOSAT and GMS satellites. The system design is based on modern DSP (Digital Signal Processing) technology. This is the same technology that Microcom employed in NOAA's GOES national receive site at the Wallop's Island NOAA Command & Data Acquisition Station.

Each *DigiTrakIV* demodulator supports any channel for any data rate; 100, 300, or 1200 BPS modulation formats. Auto 100/300 baud detection is available.

The Desktop *DigiTrakIV* provides users with flexible system configuration options.

- Each *DigiTrakIV* enclosure may contain from one to four DigiTrak demodulators.
- Microcom's **DAMS-NT Software** will support up to four Desktop *DigiTrakIV* units (16 total channels)
- DSP technology enables software configuration and updates.

If a user's network grows beyond 16 channels, the existing investment in demodulators may be employed in the expandable **DAMS-NT Receiver** configuration. The **DAMS-NT Receiver** can be configured for 1 to 160 channels (see separate data sheet).

The Desktop *DigiTrakIV* demodulators provide accurate signal quality measurements:

- Real-Time operation with no post-processing latency.
- Messages can be received with only 0.25 second's separation.
- Message time stamping to the millisecond.
- Carrier, symbol sync, frame sync and measurement end times are all reported.
- Amplitude measurements to 0.01 dB.
- Frequency measurements (start & end) to ± 0.1 Hz.

Data input and system configuration are accomplished with the **DAMS-NT Software** suite that is provided with the *DigiTrakIV* system. All GOES DCP data ingest and system management tools are incorporated in the **DAMS-NT Software**. The user friendly **DAMS-NT Software** utilizes graphical system setup and provides real-time status displays.

The GOES Pilot Module acquires the pilot signal locks onto it and utilizes the pilot signal to control the frequency and amplitude output to the demodulators. This is done by converting the downlinked 78.75MHz to 5MHz required by the *DigiTrakIV*. The Pilot Module is equipped with additional output ports for GVAR and LRIT imagery at the 70MHz IF. Visual Pilot Module operation is provided by LED's to indicate acquisition and lock status.

Microcom Design, Inc.

10948 Beaver Dam Road
Hunt Valley, MD, USA 21030
Tel: (410) 771-1070
Fax: (410) 771-0018

E-mail: sales@microcomdesign.com

Microcom Design Inc.

656-E Capital Circle, NE
Tallahassee, FL, USA 32301
Tel: (850) 325-1865

Email: sales@microcomdesign.com

Microcom Canada

Omnimatrix
3465 Ashby
Saint Laurent, QC H4R 2K3
Tel: (514) 684 1004
Fax: (514) 697 0400

Email: roger@omnimatrix.com

Microcom Brazil

Simtech Representacoes LTDA
Rua do Mercado 17/14 andar Centro
Rio de Janeiro, Brazil CEP 20010-120
Tel: 21 2506 5900
Fax: 21 2240 1242

E-mail: simtech@simtech.com.br



Microcom Design, Inc.

Desktop *DigiTrakIV*

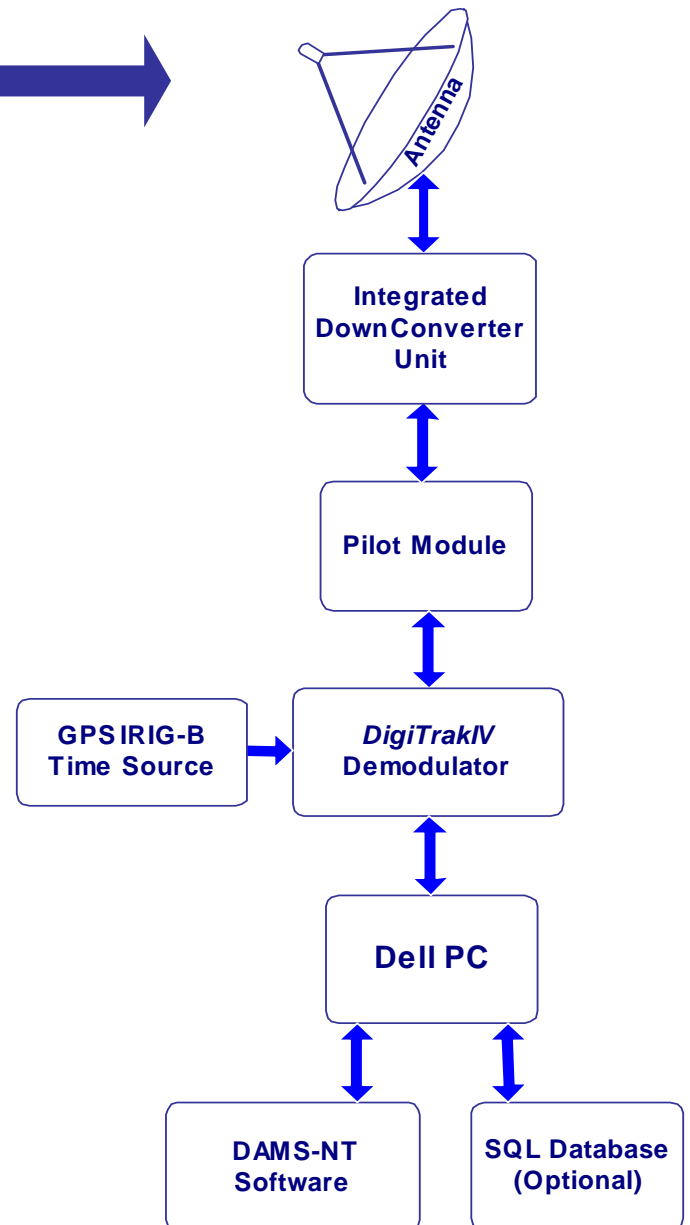
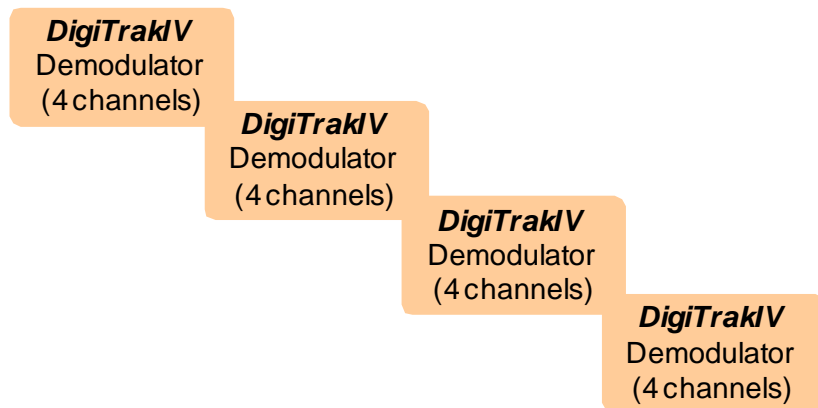


The Microcom Desktop *DigiTrakIV* receiver system consists of the components as shown in the drawing on the right. The standard system includes:

- 3.8 meter solid aluminum antenna
- IDU (Integrated Down-converter Unit (1694.45MHz to 78.75MHz)
- GOES Pilot Module
- *DigiTrakIV* demodulator (1 - 4 channels/unit)
- GPS IRIG-B Timekeeping
- Dell PC
- DAMS-NT Software

Options include:

- Larger Antenna
- Steerable, auto-track antenna
- DAMS-NT Tools with SQL database
- Configuration up to 16 channels with multiple *DigiTrakIV*s



ORDERING INFORMATION

- Specify Number of Channels

- Antenna: 3.8 M is standard, consult the factory for other choices

- Desktop *DigiTrakIV* is supplied with DAMS-NT Software. Consult factory for database options