Microchip FAQs

1. How can one tell if the microchip being used is an ISO microchip or not, especially within the USA?

ISO 11784 and 11785 clearly define the bit content and communication protocol of microchips that adhere to these ISO standards. As such, a true ISO microchip has a 64 bit content resulting in a 15 digit numeric ID code of which the first 3 digits is the manufacturer's code that operates using FDX-B technology at a frequency of 134.2 kHz. In the USA, The current HomeAgain (Digital Angel) microchip is comprised of 48 bits resulting in a 10-alphanumeric ID number that does not contain Digital Angel's manufacturer's code and operates using FDX-A technology at a frequency of 125 kHz. This also applies to the AVID Eurochip. The AVID Friendchip also operates at 125 kHz and provides a 10 alphanumeric ID number but this number is encrypted, and hence requires a specially designed reader to be able to read. It is therefore also not a microchip that adheres to the ISO Standards 11784 or 11785. Both Digital Angel and AVID do manufacturer and distribute ISO standard microchips in markets outside of the USA.

2. What is the difference between the manufacturer and country codes and which is preferred?

The first three digits of the identification number stored in a microchip that meets ISO 11784/5 will be either a manufactures code or a country code.

Country Code
Microchips containing a number which starts with a country code can only be used in countries with a single central database which controls the issue of identification numbers. Each manufacturer selling product in such a country will ask the central database for a series of identification numbers. The manufacturer will then make microchips with these numbers each of which will start with the country code. These transponders will only be sold in the country represented by the three-digit code.
It is the responsibility of the central registry to be sure that no duplicate numbers are issued. A list of the codes for each county can be found at XXX

Manufacturers Code
In a country where there is no single central authority controlling the uniqueness of the code in each microchip, a manufacturer code is used. Each manufacturer applies to the International Committee on Animal Recording (ICAR) for a three-digit manufacturer code, which will start with 9. It is then the responsibility of each manufacturer to be sure that the number in each of the transponders that he makes is unique.

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Technical details can be found in the ISO standards 11784 and 11785.

ICAR rules require that manufacturers abide by a code of conduct which includes the provisions outlined above. Manufacturers who do not abide by the code risk having their allocated manufacturer code withdrawn

3. What is Annex A and are microchips identified in Annex A truly ISO standard microchips?

When ISO standards 11784 and 11785 were developed, there was concern regarding protection of the installed base of microchips, often referred to as backward compatibility. ISO 11785 Annex A was developed to address this issue during the transition period between prior and ISO standard technology and defined the need for readers to read three technologies (Destron, Datamars, and Trovan) for a period of 2 years. AVID was not included in Annex A because they elected not to provide the encryption code with which to read their encrypted microchips. However, this 2-year period has long since passed and this was clearly defined in ISO 11785, Section 2 (Conformance), wherein it states "...transponders meeting the requirements of Annex A may be applied for a transition period of 2 years from the date of the first edition of this international standard." The date of the first edition was 1996, and as this time frame was completed in 1998, Annex A is no longer applicable, hence, Annex A microchips are not true ISO standard microchips.

More FAQs

Additional answers to commonly asked questions can be found on the WSAVA website Microchip Identification page.

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