

# TECHNICAL SPECIFICATION PYROMASTER MASTER MINI



**Firmware version:**

1.7.x

**Hardware version:**

2200

**Document revision:**

1.2

## 1. **Features:**

1.1. Available operating modes:

- Manual
- Sequential
- Automatic

1.2. Automating mode trigger:

- local
- from PyroMaker software (USB)

1.3. Supported Slave count: 8 or 32 (PLUS version)

1.4. Sequencer support: yes (PLUS version)

1.5. Channel range in manual mode: 1 - 240

1.6. Maximum supported sequence count: 240

1.7. Sequence designation range: 1 – 240

1.8. Continuous time synchronisation with PyroMaker software during ongoing show: yes

1.9. Continuous time synchronisation with Slave unit during ongoing show: yes

1.10. Slave remote arm/disarm: yes

1.11. Slave remote igniters test: yes

1.12. Replicator remote igniters test: yes

1.13. Slave remote battery level measurement: yes

1.14. Replicator remote battery level measurement: yes

1.15. Connection test to Slave unit: yes

1.16. Bandwidth scanning: yes (PLUS version)

1.17. Remote Slave standby mode on/off: yes

1.18. Preview, adding and removal of paired Slaves: yes

1.19. Radio channel selection: yes

1.20. PIN code on power on: yes (optional)

1.21. Display backlit regulation: yes

- 1.22. Battery charge display: yes
- 1.23. Keyboard confirmation sound: yes
- 1.24. Buttons backlit colour alteration depending on operating mode: yes
- 1.25. Backlit power off for channels used in manual mode: yes
- 1.26. Backlit power off for used sequences: yes
- 1.27. Confirmation of successful Slave arm: yes
- 1.28. Confirmation of successful arm of Replicators connected to Slave unit: yes
- 1.29. Semi-automatic channel triggering in manual mode: yes (STP button)
- 1.30. Semi-automatic sequence triggering: yes (STP button)
- 1.31. Current show time display: yes
- 2. Radio link:**
  - 2.1. Radio frequency: 869MHz
  - 2.2. Available radio channels: 9
  - 2.3. Maximum transmitter power: 500mW (27dBm)
  - 2.4. Receiver sensitivity: -116dBm @BER  $10^{-3}$
  - 2.5. Adjustable transmitter power: yes
  - 2.6. Range in dense urban environment (without direct line-of-sight): approx. 1-2km
  - 2.7. Range in open area (direct antenna line-of-sight): up to 10km
  - 2.8. Transmission type: bidirectional
  - 2.9. Transmission security: encryption, checksum, acknowledgements
- 3. USB communication:**
  - 3.1. USB device mode: yes
  - 3.2. USB connector style: Micro-B
  - 3.3. Detection of units used in the show: yes
  - 3.4. Automatic mode update when triggered from PyroMaker software: yes
  - 3.5. Transmission security: encryption, checksum, acknowledgements
- 4. Protection:**
  - 4.1. ESD (Electrostatic Discharge) protection
  - 4.2. Resistance to shock and weather conditions
  - 4.3. System auto-diagnostics
  - 4.4. Self error prompts (e.g. controller error)
  - 4.5. Replicator and Slave error prompts (e.g. arm error, low battery)
  - 4.6. Data transmission encryption
- 5. Other:**
  - 5.1. Continuous operation on single battery charge: approx. 18h
  - 5.2. Menu language: polish, english
  - 5.3. Battery charge voltage: 5V
  - 5.4. LCD display backlight: yes
  - 5.5. Membrane keyboard: yes
  - 5.6. Keyboard buttons backlight: yes (RGBW)
  - 5.7. Battery charge indicator: yes
  - 5.8. External antenna: yes
  - 5.9. Antenna connector style: SMA
  - 5.10. Weight: 0,27kg
  - 5.11. Dimensions: 17x8x3cm
  - 5.12. Working temperature range: -20°C do +40°C