

PFE Advanced 20 Outputs

Pyro-Funk-Empfänger / Wireless Firing Module



DE Highlights

- » Wasserdicht (Standard IP65, falls Breather gegen Dichtschraube getauscht wird IP67)
- » Umlaufende Flachdichtung mit großer Dichtfläche
- » Extrem robustes und dickwandiges Aluminium-Gehäuse
- » Alle Ausgänge frei programmierbar
- » Vollintegrierte Funklösung mit bidirektionaler Fernabfrage und -programmierung
- » Kontrastreiche Anzeige und Menüführung in Klartext
- » Messung und Anzeige der exakten Widerstandswerte aller Ausgänge
- » Maximale Schussrate: bis zu 100 Zündungen pro Sekunde möglich mit optionaler Steppererweiterung
- » Integrierte, superhelle Zünd-LEDs für jeden Ausgang erlauben schnelle Tests
- » Mit optional erhältlichem Sleep-Mode bis zu 6 Wochen Stand-by-Zeit
- » Direkte Ansteuerung von Magnetventilen möglich (12V)
- » Einstellbare Zünddauer mit optionaler Terminal-Funktion
- » Zahlreiche Spezialfunktionen für Anwendungen im SFX-Bereich

EN Highlights

- » Waterproof (Standard IP 65, if breather is replaced with a sealed screw IP67)
- » Framed internal flat gasket with large sealing surface
- » Extremely robust and thick-walled aluminum housing
- » All outputs can be programmed without any restrictions
- » Fully integrated wireless solution with bi-directional communication and programming
- » Brilliant display with menu in plain text
- » Measures and displays the precise resistance of all outputs
- » Maximum firing rate: up to 100 firings per second possible with optional Step function
- » Integrated, high-brightness firing LEDs on each output for fast testing
- » Optional Sleep Mode available with up to 6 weeks stand-by time
- » Direct control of magnetic valves (12V)
- » Programmable firing duration with optional Terminal function
- » Numerous applications in the cinematography industry

DE Unterschiede des PFE Advanced 20 zum PFE Advanced 10/100 Outputs

- » Kleiner, die Abmessungen sind: 230 x 101 x 68 mm ohne Griff, Länge 257 mm mit Griff
- » Weniger Gewicht: 2,300 kg statt 4,500 kg
- » Kein Matrixmodul verfügbar oder nachrüstbar
- » 20 Ausgänge mit 20 Multicolor-LEDs
- » Wiederaufladbare Batterie: 1x12V 2.000 mAh SLA Pb statt 2x12V 2.000 mAh SLA Pb (24V)
- » Terminalfunktion mit 10 Ausgängen, 12V statt 24V
- » Zündet 20 empfindliche und 10 unempfindliche Anzünder parallel (gleich mit PFE Adv. 10/100)
- » Zündet 7 Anzünder in Serie (PFE Adv. 10/100: 14)
- » Stepper-Funktion: optional verfügbar (genau wie PFE Adv. 10/100)
- » Keyboard-Zündungen: standardmäßig verfügbar, ohne Aufpreis, nur 10 Ausgänge
- » Betriebszeit: 40 h ständiger Empfangsbetrieb (PFE Adv. 10/100: 60 h)
- » Sleep-Funktion: optional verfügbar, nach 45 Tagen sind noch 50% der Energie in der Batterie vorhanden (PFE Adv. 10/100: 35 Tage)
- » Keine Kabelschnittstelle vorhanden

Der PFE Advanced 20 Outputs kann mittels PFC Advanced Standard und Black Edition sowie dem PFM Advanced und dem Composer aus der Ferne abgefragt und programmiert werden. Sie müssen aber PFC Advanced und Composer updaten, um auf das Gerät zugreifen zu können (PFC ab V2.88).

EN Comparisons of the PFE Advanced 20 to the PFE Advanced 10/100 Outputs

- » Smaller, the dimensions are: 230 x 101 x 68 mm without handle, length 257 mm with handle
- » Less weight: 2.300 kg instead of 4.500 kg
- » No Matrix Module available or retrospective fitting possible
- » 20 Outputs with 20 multicolor LEDs
- » Rechargeable battery: 1x12V 2,000 mAh SLA Pb instead of 2x12V 2,000 mAh SLA Pb (24V)
- » Terminal function with 10 outputs, 12V instead of 24V
- » Fires 20 sensitive and 10 insensitive igniters in parallel (the same with PFE Adv. 10/100)
- » Fires 7 igniters in series (PFE Adv. 10/100: 14)
- » Stepping function: available optionally (the same as 10/100 output device)
- » Keyboard firing mode available by default with no extra charge, 10 outputs only
- » Operation time: 40 h continuous receive (PFE Adv. 10/100: 60 h)
- » Sleep function: available optionally, after 45 days 50% of the energy in battery is left (PFE Adv. 10/100: 35 days)
- » No serial interface cable available

The PFE Advanced 20 Outputs can be remotely polled and programmed using a PFC Advanced Controller or the PFM Advanced Modem and Composer Software. However, PFC Advanced Controller and Composer must be updated (PFC V2.88 or later) to access the device.

EN A new star is born.

The PFE Advanced 20 Output Receiver is an addition in the field of wireless firing technology and is a true all-rounder. The receiver is waterproof (at least IP65) and has an ultrastable housing made of thick-walled, anodized aluminum. This allows the device to be used in the most extreme outdoor applications. Thanks to its compact size, it is also ideal for indoor and SFX applications.

The device offers a fully integrated radio solution. No external radio modems are required. In addition, the function does not depend on any external data lines.

To operate the device simply use the magnetic pen to access the menu, check all values and program settings on-site. Even switching on and off is done with the magnetic pen to ensure there are no vulnerable buttons or switches. An optional code request after switching on prevents unauthorized use of the device.

The output sockets directly accept our quick-fastening clamps which enable extremely low contact and corrosion resistance.

The PFE Advanced 20 Outputs has a plain text display for menu navigation and for displaying all device data (battery values, remaining range, programming, etc.), along with multicolor LEDs to indicate all relevant output states (continuity, programming, firing, etc.).

Based on the resistance values of the connected firing circuits and the set limit resistance, the device automatically determines whether firing is reliably possible and displays this to you.

12 volt firing voltage ensures the reliable ignition of 7 "A"- or "U"-matches in series or 20 "A"- or 10 "U"-matches in parallel. Thanks to a special combination of series and parallel connections it is possible to fire up to 140 e-matches per output simultaneously.

Since the firing power is not capacitance discharged, this receiver is also ideal for controlling solenoid valves (12V) and effect devices. With the optional terminal function, 10 outputs can be triggered multiple times with all 999 channels

with an adjustable firing duration of 0.1 to 25.0 seconds, or an "Output on" or "Output off" channel command.

The high-performance rechargeable battery delivers firing currents of up to 50 amps. Intelligent charging electronics ensures that the battery is always maintained at 100% availability without overcharging.

In conjunction with the PFC Advanced Controller or the PFM Advanced USB Radio Modem, bi-directional communication is possible. You can remotely access all relevant receiver data from your controller or PC, e.g. remaining range, battery status, continuity test, etc. Programming of the outputs can easily be edited remotely. These remote accesses can be carried out with up to 999 devices. In addition, the device can be completely switched off by radio or put into a sleep mode and woken up again to increase the maximum operating time from 40 hours up to 45 days.

An optional stepper extension is available. An individual delay time can be assigned to each output. This allows that multiple

different step operations are possible in one device at the same time. The step operations can be assigned to any number of receivers. Dynamic speed changes are easily programmed. The firing delay can be set from 0.01 up to 99.99 seconds. These delay values are digitally adjustable over the entire range in steps of 0.01 second increments.

If the battery voltage is too low, the unit can be set to switch off automatically to protect the batteries from permanent damage.

The receiver has two M10 threaded holes in the base to allow a range of mounting options, with an eyelet to accommodate a safety cable where required.

The devices of the "Advanced" series are fully compatible with the devices of the original "Profi" series. The availability of software updates enables you to keep your firing system current. The PFE Advanced uses premium components to give the utmost reliability coupled with a long lifespan, it is a product of high quality German engineering.



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EN Specifications & Details

Number of radio channels (Frequencies)	70 (USA version: 360)
Outputs	20
Assignment of firing cues without restrictions	Yes, 1-999
Firing voltage	12 V
Firing current	50 A, 17 A continuous current
Firing LEDs for each output	Yes
Source of firing energy	rechargeable battery
e-matches in series connection/output	7 A, 7 U
e-matches in parallel connection/output	20 A, 10 U
e-matches in special serial and parallel connection/output	140 A, 70 U per output
Possibility to activate magnetic valves (i.e. solenoids)	Yes, 12 V
Control methods	radio
Integrated stepping extension	Yes, optional, 0.01 - 99 seconds, resolution 10 ms (i.e. 0.01 s)
Simultaneous stepping sequences per device	20
Maximum firing rate	up to 100 firings / second
Firing duration	0.1 s to 25 s, continuous
Short circuit protection of outputs	Yes
Outputs with intelligent MOSFET transistors	Yes
OK test function (continuity test of firing lines)	Yes, precise resistance metering, ranging from 0 to 99 Ohm, directly at the receiver or remotely by using the PFC Advanced or any PC with PFM Advanced and Composer software
Operation time	40 h (with optional Sleep Mode up to 45 days)
Remote polling of the parameters of the device	Yes
Remote programming of the parameters of the device	Yes
Remote power-off	Yes
Acoustic signals	Yes
All parameters are adjustable at the device	Yes
Beginner's mode	Yes
Function: Reset to defaults	Yes

Radio range	up to 800 m / 2,000 m
Coverage area	2,000,000 m ² / 12,500,000 m ²
Radio range test function	Yes, 0-99 %
Accumulator test function	Yes, 0-99 %
Accumulator monitoring	Yes
Accumulator type	sealed lead acid battery 12 V, 2 Ah
Independent from mains supply	Yes
Housing	extremely robust aluminum housing, milled from a solid block of aluminum
Level of water ingress protection	waterproof, IP65 / IP67
Breathing membrane	Yes
LCD display with LED backlight	Yes, 2 x 16 characters plaintext
Indicators	display and multicolor LEDs
Temperature monitoring	Yes
Humidity monitoring	Yes
Charging unit (included in delivery)	Yes
Charging indicator	Yes
Car charging adapter with 12 VDC	optional equipment
Additional safety features	code and magnetic pen
Eyelet for safety rope	Yes
Threaded mounting holes	Yes, 2x M10
Dimensions	257 x 101 x 68 mm
Net Weight	2.300 kg
Possibility of firmware updates	Yes
Multilingual menu	Yes: German / English
Radio modules	fully integrated
Communication	bi-directional, 999 devices