

DW850

Maintenance Manual

REV.2

Read and keep this manual

- Read safety instructions carefully and understand them before starting your operation.
- Keep this manual at hand for reference.

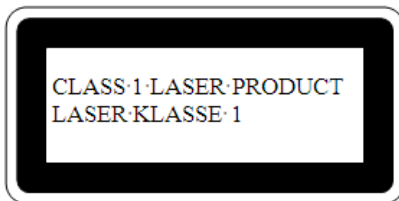
Federal Communications Commission (FCC) Statement

NOTICE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against such harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

“EINE LEICHT ZUGÄNGLICHE TRENN-VORRICHTUNG, MIT EINER KONTAKT-ÖFFNUNGSWEITE VON MINDESTENS 3mm IST IN DER UNMITTELBAREN NÄHE DER VERBRAUCHERANLAGE ANZUORDNEN (4-POLIGE ABSCHALTUNG).”

“Maschinenlarminformationsverordnung 3. GSGV, 18.01.1991: Der höchste Schalldruckpegel beträgt 70 dB(A) oder weniger gemas EN ISO 7779”

CLASS 1 LASER PRODUCT



警告使用者：

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

Warning:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Warnung:

Dies ist ein Produkt der Klasse A. In nichtgewerblichen Umgebungen können von dem Gerät Funkstörungen ausgehen, zu deren Beseitigung vom Benutzer geeignete Maßnahmen zu ergreifen sind.

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(업무용 방송통신기자재)

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가정 외의 지역에서 사용하는 것을 목적으로 합니다.

The EMI test was done in the following configuration.

If a trouble occurs in another configuration, a user may be requested to take appropriate preventive measures.

- RKU+CBLH1/CBLH2+DB60+DBS×3+DBL×3
- RKU+CBSS/CBSL+DBS×3+DBL×3
- RKU+CBXSS+DBS×3
- RKU+CBXSL+DBL×3
- RKU+CBLH2+CHBB+DBF+DB60+DBS×3+DBL×3

Please use the supplied power cord. The power cord may not be used with other products.



This symbol on the product or on its packaging means that your electrical and electronic equipment should be disposed at the end of life separately from your household wastes.

There are separate collection systems for recycling in EU. For more information, please contact the local authority or the dealer where you purchased the product.

Preface

This manual describes the maintenance of DW850 Storage system, including installation and replacement. Before starting maintenance, read the manual carefully to be familiar with operating procedures and instructions.

Particularly, be familiar with the Safety Section and obey its instructions.

Keep the manual on hand for your convenience.

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1. Conversion

(1) Model name conversion

Read each array model names as shown in the table below.

Table 1-1 Conversion Table for Array Model Name

Model name	Abbreviation for Model Name		
DW800-CBSS + DW-F850-CTLXSFA (for VSP G130)	CBXS	CBXSS	CBXSSF
DW800-CBSS + DW-F850-CTLXSSA (for VSP G130)			CBXSSS
DW800-CBSS + DW-F850-CTLXSCA (for VSP G130)			CBXSSC
DW800-CBSL + DW-F850-CTLXSFA (for VSP G130)		CBXSL	CBXSLF
DW800-CBSL + DW-F850-CTLXSSA (for VSP G130)			CBXSLS
DW800-CBSL + DW-F850-CTLXSCA (for VSP G130)			CBXSLC
DW800-CBSS + DW-F850-CTLS (for VSP G350 and VSP F350)	CBSS	CBSS1	CBSS1
DW800-CBSS + DW-F850-CTLSE (for VSP G350 and VSP F350)			CBSS1E
DW800-CBSS + DW-F850-CTLSH (for VSP G370 and VSP F370)		CBSS2	CBSS2
DW800-CBSS + DW-F850-CTLSHE (for VSP G370 and VSP F370)			CBSS2E
DW800-CBSL + DW-F850-CTLS (for VSP G350 and VSP F350)	CBSL	CBSL1	CBSL1
DW800-CBSL + DW-F850-CTLSE (for VSP G350 and VSP F350)			CBSL1E
DW800-CBSL + DW-F850-CTLSH (for VSP G370 and VSP F370)		CBSL2	CBSL2
DW800-CBSL + DW-F850-CTLSHE (for VSP G370 and VSP F370)			CBSL2E
DW800-CBL + DW-F850-CTLM (for VSP G700 and VSP F700)	CBLH	CBLH1	
DW800-CBL + DW-F850-CTLH (for VSP G900 and VSP F900)		CBLH2	
DW-F800-DBSC	DBS		
DW-F800-DBLC	DBL		
DW-F800-DB60C	DB60		
DW-F800-DBF	DBF		
DW-F800-CHBB	CHBB		

(2) Overview of the All Flash Model

The All Flash Model supports the Controller Chassis, the Drive Box and the drives shown in [Table 1-2](#).

Table 1-2 All Flash Model Support List

All Flash Model	Supported Controller Chassis	Supported Drive Box	Supported Drive
VSP F350	CBSS1 CBSS1E	DW-F800-DBSC	DKC-F810I-480MGM DKC-F810I-960MGM DKC-F810I-1R9MGM DKC-F810I-3R8MGM DKC-F810I-7R6MGM DKC-F810I-15RMGM
VSP F370	CBSS2 CBSS2E	DW-F800-DBSC	DKC-F810I-480MGM DKC-F810I-960MGM DKC-F810I-1R9MGM DKC-F810I-3R8MGM DKC-F810I-7R6MGM DKC-F810I-15RMGM
VSP F700 VSP F900	—	DW-F800-DBSC	DKC-F810I-480MGM (only VSP F700) DKC-F810I-960MGM DKC-F810I-1R9MGM DKC-F810I-3R8MGM DKC-F810I-7R6MGM DKC-F810I-15RMGM
		DW-F800-DBF	DKC-F810I-3R2FN DKC-F810I-7R0FP DKC-F810I-14RFP

In this manual, replace the product names of the All Flash Model as shown in [Table 1-3](#).

Table 1-3 Replaced Product Names for All Flash Model

Product name described in this manual	Product name to be replaced for All Flash Model
VSP G900	VSP F900
VSP G700	VSP F700
VSP G370	VSP F370
VSP G350	VSP F350

(3) Conversion table between Controller Chassis and model name

The following table shows the conversion between Controller Chassis and model name for each model. DW850 Storage System includes the following models.

Controller Chassis	Model
CBLH2	VSP G900/F900
CBLH1	VSP G700/F700
CBSS2/CBSL2	VSP G370/F370
CBSS1/CBSL1	VSP G350/F350
CBXSS/CBXSL	VSP G130

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REVISION CONTROL OF MAINTENANCE MANUAL

Legend for revision codes : AD : Addition CH : Change CR : Correction DL : Deletion

REV.	Date	Description	Sheet No.	Code
2	May.28.2018	Rev.1 → Rev.2 VSP G130/F350/F370 were added.	i iii, v, vi SAFETY00-10, 02-30, 40, 50, 03-100, 160(New), 170(New) OPTVER01-10, 20, 30, 40 FIRM03-70, 150, 160, 190, 06-60, 190 THEORY01-03-20, 40, 60, 80, 01-04-10, 20, 30, 02-02-10, 20, 50, 02-03-20, 30, 40, 50, 60, 100, 02-05-10, 02-06-30, 03-03-10, 04-01-30, 40, 04-03-10, 50, 60, 70, 04-04-10, 04-05-10, 30, 40, 60, 161(New), 162(New), 04-06-10, 20, 40, 50, 60, 70, 110, 111(New), 140, 141(New), 150, 160, 161(New), 170, 190, 200, 210, 220, 240, 250, 04-07-10, 30, 04-08-10, 20, 30, 40, 50, 04-09-10, 20, 40 LOC00-10, 20, 01-10, 02-51(New), 52(New), 250(New), 260(New), 270(New), 03-10, 40, 41(New), 42(New), 80, 90, 110, 120, 04-10, 20, 30, 05-260(New) INST00-00-10, 20, 01-02-10, 11(New), 12(New), 13(New), 01-03-10, 50, 51(New), 70, 01-04-10, 20, 30, 01-05-10, 30, 02-02-40, 41(New), 42(New), 02-03-40, 02-04-10, 20, 02-05-20, 40, 70, 130, 02-06-10, 30, 02-07-10, 02-08-20, 40, 50, 60, 80, 90, 100, 160, 02-10-20, 21(New), 61(New), 120, 130, 131(New), 150, 200, 210, 220, 240, 250, 251(New), 290, 310, 02-14-10, 03-01-20, 30, 40, 50, 90, 100, 03-03-10, 20, 30, 50, 60, 70, 80, 03-04-10, 70, 210, 250, 03-07-80, 81(New), 240, 250, 04-02-10, 04-03-40, 50, 70, 80, 90, 100, 04-04-10, 04-07-80, 90, 230, 240 MPC01-30, 02-50, 160, 320, 03-1130, 1150, 1160, 1170, 1210, 04-30, 240, 350, 05-430, 440, 441(New), 1070, 1110, 1200 DIAG03-10, 20, 30, 06-210, 270 ACC00-10, 03- 20, 04-20, 30, 40, 190, 270, 510, 540, 570, 600 SIMRC02-240, 250, 251, 260, 270, 280, 310, 350 SSBLOG05-760 TRBL00-10, 02-42, 140, 150, 170, 181, 270, 410, 03-30, 110, 160, 170, 200, 390, 400, 401(New), 1131, 1460, 1570, 1600, 1601(New), 1750, 1770, 1920, 1940, 1950, 08-110, 11-30, 160, 15-50, 60, 100, 120, 150, 160, 170(New), 180(New), 21-30 REP00-10, 20, 30, 01-01-100(New), 01-03-20, 01-04-10, 01-05-10, 01-06-40, 41(New), 90, 02-02-10, 20, 30, 110, 02-03-60, 70, 80, 100, 110, 140, 150, 02-04-10, 80, 290, 300, 370~490(New), 02-05-10, 80, 220, 230, 290~410(New), 02-06-10, 130~260(New), 02-08-10, 100, 240~370(New), 02-10-10, 170~290(New), 02-13-20, 230~280(New), 02-15-10, 20, 30, 40, 60, 80, 02-17-10, 20, 30, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 310, 470, 02-18-10, 20, 30, 02-20-10, 20, 70, 90 PARTS00-10, 01-10, 02-310, 320, 350(New), 360(New), 370(New), 380(New), 390(New), 400(New), 410(New), 03-10, 20, 30, 40, 60	CH AD

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REV.	Date	Description	Sheet No.	Code
		15 TB SSD was added.	vi OPTVER01-40 THEORY01-04-10, 40, 02-03-60, 130, 02-07-20, 04-05-70, 90, 100, 110, 120, 130, 140, 150, 160, 161, 162, 170, 180, 190, 200, 04-06-20, 310, 360, 04-08-20 INST01-02-10, 12, 13, 30, 70, 110, 170, 180, 190, 03-03-20, 04-03-40 ACC04-190 REP01-06-40, 41, 50, 60, 02-03-60 PARTS02-10, 30, 210, 230, 350, 370, 03-40	AD
		NOTICE and text was deleted.	FIRM03-10, 20, 30, 70, 80, 90, 100, 101(Del), 190, 220, 06-60, 70, 180, 190, 200	DL/CH
		Description and reference destination was changed.	FIRM03-20 TRBL03-1950	AD/CH
		Description of forced downgrade was added.	FIRM03-70, 170, 180, 181(New), 190, 06-190, 200	AD
		Sentence was added.	FIRM04-10	AD
		Re-installation of software reconsideration.	FIRM05-40, 260, 06-60 INST05-02-10, 300 MPC01-30, 40, 170, 220, 260, 02-120, 10-20, 30, 40, 50, 60, 70, 80, 90, 100, 11-150, 170 TRBL02-580, 03-790, 800, 811, 812, 900, 910, 920, 930, 940, 980, 981, 990, 991(New), 1010, 1020, 1030, 1040, 1050, 1060, 1070, 1071, 1072(New), 1080, 1090, 1091(New), 1132, 1133, 1160, 1190 REP02-21-10	CH
		NOTICE was added.	FIRM05-260 MPC04-611 TRBL03-1780, 04-60, 70, 71, 1310, 10-60, 20-60, 70, 100	AD
		Procedure for Automatic Configuration Start was changed.	FIRM05-290	CH
		ADD Function ID: 00:04, 03:16, 03:23, 03:30, 04:15	FIRM06-10	AD
		ADD Function ID for GUM: G00:32	FIRM06-20	AD
		RAID 1 configuration was changed.	THEORY02-01-10	CH
		High-speed format time was changed.	THEORY02-03-20	CH
		FMD (NFHAJ-Q6R4SS/Q13RSS) was added.	THEORY04-05-70, 04-06-360 INST01-02-170 ACC04-340 PARTS03-40	AD
		Storage System physical specifications was changed.	THEORY04-08-10, 20	CH
		TiB was added.	INST01-02-90, 130	AD
		Correction.	INST01-05-10 REP02-05-50, 02-06-60	CR
		Procedure for installing cache memory / shared memory was added.	INST03-01-20, 21(New)	AD/CH
		Improve notation for maintenance failure message at time of increase / decrease was changed.	INST03-03-150, 03-04-260, 620, 03-05-70, 140, 210, 03-06-100, 110, 03-07-110, 300, 320, 03-08-40, 80, 03-09-50, 160, 270, 03-11-100, 04-03-150, 04-04-80, 260, 470, 04-05-40, 110, 180, 04-06-40, 70, 04-07-130, 280, 04-08-40, 70, 04-10-30	AD/DL
		Procedure was deleted.	INST05-01-20, 05-02-310	DL

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REV.	Date	Description	Sheet No.	Code
		Forced operation was added.	MPC00-40, 50, 80(New), 261~262(New), 321~327(New), 441~442(New), 691~699(New), 901~902(New)	AD
		MPC boot impossible from Web Console was added.	MPC01-10, 20, 02-190, 191(New), 220, 260	AD
		Maintenance PC connection not possible was added.	MPC02-190, 330 TRBL03-980, 1060, 1070, 1071	AD
		Recovery Action was added.	MPC02-392, 440	AD
		Delete description contents.	MPC03-620	DL
		NOTICE: was added.	MPC03-770, 04-370	AD
		NOTE was changed.	MPC03-1070, 1250	CH
		Reference destination was changed.	MPC03-1130, 1140	CH
		NOTE was deleted.	MPC04-120, 170, 330, 470, 520, 540	DL
		Switch #40 was added.	MPC04-760	AD
		Manual dump collection was added.	MPC05-240, 241(New) MSG03-770	AD/CH
		Clerical corrections	LOC03-40, 42, 70 ACC04-10 SIMRC01-10 TRBL02-10, 40, 190, 200, 210, 640, 680, 760, 03-1620, 15-50	CH
		ACC:58201000 was changed.	ACC04-770	CH
		Clerical corrections	SIMRC02-10, 90	CH
		631xxx, 632xxx, 634xxx, 7c1xxx was added / changed.	SIMRC02-180, 220, 410	AD/CH
		Correspondence explanation of MPU#-MP Unit ID added.	SIMRC02-231	AD
		Location number of BKM#, BKMF#, FAN#, Battery# was changed.	SIMRC02-250, 251, 260	CH
		Remarks was added.	SIMRC02-420	AD
		6E-6F was changed.	SSBLOG05-2080	CH
		"3.6 Recovery Procedure for the Failure on the Occurrence of Unmatched Memory Installation Capacity (SIM = ffe800)" was added. Flowchart was changed.	TRBL00-20, 02-650, 03-150 TRBL00-30 to 80, 90(New), 02-43, 44(New), 120, 150, 151(New), 160, 190, 280, 650, 03-440, 03-490, 500, 510, 1550, 05-10, 40, 09-20, 21(New), 30, 40, 50, 10-70, 80, 90, 120, 130	AD CH
		Suppression of firmware downgrade was added.	TRBL00-40, 50, 60, 70, 03-2090(New)	
		Firmware update error was changed.	TRBL01-10	AD/CH
		Troubleshooting was changed.	TRBL02-40, 41, 50, 60, 120, 130, 160, 180	CH
		2.2.1 Title was changed.	TRBL00-10, 02-211, 260, 261(New), 03-1930, 17-10 REP02-04-180, 360, 490	CH
		2.2.1 flowchart was added.	TRBL02-270	AD
		Location correspondence table was changed.	TRBL03-110, 120, 121	CH
		Added reference destination for dump acquisition.	TRBL03-490, 500, 510, 820, 870, 1320, 04-71-300, 1170, 1180, 1190, 1310, 10-190, 11-60, 90, 100, 110	AD
		Error [21443-200017] was added.	TRBL03-812	AD
		Recovery Procedure for AL_PA Conflict was changed.	TRBL04-1250	CH
		"SIM = 47ec00" was changed.	TRBL08-10	CH
		NOTICE was added.	TRBL13-10	AD
		Copy time was changed. (2R4JGM)	REP01-06-40, 41, 50, 60	CH
		Description was added in NOTICE.	REP01-06-61(New), 70	AD

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REV.	Date	Description	Sheet No.	Code
		SAS cable replacement procedure was changed.	REP01-06-90, 02-20-10, 60, 70, 80, 90, 150, 160, 170, 180, 240, 250, 260, 270	CH
		Clerical corrections	REP01-07-10, 01-09-30	CH
		NOTE was added.	REP02-04-10, 02-11-20, 02-14-10	AD
		Error message was added.	MSG03-1000	AD
		Correction.	PARTS02-30, 70	CR
1	Feb.23.2018	Issued	All	-