

Purely **L**inear Processing
Magtration DNA/RNA **E**xtraction
Time proven **A**mplification
Flexible multi color **D**etection

geneLEAD XII plus

Produced by  Precision System Science Co., Ltd.

plus : Ultra Sonication

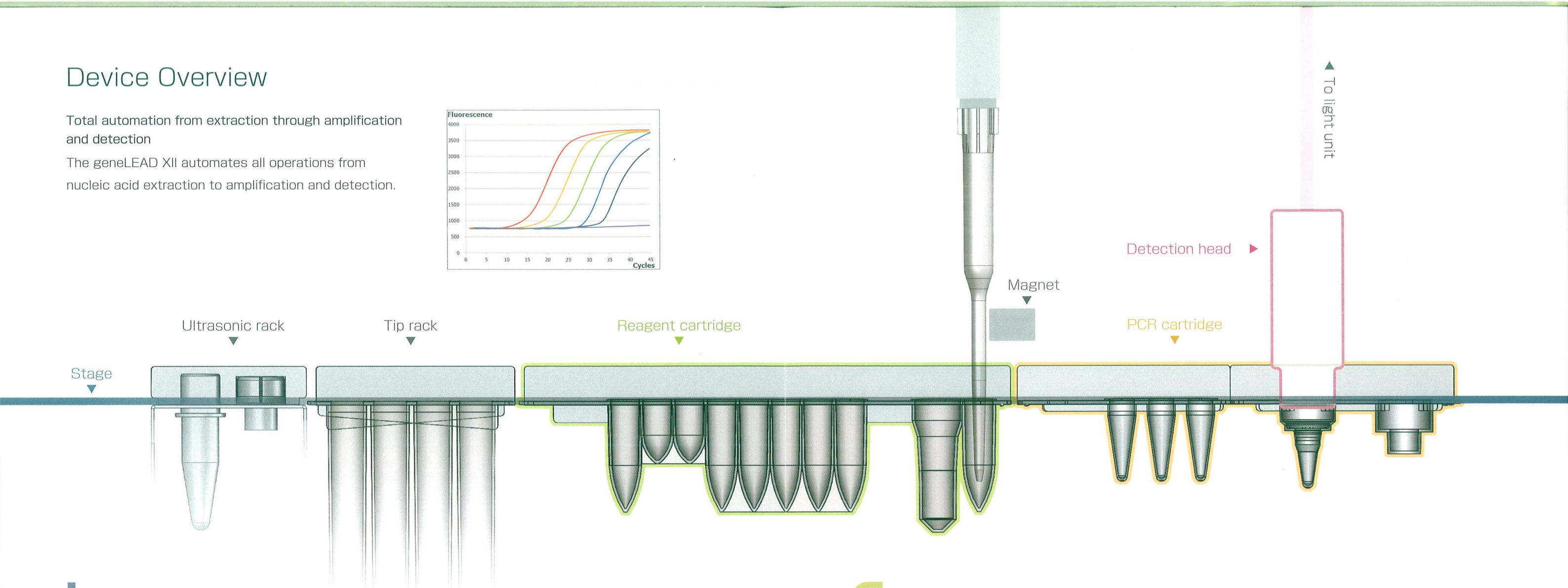
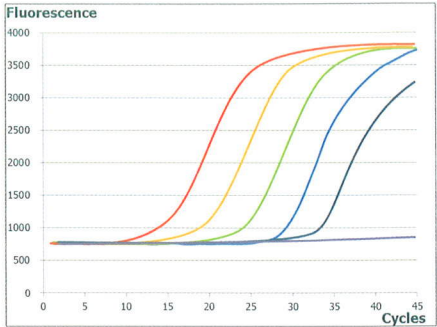
Available for Home Brew Reagent
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- Infectious diseases
- SNPs
- Human ID
- Oncology
- Veterinary / Plant

Device Overview

Total automation from extraction through amplification and detection

The geneLEAD XII automates all operations from nucleic acid extraction to amplification and detection.

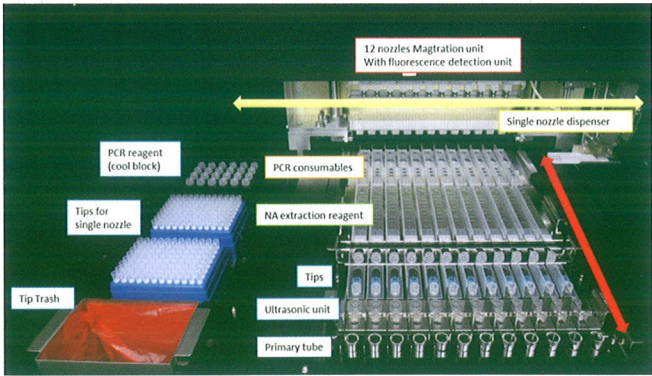


Linear

The geneLEAD system is designed based on a linear process prompt.

This design approach has a number of advantages:

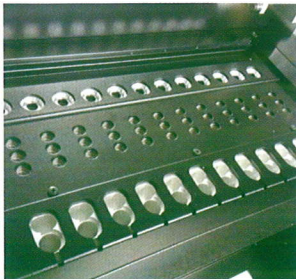
- Prevention of cross contamination between lanes
- Easy testing setup (supported with GUI guidance)
- Easy user maintenance



Amplification

The geneLEAD fulfills a variety of PCR reagent requirements by including a 12-unit thermocycler that can precisely and independently control temperature.

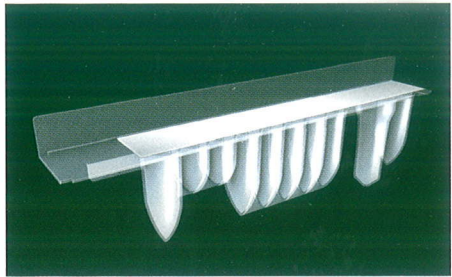
- High temperature control ($\pm 0.3^{\circ}\text{C}$ at $60 - 95^{\circ}\text{C}$ setting)
- Rapid temperature control (heating: $5.0^{\circ}\text{C}/\text{sec}$; cooling: $7.0^{\circ}\text{C}/\text{sec}$)
- Completely independent control allows up to 12 thermocycling protocols in the same run



Extraction

The MagDEA Dx SV is designed using a Universal Design approach. It is the optimal nucleic acid extraction reagent for the geneLEAD system, which offers superb testing flexibility.

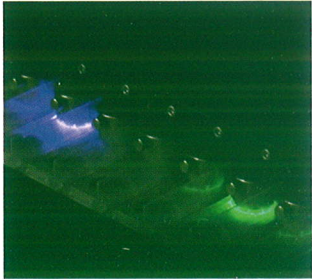
- With single control, extraction is possible from a variety of sample types (Ex: Total nucleic acid from whole blood genome DNA, serum, plasma, urine, and swab)
- Sample volume can be selected from $200\mu\text{L}$ or $400\mu\text{L}$
- Elution volume can be adjusted for PCR assay
- Automated reagent control using 2D coding



Detection

The geneLEAD system detection unit is optimized for PCR assays and allows 6-channel fluorescent detection.

- Using six fluorescent channels enables application of an array of fluorescent colors
- Using a unique fluorescent data acquisition method maximizes the effect of independent thermocyclers
- LED light source makes for long life and easy maintenance

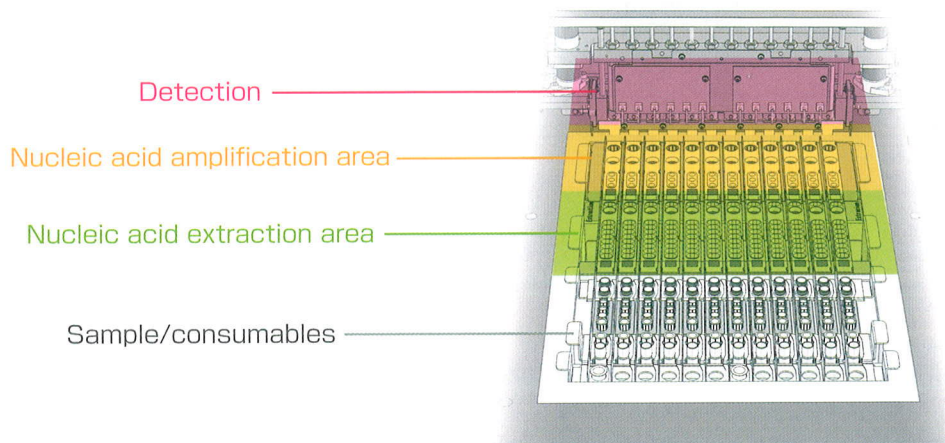


Specification Overview



Instrument type	Benchtop
Number of samples	12
Extraction sample liquid volume	200 μ L or 400 μ L
PCR reaction liquid volume	20 - 50 μ L
Temperature control	PCR unit: 45 - 95°C (12-channel independent control) Extraction unit: 70 - 95°C
Dimensions	H850 \times W1000 \times D750 mm
Weight	Approx. 190 kg
Detection system	6 channel fluorescent measurement
Extraction reagent	MagDEA Dx SV Total nucleic acid from whole blood, serum, plasma, urine, and swab

Layout



Fields of application

- Infectious diseases
- SNPs
- Human ID
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- Veterinary / Plant

Other features

geneLEAD is

- equipped with a barcode reader to manage/ control sample, elution tube, reagent, etc.
- capable of transferring sample from primary tube to secondary tube (processing stage)



● For customers in Asia / Pacific
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- The performance, specifications and appearance of products described in this catalogue are subject to change without prior notice.
- The information in this catalogue is current as of January, 2015.