LVA series of 4-quadrant amplifiers

AUTOMOTIVE SUPPLY SIMULATION AT IT'S BEST

4-quadrant amplifier LVA 1000

- ✓ Easy to use amplifier
- ✓ High stability, drives unlimited capacitive loads
- ✓ Extremely low harmonic distortion - even under very non-linear load conditions
- ✓ Very fast rise time ≤ 1 µs and slew rate > 40 V/µs
- ✓ Large signal bandwidth (-3 dB) from DC up to 100 kHz
- ✓ Small signal bandwidth (-3 dB) up to 300 kHz
- ✓ Sense wiring to compensate harness of EUT
- ✓ High short-term overload characteristic (up to 30 s)
- ✓ Very high peak-load ability (up to 200 ms)
- ✓ Programmable internal resistance: 0 … 500 mΩ
- ✓ Sink operation mode included
- ✓ Internal oscilloscope and arbitrary generator
- ✓ Amplifier control via webinterface and interface commands
- ✓ Test and evaluation software available

The relating standards:*
ISO 7637-2
ISO 7637-3
ISO 16750-2
ISO 21848
LV124
VDA320 (LV148)
BMW GS 95002
BMW GS 95002-2
BMW GS 95003-2
BMW GS 95024-2-2
BMW GS 95026
FCA CS.00054
Fiat 9.90111-01
Ford FMC1278
GMW 3097
GMW 3172
JLR EMC-CSv1.0A4
MAN M 3285
MBN LV 124-1
MBN 10567
Mitsubishi ES-X82114
Mitsubishi EX-X82115
Nissan 28401NDS02
PSA B21 7110
Renault 36-00-808/--M,N
SAE J 1113-11
Volvo 31822854
Volvo 31850329
VW 80000
VW 82148
VW TL 81000
Magnetic field test

***** *The LVA series of amplifiers can be used for certain tests within these standards. Additional equipment might be required. For detailed information, please contact sales@spitzenberger.de.*

REFERENCE SOURCE FOR AUTOMOTIVE APPLICATIONS

TOUCHSCREEN USER INTERFACE

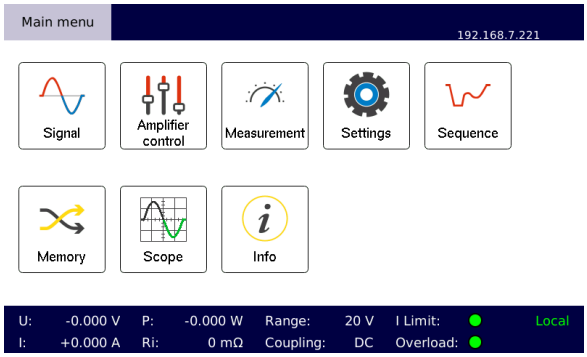

Fig. 1: Main menu

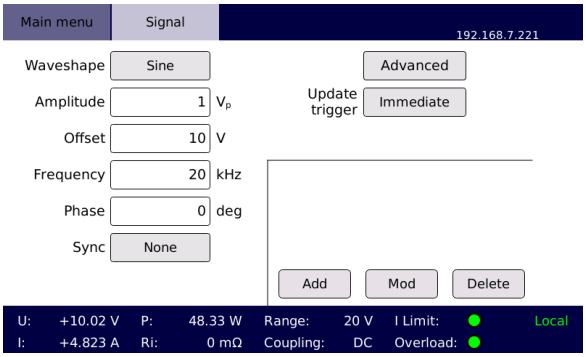

Fig. 2: Signal setting

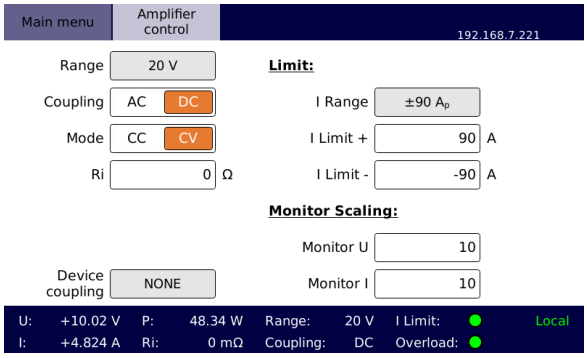

Fig. 3: Amplifier control

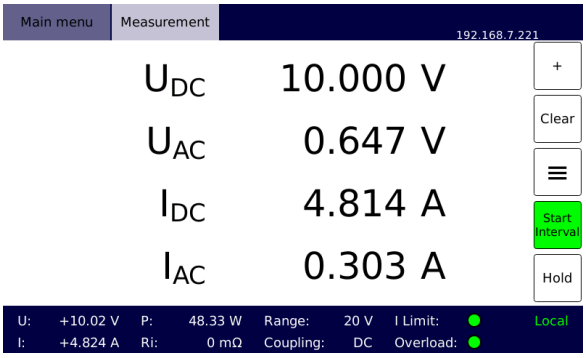

Fig. 4: Measurement

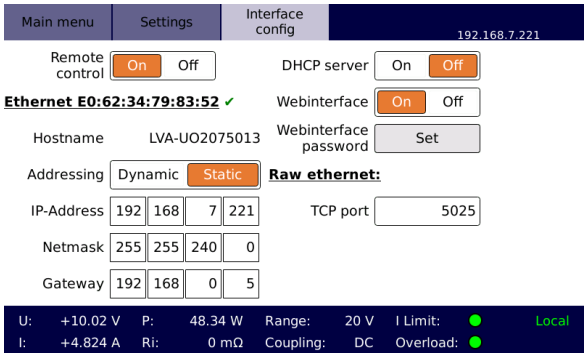

Fig. 5: Interface configuration

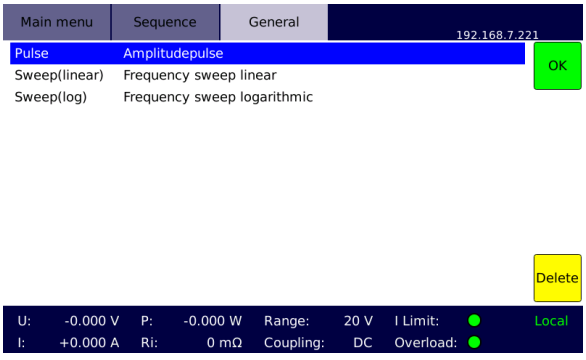

Fig. 6: Sequence menu

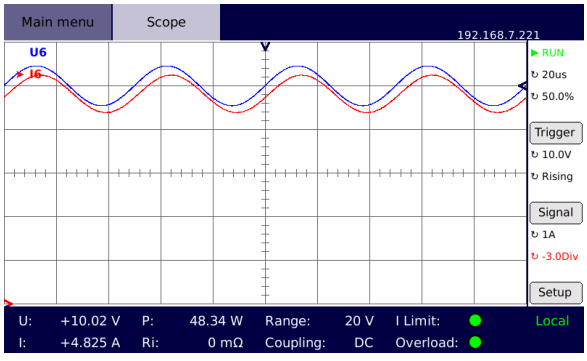

Fig. 7: Internal scope

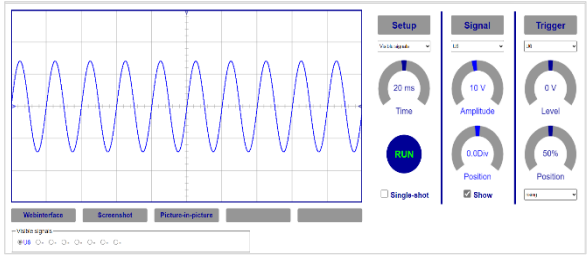

Fig. 8: Web oscilloscope

SOFTWARE CONTROL

SPS TestManager

- ✓ Test and evaluation software for fully compliant emission and immunity tests
- ✓ Automated test run of various IEC and automotive standards

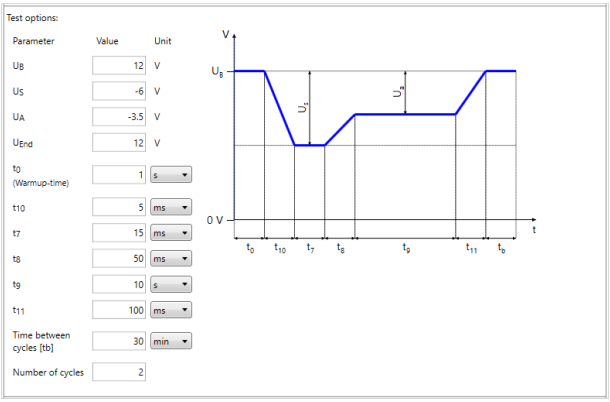

Fig. 9: SPS TestManager software

SPS SystemControl

- ✓ Simulation and control software for arbitrary waveforms, voltage and frequency variations
- ✓ Generation of user defined sequences
- ✓ Sequence preview graph

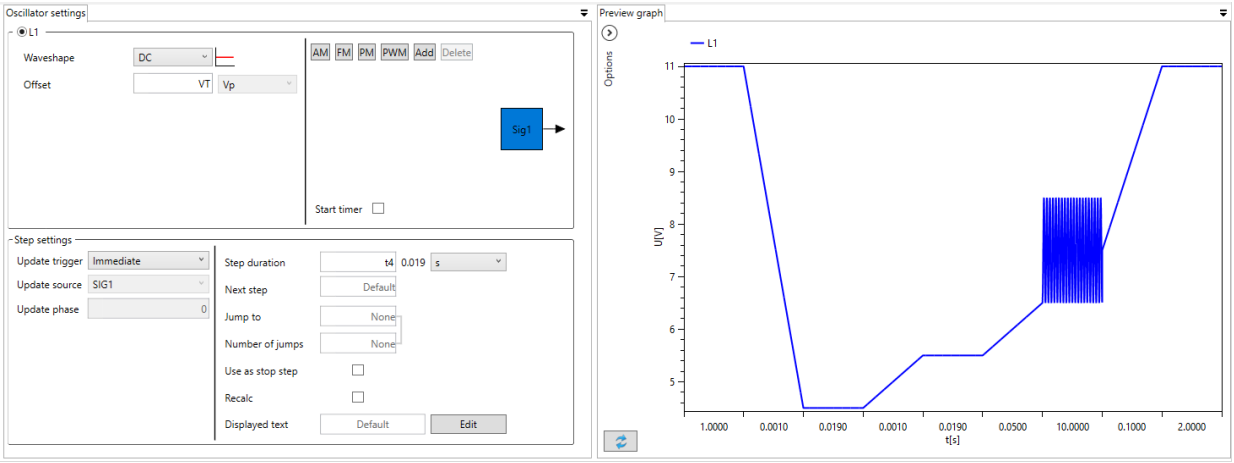

Fig. 10: SPS SystemControl software

Command interface

- ✓ Easily integrate the device into your own software applications
- ✓ Remote control commands are based on the SCPI standard

Webinterface

- ✓ Monitor and control the connected device via a web browser
- ✓ Oscilloscope function

	LVA 100			
Nominal voltage range *(DC)* *(LVA 100 is a single-range amplifier, available in four versions)*	±20 V	±36 V	±54 V	±70 V
Max. continuous current capability	5 A (range depending, see diagrams)			
Max. short-time current capability *(up to 30 s)*	10 A (range depending, see diagrams)			
Max. peak current capability *(up to 50 ms)*	20 A			

Detailed technical data: LVA 100

	LVA 1000
Nominal voltage range *(DC)*	-15 … +20 V -15 … +36 V -15 … +54 V -15 … +70 V
Max. continuous current capability	25 A (range depending, see diagrams)
Max. short-time current capability *(up to 30 s)*	35 A (range depending, see diagrams)
Max. peak current capability *(up to 50 ms)*	90 A

Detailed technical data: LVA 1000

	LVA 2500	LVA 2500/SYM
Nominal voltage range *(DC)*	-15 … +20 V -15 … +36 V -15 … +54 V -15 … +70 V	±20 V ±36 V ±54 V ±70 V
Max. continuous current capability	125 A (range depending, see diagrams)	
Max. short-time current capability *(up to 30 s)*	200 A (range depending, see diagrams)	
Max. peak current capability *(up to 50 ms)*	300 A	

Detailed technical data: LVA 2500

Detailed technical data: LVA 2500/SYM

	LVA 5000	LVA 5000/SYM
Nominal voltage range *(DC)*	-15 … +20 V -15 … +36 V -15 … +54 V -15 … +70 V	±20 V ±36 V ±54 V ±70 V
Max. continuous current capability	250 A (range depending, see diagrams)	
Max. short-time current capability *(up to 30 s)*	400 A (range depending, see diagrams)	
Max. peak current capability *(up to 50 ms)*	600 A	

Detailed technical data: LVA 5000

Detailed technical data: LVA 5000/SYM

	LVA 7500	LVA 7500/SYM
Nominal voltage range *(DC)*	-15 … +20 V -15 … +36 V -15 … +54 V -15 … +70 V	±20 V ±36 V ±54 V ±70 V
Max. continuous current capability	375 A (range depending, see diagrams)	
Max. short-time current capability *(up to 30 s)*	600 A (range depending, see diagrams)	
Max. peak current capability *(up to 50 ms)*	900 A	

Detailed technical data: LVA 7500

Detailed technical data: LVA 7500/SYM