Beacon Training System RTX 457

with Remote Control and Probe Hit Feedback

Avalanche beacons are intended for rescue by companions. They permit to locate and recover buried persons immediately after the avalanche occurred. The recovery of buried persons is a race against time. Therefore, the search by means of avalanche beacons must be well practiced in advance. The digital avalanche beacons that appeared on the market in recent years make no exception. A person not familiar with beacon search will loose precious time.

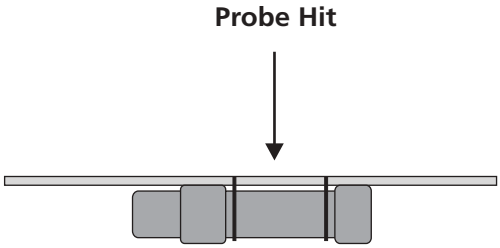
The training for beacon search must be done under realistic and reproducible conditions. It must also include the search for multiple burials. This implies

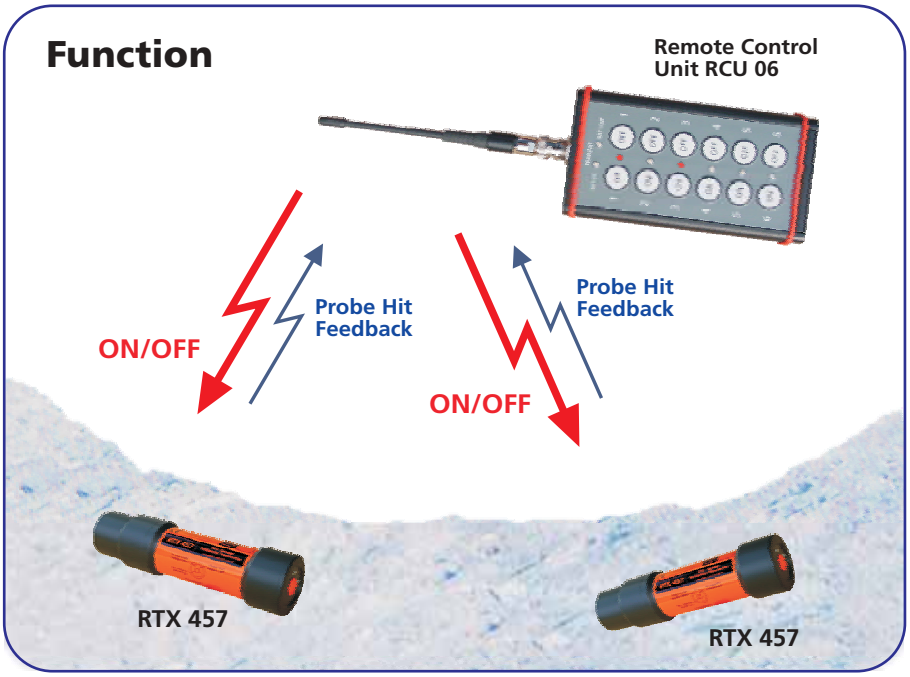
- that several beacons must be buried over a wide area at a depth of approx. 50 to 100 cm.
- that the practising persons must not know the burial locations.
- that, in the interest of efficient training, the buried transmitters should provide a capability for remote turn on/off.
- that the buried transmitters should be equipped with a system for automatic feedback of probing hits to the beacon of the searching person and also to the remote control unit.

The new **RTX 457 transmitter system** is the first system to meet the above requirements by providing a remote control 457 kHz avalanche beacon transmitter for purposes of training and beacon testing.

The main features are:

- Up to six RTX 457 avalanche beacon transmitters can be switched on and off independently via a radio link. Indicators for the currently active transmitters at the remote control unit.
- The system provides **automatic probe hit feedback**. For that purpose, every RTX 457 is connected to a target surface of suitable size, e.g. a wood sheet of about 40 by 60 cm. Three consecutive probe hits to the target surface, one second apart, will trigger a confirmation signal in the searcher's beacon (8 sec of silence) and activate the corresponding indicator at the remote control unit.
- The transmitter can provide up to 10 different transmit patterns to simulate the characteristics of all types of avalanche beacons that are currently available on the market.
- Automatic switchover from 'standby' to 'transmit' after 6 hours without receiving a remote control command (just to make sure that a RTX 457 transmitter can not get lost even if the remote control fails).
- Operation on four off the shelf AA type batteries.
- Long operating time and low battery warning (~200 hours / warning after ~120 hours).
- Compatible with the ETS 300718 transmitter requirements.





Remote Control Unit RCU 06

Mode	Status LED
OFF	No indication
ON	Slow flash
ON + Probe Hit	Fast Flash

Operating Mode		Status LED
OFF	No operation	No indication
TRANSMIT	Transmitter ON, ready for receiving remote commands	Single flash for every transmit pulse (red: battery < 40 %, green: battery = 40...100 %)
STANDBY	Transmitter OFF, ready for receiving remote commands	1 double flash per second (red: battery < 40 %, green: battery = 40...100 %)

Technical Data

RTX 457 Avalanche Transmitter

Frequency	457 kHz +- 25 Hz
Transmit field strength	approx. 2.1 mA/m at a 1 m distance
Compatible with	ETS 300718
Power supply	4 type LR6/AA 1.5 V alkaline batteries
Battery lifetime	approx. 200 h (transmitter active)
Case	black plastic, waterproof
Dimensions	approx. 270 x 70 mm
Temperature range	-30 to +50 deg C (operating)

RCU 06 Remote Control Unit

Frequency	433 MHz ISM Band
Range	up to 100 m
Power supply	1 type 6LR61, 9 V alkaline battery
Dimensions	150 x 65 x 35 mm
Temperature range	-30 to +50 deg C (operating)
Protection	IP65 (slash water proof)

This information is subject to modification without notice

Transmit pattern settings:

Pos	ON	OFF	device type
0	100 ms	880 ms	Mammut Barryvox, Pieps
1	320 ms	660 ms	Barryvox VS 2000, VS 68
2	200 ms	780 ms	
3	100 ms	580 ms	Ortovox M2
4	250 ms	600 ms	Ortovox M1
5	70 ms	850 ms	ARVA 457
6	90 ms	700 ms	Tracker
7	300 ms	650 ms	

RTX_DSE / 31.12.2005

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