



RANGEMASTER
SYSTEMS

Rangemaster Skeet Smart Receiver with RFID

User manual



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1. DESCRIPTION OF THE UNIT

4 channel digital **Smart Receiver for Skeet** is a device for receiving radio commands, controlling traps for releasing clay targets for skeet only and monitoring traps state and RFID card payment option

1.1 FEATURES

- 4 channel digital receiver
- Easy setup
- Smart menu
- Rigid antenna
- Up to 500m range with Rangemaster transmitters (LoS)
- Operational temperature: -30°C to +70°C
- Power (input): via trap or car battery, optional external power supply
- Polarity fail-safe
- Transmission-addresses settable: 32
- Possibility to run up to 32 ranges without any interference
- Heavy duty relay built in (dry contact)
- Release pull time adjustable
- Targets counter
- 16x2 LCD display
- 433 MHz

1.2 DISCIPLINES

for Skeet only

1.3 TECHNICAL DATA

Power Input:	via car battery or external power supply
Input/ supply voltage:	12V DC
Operation temperature:	-30°C to +70°C
Dimensions:	Height: 23cm, width: 14.5 cm, depth: 8.5cm
Weight:	Approx. 900 gr
Internal fuse	5x20mm, 0,4A
Display:	2x 16 Digits with English menu, with back-light
Relays:	1 for releasing high house – dry contact

	1 for releasing low house – dry contact
	1 for switching on/off high house lamp – dry contact
	1 for switching on/off low house lamp – dry contact
	1 for switching on/off recocking engines for Nasta traps (if 400V Nasta trap is used)
Relay rating:	Max.230V-0.5A AC or 24V-1.0A DC
Frequency:	433 MHz +/-2MHz

1.4 OPTIONAL ACCESSORIES

Necessary accessories

Digital remote control "IQ-SERIES" for Skeet

[TXIQ5SK](#)

Recommended accessories

Hand held card loader

[CCC-2](#)

RFID card loading software and RFID card reader

[CCS-PLUS](#)

RFID cards

[CCSECPUS](#)

TXIQ5SK remote control for Skeet



1.5 CONTENTS OF SHIPMENT

- 230V/12V DC power supply with 3 pins plug
- 1 control unit
- 1 pay mode card
- 1 free mode card
- 1 external antenna

Suitable external power supply has to be ordered separately!

2. CONNECTING

The smart receiver is connected to the traps and signal lamps to the corresponding terminals:

Relay 1 : releasing high house

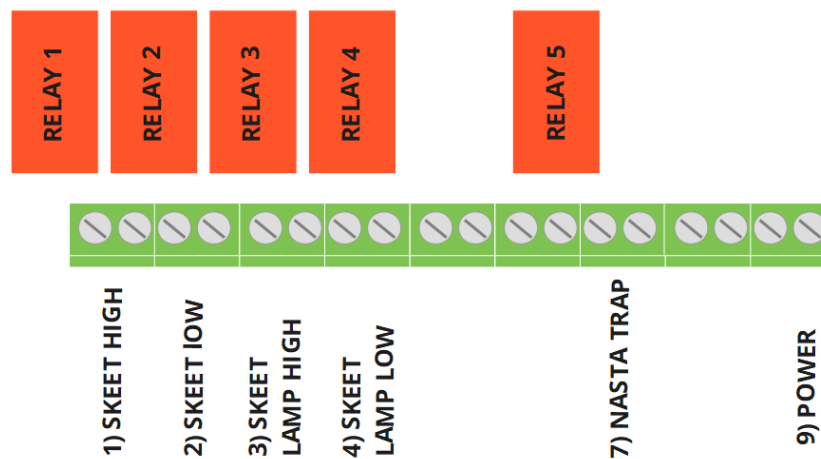
Relay 2 : releasing low house – dry contact

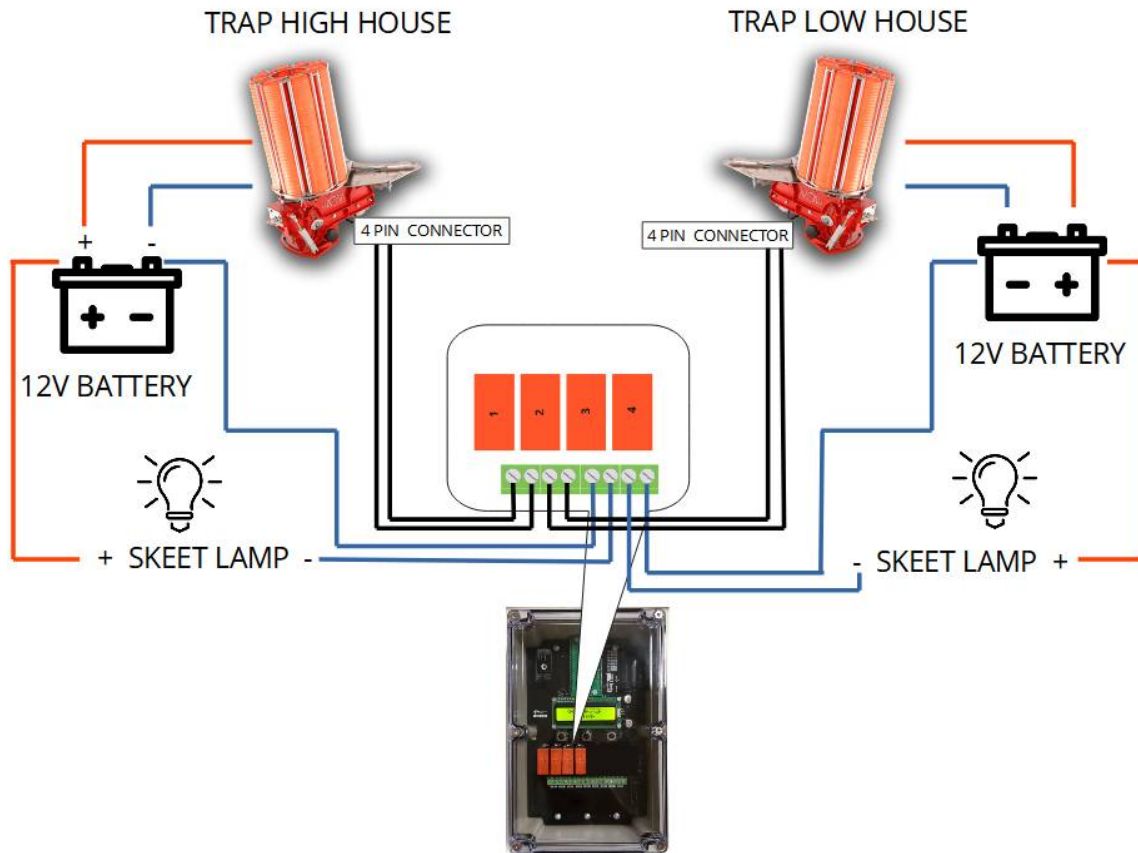
Relay 3 : switching on/off high house lamp – dry contact

Relay 4 : switching on/off low house lamp – dry contact

Relay 5*: switching on/off recocking engines for Nasta Traps (if 400V Nasta trap is used)

Skeet Receiver wires connecting scheme:





IMPORTANT!

THE RELAY IS USED FOR SWITCHING SIGNALS ONLY (DRY CONTACT) AND MUST NOT SWITCH HEAVY LOADS (E.G. A SOLENOID)!

IMPORTANT!

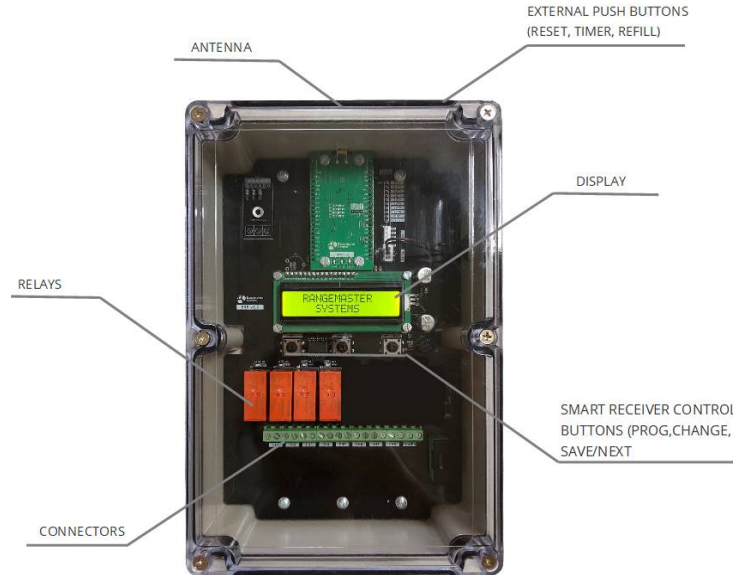
YOU HAVE TO USE AN EXTERNAL CIRCUIT BREAKER TO SWITCH THE NASTA RECOCKING ENGINES – NEVER CONNECT DIRECTLY TO INTERNAL RELAY!

NOTE: Optimum height of the Rangemaster Smart Receiver is **0.7 m above the ground**, but **not below 0.5 m**

3. TYPES OF OPERATION AND FEATURES

Type	Feature
Pay-Mode	<p>Credit has to be loaded in advance to the unit by using a RFID prepaid card.</p> <p>When credit is at 0, unit will stop working</p> <p>Access credit not used can be set to 0 by using the external Reset button</p> <p>Number of targets given = 25 + Number of No-Targets set in setup menu, <i>e.g. you swipe your card once and No Target is set to 3, you will have 28 Targets available.</i></p> <p>The Trap enable Relay will be in ON-state as long as there is credit shown; at zero credit, the relay for the traps will switch off</p>
Free Mode	<p>Clays will be released and the number of clays release are shown on the display (can be reset in admin menu).</p> <p>The Trap enable Relay will switch to ON-state as soon as a target is released; the ON time will be set in the admin menu with the "Time to Recock" period. After recocking time expired, relay will go to off state (Nasta recocking engine switched off)</p>
Timer	<p>ISSF Skeet Timer can be activated or deactivated either with the buttons on Remote control or TIMER external push button</p>
Target Counter	<p>Built in</p>
Fill status	<p>Switches off/pauses usage when calculated number of targets in Traps has reached 0 and this feature is enabled in the setup menu. Magazine capacity can be set in the admin menu.</p>

4. DESCRIPTION OF THE RECEIVER & EXTERNAL PUSH BUTTONS



External push buttons:



External button	Functionality
Reset	Sets the credit shown in the pay mode to 0
Timer	Switches on/switches off timer
Refill	Sets both the traps to refilled. If you use the countdown of clays, the system will stop releasing clays when a trap has 0 clays inside its magazine. You have to correctly set the number of clays per trap when filled to maximum and enable this feature

5. SETTINGS

After powering the **Skeet Smart Receiver** on, the following information will be displayed:

SR-SKEET	434MHz
v:1.C015	+ICaR

In pay mode the following window is displayed:

NO CREDIT PRESENT CARD

After presenting the card:

Timer:OFF	Ψ
Credits:38	

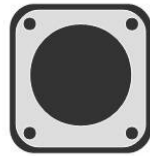
In free mode:

Ψ L:1	H:35
Timer:ON	L:35

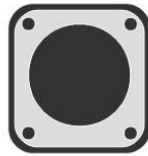
Ψ	Signal level
L:	Number of the layout
Timer:	ON - timer with a random delay from 0-3 sec is active OFF - timer is off and targets are released without delay
H:	Number of targets released from the high house after the last press on external REFILL button or after the last erasing the "TOTAL THROWN HI" counter in admin menu
L:	Number of targets released from the low house after the last press on external REFILL button or after the last erasing the "TOTAL THROWN LOW" counter in admin menu

RANGEMASTER SMART RECEIVER CONTROL BUTTONS

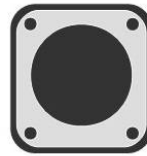
(for entering administrative menu to be able to set up parameters using push buttons placed under the display)



PROG



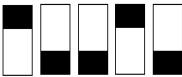
CHANGE



**SAVE
NEXT**

PROG	Button to enter the menu and leave the menu
CHANGE	Changing the value (higher)
SAVE/NEXT	Save changes and go to the next mode

No	MENU MODES	DESCRIPTION
1	SERIAL NUMBER	Displays the unique serial number in format FF-FF-FF-FF
2	TOTAL THROWN HI	Counter of clays released with high house trap
3	HI TRAP MAGAZINE	Magazine capacity for the high house trap Min. value: 50 Max. value: 1.000 To adjust the value use center CHANGE button
4	TOTAL THROWN LOW	Counter of clays released with low house trap
5	LOW TRAP MAGAZINE	Magazine capacity for the low house trap Min. value: 50 Max. value: 1.000 To adjust the value use center CHANGE button
6	YEAR CODE	Year Code enabled allows you to check for Year Code feature on RFID chip card. If it is enabled and Year Code has been changed, customers (shooters) have to turn to the front desk to have their chip cards updated otherwise their cards are not read. To disable or enable the feature use CHANGE button.

№	MENU MODES	DESCRIPTION
		To change the Year Code swipe an administrative card with the proper Year Code set
7	PAY TYPE	These are the values which are deducted from the cards: Targets, Rounds or Cash Targets: after every swipe 25 targets are deducted from the target credit amount on the RFID card; Rounds: after every swipe one credit is deducted from the Skeet round credit on the RFID card; Cash: after every swipe the amount set for each of the 26 customer groups available is deducted
8	PROTOCOL	Basic (recommended) Pro: you encrypt the radio data with a special key in format FFFF; this key also has to be set on the Transmitter (you will need a TXIQ SKEET Pro)
9	CHANNEL	Basic: Chose channel from 00 to 31 (32 in total). Pro: from 00 to 255 (256 in total). Example: CHANNEL 09 There is also arrangement of DIP switches for setting the corresponding address for the remote control  To change the name use CHANGE button. After selecting to confirm, click SAVE/NEXT .
10	NO BIRD NUMBER	0..10 additional targets given per payment (swipe by RFID card) in pay mode
11	TIMER R. CONTROL	ENABLED – switches on possibility to switch on/off timer via remote control DISABLED – switches on possibility to switch on/off timer via TIMER button on receiver. If the timer is turned off using TIMER button, the receiver does not respond to the commands from the remote control, even if this feature is set to Enabled in the admin menu
12	RELAY PULSE TIME	Determines, how long the relays for releasing the clays are in on state Min value: 0,1 seconds Max value: 1,0 seconds

№	MENU MODES	DESCRIPTION
13	TIME TO RECOCK	The time required to fully recharge/cock the trap. Minimum: 0.5 seconds, maximum: 3.0 seconds. Determines, how long the relays for switching on the Nasta trap is in on state. During this time elapsing, you cannot release any trap. This timer starts, when the relay pulse time expires
14	PRICE PER ROUND	This menu section is shown when pay mode is activated and if you use Cash as pay type credit only. Here prices per 26 customer groups are set. <i>E.g. Group A: 7,50</i> Incremental step: 0,10 To adjust the value use CHANGE button
15	FACTORY SETTINGS CHANGE TO RESET	Change will reset unit to factory default values, which are: <i>High house max. Magazine fill: 400 clays</i> <i>Low house max. Magazine fill: 400 clays</i> <i>Year Code: disabled</i> <i>Pay type: Cash</i> <i>Protocol: Basic</i> <i>Channel: 0</i> <i>No Bird number: 0</i> <i>Timer R. Control: Enabled</i> <i>Relay pulse time: 0,5 sec</i> <i>Time to recock: 2,0 seconds</i> To reset press Change button

6. TROUBLESHOOTING

No	Problem	Possible reason	Solution
1.	Trap does not respond	1. Trap is not connected to power 2. Wrong channel is set 3. Trap magazine is empty	1. Connect the trap to network. 2. Set receiver and transmitter to the same channel. 3. Load the trap magazine and press REFILL button.
2.	Power indicator is off	1. Receiver is not connected to power 2. Fuse is defective	1. Check receiver connection (make sure it is not loose) 2. Replace the fuse.
3.	Poor signal level	1. Antenna is defective 2. Other device interference	1. Replace the antenna. 2. Change channel for both receiver and transmitter. Both devices should be set to one channel.
4.	Message:Error # 4A02 Cardreader Fault	1. Poor contact with card reader	1. Check connection 2. Replace the card reader cable

7. LIMITED WARRANTY

Rangemaster Systems gives a limited warranty on this products against defects in material or workmanship for time of 12 months.
This period starts upon receipt of the product.

Rangemaster System will not be liable for loss of data or loss of profit or turnover due to a defect.

The warranty only includes repair or replacement of defect components, which failed during daily use. "Daily use" has to be read as: Use in accordance to specifications and in intended use.

General information & warranty exclusions: Damages due to water, moisture, vandalism, lightening, surges over power line or power supply, usage outside of specifications, dropping the product, excessive heat or cold (both for operation and storage) damages because of dropping the product, unnecessary force, damages because of empty or discharged batteries or accumulators are warranty exclusions and do not entitle you for a free of charge repair or replacement.

In case of chip card readers with contacts are built in the product. Items or dirt inside the reader are warranty exclusions.

In case of touch screens are built in the product: Damages due to improper use (using something else than your finger) causing scratches or punctures on the screen or on the touch surface will not be covered with warranty.

Please ask for a RMA number by sending an email to support@rangemaster.at
Add invoice number, date of invoice and serial number of product.
Also add a detailed description of errors.

Return unit for repair to:

Maxima WarenhandelsGmbH
© Rangemaster Systems – Ext. Storage
8082 Weissenbach 9
Austria/Europe

Show your RMA number of the box. Send us a tracking link after returning the product to us.

8. RMA FORM

To:

Maxima WarenhandelsGmbH
 © Rangemaster Systems – Ext. Storage
 8082 Weissenbach 9
 Austria/Europe

RMA: _____

Date: ____/____/____

Date of purchase	
Supplied by	
Invoice number (Please attach copy of invoice)	
Product serial number	
Description of error	

Please return to:

Name	
Club	
Address 1	
Address 2	
Zip code	
City/Town	
Country	
Phone	
E-Mail	