

## **AC Source Software**

Compliant Testing In Accordance with:
IEC/EN61000-3-2
IEC/EN61000-3-3
IEC/EN61000-3-11
IEC/EN61000-3-12

# N4ASoft Power Source Control Software





Product Overview				
Full Remote Control	Control any N4A AC Power Source via LAN, RS232 or USB			
Flexible Scheduling	Schedule timed events with a resolution of minutes, days or weeks			
Single Phase and 3 Phase	Single Phase and 3 Phase control			
Harmonic Synthesis	Harmonic Synthesis of complex waveforms available			
Sine, Square, Triangle and Complex Waveforms	Program a range of waveforms remotely			
C++ Win32 API	No installer required, run software direct from .exe file			

#### Product Overview

N4ASoft provides a simple to use remote control software program which is compatible with all N4A Power Sources which can be executed directly from the self contained .exe with no installation required.

#### Basic Control

Basic control of the AC Power Source is provided via the main control screen, where Voltage, Frequency, Waveform Type, DC Offset, Coupling, Sense and various other settings can be configured.



Key

- 1 Voltage Control
- ② DC Offset
- <sup>3</sup> Frequency Control
- Sense Control
- Output Adjust
- <sup>6</sup> Waveform Slection
- Coupling
- Output ON/OFF

#### Schedule Mode

N4ASoft features a scheduling mode which facilitates the programming of events via software, both frequency and voltage changes are possible with this mode.



#### Harmonic Synthesis

Harmonics mode enables the user to generate harmonics and interharmonics up to 15kHz, both magnidue and phase offset are adjusted via the software or the AC Source front panel.







3rd Harmonic

5th Harmonic

#### Screenshot

The capture menu provides a simple screenshot download feature, at the click of a button N4ASoft will download colour or black and white images of the current N4A Power Source display. This can then be copied to the clipboard and exported to a document of your choice.

DU 1	DU 2	DULD	Configuration: Output settin	ngs			
PHI	FH Z	PH 3	Mode	Hamonics	~	Phase offset	0.0000E0
SWEEP	CONFIG	MAINT	L-N Voltage range	Auto	~	Harmonic Freq. (Hz)	150.000
HARM	ALARM	SEQ	Harmonic L-N Voltage	30			
			Waveform	Sinewave	~		
SYS	COMMS	PROG	Order	3	<b>•</b>		



#### IEC61000

All N4A AC Power Sources are compliant to IEC61000-3-2/3/11/12\* (Harmonics and Flicker), providing extremely low THD within the limits of the standard (% distortion) under demanding load conditions. N4ASoft or IECSoft can be used to control the power source for such compliance tests.

### N4ASoft Specification

	N4ASoft				
System Configuration					
Campatible AC Power Sources	N4A03, N4A06, N4A18, N4A30, N4A67				
File Type	.exe, no installer required				
File Size	815kb				
Windows Requirements	Win XP or later				
Modes	Basic, Harmonics, Schedule, Screen Capture				

### AC SOURCE SPECIFICATION

	N4A03 (1 Phase)	N4A06 (1 Phase)	N4A18 (3 Phase)	N4A30 (3 Phase)	N4A67 (3 Phase)
Nominal Output Power	3,000VA	6,000VA	18,000VA	30,000VA	67,500kVA
Output					
Output Voltage (AC)	0-300Vrms	0-300Vrms	0-300Vrms	0-300Vrms	0-300Vrms
Output Voltage (DC)	0-425V DC				
Maximum Continuous Output Power (AC)	3000VA	6000VA	18,000VA	30,000VA	67,500VA
Maximum Inrush (3 Second) Output Power	6000VA	12000VA	36,000VA	60,000VA	90,000VA
Maximum Output Current (Continuous)	10Arms	20Arms	20Arms (Per Phase)	32Arms (Per Phase)	75Arms (Per Phase)
Maximum Output Current (Inrush)	20Arms	40Arms	40Arms (Per Phase)	64Arms (Per Phase)	100Arms (Per Phase)
Output Frequency	DC - 1kHz				
Min Slew Rate	3V/us	3V/us	3V/us	3V/us	3V/us
Output Voltage Stability	Better than 0.1%				
Output Voltage Accuracy	Better than 0.5%				
THD	Better than 0.3%*				
Output Noise	<500mVrms	<500mVrms	<500mVrms	<500mVrms	<500mVrms
Recovery Time of Output Waveform	Better than 50us				
Max Compensated drop on wires (w.r.t voltage setting)	5%	5%	5%	5%	5%
Recovery Time of Drop on Wires	Less than 200ms				
Maximum Crest Factor Output (Current)	[Inrush Imax*1.41]/RMS Load Current				
General					
Dimensions	281mm x 471mm x 513mm	281mm x 471mm x 513mm	1785mm x 930mm x 755mm	1785mm x 930mm x 755mm	1800mm x 1200mm x 800mm
Weight	30kg	45kg	740kg	740kg	1300kg
Input Voltage	230V AC +/- 10% 1PH	400V AC +/- 10% 3PH			
Input Frequency	45-65Hz	45-65Hz	45-65Hz	45-65Hz	45-65Hz
Operating Temperature	0-35degC	0-35degC	0-35degC	0-35degC	0-35degC
Input Current	24Arms	16Arms Phase / 27A Neutral	60A continuous 120A inrush / Phase	80A continuous 160A inrush / Phase	160A continuous 220A inrush / Phase

\*At Nominal Voltage with Linear Load

The N4L product range also includes Power, Frequency Response and Impedance Analyzers, Selective Level Meters and Laboratory Power Amplifiers



MHz PSM17xx 10µHz ~ 35MHz



#### Newtons4th

Newtons4th Ltd (abbreviated to N4L) was established in 1997 to design, manufacture and support innovative electronic equipment to a world-wide market, specialising in sophisticated test equipment particularly related to phase measurement. The company was founded on the principle of using the latest technology and sophisticated analysis techniques in order to provide our customers with accurate, easy to use instruments at a lower price than has been traditionally associated with these types of measurements. Flexibility in our products and an attitude to providing the solutions that our customers really want has allowed us to develop many innovative functions in our ever increasing product range.

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