

TECHNICAL SPECIFICATION

PYROMASTER SLAVE4



Firmware version:
1.1.x
Hardware version:
1304
Document revision:
1.0

1. **Features:**

1.1. Available operating modes:

- Manual (remote)
- Sequential (remote)
- Automatic (remote)

1.2. Arming:

- remotely (from Master unit)

1.3. Triggering/Firing:

- remotely (from Master unit)

1.4. Channel count: 4

1.5. Max. sequences count: 4

1.6. Sequence designation range: 1 – 1023

1.7. Maximum duration of single sequence: 9:59,99

1.8. Maximum duration of automatic program: 9:59:59,99

1.9. Maximum resolution of programmed sequence: 0,01s (10ms)

1.10. Maximum resolution of automatic program 0,01s (10ms)

1.11. Adjustable channel activation time: yes, remotely (0,1s – 2,5s)

1.12. Channel offset for manual mode: yes

1.13. Channel queuing (for activation time above 0,5s): yes

1.14. Continuous time synchronisation with Master unit during ongoing show: yes

1.15. Igniter tests:

- Automatic (all channels)
- Remote (from Master unit)

1.16. Power supply: internal battery or external (12-24 VDC)

1.17. Igniter firing voltage (internal battery): 24V

1.18. Igniter firing voltage (external power supply): equal to the voltage of the external power source

1.19. Maximum igniter count per channel: 3

1.20. Igniter test current: max 3mA

1.21. Measurement of resistance in the igniter test: no

- 1.22. Preview, edit and deletion of automatic program directly in the unit: no
- 1.23. Preview, edit and deletion of sequences directly in the unit: remotely (from Master unit)
- 1.24. Preview, adding and removal of Replicator units: no
- 1.25. Editing of Replicator channels directly in Slave unit: no
- 1.26. Replicator connection confirmation: no
- 1.27. Support for safety zones: yes
- 1.28. Radio channel selection: yes (from Master unit)
- 1.29. Display backlit regulation: no
- 1.30. Battery charge display: yes
- 1.31. Keyboard confirmation sound: yes
- 1.32. Arm sound alert: yes
- 1.33. Standby mode: yes
- 1.34. Standby mode activation/deactivation:
 - Locally
 - Remotely (from Master unit)
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
 - 2.10. Automatic switch to wired communication: yes
3. **USB communication:**
 - 3.1. USB device mode: yes
 - 3.2. USB connector style: C
 - 3.3. Automatic program upload: yes
 - 3.4. Sequence upload: 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. Channel short-circuit protection
 - 4.4. Safe igniter test (maximum test current control, igniter test forbidden in armed mode)
 - 4.5. System auto-diagnostics
 - 4.6. Self error prompts (e.g. arm error, controller error)
 - 4.7. Replicator error prompts (e.g. arm error, low battery)
 - 4.8. Error reports directly to Master unit
 - 4.9. Data transmission encryption
5. **Other:**
 - 5.1. Continuous operation on single battery charge: approx. 24h
 - 5.2. Continuous operation in standby mode on single battery charge: approx. 120h
 - 5.3. Battery charge voltage: 5V (USB)
 - 5.4. Front panel LED indicators: yes

- 5.5. LED channel activation indicator of each single channel: yes
- 5.6. External antenna: yes
- 5.7. Antenna connector style: SMA
- 5.8. Housing: metal
- 5.9. Igniter connectors: pluggable spring connectors
- 5.10. Weight: 130g
- 5.11. Dimensions: 69x64x25mm
- 5.12. Working temperature range: -20°C do +40°C