



## Wiping Schemes

Schemes Supported in BCWipe

Data Protection **Pure & Simple**

> Wiping is a term used to describe the process of shredding contents of a file or disk space beyond recovery.

> Standard wiping schemes exist to securely erase all 'Data Remanence'. The standards to be complied with are issued by various institutes including US Department of Defense, US Army, as well other institutes and agencies.

> Data recovery infeasibility is believed to rely on the number of passes specified by the standard.

> In the presentation below every scheme description is provided with security level grade based on the number of passes: the higher the slider is, the more secure the scheme is considered.



Wiping scheme	BCWipe	BCWipe Total WipeOut
U.S. DoD 5220.22-M (ECE) & (E)	✓	✓
U.S. DoE M 205.1-2	✓	✓
German BCI/VSITR	✓	✓
Russian GOST	✓	✓
British HMG IS6	✓	✓
NAVSO-P5239-26	✓	✓
US Army AR380-19	✓	✓
NIST 800-88-1, 800-88-2 & 800-88-3		✓
Canadian RCMP TSSIT OPS-II	✓	✓
Bruce Schneier	✓	✓
Peter Gutmann	✓	✓
1-pass Random	✓	✓
1-pass zero	✓	✓
1-pass test mode	✓	✓
Create your own wiping scheme		
- Wiping Scheme Editor	✓	
- Read custom scheme from file	✓	✓



## US DoD 5220.22-M(ECE)

Pass	Pattern Hex notation	Pattern Binary notation
1	D3	11010011
2	2C	101100
3	Random	Random
4	Random	Random
5	95	10010101
6	6A	1101010
7	Random	Random

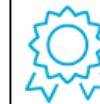


Jetico's choice for wiping  
Hard Disk Drives (HDD)



 **US DoD 5220.22-M (E)**

Pass	Pattern
1	Random
2	Complementary
3	Random



Jetico's choice for wiping  
Solid-State Drives (SSD)

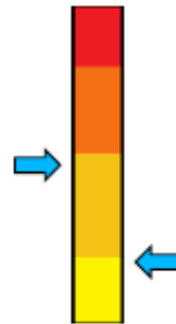


### German BCI/VSITR

Pass	Pattern
1	0
2	Complementary
3	Complementary
4	Complementary
5	Complementary
6	Complementary
7	AA

### US DoE M-205.1-2

Pass	Pattern
1	Random
2	Random
3	00



# Russian GOST R50739-95 & British HMG IS6

**British HMG IS5  
(Baseline)**

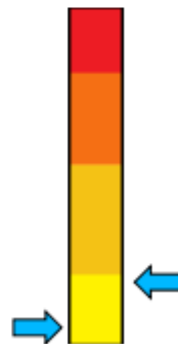
Pass	Pattern
1	00

**Russian GOST R 50739-95**

Pass	Pattern
1	00
2	random

**British HMG IS5  
(Enhanced)**

Pass	Pattern
1	00
2	FF
3	Random



# NAVSO-P5239-26 & US Army AR380-19

## NAVSO-P5239-26 (MFM)

Pass	Pattern
1	FF
2	FF, +511 FF
3	Random

## NAVSO-P5239-26 (RLL)

Pass	Pattern
1	FF
2	E8,FF,FF,FF
3	Random

## US Army AR380-19

Pass	Pattern
1	Random
2	0 0
3	Complementary





# NIST 800-88-1, 800-88-2 & 800-88-3

## 1-Pass NIST 800-88-1

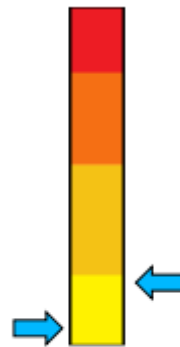
Pass	Pattern
1	00

## 1-Pass NIST 800-88-2

Pass	Pattern
1	Random

## 1-Pass NIST 800-88-3

Pass	Pattern
1	00
2	FF
3	Random



# Bruce Schneier & Canadian RCMP TSSIT OPS-II

**Bruce Schneier**

Pass	Pattern
1	00
2	FF
3	Random
4	Random
5	Random
6	Random
7	Random

**Canadian RCMP TSSIT OPS-II**

Pass	Pattern
1	00
2	Complementary
3	Complementary
4	Complementary
5	Complementary
6	Complementary
7	Random



Pass	Pattern	Pattern Binary notation
1	Random	Random
2	Random	Random
3	Random	Random
4	Random	Random
5	55	01010101 01010101 01010101
6	AA	10101010 10101010 10101010
7	92,49,24	10010010 01001001 00100100
8	49,24,92	01001001 00100100 10010010
9	24,92,49	00100100 10010010 01001001
10	0 0	00000000 00000000 00000000
11	11	00010001 00010001 00010001
12	22	00100010 00100010 00100010
13	33	00110011 00110011 00110011
14	44	01000100 01000100 01000100
15	55	01010101 01010101 01010101
16	66	01100110 01100110 01100110
17	77	01110111 01110111 01110111
18	88	10001000 10001000 10001000



Pass	Pattern	Pattern Binary notation
19	99	10011001 10011001 10011001
20	AA	10101010 10101010 10101010
21	BB	10111011 10111011 10111011
22	CC	11001100 11001100 11001100
23	DD	11011101 11011101 11011101
24	EE	11101110 11101110 11101110
25	FF	11111111 11111111 11111111
26	92,49,24	10010010 01001001 00100100
27	49,24,92	01001001 00100100 10010010
28	24,92,49	00100100 10010010 01001001
29	6D,B6,DB	01101101 10110110 11011011
30	B6,DB,6D	10110110 11011011 01101101
31	DB,6D,B6	11011011 01101101 10110110
32	Random	Random
33	Random	Random
34	Random	Random
35	Random	Random



# One-Pass Random & Custom Scheme



## 1-Pass Random

Pass	Pattern
1	Random

### Note:

Custom scheme is available in BCWipe only; BCWipe Total WipeOut doesn't include this option

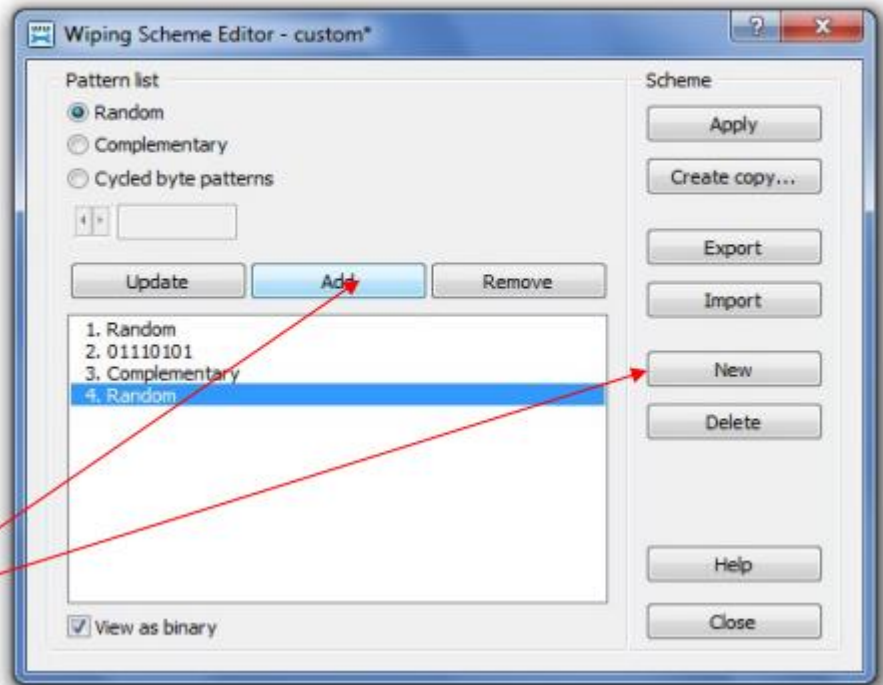
Click 'New' and use 'Add' to create your scheme



Jetico's choice for wiping Removable Drives



## Custom Scheme





For More Information

[support@jetico.com](mailto:support@jetico.com)

[www.jetico.com](http://www.jetico.com)

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