RANGEMASTER SYSTEMS

X1 Multi Use Phono Pull Unit with Chipcard Reader

User Manual

PROFESSIONAL SHOOTING GROUND AUTOMATION

TABLE OF CONTENTS:

This unit has been carefully produced for / by:

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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 0,25s steps
- 5 microphones directly connectible
- All microphones open with adjustable time between two calls
- LCD display with back light
- 12VDC external power supply with 110-240VAC input or car battery
- Simple installation
- High quality design
- Counter built-in
- Chip card payment solution built in

1.3 TECHNICAL DATA

Power Input:	With external power supply: 110-240VAC 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
Payment:	Chip card payment built in

1.4 SHIPMENT CONTAINS

- Phono Pull Unit
- 5 Microphone connectors
- 110-240VAC external power supply with connector
- Additional connector for alternate external power supply
- Plug to connect a trap
- Manual
- Set of chip cards for programming

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1.5 OPTIONS/ACCESSORIES

|		
Microphones:	26 Ohm highly sensitive microphone	Order code: MIC00
Cables:	Set of 5x 15m cables w/h connectors	Order code: X1CAB
Tripods/Pedestals:	Colour-coated heavy duty tripod	Order code: MIC03
Payment:	Chip card loading software and chip card reader	Order code: CCS
	Secure chip cards with copy protection	Order code: CCSEC
	Chip card loader, handheld	Order code: CCC

2.0 LEGEND:
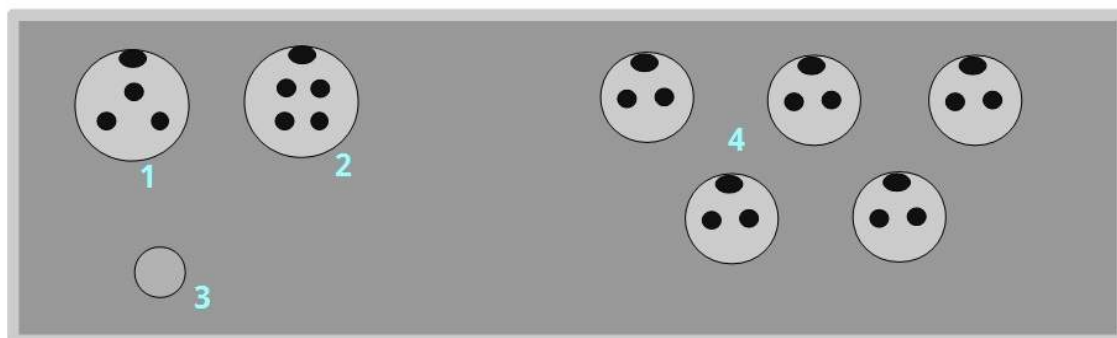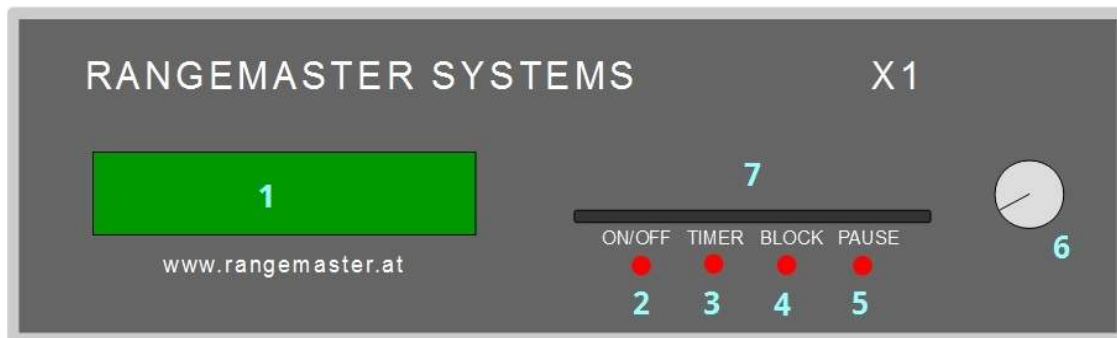
LEGEND	
FRONT:	
F1:	2x16 DIGITS LCD DISPLAY
F2:	ON/OFF
F3:	RELEASE TIMER ON/OFF/ADJUST
F4:	BLOCK TIMER ADJUST
F5:	SLEEP/CONTINUE
F6:	MICROPHONE SENSITIVITY ADJUSTMENT
F7:	CHIP CARD READER SLOT
BACK:	
B1:	CONNECTOR POWER IN
B2:	CONNECTOR TRAP RELEASE
B3:	PUSH BUTTON FOR CLEARING AVAILABLE CREDIT
B4:	5x MICROPHONE CONNECTORS

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3.0 INSTALLATION:

Items
necessary:

- Multi-Use Phono Pull unit with chip card reader (X1)
- Power (110-240VAC) for external power supply (PS included)
- 5 Microphones MIC00 with pedestals/tripods MIC03 (not included)
- Microphone cables of any type with 2 wires (approx 0,75mm² each) and cable connecting X1 to trap (not included)
- Microphone connectors (included)
- Plug for connecting cable to trap (included)
- Soldering iron & solder (not included)
- Small screwdriver (not included)

⚠️ **NOTE**: If you ordered the cable set with 5x 15m presoldered (X1CAB), please continue with step 4

Step1: Cut microphone cables and trap release cable to appropriate length
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 then 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.

Version 1: +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.

Version 2: 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 X1 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 X1, you do not have to care about polarity!**

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4.0 OPERATING

4.1 NON - PAYMENT MODE

- Switch on unit using "Push Button F2 ON/OFF"; ensure that the switch on the power cable is also set to "On"
- Press F5 button "PAUSE" to abandon "Sleep mode"
- Adjust release timer (if necessary) by pushing button F3 (setable: 0, 0,1 or random from 0 to 3 seconds). Value set will be stored in EEPROM and this value is kept till changed again.
- Adjust break time between 2 calls if necessary 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. Repressing button F5 will wake up system again.
- Adjust microphone sensitivity F6: clock-wise: more sensitive Counter-clockwise: less sensitive
- Resetting credit counter: Switch off unit, Press and keep pressed button B3 while switching on again

PLEASE NOTE: Connecting less then 5 microphones will make the Phono pull "hyper-sensitive" and false positive releases might occur due to ambient noise! ALWAYS CONNECT ALL 5 MICROPHONES. Also be aware, that minimum distance between adjacent microphones has to be > 1,5m!

4.2 PAYMENT MODE

IF YOU HAVE NOT GET THE UNIT WITH CHIP CARDS AND CHIP CARD-LOADER, PLEASE SKIP THIS SECTION

BASIC SETUP:
- Switch on unit using "Push Button F2"
- Press F5 button to abandon "Sleep mode"
- Load credit from chip card in order to be able to release targets

PLEASE NOTE: While chi pcard is inserted in the chip card reader, no target release is possible.

PLEASE NOTE: Connecting less then 5 microphones will make the Phono pull "hyper-sensitive" and false positive releases might occur due to ambient noise! ALWAYS CONNECT ALL 5 MICROPHONES.
Also be aware, that minimum distance between adjacent microphones has to be > 1,5m!

OPTIONAL ADJUSTMENTS:

Other optional adjustments are in accordance to prior section!

LOAD CREDIT:

To be able to release targets, credit has to be loaded from chip card; simply insert chip card and the preset amount of targets will be deduced from the chip card.
There is no limitation in loading; e.g. you can load 25 targets only or also 150 by inserting the chip card 6 times

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4.3 ADMINISTRATION MENU

ACCESSING ADMINISTRATION MENU:

- Ensure unit is switched off
- Insert your administrative card and leave card inside reader
- Switch on unit

Button F3: decrease value
Button F4: increase value
Button F5: next menu

Remove chip card: closes administration menu

OPTIONS:

- Reset credit: resets the credit available for release clays to 0 use F3 or F4 button to set to zero

- Number of targets to be added per successful registration:
  min value: 5
  max value: 100

- Number of targets or points to be deduced from card credit per successful registration:
  min value: 1
  max value: 10

We recommend you to use a 1:1 basis; e.g. you set number of targets to 25 and number of targets to be deduced from chip card to 25
Anyway, you can can change the value to better reflect you price per clay/round with this multiplicator. e.g. a value of 10 with 25 targets will deduce 250 (points) from your card

- Switch between payment mode and "free mode"
  Payment mode: releasing of clays will on be possible if available targets > 0
  Free mode: you can release any number of clays

- Number of free no birds per successful registration
  Min value: 0
  Max value: 10

Every time a shooter registers, the value set here will be added to the number of clays paid:
e.g. you credit 25 clays per registration and the value set here is set to 2; therefore 27 clays can be released

- Show and reset counter 1:

Displays number of clays released since last reset use F3 or F4 button to reset counter

- Show and reset counter 2:

Number of clays credited use F3 or F4 button to reset counter

- Show counter 3:

Will show total number of clays released this counter is read only/cannot be reset

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4.4 RECOMMENDATIONS & WARNINGS

X1 includes sophisticated over voltage protection and protection against lightening. Nonetheless, it is recommended to disconnect X1 from all cables during thunderstorms/ possible risk of lightening.

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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
Weissenbach 9-51,
8082, Kirchbach, Austria

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

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6.0 RMA FORM

To:

Maxima WarenhandelsGmbH
Rangemaster Systems
Weissenbach 9-51,
8082, Kirchbach, Austria

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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