

Daveytronic® Wireless



After successful field evaluations in large open-pit operations, Davey Bickford announces the introduction of the Daveytronic® **Wireless Blasting System**. The new system allows technicians to remotely detonate single or multiple shots from a distance of up to 1.5 mile (2.4 km) away from the pattern, significantly improving **safety** during the blast and exceeding minimum distance requirements.

The Wireless Blasting System allows the technician to configure the blasting machines in a master-slave configuration using remote activation software.

One modem for the master blasting machine and one modem for each slave are required to simply communicate between the master and slave machines. All functions of the slave blasting machine are completely transparent to the master remote trigger.



Compatibility

The System is designed to be easily **customised** to meet customer's specification. Modems are available in 2.4 GHz and 900 MHz for surface operations. The Daveytronic® Wireless Blasting System is also compatible with various types of digital underground radio systems such as the "Leaky Feeder" system.

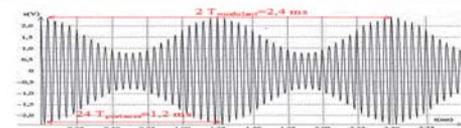
32Bits		
8Bits	16Bits	8Bits
Head	Reminder	Tail
7 6 5 4 3 2 0 1	7 6 5 4 3 2 0 1	7 6 5 4 3 2 0 1
0 0 0 0 0 0 0 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 0
0 0 0 0 0 0 0 1	0 0 0 0 0 0 0 1	0 0 0 0 0 1 0
XOR	1 1 1 0 1 1 1 1	1 1 1 1 1 1 1 1

Safety

For unparalleled operating safety, the Daveytronic® wireless system features a communication protocol protected by a Cyclic Redundancy Check (CRC), guaranteeing a high level of data integrity. The protocol uses encrypted frequency hopping communication to ensure **security** of the signal between the master and slave(s) blasting machines. The system continuously changes frequency between multiple channels so communication will not be interrupted, corrupted or disrupted, ensuring signal safety and security.

Multiple-Shot Configuration

Dedicated PC software allows the user to manage separately **up to 3 different** blasts with 3 different slave units **from the same** master Blasting Machine.



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Technical characteristics

MODEM TYPE	2,4Ghz	900MHz	VHF (Leaky feeder interface)
Output	50mW	100mW	5W
Range (max)	2.4Km -1.5 mile	5Km - 3.1 mile	Please contact us (1)
Interface	Serial 9600 Baud, 1 stop bit no parity	Serial 9600 Baud, 1 stop bit no parity	Serial 9600 Baud, 1 stop bit no parity
Certification	FCC,IC,ETSI with CE,AS/NZS 4771:2000	FCC,IC	AS-4295 (Australia) ETSI and FCC anticipated
Frequency range	ISM 2.4000 - 2.4835 GHz	ISM 902 - 928 MHz	VHF: 148MHz to 174MHz programme software
Sensitivity	-105dBm	-110dBm	-113dBm
Operating Temperature	-40 to +85°C -40 to 185°F	-40 to +85°C -40 to 185°F	-10 to +60°C -40 to 140°F
Weight	1200g/2.6 lb	1200g/2.6 lb	800g/1.8 lb
Size (cm)	L: 210mm x W: 110mm x H: 42mm L 8.2"xW 4.3" x H 1.6"	L: 210mm x W: 110mm x H: 42mm L 8.2"xW 4.3" x H 1.6"	L: 156mm x W: 100mm x H: 41.5mm L 6.1"xW 3.9" x H 1.6"
Modulation type	Frequency Hoping, Wide band FM modulator	Frequency Hoping, Wide band FM modulator	Nyquist-shaped 4-Level FSK
Operating voltage (2)	12V	12V	12V
Max Current draw	0.18A	0.17A	1.25A
Antenna type	1/2 wave dipole whip, 5.25" (13.3 cm), 2.1 dBi Gain	1/2 wave dipole whip, 6.75" (17.1 cm), 2.1 dBi Gain	Contact us.
Data corruption protection	CRC 16	CRC 16	CRC 16

(1) For any site specific requirements, please contact a Davey Bickford technical representative.

(2) Powered by Blasting Machine

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