

# ZENITH ELECTRONICS CORPORATION

*In conjunction with KNPB TV and the Nevada/Northern  
California chapters of the SBE and SMPTE present*

## ATSC's *Digital VSB*

### TRANSMISSION SYSTEM SEMINAR

**Monday, August 20, 2001**

**8:30 a.m. to 5:00 p.m.**

**KNPB TV Studios**

**1670 North Virginia Street**

**Reno, Nevada**



*Presented by*

**Gary  
Sgrignoli**

**Staff Consulting  
Engineer,  
Zenith Electronics  
Corporation**

Phone: 847-941-8824

Fax: 847-941-8555

A one-day seminar will be presented on the ATSC's digital television (DTV) vestigial sideband (VSB) transmission system. This seminar is aimed at broadcasters, broadcast consultants, equipment manufacturers, translator/LPTV operators and cable operators. The seminar will develop a basic understanding of the digital VSB transmission system and its performance attributes. There will be demonstrations of commercial and consumer DTV transmission and reception equipment throughout the seminar.



**This seminar is open to the public**

The seminar will open with a brief HDTV demonstration, followed by PowerPoint presentations in the morning and afternoon. The following topics will be covered:

- NTSC and DTV: Past, present and future
- Basic Data Communication and modulation theory review
- Brief ATSC system overview
- ATSC VSB transmission system tutorial
- VSB lab test plan, methodology and test results
- VSB transmitter measurements, ATSC and FCC compliance
- Introduction to the FCC channel allocation factors (OET 69)
- ATSC cable carriage methodology
- ATSC repeater technology (Translators and on-channel repeaters)
- VSB field test plan, methodology and test results
- DTV receiver improvements



VSB hardware demonstrations will include:

- Basic lab test methodology and results
- Transmitter site compliance and measurements
- Field test methodology and results
- DTV receiver improvements

Questions?  
 Contact Fred Ihlow  
 at KNPB TV  
 Phone: 775-784-4555  
 Email: fred@knpb.org



Time for Q and A will be allowed and encouraged during the Power Point presentation and the hardware demo. In-depth seminar notes and reference material will be handed out to all attendees. A light lunch will be provided.

**Enrollment is limited to 60 people, so please RSVP soon.** Cost is \$65 per person. Make checks payable to KNPB. Reno, Nevada has a wide variety of hotels that offer very attractive rates for Sundays through Tuesdays.

**Hurry! Registration deadline is August 10!**

## Registration Form

\_\_\_\_\_  
 Contact name

\_\_\_\_\_  
 Company

\_\_\_\_\_  
 Address 1

\_\_\_\_\_  
 Address 2

\_\_\_\_\_  
 City State Zip

\_\_\_\_\_  
 Phone Fax

**Please enclose \$65 for each participant in the seminar. List badge names below:**

**1)** \_\_\_\_\_

**2)** \_\_\_\_\_

Method of payment Total enclosed:

Check enclosed

Made out to **KNPB**

Visa

\_\_\_\_\_  
 MasterCard Card number Exp. date

Discover

\_\_\_\_\_  
 American Express Signature

Mail to: KNPB TV, 1670 North Virginia St., Reno, NV 89503