MATRON 4 Type 3668
Indoor noise logging kit

MATRON 4 Type 3668 is the fourth generation of kits for logging noise indoors from Brüel & Kjær, refined through years of experience. At its heart is Hand-held Analyzer Type 2250-L (2250 Light) with Class 1 measurement and sound recording capabilities, and a preconfigured measurement template that simplifies operation.

MATRON 4 is typically used for domestic noise assessments in the United Kingdom according to the Environmental Protection Act 1990. The system is installed in an indoor environment, such as a home or an office, and left to continuously log noise data for up to 14 days. During this period, the noise levels are measured and stored, and the complainant makes sound recordings of disturbances by simply pressing a button.

MATRON 4 includes a 1 year licence for one analyzer for Measurement Partner Suite BZ-5503, the post-processing platform (PC software) for Brüel & Kjær Hand-held Analyzers and the systems built on them, covering all the post processing functionality you will need when working with measurement data. Measurement Partner Suite also includes data storage in MP Cloud which can be useful when sharing data between offices.

Uses and Features

**Uses**
- General indoor noise logging tasks
- Domestic noise assessments

**Features**
- Simple, preconfigured, ready-to-use MATRON 4 measurement template
- Lockable case
- 2 Gb industrial quality SD card
- Power supply via mains (battery optional)
- Full analysis capability in Measurement Partner Suite
- Discreet transportation bag
- Available in three versions:
  - Type 3668-L-SC: The complete kit
  - Type 3668-L-S: The complete kit minus the sound calibrator
  - Type 3668-W: The upgrade kit
About MATRON 4

**MATRON 4 Case**
MATRON 4 is built around a Brüel & Kjær Hand-held Analyzer that is installed in a lockable hard-shell case. The case has two external connectors for the power supply and microphone, and an external button for manually triggering sound recordings on the analyzer while it is in the case. The case provides protection for the analyzer during transport and use, and stores the stylus, microphone cover and microphone when not in use.

**The Analyzer**
MATRON 4 Type 3668 is supplied with Hand-held Analyzer Type 2250-L. Type 2250-L is supplied without a battery and MATRON 4 is powered via the power supply connector on the case.

*Using Hand-held Analyzer Type 2250 or Type 2270*
MATRON 4 is only supplied with Type 2250-L. To use Type 2250 or Type 2270 (or another Type 2250-L), purchase the upgrade kit: MATRON 4 Type 3668-W. For the substituted analyzer to perform as a dedicated MATRON 4 analyzer with the MATRON 4 template, you will need to install the special MATRON 4 installation of the analyzer software.

**Measurement Templates**
The included analyzer comes with the simplified, preconfigured MATRON 4 measurement template which is sufficient for the majority of noise-complaint cases when accompanied by sound recordings of disturbances. It has broadband logging of the equivalent continuous level (L_{Aeq}) at one second intervals without frequency and statistics, which keeps the measurement project small.

If you are familiar with how to set up a measurement template, the analyzer also comes with two additional templates: Logging SLM and Logging 1/3 Octave. To perform frequency analysis on the data, you will need 1/1- and 1/3-octave Frequency Analysis Software BZ-7132, an optional software license (not included with Type 3668).

**Using the Included Analyzer as a Stand-alone Analyzer**
The analyzer that is included in a MATRON 4 kit is not equipped to be used as a stand-alone analyzer. To convert it into a standard hand-held analyzer, you will need additional hardware such as a battery.

**Accessories for Stand-alone Analyzer**
The suggested Brüel & Kjær hardware for performing standard Environmental noise measurements are:
- QB-0061: Lithium-ion battery for hand-held analyzers
- KE-0441: Leather equipment cover for hand-held analyzers
- UA-1651: Tripod extension for hand-held analyzers
- UA-0237: Windscreens for 1/2” microphones

For information about additional hardware and software for Type 2250-L, consult Product Data BP 2151.
Post-processing with Measurement Partner Suite

MATRON 4 Types 3886-L-S and 3668-L-SC include a 1 year licence for Measurement Partner Suite. The licence is locked to the serial number of the included analyzer, which allows anyone who works with the instrument full access to Measurement Partner Suite.

**About Measurement Partner Suite**

Measurement Partner Suite is the post-processing software for Hand-held Analyzer Types 2250, 2270 and 2250-L and their systems, such as MATRON 4. It has both free and licenced functionality.

Measurement Partner Suite enables effective analysis of the important parts of a logging profile, eliminating the need to search through large amounts of data in Microsoft® Excel®. You can export sound recordings (WAV format) to create digital media, which can be used as documentation.

Measurements will include frequency data if you have purchased Frequency Analysis Software BZ-7132. Using Measurement Partner Suite, spectra can be easily converted from 1/3- to 1/1-octave manually in the measured spectrum window or automatically in the calculator.

**Specifications – MATRON 4 Types 3668-L-S, 3668-L-SC and 3668-W**

MATRON 4 is based on the Hand-held Analyzer Type 2250 Light platform. See Product Data BP 2151 for analyzer specifications.

**Compliance with Standards**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Description</th>
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<tbody>
<tr>
<td>CE mark</td>
<td>The CE marking is the manufacturer’s declaration that the product meets the requirements of the applicable EU directives</td>
</tr>
<tr>
<td>RCM mark</td>
<td>RCM mark indicates compliance with applicable ACMA technical standards – that is, for telecommunications, radio communications, EMC and EME</td>
</tr>
<tr>
<td>China RoHS mark</td>
<td>China RoHS mark indicates compliance with administrative measures on the control of pollution caused by electronic information products according to the Ministry of Information Industries of the People’s Republic of China</td>
</tr>
<tr>
<td>WEEE mark</td>
<td>WEEE mark indicates compliance with the EU WEEE Directive</td>
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**Safety**

- EN/IEC 61010–1: Safety requirements for electrical equipment for measurement, control and laboratory use
- ANSI/UL 61010–1: Safety requirements for electrical equipment for measurement, control and laboratory use

**EMC Emission**

- EN/IEC 61000–6–3: Generic emission standard for residential, commercial and light industrial environments
- EN/IEC 61000–6–4: Generic emission standard for industrial environments
- CISPR 22: Radio disturbance characteristics of information technology equipment. Class B Limits
- FCC Rules, Part 15: Complies with the limits for a Class B digital device
- This ISM device complies with Canadian ICES–001 (standard for interference-causing equipment)

**EMC Immunity**

- EN/IEC 61000–6–1: Generic standards – Immunity for residential, commercial and light industrial environments
- EN/IEC 61000–6–2: Generic standards – Immunity for industrial environments
- EN/IEC 61326: Electrical equipment for measurement, control and laboratory use – EMC requirements

**Note:** The above is only guaranteed using accessories listed in this Product Data sheet.
MATRON 4 Type 3668-L-SC
Type 3668-L-SC is the complete kit and includes the following:
• KE-0021: Bag
• KE-0022: Case
• Hand-held Analyzer Type 2250-L-D01 with:
  – BZ-7130: Sound Level Meter Software
  – BZ-7133: Logging Software
  – BZ-7226: Signal Recording Option
  – BZ-5298: Software installation media (DVD)
  – Type 4950: 1/2” Free-field Microphone (prepolarized, 8 Hz to 16 kHz)
  – ZC-0032: Microphone preamplifier (1/2”) for Hand-held Analyzer
  – UA-1654: Stylus for Hand-held Analyzer, set of five
• Sound Calibrator Type 4231
• UL-1009: SD card (industrial quality, 2 Gb)
• ZG-0426: Power supply
• AN-0059: Mains cable (United Kingdom)
• DK-1776: Padlock
• UA-0750: Tripod, lightweight
• UA-0588: Tripod Adaptor, for 1/2” microphones
• UA-1236: Microphone cover
• AO-0697-D-030: Cable, microphone extension, 3 m (9.8 ft)
• AO-1494: Cable, USB
• BR-0003: Field Guide
• BZ-5503-012: Post-processing module (Measurement Partner Suite)

MATRON 4 Type 3668-L-S
Type 3668-L-S is the complete kit minus Sound Calibrator Type 4231

MATRON 4 Type 3668-W
Type 3668-W is for upgrading to MATRON 4 and includes the following:
• KE-0021: Bag
• KE-0022: Case
• UL-1009: SD card (industrial quality, 2 Gb)
• AN-0059: Mains cable (United Kingdom)
• DK-1776: Padlock
• UA-0750: Tripod, lightweight
• UA-0588: Tripod Adaptor, for 1/2” microphones
• UA-1236: Microphone cover
• AO-0697-D-030: Cable, microphone extension, 3 m (9.8 ft)
• BR-0003: Field Guide

Optional Brüel & Kjær Products

HARDWARE
JP-0050  World Adaptor Set, four plug adaptors

Suggested accessories for using Type 2250-L-D01 as a standard analyzer:
• KE-0441: Leather equipment cover for hand-held analyzers
• QB-0061: Lithium-ion battery for hand-held analyzers
• UA-1651: Tripod extension for hand-held analyzers
• UA-0237: Windscreen, for 1/2” microphones, spherical

SOFTWARE MODULE
BZ-7132  1/1- and 1/3-octave Frequency Analysis

POST-PROCESSING MODULES (MEASUREMENT PARTNER SUITE)
BZ-5503-012  1 year subscription for one instrument
BZ-5503-036  3 year subscription for one instrument
BZ-5503-060  5 year subscription for one instrument
BZ-5503-N36  3 year subscription for any instrument (dongle)
BZ-5503-N60  5 year subscription for any instrument (dongle)

Brüel & Kjaer Services

SERVICE CONTRACTS
Four-year service contracts are available. Service contracts are custom products and can include calibration, warranty, and post-processing licencing to suit your needs.

Recommended Service Contract for MATRON 4
The recommended 4 year service contract for Type 3668-L-SC includes:
• Biennial (every other year) accredited calibration of Type 2250-L
• Annual accredited calibration of Type 4231
• Warranty coverage for four years
• Measurement Partner Suite licencing for four years

CALIBRATION
SLM-ADV-CAI  Accredited initial calibration of sound level meter with microphone and preamplifier
SLM-ADV-CAF  Accredited calibration of sound level meter with microphone and preamplifier
CALI-S-CAI  Accredited initial calibration of sound level calibrator
CALI-S-CAF  Accredited calibration of sound level calibrator

MAINTENANCE
3668-EW1  Extended Warranty for one year for MATRON 4 system including sound level meter with microphone and preamplifier

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