

# LIFECHIP®

## ALPACA/LLAMA RADIO-FREQUENCY IDENTIFICATION (RFID) MICROTRANSPONDER SYSTEM WITH BIO-THERMO® TECHNOLOGY

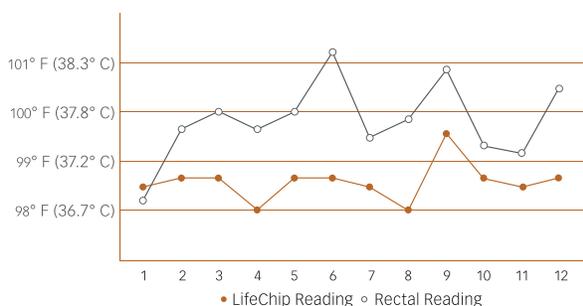
### DESCRIPTION

- LifeChip® Radio-Frequency Identification (RFID) microchips offer a unique and unalterable means of identifying alpacas and llamas of all ages and sizes.
- LifeChip microchips, each about the size of a grain of rice, contain a passive transponder programmed with a unique 15 digit ISO-compliant number (134.2 kHz). Once in place, these microchips can be read by any Destron Fearing or ISO-compliant reader.
- Veterinarians administer the microchip in the poll of the head with the help of a specially designed, single-use syringe.
- Numbers can then be registered in each alpaca/llama's registry or kept in farm/ranch files for future reference.
- Microchips provide proof of ownership in the event an alpaca or llama is lost or stolen, as well as proof of identity for alpacas and llamas involved in breeding operations and international/domestic travel.
- LifeChip microchips are the only ISO-compliant and National Animal Identification System approved camelid microchips on the market today. Available in standard (985) and NAIS code (840) formats, owners can choose the Lifechip microchip numbering system that best suits their animal's needs.
- Each LifeChip microchip is capped with a patented, bio-compatible material called BioBond®, which secures the microchip to the administration site within 24 hours of placement.
- With optional Bio-Thermo® technology, LifeChip microchips can provide a quick and reliable reading of an alpaca/llama's body temperature.

### BIO-THERMO: EXCLUSIVE TO DESTRON FEARING

- LifeChip microchips with Bio-Thermo technology give owners, breeders and veterinarians a quick and easy way to check an alpaca/llama's temperature.
- Research studies in camelids demonstrate the relationship between LifeChip readings and rectal readings in determining body temperature. (See Figure 1)
- To best utilize this technology, create a profile of the alpaca/llama's normal temperature range by taking rectal and Bio-Thermo temperature readings under different circumstances (e.g., at rest and during travel, exercise, breeding cycles, pregnancy and lactation).
- Consistent variations in the two readings can be identified as normal for that individual and cataloged for future reference.

Figure 1. Eight month comparative data on LifeChip vs. rectal temperature on an eight-year-old pregnant llama\*



**Findings:** Chart indicates that the study llama's normal rectal temperature is approximately 100° F when measured over the course of several days. A consistent, variation of -1° to -2° is indicated by the Bio-Thermo readings over the same course of time.

**Conclusion:** The study llama's actual temperature was 1° to 2° higher than Bio-Thermo readings. Knowing this, the alpaca/llama's manager or veterinarian will be able to quickly and easily identify if the animal's temperature is abnormal by adding 1° to 2° to the Bio-Thermo reading.

\*Although some trial animals exhibited wider deviations from their rectal temperatures, these deviations were consistent throughout the course of the evaluation.



## ADMINISTRATION

### Intended for veterinary use only

Thoroughly read directions in their entirety before administration and follow as instructed. Failure to follow directions and precautions may result in improper delivery and performance.

- 1) Identify the administration site. Recommended placement is at the poll on the left side of the animal.
- 2) Scan the administration site and surrounding area with an approved RFID reader to determine if a microchip has been previously administered. If so, a second microchip should not be administered.
- 3) Scan the microchip in the package to:
  - Ensure proper RFID reading
  - Verify the number scanned matches the one printed on the bar code sticker
- 4) Clean and aseptically prepare the site for administration.
- 5) Each LifeChip microchip is pre-loaded into a sterilized, single-use syringe. Remove the protective cap and insert the needle into the site up to its base.
- 6) Pull the needle back ¼" (0.6 cm) to create a cavity for the microchip.
- 7) Depress the plunger until the second click.
- 8) Apply light pressure to the administration site when removing the delivery device and afterward to minimize any bleeding. Treat as needed.
- 9) Replace the needle cap and properly dispose of the empty delivery device.
- 10) Rescan the microchip to ensure proper administration.  
NOTE: Bio-Thermo readings sufficient for temperature tracking/management will not be attainable until 24-48 hours after microchip administration.
- 11) Affix the bar code sticker to the alpaca/llama's records and/or retain the code for future reference.
- 12) Record the microchip number with the alpaca/llama's registry or regulatory agency as directed.

## WARNINGS

Not for use in humans.

Not for use in cats or dogs as pet rescue shelters may not have the ability to scan this variety of LifeChip.

Not for use in alpacas/llamas intended for human consumption.

LifeChip with Bio-Thermo technology is one tool that can be useful in monitoring the health of recipient alpacas/llamas. It will not replicate rectal temperature and is not intended to provide specific/isolated diagnostics. Regardless of temperature readings, if other symptoms of illness or distress exist, consult your veterinarian for a complete examination and diagnosis.

## PACKAGING SPECIFICATIONS

Product	Order #	Units / Package	Package Dimensions	Package Weight
Standard LifeChip (985)	TX1470B10	10	4 3/8" H x 7 7/8" W x 3 1/4" D (11.1 cm x 20.0 cm x 8.3 cm)	0.4 lbs (181.4 g)
Standard LifeChip (985) with Bio-Thermo	TX1470BBT10	10	4 3/8" H x 7 7/8" W x 3 1/4" D (11.1 cm x 20.0 cm x 8.3 cm)	0.4 lbs (181.4 g)
NAIS LifeChip (840)	TX1470840B10SP	10	4 3/8" H x 7 7/8" W x 3 1/4" D (11.1 cm x 20.0 cm x 8.3 cm)	0.4 lbs (181.4 g)
NAIS LifeChip (840) with Bio-Thermo	TX1470840BBT10	10	4 3/8" H x 7 7/8" W x 3 1/4" D (11.1 cm x 20.0 cm x 8.3 cm)	0.4 lbs (181.4 g)

