## Ruminal Heart Rate/Temperature Data Logging System Quickstart Guide

## ATTENTION!

After receiving the items please check if Ruminal Implant Transmitter and Collar Data Logger are inactive (see Points 3, 4 and 7 below). Unintentional activation is possible if they are stored close to magnets!

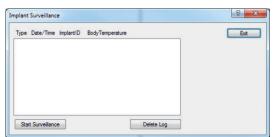
Before applying the Ruminal Implant Transmitter in the animal's rumen you have to ensure that the Ruminal Implant Transmitter is enabled and synchronized with the Collar Data Logger located in the battery pack of the collar. There is no chance to activate the Ruminal Implant Transmitter afterwards! Make sure that the adjustable side of the collar is on the left side of the animal for correct detection of the animals head position.

1. Find the "VECTRONIC Software" folder on enclosed USB Stick and copy the folder "RumiLog" to your computer. If you need to install the driver for the USB connection to the base station and Data Logger manually, you can find them in the "USB-Driver" folder.

2. Connect the RumiLog Base Station (grey box) with the FIWI USB connection cable to your computer. Start the Graphical User Interface RumiLog.exe and choose the COM-port of the USB connection.

3. Open the RumiLog Base Station "Implant Surveillance" window and click "Start Surveillance":

File Edit View CON	M Port Logger	Base Station	Help	
🗅 😂 🖬   X 📭 I	B 🕹 🤋 K?	Read Se	ttings	
Update COM Port COM3 -		Implant Surveillance		) ata
	1 <u> </u>	Read Da	ta	
		Read Ba	se Rev	



4. Enable/Disable the Ruminal Implant Transmitter by holding the magnet for three seconds (2 - 4 seconds tolerance) to the respective marking on the ceramic head. The Implant ID with the note "turned on"/"turned off" will appear in the Implant Surveillance window:

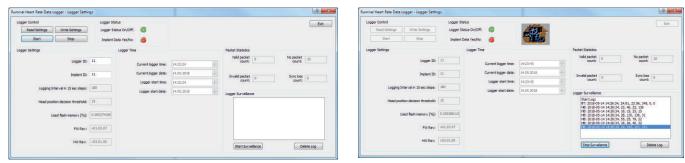
nplant Surveillance	8 ×
Type Date/Time ImplantID BodyTemperature	Exit
Start Log: MS: 2018-05-23 15:40:49, 21, Turned On	
Stop Surveilance Delete Log	



5. Connect the Collar Data Logger to your computer via the FIWI USB cable. Choose theCOM-port, open the Logger Settings window and click the "Read Settings" button to verify the correct Implant ID (change it if necessary). Click the "Start" button to enable the logger operation and click "yes" on the following pop-up window to confirm the settings. The current logger time and date, should be equal to the current PC time. There is no daylight saving switch implemented in the Collar Data Logger.

File Edit View CO	M Port	ogger	Base Station Help	
0 🗃 🖬   % 🖻	8 6	Re	ad Data	
Update COM Port	COM:	Logger Settings		ead Data
		Era	ase Memory	
		Set	t Head Pos Threshold	
		Ca	librate Frequency	

6. The Collar Data Logger is now started and tries to synchronize with the Ruminal Implant Transmitter, this may take up to 6 minutes. Click the "Start Surveillance" button, and wait until the collar receives packets from the Implant which are displayed in the Logger Surveillance window (BT: body temperature data, HB: heart beat data).



Now you can stop the Logger Surveillance mode and click the "Read Settings" button again, two green lights should indicate proper synchronization with the Implant and you have succeeded.

Logger Control Read Settings Write Settings	Logger S Logger S	itatus Status On/Off: 🛛 🙆	-				E
Start Stop	Implant	t Data Yes/No: 💿	THE REAL				
Logger Settings		Logger Time			Packet Statistics		
Logger ID:	11	Current logger time:	14:27:04	*	Valid packet 7 count: 7	No packet count:	10
Implant ID:	11	Current logger date:	14.05.2018	-	Invalid packet	Sync loss	0
		Logger start time:	14:23:43		count:	count:	
Logging Interval in 15 sec steps:	180	Logger start date:	14.05.2018	e V	Logger Surveillance		
Head position decision threshold:	15				Start Log: BT: 2018-05-14 14:26: HB: 2018-05-14 14:26:	34, 22, 46, 22, 136	), 0
Used flash memory [%]:	0.000341257				HB: 2018-05-14 14:26: HB: 2018-05-14 14:26: HB: 2018-05-14 14:26: HB: 2018-05-14 14:26: HB: 2018-05-14 14:26:	34, 28, 130, 136, 31 34, 55, 25, 79, 22	
FW Rev:	v01.03.07				HB: 2010-05-14 14:26: HB: 2018-05-14 14:26: Stop Log:		
HW Rev:	v03.01.00						

## GPS Collars made in Germany since 2000

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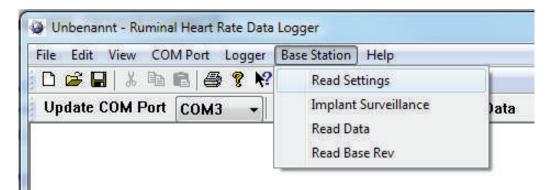
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7. Alternatively when working in the field without your computer you can also use the magnet to switch the Collar Data Logger on and off. Therefore just connect the Status Indicator Unit to the Collar Data Logger and hold the magnet for 3 seconds to the 'Mag.Switch' field on the battery case. The LED will blink every 2 seconds if the Logger is enabled. After successfully synchronizing with the Ruminal Implant Transmitter the LED will blink every second. To decrease the synchronization time it is recommended to activate the Implant before activating the Logger!

8. Verifying the Collar Data Logger settings remotely via the RumiLog Base Station can be useful to obtain full information about the state of the Collar Data Logger in the field without having to connect to it.



Open the Base Station "Read Settings" window and set the corresponding Implant ID. Click the "Read Settings" button to start the download, it can take up to 3 minutes to display the Collar Data Logger settings.

Pick Implant ID: 0		atus tatus On/Off: 🌀 Data Yes/No: 🌀						Exit
ogger Settings		Logger Time			Packet Statistics			
Logger ID:	0		-		Valid packet count:	0	No packet count:	0
9355 <del>55</del> 6775283		Current logger time:	00:00:00	A. 				
Implant ID:	0	Current logger date:	01.01.2000	* *	Invalid packet		Sync loss	
		Logger start time:	00:00:00	(A) (V)	count:	0	count:	0
Logging Interval in 15 sec steps:	0	Logger start date:	01.01.2000	(A) (V)	Loggers in vicinity			
Head position decision threshold:	0							
Used flash memory [%]:	0							
FW Rev:								
HW Rev:								

9. Make yourself familiar with the startup procedure and run a test trial prior to use it in the field to understand how the system works.

Refer to 'Graphical User Interface Help' if you have questions about configuration and features. In case of problems please feel free to contact our customer support:

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