

Service data bulletin



Instrument: GDS101 Date: 18.05.2007

Created by: Geir Theodorsen

SUBJECT: This is a guide to test GDS101 transceiver with a tester

EQUIPMENT REQUIRED: Echosounder tester

Type: EDI model DSTS-4A

Balanced to unbalanced line converter (balun)

Type: BAL-550

These may be purchased through SKIPPER Electronics AS or from manufacturer Electronic Devices Inc. www.dsts.com



WHAT TO DO: Connect a screened two wire cable from Balun to appropriate connections on terminal board inside the GDS101.



Turn on the GDS101. Set range 0-50m. Goto screen 2. Set GDS101 to correct frequency. Goto screen 10. Set Gain 20%, TVG 36%, Power 100%

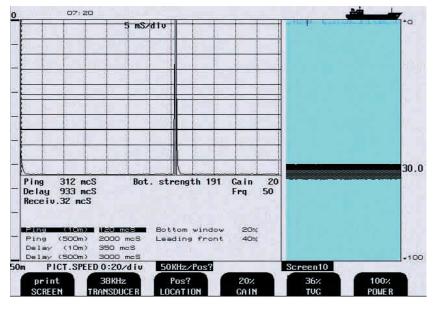
Turn on the EDI. Set Ampl Vernier Cal 1x, Reply Level 1mV, depth 30m

Here are the expected outputs from transceiver read on the EDI:

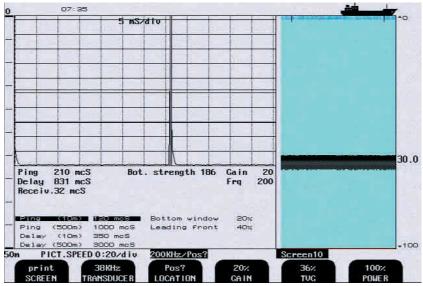
FREQ KHZ	WIDTH µSEC	PERIOD mSEC	AMPL V P-P
198-202	200-300	315-335	950-1650
49-51	300-400	315-335	1200-1850
37-39	350-550	315-335	520-700
	KHZ 198-202 49-51	KHZ μSEC 198-202 200-300 49-51 300-400	KHZ μSEC mSEC 198-202 200-300 315-335 49-51 300-400 315-335

Received signals from EDI read on GDS101. Bottom strength should be above 150.

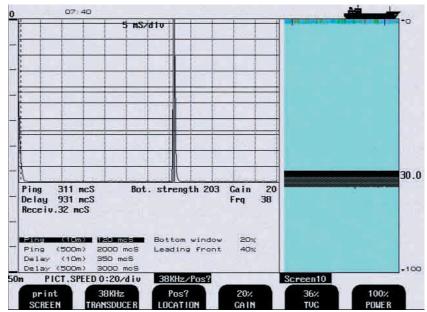
Screen 10. 50kHz



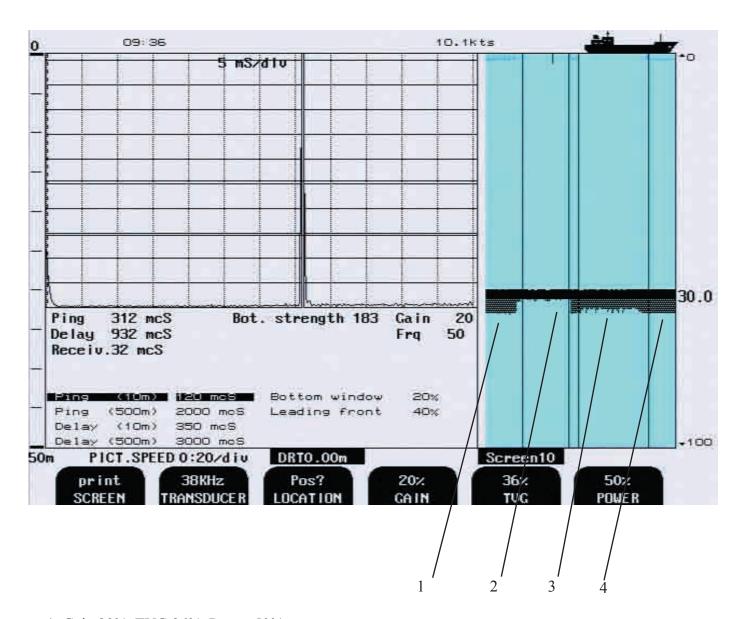
Screen 10. 200kHz



Screen 10. 38kHz



Test of Gain and TVG



- 1: Gain 20%, TVG 36%, Power 50%
- 2: Gain 10%, TVG 36%, Power 50%
- 3: Gain 20%, TVG 0%, Power 50%
- 4: Gain 20%, TVG 36%, Power 50%

Observe the graphical bottom change as described above.