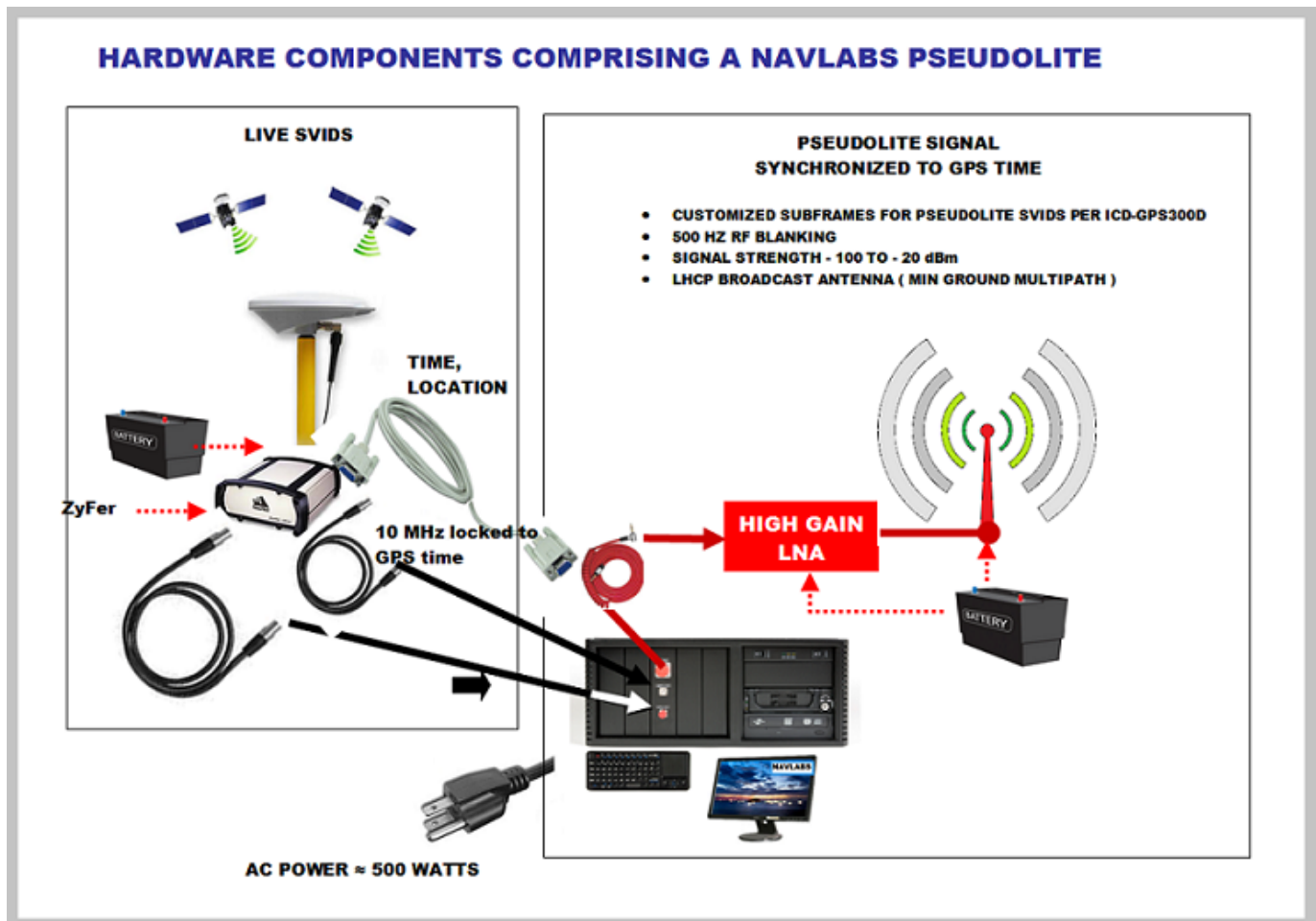


PSEUDOLITE / GROUND TRANSMITTER

The NAVLABS DS_400 Digital Simulation Engine has Pseudolite generation capability built in from first article.

To be used as an actual Pseudolite, the NAVLABS DS_400 supplies many, but not all of the needed components. In addition to 4 (or more DS_400 GPS Engine) THE FOLLOWING ELEMENTS ARE REQUIRED:

- Time Transfer GPS receiver. These are commercially available. They output a 1-PPS slaved to the GPS one-second rollover and supply the epoch per TCIP.
- A Signal Amplifier and Broadcast system



Configure the Pseudolite/Ground Transmitter using the satellite dBase editor page as follows:

Satellite Telemetry Data Setup and Configuration Editor

DISPLAYED SVID 1 IMPORT LEGACY DATA Users Guide IS-GPS-200D DO-261_L5 ICD-GPS 700

L2C & L5 DATA / MESSAGING **MNAV DATA / MESSAGING** **GROUND TRANSMITTERS** **WAAS DATA / MESSAGING**

Transmitter ID	Enabled	Location - Latitude	Longitude	Altitude	Clock Bias (Afo)	Clock Drift (Af1)	Use Data Bits From Svid	Assign to Hardware RF, Channel	Pulse Rate	Attenuation
1	<input type="checkbox"/>	0 Degrees	0 Degrees	0 m	0 s	0 s/s	1	1	0 Hz	0 dB
1	<input type="checkbox"/>	0 Degrees	0 Degrees	0 m	0 s	0 s/s	1	1	0 Hz	0 dB
1	<input type="checkbox"/>	0 Degrees	0 Degrees	0 m	0 s	0 s/s	1	1	0 Hz	0 dB
1	<input type="checkbox"/>	0 Degrees	0 Degrees	0 m	0 s	0 s/s	1	1	0 Hz	0 dB

Align Almanac to 3.5 Days Into Week [TOA]
 Synchronize Data Sets to Simulation Start Time
 Auto Create Telemetry every Hour

SHOW ELEVATION PROFILE
 SHOW DATASET PROFILE

LEGACY TLM WORD
 A/S BIT
 ALERT [2bits]
 Reserved

GPS RANGE MODELS

CANCEL APPLY

DS 400 PSEUDOLITE DEFINITION

- L1 P , L2 P
- 20 SVIDS: SVID 34 TOW = $100 + N \cdot 0.001$ SEC
- BLANKING / ATTENUATION VIA SUPERIMPOSED WAVEFORM
- FAST PULSING : 5 KHz 10% PULSE DUTY CYCLE + WAVEFORM + INIT
- SLOW PULSING : 50 Hz 10% PULSE DUTY CYCLE + WAVEFORM + INIT
- NO PULSE
- POWER: -55 dBm max. OUTPUT VIA RF#2 OR COMBINED ON RF #1
- DATA MODULATION: 50 Hz SAME