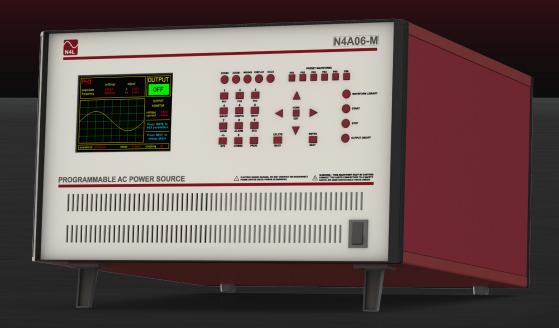
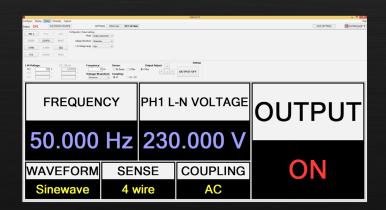


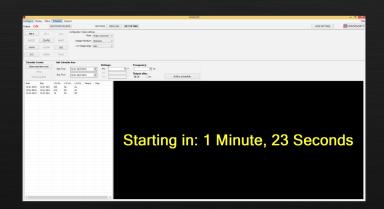
# **AC Source Software**

# 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







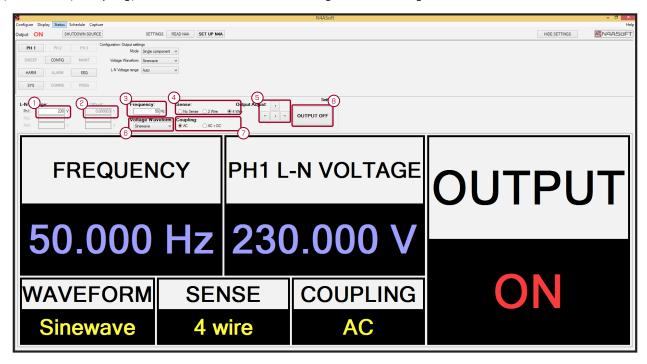
| Product Overview                             |   |  |  |  |
|--|---|--|--|--|
| Full Remote Control                          | Control any N4A AC Power Source via LAN, RS232 or USB             |  |  |  |
| Flexible Scheduling                          | Schedule timed events with a resolution of minutes, 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.

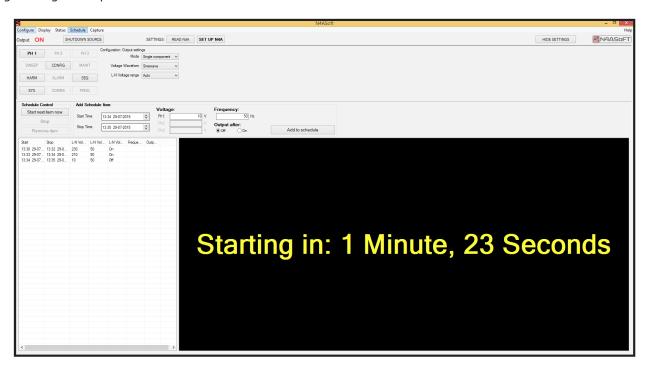


#### Key

- 1 Voltage Control
- ② DC Offset
- ③ Frequency Control
- 4 Sense Control
- Output Adjust
- Waveform Slection
- Occupling
- Output ON/OFF

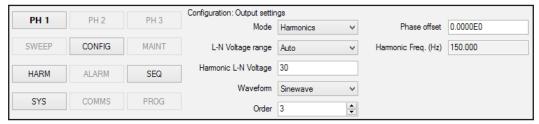
#### ■ Schedule Mode

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

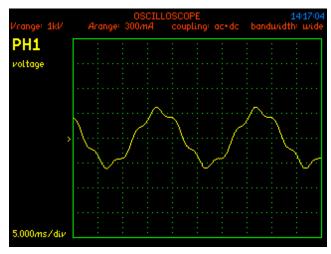


#### ■ Harmonic Synthesis

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.



Harmonics Mode

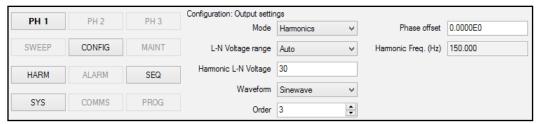


5.000ms/div

3rd 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.



Capture Mode

## ■ 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.

\*Depending upon current rating\*

\*Depending upon current rating\*

# N4ASoft Specification

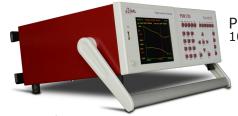
|                                | N4ASoft                                    |  |  |  |  |
|--------------------------------|--|--|--|--|--|
| System Configuration           |  |  |  |  |  |
| Campatible AC Power<br>Sources | N4A03, N4A06, N4A18, N4A30, N4A67          |  |  |  |  |
| File Type                      | .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<br>Output Power (AC)                     | 3000VA                                 | 6000VA                                 | 18,000VA                               | 30,000VA                               | 67,500VA                               |
| Maximum Inrush (3<br>Second) Output Power                   | 6000VA                                 | 12000VA                                | 36,000VA                               | 60,000VA                               | 90,000VA                               |
| Maximum Output<br>Current (Continuous)                      | 10Arms                                 | 20Arms                                 | 20Arms (Per Phase)                     | 32Arms (Per Phase)                     | 75Arms (Per Phase)                     |
| Maximum Output<br>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<br>Stability                                 | Better than 0.1%                       |
| Output Voltage<br>Accuracy                                  | Better than 0.5%                       |
| THD   | Better than 0.3%*                      |
| Output Noise  | <500mVrms                              | <500mVrms                              | <500mVrms                              | <500mVrms                              | <500mVrms                              |
| Recovery Time of<br>Output Waveform                         | Better than 50us                       |
| Max Compensated<br>drop on wires (w.r.t<br>voltage setting) | 5%                                     | 5%                                     | 5%                                     | 5%                                     | 5%                                     |
| Recovery Time of Drop on Wires                              | Less than 200ms                        |
| Maximum Crest Factor<br>Output (Current)                    | [Inrush Imax*1.41]/RMS<br>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<br>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<br>Temperature                                    | 0-35degC                               | 0-35degC                               | 0-35degC                               | 0-35degC                               | 0-35degC                               |
| Input Current   | 24Arms                                 | 16Arms Phase / 27A Neutral             | 60A continuous 120A inrush<br>/ Phase  | 80A continuous 160A inrush<br>/ Phase  | 160A continuous 220A<br>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



 $\begin{array}{l} PSM3750 \\ 10 \mu Hz \sim 50 MHz \end{array}$ 









#### 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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