



**R**RANGEMASTER  
**S**YSTEMS

**W**ireless release module "BURAN"  
for **R**angemaster X3 systems  
Data sheet

Order code: BURAN  
Revision Date: 01.07.2021

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## 1. DESCRIPTION OF THE UNIT:

**Wireless release module "BURAN"** is a wireless transmitter for Rangemaster X3 Pro/.NET systems for controlling wireless receivers.

### 1.1 FEATURES:

- Easy connection and set up
- External, rigid antenna
- Up to 700m range with Rangemaster receivers (LoS)
- Operational temperature: -30°C to +70°C
- Power (input): via 37 pin cable 12V power supply from X3 unit
- Transmission-addresses settable

### 1.2 DISCIPLINES:

Sporting, Compak Sporting, Skeet and Trap

### 1.3 TECHNICAL DATA:

Power Input:	X3 - 12V power supply
Power consumption:	<100 mW
Min. supply voltage:	12 V DC
Max. supply voltage:	18 V DC
Operation temperature:	-30°C to +70°C
Dimensions:	Height: 15cm (+13cm antenna), width: 11 cm, depth: 7.5 cm
Weight:	Around 350 gr w/o power supply
Output:	Radio signal
Frequency:	433 MHz

### 1.4 OPTIONAL ACCESSORIES:

#### Receivers

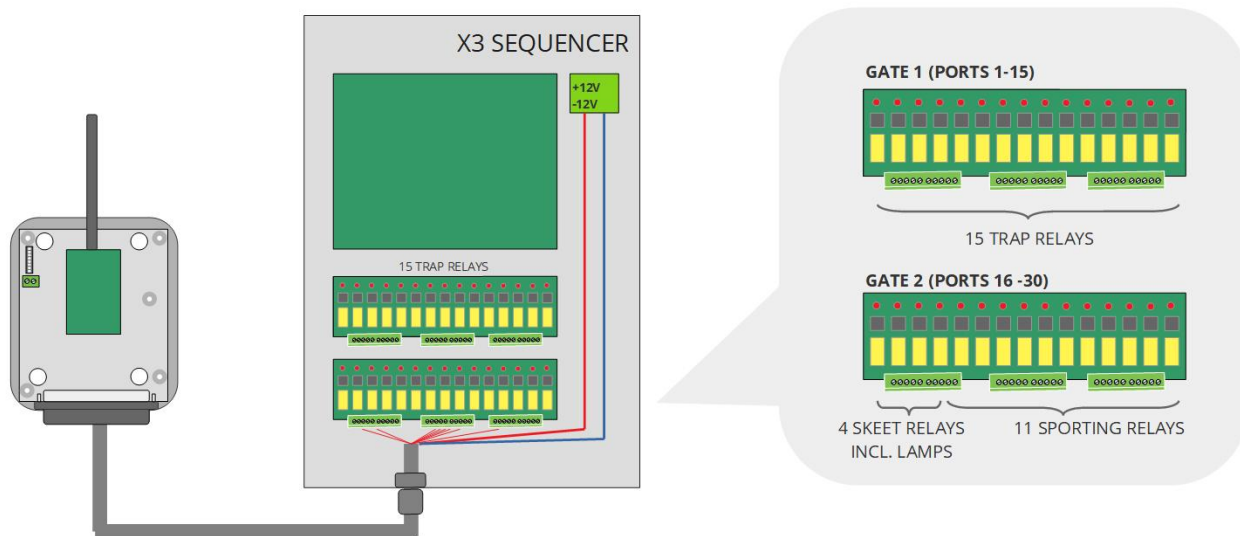
1/24 channel Smart Receiver	<a href="#">RXSR4S</a>
8 channel Smart Receiver	<a href="#">RXSR8</a>
4 channel Smart Receiver for Skeet	<a href="#">RXSRSK</a>
1/24 receiver	<a href="#">RX-U</a>

## 2. CONNECTING

### 2.1 CONNECTING MODULE TO RANGEMASTER X3 SEQUENCER

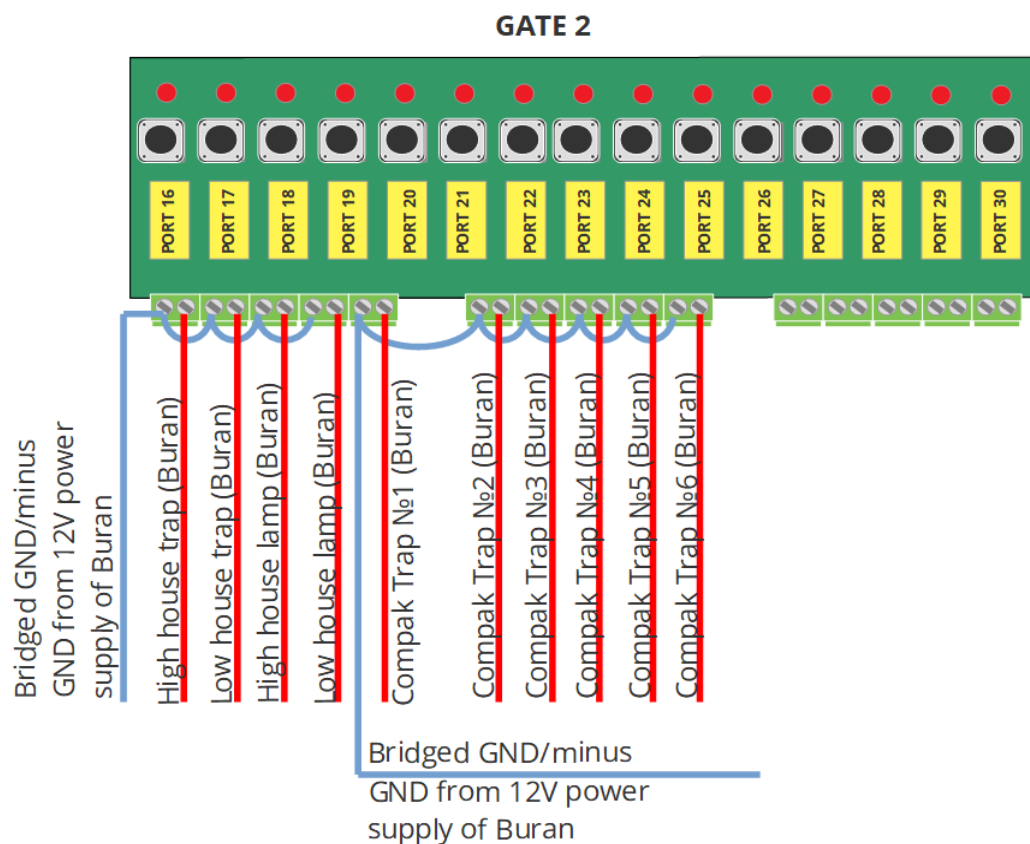
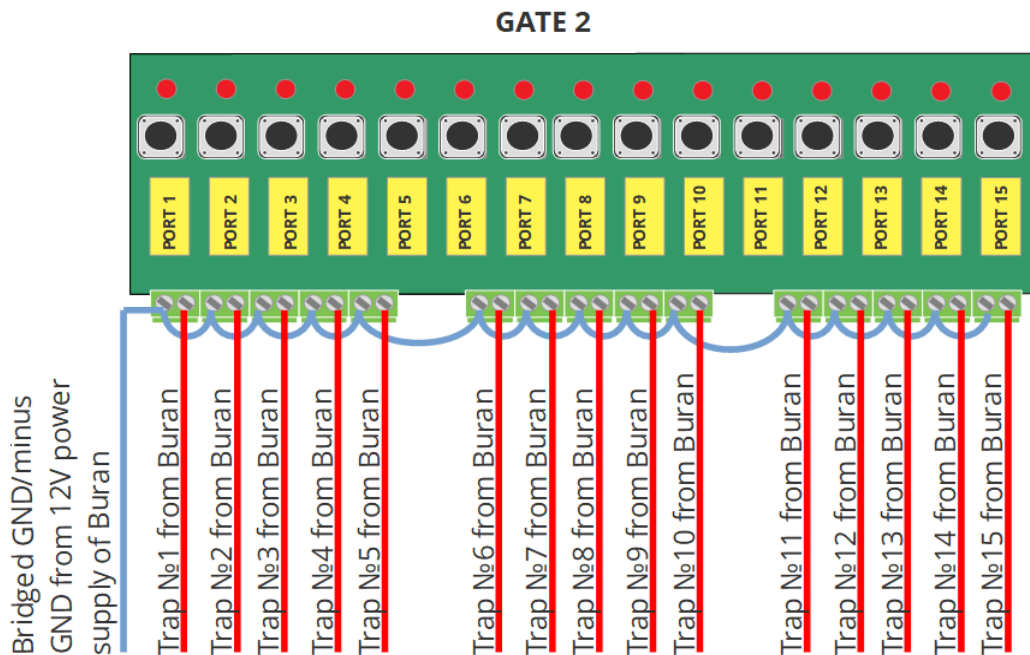
The wireless release module is connected to the X3 sequencer via 37 wire cable (cable is included).

Connect wires in accordance to the traps (Compak 1, Compak 2, Compak 3, Compak 4, Compak 5, Compak 6, Skeet High, Skeet Low and Trap) like shown on the pictures below.



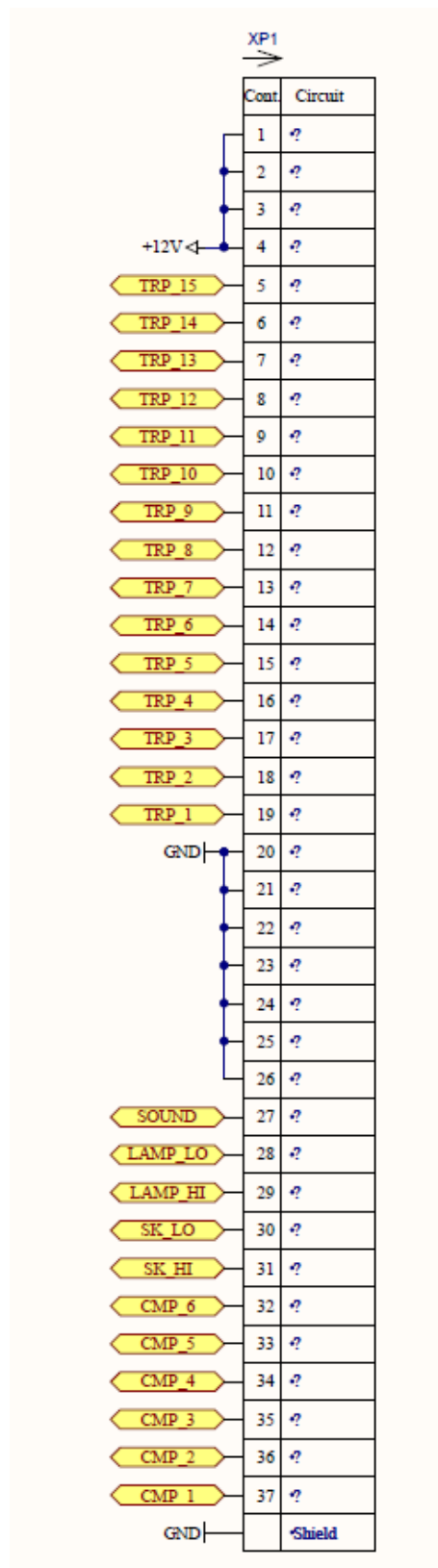
**NOTE:** wireless module should be mounted minimum 2m above the ground!

X3 has two relay boards **GATE 1 (Ports 1-15)** and **GATE 2 (Ports 16-30)**



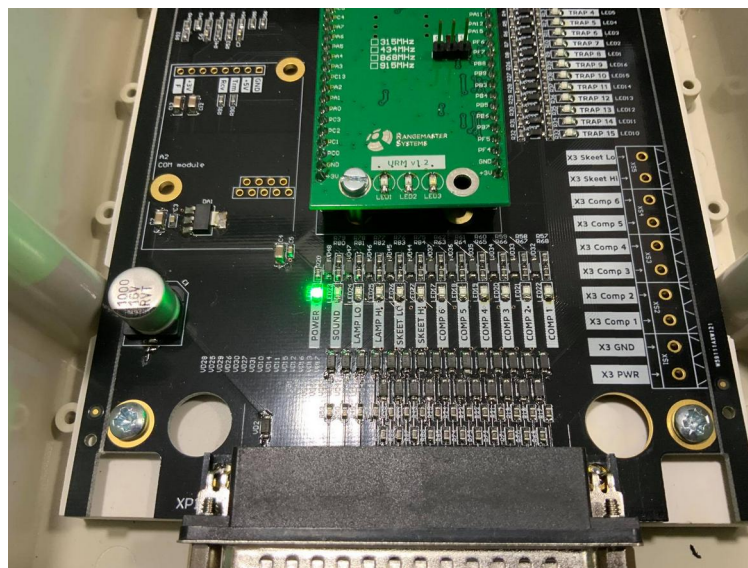
## 2. 2 37 WIRES COMING FROM BURAN

Nº	37 WIRES FROM BURAN
1.	POWER +12V
2.	POWER +12V
3.	POWER +12V
4.	POWER +12V
5.	TRAP 15
6.	TRAP 14
7.	TRAP 13
8.	TRAP 12
9.	TRAP 11
10.	TRAP 10
11.	TRAP 9
12.	TRAP 8
13.	TRAP 7
14.	TRAP 6
15.	TRAP 5
16.	TRAP 4
17.	TRAP 3
18.	TRAP 2
19.	TRAP 1
20.	GND
21.	GND
22.	GND
23.	GND
24.	GND
25.	GND
26.	GND
27.	SOUND (BUZZER)
28.	LAMP SKEET LOW HOUSE
29.	LAMP SKEET HIGH HOUSE



30.	SKEET LOW HOUSE
31.	SKEET HIGH HOUSE
32.	COMPAK 6
33.	COMPAK 5
34.	COMPAK 4
35.	COMPAK 3
36.	COMPAK 2
37.	COMPAK 1
	GND (Shield)

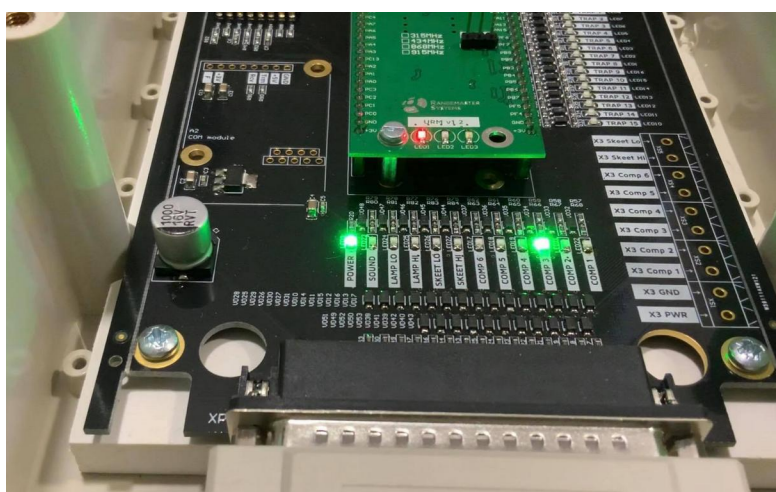
In order to know which wire is responsible for which section, use GND (minus) and connect with each wire to see the description next to blinking LED:



## 2. 3 INDICATOR LEDS

Name of LED	Explanation	Colour	Identification	X2	X3
LED9	Power	Green	Power is on	+	+
LED1	Signal	Red	Signal is sent	+	+
LED3	Address	Green	Address is changed	+	+
COMP 1	Compak Sporting A	Red	Signal is sent	+	+
COMP 2	Compak Sporting B	Red	Signal is sent	+	+
COMP 3	Compak Sporting C	Red	Signal is sent	+	+
COMP 4	Compak Sporting D	Red	Signal is sent	+	+
COMP 5	Compak Sporting E	Red	Signal is sent	+	+
COMP 6	Compak Sporting F	Red	Signal is sent	+	+
SKEET HI	Skeet High/Sporting G	Red	Signal is sent	+	+
SKEET LO	Skeet Low/Sporting H	Red	Signal is sent	+	+
LAMP HI	Lamp High	Red	Signal is sent	+	-
LAMP LO	Lamp Low	Red	Signal is sent	+	-
SOUND	Buzzer	Red	Signal is sent	+	-
TRAP 1	Trap 1-Trap 15	Red	Signal is sent	+	-

Example of successful transmission of release command for Compak #3 = C  
Input for Compak #3 = C switched against GND, red transmission LED blinks:





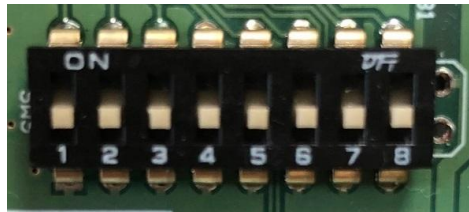
## 2.4 TRANSLATION TABLE

No	INPUT PRINT IN BURAN	TRAP NAME (KEYS)	COMMENT
1.	COMPAK 1/ SPORTING 1	A	For sporting or compak
2.	COMPAK 2/ SPORTING 2	B	For sporting or compak
3.	COMPAK 3/ SPORTING 3	C	For sporting or compak
4.	COMPAK 4/ SPORTING 4	D	For sporting or compak
5.	COMPAK 5/ SPORTING 5	E	For sporting or compak
6.	COMPAK 6/ SPORTING 6	F	For sporting or compak
7.	SKEET HIGH/ or SPORTING 7	G	Dual use for skeet high or sporting 7
8.	SKEET LOW or SPORTING 8	H	Dual use for skeet low or sporting 8
9.	TRAP 1	I	For additional traps (e.g. sporting)
10.	TRAP 2	J	For additional traps (e.g. sporting)
11.	TRAP 3	K	For additional traps (e.g. sporting)
12.	TRAP 4	L	For additional traps (e.g. sporting)
13.	TRAP 5	M	For additional traps (e.g. sporting)
14.	TRAP 6	N	For additional traps (e.g. sporting)
15.	TRAP 7	O	For additional traps (e.g. sporting)
16.	TRAP 8	P	For additional traps (e.g. sporting)
17.	TRAP 9	Q	For additional traps (e.g. sporting)
18.	TRAP 10	R	For additional traps (e.g. sporting)
19.	TRAP 11	S	For additional traps (e.g. sporting)
20.	TRAP 12	T	For additional traps (e.g. sporting)
21.	TRAP 13	U	For additional traps (e.g. sporting)
22.	TRAP 14	V	For additional traps (e.g. sporting)
23.	TRAP 15	W	For additional traps (e.g. sporting)
24.	LAMP HIGH	X	Used for SR8 (Skeet receiver)
25.	LAMP LOW	Y	Used for SR8 (Skeet receiver)

### 3. SETTINGS

#### 3. 1 SETTING THE ADDRESS

To make the wireless module work with receivers on the layout, they all have to be set to the same channel. To be able to set the address use the DIP switch placed on the PCB inside the enclosure on the left upper corner.



**NOTE:** All layouts must be set to different channels!

## 3.2 ADDRESS TABLE:

LAYOUT MODE								
Channel/ DIP switch	1	2	3	4	5	6	7	8
1.1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1.2	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1.3	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
1.4	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
2.1	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
2.2	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
2.3	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
2.4	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
3.1	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
3.2	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
3.3	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
3.4	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
4.1	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
4.2	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
4.3	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
4.4	ON	ON	ON	ON	OFF	OFF	OFF	OFF
5.1	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
5.2	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
5.3	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
5.4	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
6.1	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
6.2	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
6.3	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
6.4	ON	ON	ON	OFF	ON	OFF	OFF	OFF
7.1	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
7.2	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
7.3	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
7.4	ON	ON	OFF	ON	ON	OFF	OFF	OFF
8.1	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
8.2	ON	OFF	ON	ON	ON	OFF	OFF	OFF
8.3	OFF	ON	ON	ON	ON	OFF	OFF	OFF
8.4	ON	ON	ON	ON	ON	OFF	OFF	OFF

CHANNEL MODE								
Channel/ DIP switch	1	2	3	4	5	6	7	8
00	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
01	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
02	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
03	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
04	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
05	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
06	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
07	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
08	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
09	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
10	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
11	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
12	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
13	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
14	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
15	ON	ON	ON	ON	OFF	OFF	OFF	OFF
16	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
17	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
18	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
19	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
20	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
21	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
22	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
23	ON	ON	ON	OFF	ON	OFF	OFF	OFF
24	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
25	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
26	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
27	ON	ON	OFF	ON	ON	OFF	OFF	OFF
28	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
29	ON	OFF	ON	ON	ON	OFF	OFF	OFF
30	OFF	ON	ON	ON	ON	OFF	OFF	OFF
31	ON	ON	ON	ON	ON	OFF	OFF	OFF

#### 4. TROUBLESHOOTING

No	Issue	Possible reason	Solution
1.	No traps are released	Address is set incorrectly	Set the correct address - <a href="#">refer to 3.1</a>
		Cable is disconnected	Check the power cable
		Antenna is not fixed	Fix the cable.
		Module is mounted too low	Remount the module 1.5m above the ground.
		Receivers on the layout are not powered on or in standby mode	Check receivers
2.	Wrong traps are released	Address of Buran or receiver is set incorrectly	Set the correct address - <a href="#">refer to 3.1</a>
		The wires from X3 unit to Buran are connected incorrectly	<a href="#">Refer to section 2</a> and recheck connection
3.	Traps on other layouts are released	Address of Buran or receiver is set incorrectly	Set the correct address - <a href="#">refer to 3.1</a> <b>NOTE: All layouts must be set to different channels!</b>

## 5. 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 Systems 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](mailto: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

Dr. Robert Graf Straße 64/9

Graz, A-8010

Austria/Europe

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

## 6. RMA FORM

To:

Maxima WarenhandelsGmbH  
Rangemaster Systems  
8082 Weissenbach 51  
Austria/Europe

RMA: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

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

Please return to:

<b>Name</b>	
<b>Club</b>	
<b>Address 1</b>	
<b>Address 2</b>	
<b>Zip code</b>	
<b>City/Town</b>	
<b>Country</b>	
<b>Phone</b>	
<b>e-Mail</b>	