

'Sika' receiver

**Professional
& user-friendly
radio-tracking**

Specifications

Frequency band:
8 or 30 MHz band
138.000 to 173.999 MHz

Sensitivity:
-150 dBm (min. discernible signal)

Battery Life:
28 hours (rechargeable battery)
26 hours (4 x AA primary cells)

Size of box:
150 x 85 x 55 mm
(6 x 3.25 x 2 inches)

Weight:
800 g (1.8 lb)

Functions:
User-programmable memory (256 channels)
Scanning (1 - 999 seconds)
Analogue and digital gain
Signal strength indication by bar graph and numerical readout

Other Features:
Fully waterproof, very robust
Backlit LCD for tracking at night



Liquid Crystal Display (LCD)

Top row: signal strength and low battery symbol
Bottom row: frequency - channel - gain - mode

Enters
Scan Mode

Sets MHz
frequency

LCD Back-light
Timed auto switch off

Frequency/
Channel
up/down

Frequency/
Channel
mode switch

Tuning Step
Switches between
0.1 and 1 kHz

Digital Gain
up/down keys

Stores a
frequency
in memory

Membrane Keypad
Completely waterproof.

Loudspeaker

Fully protected under membrane keypad

Battery Charger and
External Power Socket

Headphones Socket

Silicone
lid seal
For water
proofing

Thumb
wheel
For speedy
gain control

Charging LED

Antenna Connector
(standard BNC)

Diecast Aluminium Case
Lightweight and very robust

Biotrack Ltd
52 Furzebrook Road
Wareham
Dorset BH20 5AX
United Kingdom

Tel: (+44)(0)1929 552 992
Fax: (+44)(0)1929 554 948
Email: info@biotrack.co.uk
Web-site: www.biotrack.co.uk



Specification	Value	Explanation
Frequency Band	8 or 30 MHz options between 138 and 174 MHz	Most tracking receivers cover a 1-2 MHz band only. The Sika can cover up to 30 MHz! The main benefits of the 30 MHz band version are: <ul style="list-style-type: none"> ▪ Sika can be used almost anywhere ▪ Sika is 'future-proof' against changes in frequency allocation
Sensitivity	MDS -150 dBm	The more sensitive a receiver, the better the chances of you hearing very weak signals. MDS means 'Minimum Discernible Signal' and is the weakest signal that can be heard on the receiver. The more negative the MDS, the better the sensitivity (e.g. -150 is better than -145).
Selectivity	6 dB 90 dB ± 3.75 kHz ± 12 kHz	The more selective the receiver, the less chance you will hear 'interference' from adjacent frequencies (including radio tags and signals from other radio users). However, beware selectivity that is too narrow (e.g. < 2 kHz at 6dB). This will make tuning more critical and increases the risk of missing a tag that has shifted frequency slightly (e.g. due to a change in temperature).
Gain Control Range	Receiver gain 90 dB	When tracking powerful tags at close range you have to be able to reduce the gain to very low levels, otherwise the signal will no longer appear to be directional. The greater the Gain Control Range, the less likely you are to encounter problems with close range tracking. Receivers with inadequate gain control range need attenuator switches.

Specification	Value	Explanation
Channels Number of channels (user programmable)	256	Having channels makes the receiver easier to use in the field and enables memory scanning for lost animals.
Scanning Min. – Max. dwell time	1 – 999 secs	The Scanning function steps through the channels on your receiver and stops on each one for a user-defined 'dwell' time. Scanning automates the process of frequency changing when searching for a number of tags at once. It is especially useful during searches from vehicles.
Frequency Stability Over -20 to +50 C	< 1 kHz	If a receiver frequency changes with temperature there is a chance that you will miss tags because the receiver is no longer tuned to the best frequency to hear them. The more stable the frequency of the receiver over temperature, the less the risk you will miss a tag because of frequency shift.
External power supplies	10 – 15 V	Powering a receiver from an external power supply saves internal battery life and allows the receiver to run or be re-charged from a vehicle.
Waterproofing Method Rating	Neoprene and silicone seals. IP65	The waterproof rating code 'IP65' is from a standard dust and water resistance scale. It means the device is dust-tight and impenetrable to water spray from all directions. Sika has a waterproof seal on box lid and battery compartment. The speaker is fully covered by the membrane keypad and the gain control is hermetically sealed. All connectors are sealed on inside of box and external covers are supplied for connectors when not in use. Water-proofing to IP65 is an essential feature of any modern radio-tracking receiver.