



RRANGEMASTER
SSYSTEMS

Multi-Use Phono Pull User Manual



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TABLE OF CONTENTS:

1.1	APPLICATION	2
1.2	FEATURES	2
1.3	TECHNICAL DATA	2
1.4	SHIPMENT CONTENTS	2
1.5	OPTIONS/ACCESSORIES	2
2.0	LEGEND	3
3.0	INSTALLATION	4
4.0	OPERATING	4
4.1	RECOMMENDATIONS/WARNINGS	5
5.0	LIMITED WARRANTY	6
6.0	RMA FORM	7

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1.1 APPLICATION:

Wobble Trap, ATA and other types of clay target shooting

1.2 FEATURES:

- Instant release voice recognition/Phono pull unit
- Highly robust against noises to avoid no-birds
- Adjustable microphone sensitivity
- Adjustable timer: 0, 0,1 random 0 to 3 seconds in 0,3s steps
- 5 microphones directly connectible
- All microphones open with adjustable time between two calls
- LCD display with back light
- 12VDC external power supply with 220-240VAC input or car battery
- Simple installation
- High quality design
- Counter built-in
- Easy connection to payment systems

1.3 TECHNICAL DATA:

Power Input:	With external power supply: 220-240VAC or any other 12-15V/1A DC power source like car battery etc.
Power consumption:	< 5W
Op. Temperature:	- 20°C up to +50°C
Dimensions:	Height: 7,5cm, width: 20cm, depth: 29cm
Weight:	0,75 kg
Output:	+12V with ground switched or switched contact (relay)
Display:	LCD, 2x16 digits/letters with back light
Counter:	1 Total counter, non resettable, 32bit 1 Counter, resettable, 32bit

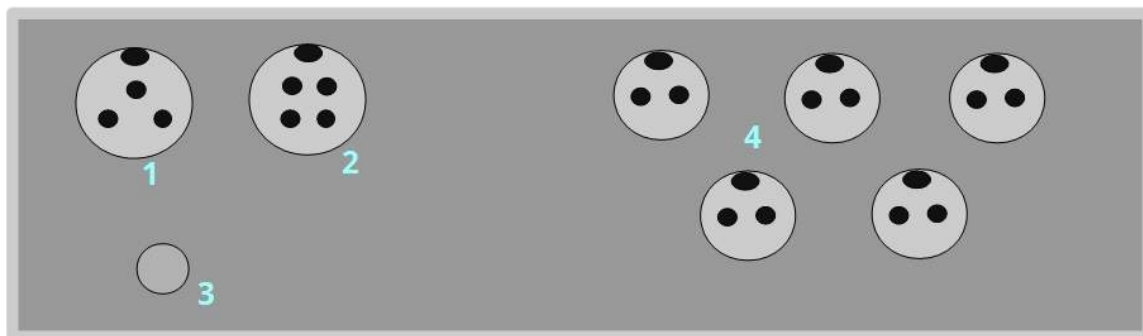
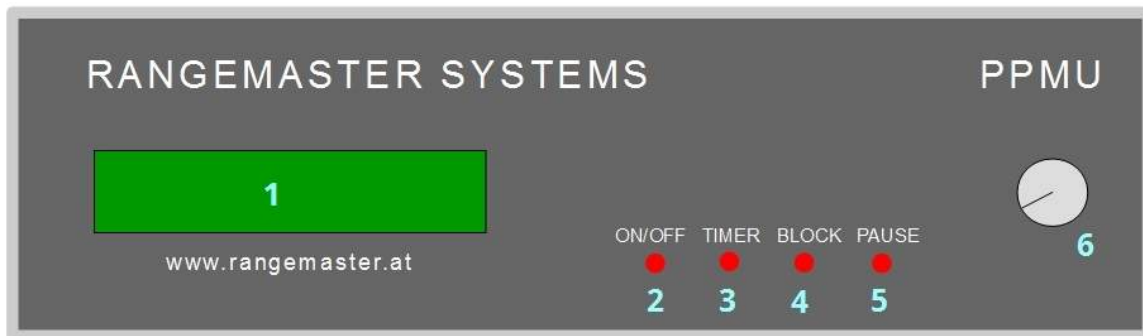
1.4 SHIPMENT CONTAINS:

- Phono Pull Unit
- 5 Microphone connectors
- 220-240VAC external power supply with connector
- Additional connector for alternate external power supply
- Plug to connect a trap
- Manual

1.5 OPTIONS/ACCESSORIES:

Microphones:	26 Ohm highly sensitive microphone	MIC00
Tripods/Pedestals:	Colour-coated heavy duty tripod	MIC03

Payment:	Secure chip cards	CCSEC
	Chip card loader, handheld	CCC-2
	Chip card loading software and chip card reader	CCS

2.0 LEGEND:


LEGEND	
FRONT:	
F1:	2x16 DIGITS LCD DISPLAY
F2:	ON/OFF
F3:	RELEASE TIMER ON/OFF/ADJUST
F4:	BLOCK TIMER ADJUST
F5:	SLEEP/CONTINUE
F6:	MICROPHONE SENSITIVITY ADJUSTMENT
BACK:	
B1:	POWER IN
B2:	RELEASE TO TRAP OR PAYMENT SYSTEM
B3:	RESET COUNTER 1
B4:	5x MICROPHONE IN SOCKETS

3.0 INSTALLATION:

Items
necessary:

- Multi-Use Phono Pull unit (PPMU)
- Power (220-240VAC) for external power supply (PS included)
- 5 Microphones MIC00 with pedestals/tripods MIC03 (not included)
- Microphone cables of any type with 2 wires (approx 0,5mm² each)
- and cable connecting PPMU to trap (not included)
- 1..5 microphone connectors (included)
- Plug for connecting cable to trap (included)
- Soldering iron & solder (not included)
- Small screwdriver (not included)

Step1: Cut microphone cables and trap release cable to appropriate length
Please note: All microphone cables have to be of the same length and diameter of wires!

Step2: Solder microphone cable with microphone connectors

Step3: Connect microphone cables with the microphones



Please note: Connecting less than 5 microphones will make the Phono pull “hyper-sensitive” and “false positives” might occur due to ambient noise!

ALWAYS CONNECT ALL 5 MICROPHONES!

Also be aware, that minimum distance between adjacent microphones must be > 1,5m!

Step4: Connect trap release cable to trap:

Pin out on 4 ways plug:

Pin1: +12V, Pin2: Relays in, Pin3: Relays out, Pin4: Ground (-)

Check if you need power supplied with ground(minus) switched or if you operate your trap in a push button style.

+12V and switched ground: Connect + to pin 1 on connector, then connect – to pin 2 on connector, make a bridge between pin 4 and pin 3.

Operate in push button mode:

1 wire goes to pin 2, 1 wire goes to pin 3, pin1 & pin4 are not connected

Step5: Ensure that all 5 microphones are properly connected to the 5 corresponding connectors B5
Connect Power supply with PPMU and to external AC power



Using another power supply (e.g. car battery): ensure that voltage is above 12V and below 15V. As there is a rectifier inside PPMU, you do not have to care about polarity!

4.0 OPERATING:

- Switch on unit using “Push Button F2”
- Press F5 button to abandon “Sleep mode”
- If necessary, adjust release timer by pushing button F3 (settable: 0, 0,1 or random from 0 to 3 seconds). The value you set will be stored in EEPROM and this value is kept until changed again.
- If necessary, adjust break time between two calls by pushing button F4 (adjustable from 1 to 5 seconds)
- Sleep-/Continue:
 - when pressing button F5, system will go in sleep mode and will not react to commands.
 - Pressing button F5 again will wake up system again.
- Adjust microphone sensitivity F6:
 - clock-wise: more sensitive
 - counter-clockwise: less sensitive
- Resetting counter: Press button B4, Counter T1 will be set to Zero; Counter T2 is not resettable.

4.1 RECOMMENDATIONS & WARNINGS:



PPMU includes sophisticated over voltage protection and protection against lightening. Nonetheless, it is recommended to disconnect PPMU from all cables during thunderstorms/ possible risk of lightening.

5.0 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.

6.0 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	