

ptx RM

# ptx RM

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## Manual

**Dear client**

**Thank you very much for buying the German engineered digital PTX ignition system. We are very pleased you made the decision to use our products.**

**Pyrotronix Show Control Systems assures you state of the art equipment with components designed for reliable performance indoor and outdoor. The rugged components of the PTX system offers the firework-designer enormous set up possibilities as well as an easy and simple work flow from the show script till the set up.**

**Please note that all manual as well as all screen displays, keyboard layouts, hardware descriptions or software are subjects to copyrights and other intellectual property rights of PYROTRONIX Show Control Systems GmbH, Germany.**

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**Ihr PYROTRONIX Team**

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## 1. General Safety Instructions

The correct order of setting up and connecting **ptx system** is mandatory for every user in order to achieve the highest degree of safety. At the beginning of the setting up process please ensure that the control panel key is with the responsible person.

**ptx system** must only be operated with original equipment and accessories manufactured by Pyrotronix Show Control Systems, Germany. The use of non-original equipment may result in the malfunction of the ptx Ignition System. Misuse of **ptx system** may lead to property damage or personal injury. **ptx system** is designed for professional use only.

Professional fireworks/pyrotechnic operators shall only use the system in a controlled professional environment permitted by the authority having jurisdiction. **ptx system** shall only be used to ignite pyrotechnics and fireworks. Connecting components or effects to the system is only allowed, when no power source is connected to the system whenever you are setting up, connecting or adding components or effects. This also applies to every kind of work with fireworks/pyrotechnic devices. Before using **ptx system** and effects in public places, the necessary notifications/ permissions must be obtained from the responsible authorities. When working in close proximity to people, staging, scenery or similar things it is very important that safety standards be closely followed. Familiarity with, staging, scenery, or similar things is necessary to maintain appropriate safety standards.

Smoking and open flames or lights shall be banned in the pyrotechnic/fireworks area. You shall be familiar with the fire alarm, detection and suppression systems.

Observe the safety instructions in this manual. Observe the safety instructions of the fireworks/pyrotechnic effects and respect the recommend safety distances. The operating technician must have an unrestricted view to the firing position as well as to the whole fireworks/pyrotechnic area. Never put your face or other parts of your body over fireworks/pyrotechnic effects with armed ignition boxes. Maintain the appropriate distance of separation for the effect or firework being used **ptx system** gets powered.

The specific procedures pertaining to the use and operation of **ptx system** are outlined in the user manual. Deviation from any of the procedures outlined in this manual are specifically forbidden and not recommended by Pyrotronix GmbH. Any deviations to the procedures as outlined in the user manual may result in property damage or personal injury.

Any deviations to the procedures as outlined in the user manual is considered a misuse of the system and done so at your own risk.

PYROTRONIX Show Control Systems GmbH Germany cannot be held responsible for any harm caused by the misuse, improper electrical connection, failure to properly maintain, improper handling of pyrotechnics and fireworks or deviation from the procedures outlined in **ptx system** user manual.

# ptx RM

## 2. Description of ptx RM

ptx RM is a universal Radio-Module that can act as radio receiver, as transmitter (adapter cable required) or as wireless bridge between two cable lines. At the same time, the RM works as power-pack to any connected cable-based system and powers up to 30 ptx IC16 or 10 IC48.

## 3. Handling

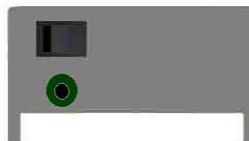
ptx MFB is equipped with a programmable display, address and frequency can be set and battery capacity will be shown.



At the front side there is the connection for ptx Data IN/ OUT and the aerial socket.



At the back there is the main power switch and the charging socket.



## 4. Menu

Address and frequency can be set and battery capacity will be shown by display.

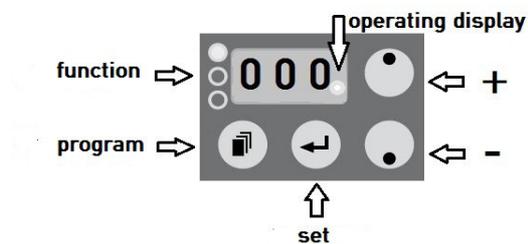


## ptx RM

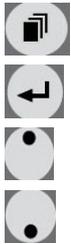
To activate ptx RM please switch ON main power switch, the display is ON. The right decimal point is lightning, ptx MFB is ready to operate.

After 15 sec ptx RM is going into sleep mode, display is OFF. Only right decimal point is still lightning to show that ptx RM is ready to operate. To activate the display please press any display key.

As soon as there is data transmission from ptx Controller ptx RM is activated and ready to operate.



All functions and settings can be selected by the display



- select function
- confirm or change setting
- plus
- minus

## 5. ptx RM as RECEIVER

### 6. Address Setting

To test the link quality of ptx MFB with any ptx Controller one address has to be set. Addresses from 1 up to 200 are possible.

If this function is not necessary for your setup address can set on zero.

To set the address press the key  as long as the upper red LED is ON, signed with A (address).

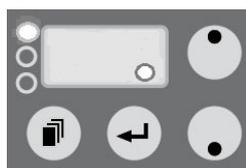


By pressing , and  $+$   or  $-$   the address of the ptx RM can be set. If one number is flashing, it is possible to change. Confirm selected number with .



If all 3 numbers are fixed, the address is confirmed. The picture above shows address No. 12.

In standby mode the display is OFF, right decimal point is still ON to show that ptx RM is ready to operate.



To activate the display please press any display key.

## 7. Frequency Setting

To set the frequency, press key  as long as the middle **green** LED is ON, signed with F (frequency).

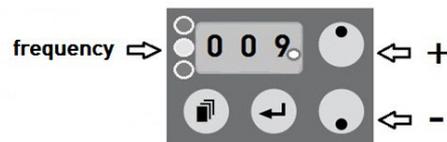
By pressing , the number is flashing.

The selected frequency can be set. with  $+$   or  $-$  .

16 different frequency channel are available, 0- E (869MHz), F (915MHz).

Confirm selected number with , the number is now fixed.

Transmitter and receiver have to be set at the same frequency.



In standby (sleep) mode the display is OFF, right decimal point is still ON to show that ptx RM is ready to operate.

To activate the display please press any display key.

## 8. Battery

To show the capacity of internal battery press key  as long as the lower **yellow** LED is on, signed with B (battery) - in the picture below battery power is 100%.



In standby (sleep) mode the display is OFF, right decimal point is still ON to show that ptx RM is ready to operate.

To activate the display please press any display key.

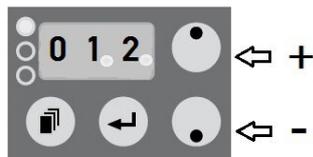
## ptx RM

**Please notice the advice to charge the battery. As soon as the indicator of battery capacity shows 30%, please charge the battery. Please connect 230V Charge with main power supply. If you don't charge, battery can be damaged.**

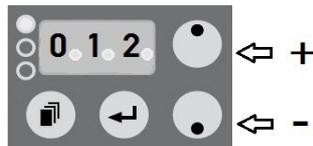
**Switch OFF the device after using to prevent discharging of battery.**

### 9. More Display

If both decimal points (right and middle) are ON, ptx RM is in communication with any kind of ptx Controller.



If all three decimal points are ON, ptx MFB is ready for ignition, the device is set on ARMED.



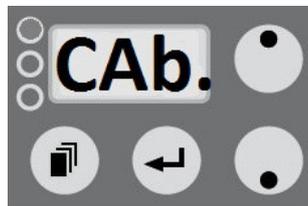
## 10. ptx RM as TRANSMITTER

To set the function 'TRANSMITTER', press key  as long as all three LED are OFF.

Display shows either the marking 'rAd' operation as RECEIVER



or the mark 'CAb', operation as TRANSMITTER.



By pressing , and  $+$   or  $-$   the function TRANSMITTER. Selected function is flashing. Confirm selected number with , the display is fixed.

Operation as is only possible with a special adapter (included in delivery), in combination with ptx Data Cable. Adapter will be connected with Data IN/OUT of ptx RM and Data OUT of any ptx device (ptx IC, ptx MFB....).



## 11. Technical Data

|                     |                          |
|---------------------|--------------------------|
| Output power        | 70V                      |
| Battery             | Lithium Ionic            |
| Range               | 1000m                    |
| Frequency           | 0-E = 869MHz, F = 915MHz |
| Radio channel       | 16                       |
| Stand by time       | 15h                      |
| Charging power      | 110- 230V AC, 50/ 60Hz   |
| Data IN/OUT         | 1                        |
| Weight              | 1,35kg                   |
| Dimension L x B x H | 330 x 58 x 97mm          |

From August 1, 2011 we offer a new frequency for some countries outside of Europe. New frequency is 915MHz, setting is with frequency switch, position F.  
From this day all ptx radio devices will be delivered with this setting.

Ab dem 1. Aug. 2011 bieten wir für den außereuropäischen Funkverkehr eine neue Frequenz - 915MHz - an. Alle Geräte, die ab diesem Zeitpunkt ausgeliefert werden, sind mit dieser Frequenz ausgerüstet. 915MHz werden mit dem Frequenzwahlschalter, Stellung F, eingestellt.