

Bio.Genica

Genetic Engineering and Manufacturing



PRODUCT INFORMATION

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Bioengineering Comes of Age.

Genetic engineering, or ‘recombinant DNA technology’, dates back to 1973. Stanley Cohen and Herbert Boyer were the first to successfully manipulate proteins in a bacterium, changing the sequence of DNA in its cells which then established the foundations for our modern biotech industry 1.

The original bacteria’s usage was to eat oil, helping the environment in cases of oil spills. Although the bacteria were too fragile to actually operate in reality, their patenting opened doors to a whole new field. Much of the other early work in biotechnology centred on manipulation of bacteria for medical purposes, such as synthesizing important proteins for pharmaceutical companies. However, in 1985 the industry expanded beyond simple bacteria when the US Patents Office ruled that genetically engineered plants, seeds and plant tissue could all be patented as human inventions. Two years later this ruling was extended to cover multicellular organisms, including animals and in 1988 the ‘onco-mouse’ became the first mammal patented. Since then fish, cows, pigs and sheep have all been successfully registered as patented inventions.

Through this catalogue, you’ll be introduced not only to our 2005 and upcoming 2006 product line-up, but also to the methodology of our company. There are many things that separate Bio-Genica from every other Bioengineering company in the industry today. We hope to share some of these with you, and allow you to see a little more of what we’re all about.



As always, we care about what you have to say. If you have any thoughts you’d like to share with us, you can find our 1-800 number in the back of the catalogue and a representative would be happy to talk with you.

Adam Brandejs
President & CEO
Bio-Genica Genetic Engineering & Manufacturing

The New Generation of Domestic Pets

The Genpets™ are mass produced Bio-engineered pets implemented today. As you've certainly noticed, instead of selling these pets loosely in bulk, each pet comes pre-packaged as a fully self-contained unit.

The packages are what really separate the Genpets™ from every other product on the market today, as they are designed with a high level of embedded technology that ensures complete control over each individual unit. We'll go into more detail on some of the features of the packages a little later.

Our purpose is to bring a superior product to a stagnant market. When Bioengineering was new, the controversy and buzz around kept it afloat; however, now that the technology has been proven, it has become yesterday's news. We needed something new to catch the eyes of those worldwide. Our product is something far greater and more exciting than any simple gadget. We are marketing life itself.

nature -redefined



BREAKING BARRIERS

We live in an exciting time. In the privatization of nature, agricultural crops are being modified for greater yield, and organisms with built-in obsolescence are being sold as processed commodities.

Bio-Genica has successfully positioned itself as a corporate entity with the ability to effectively change the way we view all life. Like any technological advancement, we will mould this bio-engineered life to fit into our lives the same way cellphones, gameboys, toasters and every other consumable, technological commodity has been.

By modeling our products after the same key traits other technological advancements have followed, we can make them a renewable, disposable commodity. We bring the product out of growth farms and bio-labs and into stores to better fit the consumer's busy lifestyle. Bio-Genica's investment in furthering this technology will directly shape the future of this industry. Where will you be?

Building on Success

The entire Genpets™ line-up pulls its basis from a natural stage of evolution in the market. Our idea ties together the best of packaging with the best of products. Dolls and robotic toys quickly become tiresome, while traditional pets require a high level of upkeep. Genpets™ however, learn and adapt. They are living pets, but better, modified to be as reliable, dependable and efficient as any other technology we use in our busy lives.



REthink Nature

Nature has never been a closed system, nor has it ever been balanced - we as a species have been affecting it for thousands of years. It has been our inspiration, and by choosing the best it has to offer we have been able to create absolute perfection. Patenting of living systems has become slowly accepted as our outlook on life has changed. As it is obvious that Genpets™ have never, and would never exist in nature, it seems silly to even question them as a patented technology. Unlike other domesticated pets, Genpets™ have not been torn from their natural environment and forced to quickly adapt to a foreign habitat; instead, they are fulfilling a pre-designed destiny. Now doesn't bioengineering nature make far more sense? Nature to us, is nothing more than inspiration for rough parts. We have picked out the best of everything to create absolute perfection.

Innovation Without Limits

While the legal system surrounding bioengineering has adjusted accordingly to protect breeders' rights in the global biotech marketplace, at Bio-Genica, we are still very tactful when dealing with the legal ramifications of copyrighting life. What we do now, shapes what you do tomorrow. We want tomorrow to be a bright and wonderful place.

Methodology

Our methodology is simple: give the consumer a superior product and stand behind it 100%. We feel we have set ourselves apart from the competition and proven ourselves superior in every way. All of our production is done in-house. We do not outsource for any materials or process, which allows us to have our products to the market faster, and cheaper. Our methodology is simple - be the best!

FEATURES & BENEFITS

Includes:

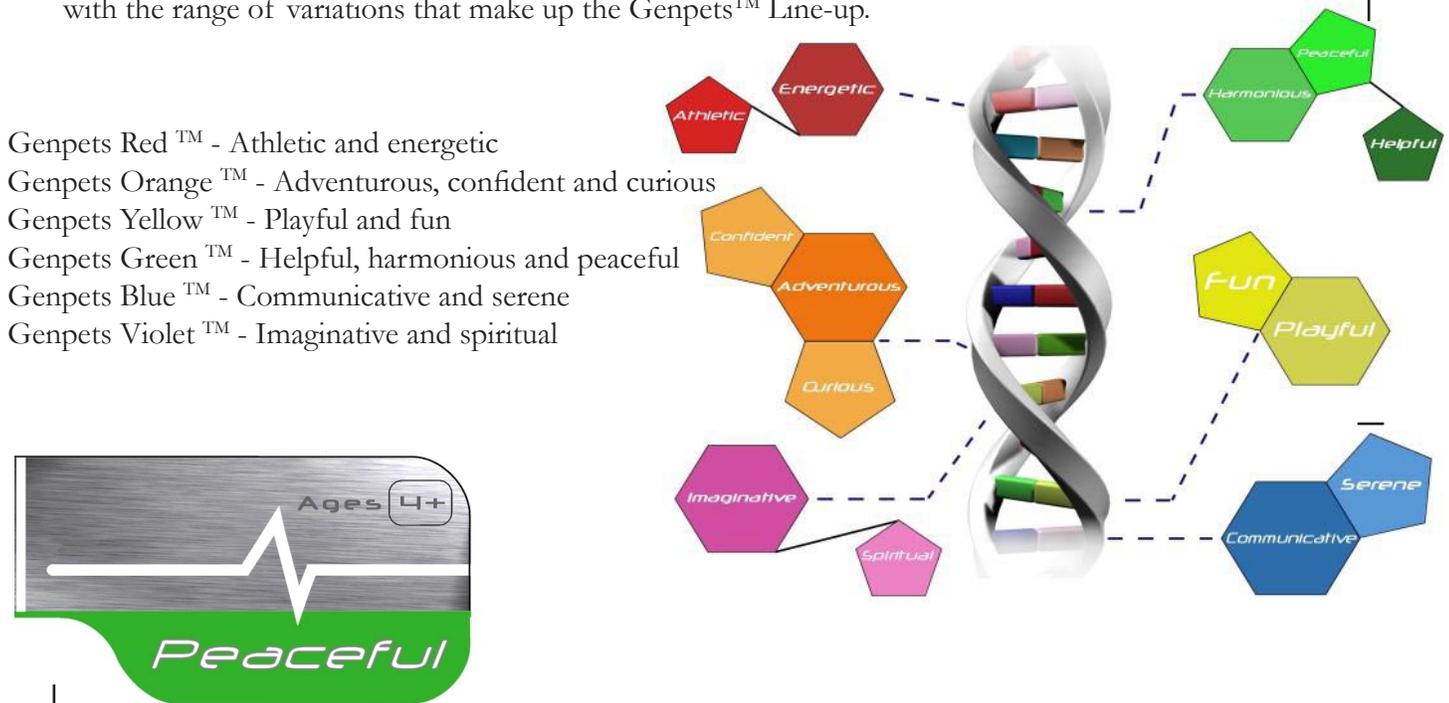
GENPETRED
CARE UNIT
DISCLAIMER
CARE
INSTRUCTIONS

Colour Coding - Simple and Clear

Through extensive psychological testing done in the last century, certain behaviours and moods can be linked to specific colours and shades.

We have taken the bioengineering of our Genpets™ one-step further, by altering and embedding certain personality characteristics into each type. Each personality type of the Genpets™ has been linked to its respective colour, and that colour is then used as a base for each package. For example, a child wanting a tougher, more aggressive Genpet™, would choose a red colour coded one, rather than a more calm, green coded one.

Below is a graph breaking down the basic coding schema. Take a closer look and familiarize yourself with the range of variations that make up the Genpets™ Line-up.



Heart monitors - Attention Grabbing & Informative

As you'll notice right away upon viewing the packages, there are more bells and whistles than just the fresh gauge. Each package has a built in low cost heart monitor. The heart monitors are simply a set of five LED's, however they are fully functional and fully emulate how a real heart monitor would act. The main functions of the heart monitor are filtered through the embedded microprocessor in each package (see page --), which translates the graph into data the simpler display can handle.

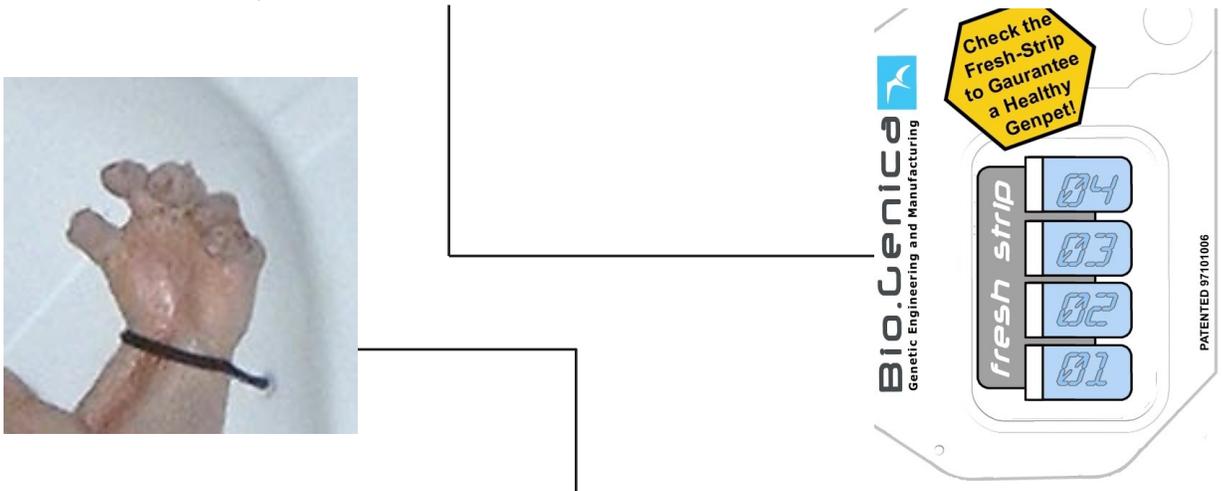
While these monitors aren't absolutely necessary, they add minimal cost to the overall package and the flashing lights immediately draw the attention of nearby children, whether they know what a Genpet™ is or not. In our tests, few children were able to resist the draw of one flashing package, let alone an entire wall of them.

The Genpets Fresh Strip™ - Our Commitment to Quality

No one likes rotten fruit, and no one likes a defective product. At Bio-Genica we understand this. In every single package we have included an easy to use fresh gauge. Four simple LED's display the status of the Genpet™. If it's been sitting on the store shelf too long, or if the package circuitry has malfunctioned in some way, the gauge will display this. Four blue LED's mean that the pet is in pristine freshness, while one illuminated LED means that while the Genpet™ is still healthy, it is approaching its expiration date.

Store operators can manually adjust the IV and temperature levels of the packages using the operator's panel located on the right side of the store display. Units displaying one bar can sometimes have their expiration extended, or even renewed, by simply tweaking their settings. For more information on this, look in the operator's manual that you receive free with your Genpets™ display unit.

(Packages displaying one or less LED's upon one week of shipment arrival can be returned for a full refund to our main warehouse).



Movement Restriction Helps Viewing & Shipment Security

Restraining the pets in their packaging ensures no damage during shipment, as well as that no other security precautions need be taken to ensure the pets stay in their packaging while on open store shelves.

The pets have been positioned for maximum viewing, allowing customers to see the pets fully with no need to remove them from the packages or to have display models. This means less store space need be taken up by extra props and in-store displays. Bio-Genica has listened to feedback received from retailers, and responded.



Stasis Mode™ - Quiet Shelf Life & Consumer Bonding

While the Genpets™ hang on the store shelves they are in a stasis like hibernation mode. This not only ensures comfort for them while they are on store shelves, but reinforces the fact that they can be placed anywhere within a store without being disruptive.

There is a side benefit to this as well though - Bonding - which we have received critical acclaim for. When the Genpets™ are removed from the growing farms, they are placed into Stasis Mode™ immediately. When the consumer brings the Genpet™ home and unpacks it to release it from its slumber, the Genpet™ will bond to its new owner, like a baby to its mother. This bond is just one more innovative extra that not only sets our product apart from other bioengineering, but also every other, non-engineered pet on the market.

Embedded LCD Screens further our commitment to the future

We not only include small and power efficient LCD screens in our store display, we've now begun to embed them in the packages as well!!! Keep your eyes open for the all-new 'Genpets LCD™²'.

The videos displayed on the screens are a great addition to the overall display of the items. They grab the attention of your customers, educating them as to the benefits and key aspects of the Bio-Genica line-up, as well as generating excitement for future products.

Upgrading the video system is simple, and occasionally Bio-Genica sends out new, more updated videos for playing on the screens. This ensures you never have stale content playing in your stores.

But it doesn't stop there. For us, our first priority is the satisfaction of our customer base, present and future. When disconnected from the sales rack, the embedded video screens on the Genpet™ packaging show detailed instructions and care tips. We take customer service, as well as our commitment to the environment to a whole new level! No paper need be printed for manuals, care instructions, and legal notes. For innovation, Bio-Genica is at the top.

Cable Fed Nutrients

Each Genpet™ Package has a special nutrient feeding tube attached to it supplying our specially formulated mix. This allows simple storage while on store shelves, with no special requirements for shop managers or staff. These cables also supply the required energy needed by the internal circuitry of the packages so that no large batteries need be used. Each unit does have a backup fail-safe Li-ION battery capable of supplying approximately three hours of use* in case of power loss or module failure. This battery also kicks in when the pet has been disconnected and removed from the store shelf for purchase.

All cables have enough slack to allow customers to pick up and examine the Genpets™ more closely, before purchase, and have an easy release and auto shut-off clip attached.



Embedded Microchips

Every single Genpet™ package comes embedded with an onboard 16f628a microchip that not only controls and monitors life functions, but also adds custom tracking abilities.

All of the LED's and other life support systems embedded in the packaging to help prolong the shelf life of the product are directly controlled by these microchips.

The microchips also have the ability to communicate with the base display, providing detailed information about the status of each package, as well as allowing them to calibrate themselves to the surrounding ambient environment.

Using simple serial communication the microchips' flash memory can also be downloaded with new instructions and firmware when they become available. (see page - for further info on the Genpets network™)

The microchips add a very nominal cost to each package but allow for superior control. This is just one way in which we strive to give our consumers added value without added cost.

The Genpets Network™ Global Package Statistics, & up to Date Firmware

Each Genpets™ display unit comes equipped with a simple wireless network protocol built-in that allows it to communicate with our larger Genpets network.

This allows for:

Firmware upgrades (see page --) whenever our programmers come out with new instruction sets they release them as a binary on our network. When your base display establishes contact with our servers it checks for these binaries, and after downloading them, automatically upload and flash to the embedded microchips (the ram of each chip is first backed up as to ensure custom settings you have applied are not lost).

Global stats - see how your sales compare to those all over the world, what colour is selling best, compare your stats this month to last, and more.

Up to the second tracking using built in serial numbers - each embedded microchip has a specific serial number unique to it. This not only allows us to track the Genpets™, but it allows you added control over each shipment

All these features come at no cost to you and are absolutely free. What's more, this spring we'll be launching a highly upgraded server with expanded bandwidth that will allow for real-time streaming video on the built-in video displays and so much more, so stay tuned...

Quality Analysis Procedures

All of our Genpets™ undergo thorough tests and analysis before hitting the market place. Each batch is filtered for defects and checked for quality by advanced equipment and highly trained staff. The Genpets™ Line-up has been streamlined to most efficiently deal with all situations they might encounter under the care of an unsupervised child.

World-Class Initiative for Protecting the Environment

Bio-Genica's labs use multi-pass filters to reuse as many chemicals and biomaterials as possible. This technique also allows us to reduce the waste expelled by our facilities into the environment.

Not only are we committed in the processing and production phase, we also, by nature of what we do, ensure care for the environment in the future. Because our Genpets™ are biological material, they're fully recyclable. Just one more example of how Bio-Genica stands out as a company providing for a brighter future.



Specifications



- ▶ Bioengineered Pet
- ▶ Allergen Free
- ▶ Child Safe
- ▶ Low Maintenance
- ▶ Never Before Seen Packaging

Package Size

- ▶ 298 x 244 x 76 mm
- ▶ 11.8 x 9.5 x 3 inches

(*Genpet™ life may vary depending on temperature and Genpet™ freshness)

Genpets S01-xxRev0

Specifications

Your pet, your way — Genpets™ Series 01

are mass produced Bio-engineered pets implemented today. Each pet comes pre-packaged as a fully self-contained unit. Genpets™ learn and adapt. They are fully living pets, but better, modified to be as reliable, dependable and efficient as any other 'technology' we use in our busy lives.

Feature Advancements

take Genpets™ beyond any other commercial product available today. Color Coding, Fresh Strips, Heart Monitors, Stasis Mode, embedded LCD displays, microchips, as well as the Genpets Network™ are some of the exciting ways we're doing this.

Package

- ▶ Fresh Strip
- ▶ Heart Monitor
- ▶ Embedded microchip
- ▶ Bio-Genica IV System
- ▶ Mobile power unit
- ▶ LCD Screen (on Genpets LCD™)

Sound

- ▶ Low audible noise

Life-span

- ▶ 1 or 3 years*

Accessories (incl)

- ▶ Collar
- ▶ Legal notes
- ▶ Disclaimer
- ▶ Care unit
- ▶ Care instructions

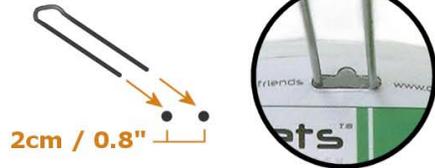
Available colors

- ▶ Genpet Red™
- ▶ Genpet Orange™
- ▶ Genpet Yellow™
- ▶ Genpet Green™
- ▶ Genpet Blue™
- ▶ Genpet Indigo™
- ▶ Genpet Violet™

Genpet Reseller Setup Guide A1

Reference when setting up 9 Genpets without the normal store display

- 1 Drill two 1/8 inch holes into wall.**
Holes should be in pairs 0.8" apart and then each pair should be spaced 16" apart horizontally and 14" vertically



- 2 Connect IV Feed/power cable connectors of Genpets 1-6**
Attach the following Genpet cables together with Y-Adaptors

- ① + ④
- ② + ⑤
- ③ + ⑥
- ⑦ + ⑧



- 3 Finalize connections.**
Using a short cable, attach the Y-adaptor connecting 1+4 to 2+5 as well as another short cable and Y-adaptor to connect 2+5 to 3+6 and connect 7+8 to 9 using another short cable

Tip: Try running the cabling above and through the store hooks to help tidy the setup



- 4 Attach Genpet cable to the included Power / Life support system**



- 5 Find the standard power socket A and attach the suitable power cord between the unit and a suitable AC power source.** For Europe, ensure C is set to 230V and respectively 115v for North America. Resellers attaching an optional DVD Video unit to B, refer to page 2.

- 6 Switch the power unit online.** The life support system will now be powering the nutrient system as well as the life support systems within the Genpet packages. If any Genpet Packages do not illuminate, double check all connections or call your nearest Bio-Genica service rep.



Summary

Bio-Genica has the market focus, products, services, and team dedicated to maintaining and extending our leadership in our core markets.

Colour coding, Fresh strips, Heart monitors, Stasis mode, embedded LCD displays, microchips, as well as the Genpets network™ are some of the exciting ways we're doing this.

If you're dedicated to providing your customers the best in products, service, support, and value, we're ready for you to join the Bio-Genica team.

Our product lines will continue to be refined for maximum efficiency and we welcome all feedback. We hope you'll continue your interest in Bio-Genica and to impress you even more in the coming year.

Bio-Genica is: Redesigning, Redefining, Rediscovering, and Rethinking nature, and will continue to achieve the most significant scientific and creative breakthroughs of the 21st century. Exciting changes are ahead and we hope that you'll be right there with us.

We invite you to REthink nature with Bio-Genica.



Bio.Genica
Genetic Engineering and Manufacturing

