RANGEMASTER
SYSTEMS

Wireless release module "BURAN"
for Rangemaster X2 systems
Data sheet

PROFESSIONAL SHOOTING GROUND AUTOMATION

TABLE OF CONTENTS:

This unit has been carefully produced for / by:

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1. DESCRIPTION OF THE UNIT:

Wireless release module "BURAN" is a wireless transmitter for Rangemaster X2 family systems for controlling wireless receivers via X2 control unit.

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 for X2

- Transmission-addresses settable

1.2 DISCIPLINES:

Sporting, Compak Sporting and Skeet

1.3 TECHNICAL DATA:

Power Input:	X2 supplies suitable via 37 pin cable
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	RXSR4S
8 channel Smart Receiver	RXSR8
4 channel Smart Receiver for Skeet	RXSRSK
1/24 receiver	RX-U

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2. CONNECTING

2. 1 CONNECTING MODULE TO RANGEMASTER **X2** SEQUENCER

The wireless release module is connected to the X2 sequencer via 37 wire cable with socket to the 37 pins female traps connector on the back side of X2 sequencer (B4 on the picture).

2m connecting cable is included.
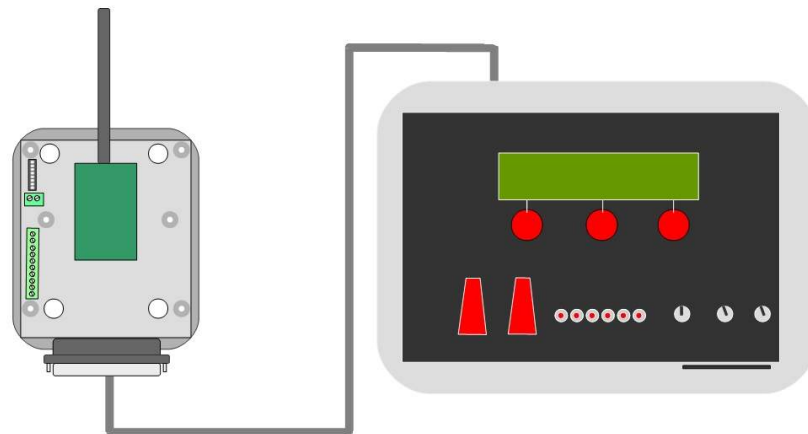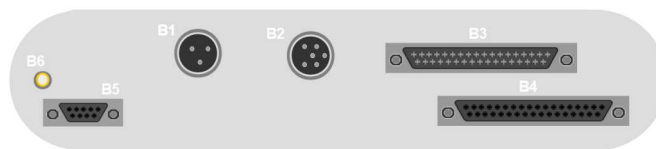
NOTE: wireless modul should be mounted 1.5m above the ground!

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2. 2 CONNECTION KEYS

LINES	TRAP NAME (KEYS)	COMMENT
COMPAK 1	A	For sporting or compak
COMPAK 2	B	For sporting or compak
COMPAK 3	C	For sporting or compak
COMPAK 4	D	For sporting or compak
COMPAK 5	E	For sporting or compak
COMPAK 6	F	For sporting or compak
SKEET HIGH	G	Dual use for skeet high or sporting
SKEET LOW	H	Dual use for skeet low or sporting
TRAP 1	I	For additional traps (e.g. sporting)
TRAP 2	J	For additional traps (e.g. sporting)
TRAP 3	K	For additional traps (e.g. sporting)
TRAP 4	L	For additional traps (e.g. sporting)
TRAP 5	M	For additional traps (e.g. sporting)
TRAP 6	N	For additional traps (e.g. sporting)
TRAP 7	O	For additional traps (e.g. sporting)
TRAP 8	P	For additional traps (e.g. sporting)
TRAP 9	Q	For additional traps (e.g. sporting)
TRAP 10	R	For additional traps (e.g. sporting)
TRAP 11	S	For additional traps (e.g. sporting)
TRAP 12	T	For additional traps (e.g. sporting)
TRAP 13	U	For additional traps (e.g. sporting)
TRAP 14	V	For additional traps (e.g. sporting)
TRAP 15	W	For additional traps (e.g. sporting)
LAMP HIGH	X	Used only for SR8 (Skeet receiver)
LAMP LOW	Y	Used only for SR8 (Skeet receiver)
SOUND	Z	Used as remote relay input (RXu, Trap №27)

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2. 3 INDICATOR LEDS

Name of LED	Explanation	Colour	Identification	X2	X3
LED9		Green	Power is on	+	+
LED1		Red	Signal is sent	+	+
LED3		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		Red	Signal is sent	+	-
TRAP 1	Trap 1-Trap 15	Red	Signal is sent	+	-

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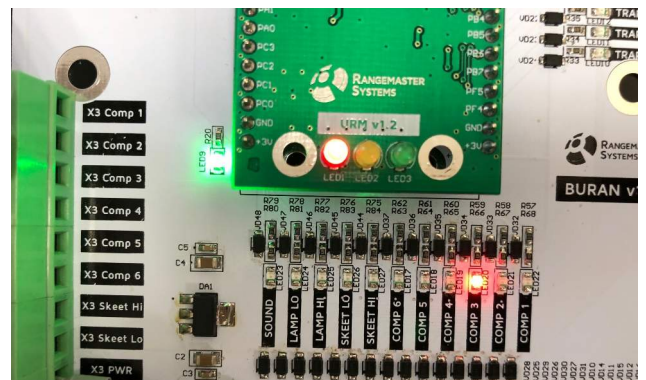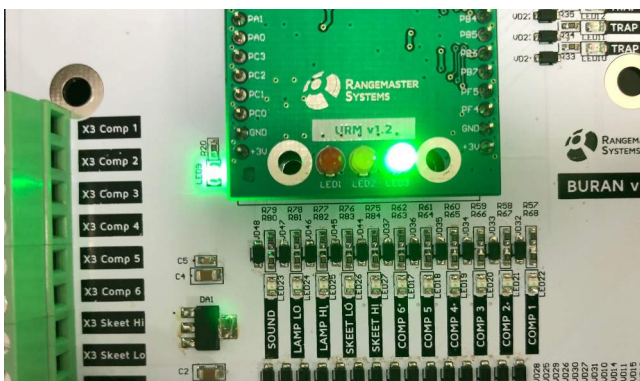
3. SETTINGS

3. 1 SETTING THE ADDRESS

To make the wireless module compatible with receivers on the layout, they all should 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.
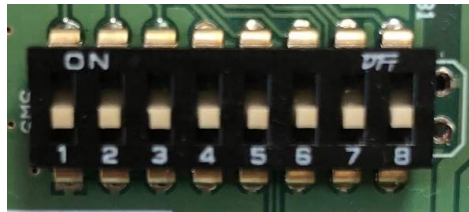
NOTE: All layouts should have different channels!

NOTE: In order to avoid interference, channels on X2/X3 and remote control should be set to the different address.

E.g. in case X2 sequencer and TXIQ 8 remote control will have the same address like Buran and smart receivers attached to the traps, when referee will press lost button (A button) on the remote control he will also release A trap. To avoid that X2 and TXIQ8 should have one address and Buran with receivers on the layout should have different address.

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3.2 ADDRESS TABLE:

Channel/ DIP switch	LAYOUT MODE							
	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/DIP switch	CHANNEL MODE							
	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

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4. TROUBLESHOOTING

If wireless module doesn't work. Possible issues:

- <u>Wrong channel is set</u>: correct the address (<u>refer to 3.1</u>)
- <u>Cable is disconnected</u>: check the power cable
- <u>Antenna is not fixed</u>: fix the cable.
- <u>Module is mounted too low:</u> remount the module 1.5m above the ground.
- <u>Receivers on the layout are not powered on or in standby mode</u>: check receivers.

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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
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.

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6. 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	

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