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The following material resulting from the investigation under the above numbers is enclosed.

Issue

<u>Date</u>	<u>Vol</u>	<u>Sec</u>	<u>Pages</u>	<u>Revised Date</u>
	X1		Index Page(s)	
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SEO File

File		Volume	Page	Date:
E158873	Index	X1	1	2018-12-12

Index

Product Type	Model/Type Reference	Report Reference #	Status
Digital Video Recorder	SVR-430	E158873-A2-UL	
Video Presenter	UF-80, UF-80DX, UF-80ST	E158873-A4-UL	
Video Presenter	SDP-900DXAN, SDP-950DXAN, SDP-950STAN	E158873-A6-UL	
Video Presenter	SDP-850, SDP-850DX	E158873-A9-UL	
Video Presenter	SDP-6500DXA	E158873-A12-UL	
Video Presenter	UF-130DX	E158873-A14-UL	
Video Presenter	UF-130ST	E158873-A15-UL	
Network Video Recorder	SNR-6400, SNR-3200, SRN-3250, SRN-6450	E158873-A16-UL	
Video Presenter	SDP-860	E158873-A18-UL	
Digital Video Recorder.	SVR-1670	E158873-A19-UL	
UTP Power Supply Unit	SPU-400	E158873-A20-UL	Withdrawn
Digital Video Recorder.	SRD-1630D, SRD-1630, SRD-1610D, SRD-1610, SRD-830D, SRD-830, SRD-1670D, SRD-1670DC, SRD-1670, SRD-1671, SRD-870D, SRD-870DC, SRD-870, SRD-871, SRD-1650D, SRD-1650DC, SRD-1650, SRD-1651, SRD-850D, SRD-850DC, SRD-850, SRD-851, SRD-1630DCP, SRD-1630DCN, SRD-1610DCP, SRD-1610DCN, SRD-830DCP, SRD-830DCN, SRD-#####\$&@	E158873-A24-UL	
Digital Presenter	SDP-760	E158873-A44-UL	
Network Camera	SNP-5300H*, SNP-6201H* (* is N or P: N = NTSC, P=PAL)	E158873-A45-UL	
Network Camera	SND-7011*, SND-5011*, SND-5061*, SND-7061*, SNV-5010*, SNZ-5200* (* is N or P: N = NTSC, P=PAL)	E158873-A46-UL	
Network Camera	SNP-5300*, SNP-6201* (* is N or P: N = NTSC, P=PAL)	E158873-A47-UL	
Digital Color Camera	SCP-3371H*, SCP-2371H*, SCP-2271H*, SCP-2373H*, SCP-2273H* (* is N or P: N = NTSC, P=PAL)	E158873-A48-UL	
Digital Color Camera	SCP-3371*, SCP-2371*, SCP-2271*, SCP-2373*, SCP-2273* (* is N or P: N = NTSC, P=PAL)	E158873-A49-UL	
Network Camera	SND-7082*, SND-7082F*, SNV-7082* (* is N or P: N = NTSC, P=PAL)	E158873-A50-UL	
Network Camera	SNB-7001*, SNB-5001*, SNB-3002* (* is N or P: N = NTSC, P=PAL)	E158873-A51-UL	
Network Camera	SNO-7082R* (* is N or P: N = NTSC, P=PAL)	E158873-A52-UL	
Network Camera	SNB-7002* (* is N or P: N = NTSC, P=PAL)	E158873-A53-UL	
DIGITAL COLOR CAMERA	SCV-2010F*, SCD-1020R*, SCD-2080R*, SCD-2020R*, SCD-2010*, SCD-2010B*, SCD-2010F*, SCB-3020*, SCB-3021*, SCB-2010*, SCO-1020R* (* is N or P: N=NTSC, P=PAL)	E158873-A54-UL	
Network Camera	SNB-6004*, SNB-6003*, SNB-5004*, SNB-5003*, SNB-7004*, SNB-6005* (* is N or P: N = NTSC, P=PAL)	E158873-A55-UL	

File		Volume	Page	Date:
E158873	Index	X1	2	2018-12-12

Network Camera	SND-6084*, SND-6083*, SND-5084*, SND-5083*, SND-7084* (* is N or P: N = NTSC, P=PAL)	E158873-A56-UL	
DIGITAL COLOR CAMERA	SCD-2022*, SCD-2022R*, SCD-2042R* (* is N or P: N = NTSC, P=PAL)	E158873-A58-UL	
Digital Color Camera	SCB-2004*, SCB-2005* (* is N or P: N = NTSC, P=PAL);	E158873-A59-UL	
Digital Color Camera	SCD-2082*, SCV-2082R*, SCV-3083*, SCD-3083* (* is N or P: N = NTSC, P=PAL)	E158873-A60-UL	
Network Camera	SND-6084R*, SND-7084R*, SND-5084R* (* is N or P: N = NTSC, P=PAL)	E158873-A61-UL	
NETWORK CAMERA	SNO-6084R*, SNO-7084R* (* is N or P: N = NTSC, P=PAL)	E158873-A62-UL	
Network Camera	SNV-6084R*, SNV-6084*, SNV-5084*, SNV-7084*, SNV-7084R*, SNV-5084R*, SNV-6084T* (* is N or P: N = NTSC, P=PAL)	E158873-A63-UL	
Digital Color Camera	SCO-2081R* (* is N or P: N = NTSC, P=PAL)	E158873-A64-UL	
DIGITAL COLOR CAMERA	SCB-2004*D, SCB-2005*D (* is N or P: N = NTSC, P=PAL)	E158873-A65-UL	
DIGITAL VIDEO RECORDER	SRD-1673D*, SRD-1654D*, SRD-854D*, SRD-852D*, SRD-1673*, SRD-1653*, SRD-873*, SRD-1640*, SRD-840* (* is N or P, N=NTSC / P=PAL)	E158873-A66-UL	
Network Camera	SNP-6200RH*, SCP-2370RH* (* is N or P: N=NTSC, P=PAL)	E158873-A67-UL	
Network Camera	SNV-6012M* (* is N or P: N = NTSC, P=PAL)	E158873-A68-UL	
Network Camera	SNF-7010*, SNF-7010V*, SNF-7010VM* (* is N or P: N = NTSC, P=PAL)	E158873-A69-UL	
Network Camera	SNO-6011R* (* is N or P: N = NTSC, P=PAL)	E158873-A72-UL	
Network Camera	SND-6011R* (* is N or P: N = NTSC, P=PAL)	E158873-A73-UL	
Digital Video Recorder	SRD-1680D*, SRD-880D* (* is N:NTSC / P:PAL)	E158873-A74-UL	
DIGITAL COLOR CAMERA	SCZ-2373*, SCZ-2273* (* is N or P: N = NTSC, P=PAL)	E158873-A75-UL	
NETWORK CAMERA	SCO-6081R* (* is N or P: N = NTSC, P=PAL)	E158873-A76-UL	
DIGITAL COLOR CAMERA	SCV-6081R* and SCD-6081R* (* is N or P: N = NTSC, P=PAL)	E158873-A77-UL	
NETWORK VIDEO RECORDER	SRN-4000	E158873-A78-UL	
DIGITAL COLOR CAMERA	SCD-6021* (* is N or P: N = NTSC, P=PAL)	E158873-A81-UL	
NETWORK CAMERA	SNV-6013* (* is N or P: N = NTSC, P=PAL)	E158873-A83-UL	
NETWORK CAMERA	SNB-6010*, SNB-6010A*, SNB-6011*, SNB-6010B*, SNB-6011B* (* is N or P: N = NTSC, P=PAL)	E158873-A85-UL	
NETWORK CAMERA	SNP-6320H*, SNP-5430H* (* is N or P: N = NTSC, P=PAL)	E158873-A86-UL	
NETWORK CAMERA	SNP-6320*, SNP-5430* (* is N or P: N = NTSC, P=PAL)	E158873-A87-UL	
Network Video Recorder	SRN-472S, XRN-810S* (* is N or P: N = NTSC, P=PAL)	E158873-A88-UL	
Digital Video Recorder	SRD-1676D*, SRD-1656D*, SRD-876D* (* is N or P, N=NTSC/ P=PAL)	E158873-A89-UL	

File		Volume	Page	Date:
E158873	Index	X1	3	2018-12-12

DIGITAL COLOR CAMERA	SCB-5000* (* is N or P: N = NTSC, P=PAL)	E158873-A90-UL	
DIGITAL COLOR CAMERA	SCB-5000*D (* is N or P: N = NTSC, P=PAL)	E158873-A91-UL	
DIGITAL COLOR CAMERA	SCD-5080* (* is N or P: N = NTSC, P=PAL)	E158873-A92-UL	
DIGITAL COLOR CAMERA	SCB-5003*, SCB-5005*, HCB-6001* (* is N or P: N = NTSC, P=PAL)	E158873-A94-UL	
DIGITAL COLOR CAMERA	SCV-5082* (* is N or P: N = NTSC, P=PAL)	E158873-A95-UL	
DIGITAL COLOR CAMERA	SCD-5083*, SCD-5083R*, SCD-5082*, SCD-5083B*, SCD-5081R* (* is N or P: N = NTSC, P=PAL)	E158873-A96-UL	
DIGITAL COLOR CAMERA	SCV-5083* (* is N or P: N = NTSC, P=PAL) SCV-5083R* (* is N or P: N = NTSC, P=PAL) SCV-5081R* (* is N or P: N = NTSC, P=PAL)	E158873-A97-UL	
NETWORK CAMERA	SNF-8010VM*, SNF-8010* (* is N or P: N = NTSC, P=PAL)	E158873-A98-UL	
DIGITAL COLOR CAMERA	SCD-5030*, SCD-5020* (* is N or P: N = NTSC, P=PAL)	E158873-A99-UL	
NETWORK CAMERA	SNO-5084R* (* is N or P: N = NTSC, P=PAL)	E158873-A100-UL	
DIGITAL COLOR CAMERA	SCO-5083R*, SCO-5081R* (* is N or P: N = NTSC, P=PAL)	E158873-A101-UL	
NETWORK CAMERA	SNP-6321*, SNP-L6233* (* is N or P: N = NTSC, P=PAL)	E158873-A102-UL	
NETWORK CAMERA	SNP-6321H*, SNP-L6233H* (* is N or P: N = NTSC, P=PAL)	E158873-A103-UL	
DIGITAL COLOR CAMERA	SCV-5085* (* is N or P: N = NTSC, P=PAL)	E158873-A104-UL	
NETWORK CAMERA	SNB-8000* (* is N or P: N = NTSC, P=PAL)	E158873-A105-UL	
NETWORK CAMERA	SNV-8080* (* is N or P: N = NTSC, P=PAL)	E158873-A106-UL	
NETWORK CAMERA	SNZ-6320	E158873-A107-UL	
NETWORK CAMERA	SNP-6320RH*, SNP-L6233RH* (* is N or P: N=NTSC,P=PAL)	E158873-A108-UL	
NETWORK CAMERA	SNP-5321H*, SNP-L5233H* (* is N or P: N = NTSC, P=PAL)	E158873-A109-UL	
NETWORK CAMERA	SNP-5321*, SNP-L5233* (* N: NTSC / P:PAL)	E158873-A110-UL	
NETWORK CAMERA	SND-L6013R*, SND-L6013*, SND-L6012*, SND-L5013* (* is N or P: N:NTSC/ P:PAL)	E158873-A111-UL	
NETWORK CAMERA	SNO-L6083R*, SNO-L5083R* (* is N or P: N = NTSC, P=PAL)	E158873-A113-UL	
Network Video Recorder	SRN-1673S*(* is N or P)	E158873-A115-UL	
NETWORK CAMERA	SNO-L6013R* (* is N or P: N = NTSC, P=PAL)	E158873-A118-UL	
NETWORK CAMERA	SND-L6083R*, SND-L5083R* (* is N or P: N = NTSC, P=PAL)	E158873-A119-UL	
Network Video Recorder	SRN-873S* (* is N or P: N = NTSC, P=PAL)	E158873-A120-UL	
NETWORK	SNV-L6083R*, SNV-L5083R* (* is N or P: N =	E158873-A121-UL	

File		Volume	Page	Date:
E158873	Index	X1	4	2018-12-12

CAMERA	NTSC, P=PAL)		
NETWORK CAMERA	SNB-9000* (* is N or P: N = NTSC, P=PAL)	E158873-A122-UL	
Optical PTZ Accessary	SBP-301HF, SBP-302HF, SBP-303HF.	E158873-A125-UL	
Optical PTZ Accessary	SBP-300HF	E158873-A126-UL	
NETWORK CAMERA	SNV-8081R* (* is N or P: N = NTSC, P=PAL)	E158873-A127-UL	
NETWORK CAMERA	SNO-8081R* (* is N or P: N = NTSC, P=PAL)	E158873-A128-UL	
NETWORK CAMERA	SNV-6085R* (* is N or P: N = NTSC, P=PAL) SNV-6085* (* is N or P: N = NTSC, P=PAL)	E158873-A129-UL	
DIGITAL COLOR CAMERA	SCB-6003* (* is N or P: N = NTSC, P=PAL)	E158873-A130-UL	
DIGITAL COLOR CAMERA	SCO-6023R* (* is N or P: N = NTSC, P=PAL)	E158873-A132-UL	
DIGITAL COLOR CAMERA	SCV-6083R* (* is N or P: N = NTSC, P=PAL)	E158873-A133-UL	
DIGITAL COLOR CAMERA	SCV-6023R* (* is N or P: N = NTSC, P=PAL)	E158873-A135-UL	
DIGITAL COLOR CAMERA	SCD-6023R*, SCD-6013* (* is N or P: N = NTSC, P=PAL)	E158873-A136-UL	
DIGITAL COLOR CAMERA	SCD-6083R* (* is N or P: N = NTSC, P=PAL)	E158873-A137-UL	
DIGITAL COLOR CAMERA	SCO-6083R* (* is N or P: N = NTSC, P=PAL)	E158873-A138-UL	
NETWORK CAMERA	SNV-L6014RM*, SNV-L6013R* (* is N or P: N = NTSC, P=PAL)	E158873-A139-UL	
DIGITAL COLOR CAMERA	PNO-9080R* (* is N or P: N = NTSC, P=PAL)	E158873-A140-UL	
NETWORK CAMERA	PNV-9080R* (* is N or P: N = NTSC, P=PAL)	E158873-A141-UL	
NETWORK CAMERA	PND-9080R* (* is N or P: N = NTSC, P=PAL)	E158873-A142-UL	
Digital Video Recorder	SRD-1685*, SRD-894*, HRD-842* (* is N or P, N=NTSC/ P=PAL)	E158873-A143-UL	
Digital Video Recorder	SRD-1694*, HRD-1642* (* is N or P, N=NTSC/ P=PAL)	E158873-A144-UL	
Network Video Recorder (NVR)	XRN-2011*, XRN-2010*, XRN-3010*, XRN-1610* (* is N or P: N=NTSC, P=PAL) XRN-2010P/DM, XRN-3010P/DM, XRN-3010A, XRN-2011A, XRN-2010A, XRN-1610A	E158873-A146-UL	
NETWORK CAMERA	QNO-7030R*, QNO-7020R*, QNO-7010R*, QNO-6030R*, QNO-6020R*, QNO-6010R*, QNO-6070R*, QNO-7080R*, QNO-6071R* (* is N or P: N = NTSC, P=PAL)	E158873-A147-UL	
NETWORK CAMERA	QND-7030R*, QND-7020R*, QND-7010R*, QND-6030R*, QND-6020R*, QND-6010R*, QND-6070R*, QND-7080R* (* is N or P: N = NTSC, P=PAL)	E158873-A148-UL	
NETWORK CAMERA	QNV-7030R*, QNV-7020R*, QNV-7010R*, QNV-6030R*, QNV-6020R*, QNV-6010R*, QNV-6070R*, QNV-7080R* (* is N or P: N = NTSC,	E158873-A149-UL	

File		Volume	Page	Date:
E158873	Index	X1	5	2018-12-12

	P=PAL)		
Network Video Recorder	XRN-1610S* (* is N or P: N=NTSC, P=PAL) XRN-1610SP/DM, XRN-1610SA	E158873-A150-UL	
NETWORK CAMERA	PNF-9010RV*, PNF-9010R*, PNF-9010RVM* (* is N or P: N = NTSC, P=PAL)	E158873-A151-UL	
NETWORK CAMERA	PNM-9020V* (* is N or P: N = NTSC, P=PAL)	E158873-A152-UL	
Network Video Recorder	PRN-4011* (* is N or P: N=NTSC, P=PAL)	E158873-A153-UL	
DIGITAL COLOR CAMERA	HCP-6320*, HCP-6320A*, HCP-6230* (* is N or P: N = NTSC, P=PAL)	E158873-A154-UL	
DIGITAL COLOR CAMERA	HCP-6320H*, HCP-6320HA*, HCP-6230H* (* is N or P: N = NTSC, P=PAL)	E158873-A155-UL	
NETWORK CAMERA	PNP-9200RH*, XNP-6370RH*, XNP-6330RH* (* is N or P: N=NT, P=PAL)	E158873-A156-UL	
NETWORK CAMERA	XNB-8000*, XNB-6000* (* is N or P: N = NTSC, P=PAL)	E158873-A157-UL	
NETWORK CAMERA	XNO-8080R*, XNO-6080R*, XNO-6120R* (* is N or P: N = NTSC, P=PAL)	E158873-A158-UL	
NETWORK CAMERA	XNV-8040R*, XNV-8030R*, XNV-8020R*, XNV-6020*, XNV-6010*, XNV-6020R* (* is N or P: N = NTSC, P=PAL)	E158873-A159-UL	
NETWORK CAMERA	XND-8040R*, XND-8030R*, XND-8020R*, XND-6020*, XND-6010*, XND-6020R* (* is N or P: N = NTSC, P=PAL)	E158873-A160-UL	
NETWORK CAMERA	XNV-8080R* (* is N or P: N = NTSC, P=PAL) XNV-6080R* (* is N or P: N = NTSC, P=PAL) XNV-6080* (* is N or P: N = NTSC, P=PAL) XNV-6120R* (* is N or P: N = NTSC, P=PAL) XNV-6120* (* is N or P: N = NTSC, P=PAL) XNV-8080RS, XNV-6080RS, XNV-6120RS.	E158873-A161-UL	
NETWORK CAMERA	XND-8080RV*, XND-8080R*, XND-6080RV*, XND-6080R*, XND-6080V*, XND-6080* (* is N or P: N = NTSC, P=PAL)	E158873-A162-UL	
AHD Multi Directional Camera	HCM-9020VQ* (* is N or P: N = NTSC, P=PAL)	E158873-A163-UL	
NETWORK CAMERA	XNO-8020R*, XNO-8030R*, XNO-8040R*, XNO-6010R*, XNO-6020R* (* is N or P: N = NTSC, P=PAL)	E158873-A164-UL	
NETWORK CAMERA	XNV-6011* (* is N or P: N = NTSC, P=PAL)	E158873-A165-UL	
DIGITAL COLOR CAMERA	HCD-6080R*, HCD-6070R* (* is N or P: N = NTSC, P=PAL)	E158873-A167-UL	
DIGITAL COLOR CAMERA	HCV-6080R*, HCV-6070R* (* is N or P: N = NTSC, P=PAL)	E158873-A168-UL	
NETWORK CAMERA	XNP-6120H* (* is N or P: N = NTSC, P=PAL)	E158873-A169-UL	
NETWORK CAMERA	XND-8020F*, XND-6011F* (* is N or P: N = NTSC, P=PAL)	E158873-A170-UL	
NETWORK CAMERA	PNM-9080VQ* (* is N or P: N = NTSC, P = PAL)	E158873-A172-UL	
Network Storage	SRB-160S	E158873-A173-UL	
NETWORK CAMERA	TNB-6030* (* is N or P: N = NTSC, P = PAL)	E158873-A174-UL	
NETWORK	PNM-9081VQ* (* is N or P: N = NTSC, P = PAL)	E158873-A176-UL	

File		Volume	Page	Date:
E158873	Index	X1	6	2018-12-12

CAMERA			
NETWORK CAMERA	XNO-6085R* (* is N or P: N = NTSC, P=PAL)	E158873-A177-UL	
NETWORK CAMERA	XNB-6005* (* is N or P: N = NTSC, P=PAL)	E158873-A178-UL	
NETWORK VIDEO RECORDER	SNR-D5401N	E158873-A179-UL	
NETWORK CAMERA	XND-6085*, XND-6085V* (* is N or P: N = NTSC, P=PAL)	E158873-A180-UL	
NETWORK CAMERA	XNV-6085* (* is N or P: N = NTSC, P=PAL)	E158873-A181-UL	
NETWORK CAMERA	XNP-6040H* (* is N or P: N = NTSC, P=PAL)	E158873-A182-UL	
NETWORK VIDEO DECODER	SPD-150* (* is N or P: N = NTSC, P=PAL), SPD-151	E158873-A184-UL	
DIGITAL COLOR CAMERA	HCB-6000*, HCB-7000* (* is N or P: N = NTSC, P=PAL)	E158873-A185-UL	
DIGITAL COLOR CAMERA	HCZ-6320* (* is N or P: N = NTSC, P=PAL)	E158873-A186-UL	
NETWORK CAMERA	XNF-8010RVM*, XNF-8010RV*, XNF-8010R* (* is N or P: N = NTSC, P=PAL)	E158873-A187-UL	
DIGITAL COLOR CAMERA	HCO-6070R*, HCO-6080R* (* is N or P: N = NTSC, P=PAL)	E158873-A188-UL	
NETWORK CAMERA	XNB-6001* (* is N or P: N = NTSC, P=PAL)	E158873-A189-UL	
DIGITAL COLOR CAMERA	HCO-7070R* (* is N or P: N = NTSC, P=PAL)	E158873-A190-UL	
LENS MODULE	SLA-T2480*, SLA-T2480V*, SLA-T4680*, SLA-T4680V* (* is N or P: N = NTSC, P=PAL), SLA-T4680D, SLA-T4680DW, SLA-T4680DS, SLA-T2415.	E158873-A191-UL	
DIGITAL COLOR CAMERA	HCD-7070R* (* is N or P: N = NTSC, P=PAL)	E158873-A192-UL	
DIGITAL COLOR CAMERA	HCV-7070R* (* is N or P: N = NTSC, P=PAL)	E158873-A193-UL	
NETWORK VIDEO RECORDER	TRM-1610S	E158873-A194-UL	
LENS MODULE	SLA-T1080F* (* is N or P: N = NTSC, P=PAL)	E158873-A195-UL	
NETWORK SWITCH	SPN-10080P, SPN-10080PM	E158873-A196-UL	
ANALOG CAMERA	HCV-7010R*, HCV-7020R*, HCV-7030R* (* is N or P: N = NTSC, P=PAL)	E158873-A197-UL	
DIGITAL COLOR CAMERA	HCD-7010R*, HCD-7020R*, HCD-7030R* (* is N or P: N = NTSC, P=PAL)	E158873-A198-UL	
DIGITAL COLOR CAMERA	HCO-7010R*, HCO-7020R*, HCO-7030R* (* is N or P: N = NTSC, P=PAL)	E158873-A199-UL	
NETWORK CAMERA	XNP-6320, QNP-6230	E158873-A200-UL	
NETWORK CAMERA	XNP-6320H, XNP-6320HS, QNP-6230H	E158873-A201-UL	
NETWORK THERMAL CAMERA	TNO-4050T, TNO-4030T, TNO-4040T, TNO-4040TR, TNO-4030TR	E158873-A202-UL	
NETWORK THERMAL	TNO-4051T, TNO-4041T, TNO-4041TR	E158873-A204-UL	

File		Volume	Page	Date:
E158873	Index	X1	7	2018-12-12

CAMERA			
NETWORK CAMERA	XNV-6013M	E158873-A205-UL	
NETWORK CAMERA	XNV-6012M, XNV-6012	E158873-A206-UL	
NETWORK CAMERA	XNV-6022R, XNV-6022RM	E158873-A207-UL	
NETWORK CAMERA	LNO-6070R, LNO-6071R	E158873-A208-UL	
NETWORK CAMERA	LNO-6030R, LNO-6020R, LNO-6010R, LNO-6031R, LNO-6021R, LNO-6011R	E158873-A209-UL	
NETWORK CAMERA	LNV-6070R, LNV-6071R	E158873-A210-UL	
NETWORK CAMERA	LND-6070R, LND-6071R	E158873-A213-UL	
NETWORK CAMERA	LNV-6030R, LNV-6020R, LNV-6010R, LNV-6031R, LNV-6021R, LNV-6011R	E158873-A214-UL	
NETWORK CAMERA	LND-6030R, LND-6020R, LND-6010R, LND-6031R, LND-6021R, LND-6011R.	E158873-A215-UL	
NETWORK CAMERA	XNV-L6080R, XNV-L6080	E158873-A216-UL	
NETWORK CAMERA	XND-L6080RV, XND-L6080R, XND-L6080V	E158873-A217-UL	
NETWORK CAMERA	XNO-L6080R	E158873-A218-UL	
NETWORK CAMERA	PNM-7000VD	E158873-A220-UL	
NETWORK VIDEO ENCODER	SPE-410	E158873-A222-UL	
NETWORK VIDEO ENCODER	SPE-1610	E158873-A223-UL	
NETWORK POSITIONING CAMERA	TNU-6320	E158873-A224-UL	
Network Video Recorder	QRN-1610S	E158873-A225-UL	
NETWORK CAMERA	QNE-7080RV, QNE-6080RV, QNE-7080RVW, QNE-6080RVW.	E158873-A226-UL	
NETWORK CAMERA	PNM-9000VQ	E158873-A227-UL	
Network Camera	XNP-6550RH	E158873-A229-UL	
NETWORK CAMERA	PNM-9320VQP	E158873-A230-UL	
NETWORK CAMERA	XNZ-6320	E158873-A231-UL	
NETWORK ENCODER	SPE-110N	E158873-A232-UL	
THERMAL POSITIONING CAMERA	TNU-4041T, TNU-4051T	E158873-A233-UL	
NETWORK CAMERA	PNM-9030V	E158873-A234-UL	
NETWORK CAMERA	TNV-7010RC	E158873-A235-UL	

File		Volume	Page	Date:
E158873	Index	X1	8	2018-12-12

CERTIFICATE OF COMPLIANCE

Certificate Number 20181219-E158873
Report Reference E158873-A146-UL
Issue Date 2018-DECEMBER-19

Issued to: Hanwha Techwin Co Ltd
6, Pangyo-ro 319beon-gil, Bundang-gu
Seongnam-si Gyeonggi-do 13488 KOREA

This certificate confirms that
representative samples of

INFORMATION TECHNOLOGY EQUIPMENT INCLUDING
ELECTRICAL BUSINESS

Network Video Recorder (NVR)
XRN-2011*, XRN-2010*, XRN-3010*, XRN-1610* (* is N or
P: N=NTSC, P=PAL)
XRN-2010P/DM, XRN-3010P/DM,
XRN-3010A, XRN-2011A, XRN-2010A, XRN-1610A

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

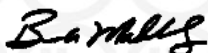
Standard(s) for Safety: UL 60950-1 & CAN/CSA C22.2 No. 60950-1-07 -
Information Technology Equipment - Safety - Part 1:
General Requirements

Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and
covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please
contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



UL TEST REPORT AND PROCEDURE

Standard:	UL 60950-1, 2nd Edition, 2014-10-14 (Information Technology Equipment - Safety - Part 1: General Requirements) CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10 (Information Technology Equipment - Safety - Part 1: General Requirements)
Certification Type:	Listing
CCN:	NWGQ, NWGQ7 (Information Technology Equipment Including Electrical Business Equipment)
Product:	Network Video Recorder (NVR)
Model:	XRN-2011*, XRN-2010*, XRN-3010*, XRN-1610* (* is N or P: N=NTSC, P=PAL) XRN-2010P/DM, XRN-3010P/DM, XRN-3010A, XRN-2011A, XRN-2010A, XRN-1610A
Rating:	100-240 Vac, 50/60 Hz, 4.0-1.5 A
Applicant Name and Address:	HANWHA TECHWIN CO LTD 6, PANGYO-RO 319BEON-GIL, BUNDANG-GU SEONGNAM-SI KOREA, REPUBLIC OF

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

Prepared by: Sungil Kim

Reviewed by: Seulki Park

Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

- A. Authorization - The Authorization page may include additional Factory Identification Code markings.
- B. Generic Inspection Instructions -
 - i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
 - ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.
 - iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

Digital Video Recorder with Recognized Power Supply.

Model Differences

Model XRN-2011* is basic model.

Model XRN-2010*, XRN-3010*, XRN-1610*, XRN-3010A, XRN-2011A, XRN-2010A and XRN-1610A are identical to XRN-2011* except model designation and Hard disk-drive connection method.

(Model XRN-2011*, XRN-2011A: Front injection with Hard disk-drive guide frame / XRN-2010*, XRN-3010*, XRN-1610*, XRN-3010A, XRN-2010A, XRN-1610A: Fixed with screw at internal frame)

Model XRN-2010P/DM is identical to XRN-2010* except model designation and print silk.

Model XRN-3010P/DM is identical to XRN-3010* except model designation and print silk.

Technical Considerations

- Equipment mobility : movable
- Connection to the mains : pluggable A
- Operating condition : continuous
- Access location : operator accessible
- Over voltage category (OVC) : OVC II
- Mains supply tolerance (%) or absolute mains supply values : +10%, -10%
- Tested for IT power systems : No
- IT testing, phase-phase voltage (V) : N/A
- Class of equipment : Class I (earthed)
- Considered current rating of protective device as part of the building installation (A) : 20
- Pollution degree (PD) : PD 2
- IP protection class : IP X0
- Altitude of operation (m) : up to 2000m
- Altitude of test laboratory (m) : less than 2000m
- Mass of equipment (kg) : 5.8
- No security functions were considered during this evaluation.

- For Ethernet port, following instructions should be mentioned in the instruction - This equipment is indoor use and all the communication wirings are limited to inside of the building or similar text.
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 40 °C
- The means of connection to the mains supply is: Pluggable A Detachable power cord
- The product is intended for use on the following power systems: TN
- The equipment disconnect device is considered to be: Appliance inlet
- The following circuit locations (with circuit/schematic designation) were investigated as a limited power source (LPS): All user accessible connectors

Additional Information

4787391117

SRN-2010N Continuous Record Operation at condition as manufacturer provided below;

USB port (2 EA): 5 Vdc, 0.5 A loaded as manufacturer request.

Hard disk-drive (Seagate, ST3500414CS) 8 EA connected as manufacturer provided.

CCD Camera (Samsung Techwin Co., Ltd., type SNF-7010V and SNV-6012M) connected through POE switch Hub at NETWORK port.

All tests were conducted under the CB Scheme, issued by UL International Demko A/S, CB Certificate Number DK-54017-UL(Test Report Ref. No. C16O026-A0C0), dated 2016-05-03.

4787466561

1. Change of model name from QRN1610* to XRN-1610*

4788794199

- No tests were considered necessary for UL/CSA national deviation based upon previous evaluation under CB Scheme. The CB Scheme test certificate (DK-54017-A1-UL), report ref. no. C16O026-A1C0 dated 2016-05-25 and test certificate (DK-54017-A2-UL), report ref. no. C16O026-A2C0 dated 2017-06-20 and test certificate (DK-54017-A3-UL), report ref. no. C16O026-A3C0 dated 2018-12-04 were prepared by UL International Demko A/S.

1. Addition of model for XRN-2010P/DM, XRN-3010P/DM.

2. Addition of model for XRN-3010A, XRN-2011A, XRN-2010A, XRN-1610A.

3. Change of label for all models.

Additional Standards

The product fulfills the requirements of: N/A

Markings and instructions

Clause Title	Marking or Instruction Details
Replaceable batteries (Installation Manual or CD)	"CAUTION: Risk of Explosion if Battery is replaced by an Incorrect Type. Dispose of Used Batteries According to the Instructions."
1.7.1 Power rating - Ratings	Ratings (voltage, frequency/dc, current)
1.7.1 Power rating - Company identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number

1.7.1 Power rating - Model	Model Number
Special Instructions to UL Representative N/A	

Production-Line Testing Requirements

Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for further information.

Model	Component	Removable Parts	Test probe location	V rms	V dc	Test Time, s
N/A						

Earthing Continuity Test Exemptions - This test is not required for the following models:

Electric Strength Test Exemptions - This test is not required for the following models:

Electric Strength Test Component Exemptions - The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test:

Sample and Test Specifics for Follow-Up Tests at UL

Model	Component	Material	Test	Sample(s)	Test Specifics
N/A					

1.5.1	TABLE: list of critical components					Pass
Object/part or Description	Manufacturer/ trademark	type/model	technical data	Product Category CCN(s)	Required Marks of Conformity	Supplement ID
Power cord set	Weihai Hong Lin Electronic Co., Ltd.	HL-002S (cord type SVT 18 AWG X 3), HL-004	10 A, 125 V~ SVT 3 x 18 AWG (0.824 mm2), 105 deg.C, 300 V, VW-1 or FT2	ELBZ7	UL (E254927)	
SMPS	FSP Group Inc	FSP250-50GUB	Rated input: 100-240 V~, 50-60 Hz, 4.0-1.5 A Rated output: +3.3 Vdc, 17 A; +5 Vdc, 18 A; +12 Vdc, 17 A; - 12 Vdc, 0.8 A; +5 Vsb, 2.0 A; +3.3 Vdc & +5 Vdc, Max. 105 W, Total Power 250 W	QQGQ2, 8	USR, CNR (E190414)	
Enclosure (Top)	-	-	Metal, Min. 0.6 mm thickness.	-	-	
Enclosure (Bottom)	-	-	Metal, Min. 0.6 mm thickness.	-	-	
Front Enclosure	LOTTE ADVANCED MATERIALS CO LTD	TH-1100(+)	V-0, 80 deg.C, Min. 2.0 mm thickness	QMFZ2	USR (E115797)	
Hard Disk-drive Guide Frame (for model XRN-2011*)	LOTTE ADVANCED MATERIALS CO LTD	NH-1023(+)	V-0, 80 deg.C, Min. 1.5 mm thickness	QMFZ2	USR (E115797)	
DC Fan (2 EA)	MINEBEA CO LTD	06025SS-12N- AT-D2	12 Vdc, 0.18 A,N: 4700 r/min, m: 0.065 kgr: 30 mm	GPWV2	USR (E89936)	
Hard Disk Drive (Max. 8 EA)	WESTERN DIGITAL TECHNOLOGIES INC	WDUUUUZVTX- YYXXYY (Where U may be any number or blank; Z may be any alpha character; V, T and X may be any alphanumeric character and YYXXYY may be any	Rated 5 Vdc, 12 Vdc	NWGQ2	USR (E101559)	

		alphanumeric character or blank between 3 to 7 characters)				
Hard Disk Drive (Max. 8 EA) - alternate	Interchangeable	Interchangeable	Rated 5 Vdc, 12 Vdc	NWGQ2	USR	
Lithium Battery (BAT1)	GUANGDONG TIANQIU ELECTRONICS TECHNOLOGY CO LTD	CR1220	Lithium / manganese dioxide (Coin), Non-rechargeable, 3.0 Vdc, 40 mAh, Max Abnormal Charging Current: 2.5 mA	BBCV2	USR (MH48705)	
Lithium Battery (BAT1) - alternate	SHENZHEN GAONENGDA BATTERY CO LTD	CR2032	Lithium / manganese dioxide (Coin), Non-rechargeable, 3.0 Vdc, 210 mAh, Max Abnormal Charging Current: 10 mA	BBCV2	UL (MH30114)	
Reverse Current Protection Circuit for Lithium Coin Battery	Interchangeable	Interchangeable	Diode (D36, 30 V, 1 A) and resistor (R53, 1 kohm) in series.	-	-	
USB Protection IC (U17 and U18)	Texas Instruments Inc	TPS2062	Rated 2.7 - 5.5 Vdc, Protection Current : Max. 5.0 A	QVGS2	USR (E169910)	
Internal Wiring (Secondary)	Interchangeable	Interchangeable	FEP, PTFE, PVC, TFE, neoprene, polyimide or marked VW-1; Min. 30 V, 80 deg.C	AVLV2	USR	
Flat PCB Cable	Interchangeable	Interchangeable	FEP, PTFE, PVC, TFE, neoprene, polyimide or marked VW-1; Min. 30 V, 80 deg.C	AVLV2	USR	
Label	Interchangeable	Interchangeable	Min.70 deg.C if max. surface temperature not specified.	PGDQ2 or PGJ12	USR	
PWB	Interchangeable	Interchangeable	Min. V-1, 105 deg.C	ZPMV2	USR	

Enclosures

<u>Type</u>	<u>Supplement Id</u>	<u>Description</u>
Photographs	3-01	Top View
Photographs	3-02	Front Cover Open View
Photographs	3-03	Rear View
Photographs	3-04	Side View
Photographs	3-05	SMPS View
Photographs	3-06	Inside View - Model XRN-2011*
Photographs	3-07	Inside View - Model XRN-2010*
Miscellaneous	7-04	Manual
Miscellaneous	7-05	Circuit Diagram - RTC battery
Miscellaneous	7-06	Label (XRN-2011*)
Miscellaneous	7-07	Label (XRN-2010*)
Miscellaneous	7-08	Label (XRN-3010*)
Miscellaneous	7-09	Label (XRN-1610*)
Miscellaneous	7-10	Label (XRN-2010P/DM)
Miscellaneous	7-11	Label (XRN-3010P/DM)
Miscellaneous	7-12	Label (XRN-3010A)
Miscellaneous	7-13	Label (XRN-2011A)
Miscellaneous	7-14	Label (XRN-2010A)
Miscellaneous	7-15	Label (XRN-1610A)















File 2016-05- Page 8 of 22 Report Reference # E158873-A146-UL
E158873 13
Vol. X1
Sec. A146
MIS-01
Issued:
2016-05-13

sue Date:

Revision 2016-05-
Date 13

The following supplement has been removed from this report:

Enclosure: Misc
ID: 7-01
Description: Label - Model XRN-2010* and XRN-2011*

File 2016-05- Page 9 of 22 Report Reference # E158873-A146-UL
E158873 13
Vol. X1
Sec. A146
MIS-02
Issued:
2016-05-13

sue Date:

Revision 2016-05-
Date 13

The following supplement has been removed from this report:

Enclosure: Misc
ID: 7-02
Description: Label - Model XRN-3010*

File 2016-05- Page 10 of 22 Report Reference # E158873-A146-UL
E158873 13
Vol. X1
Sec. A146
MIS-03
Issued:
2016-05-13

sue Date:

Revision 2016-05-
Date 13

The following supplement has been removed from this report:

Enclosure: Misc
ID: 7-03
Description: Label - Model XRN-1610*

File 2016-05- Page 11 of 22 Report Reference # E158873-A146-UL
E158873 13
Vol. X1
Sec. A146
MIS-04
Issued:
2016-05-13

sue Date:

Revision 2016-05-
Date 13

The following supplement has been removed from this report:

Enclosure: Misc
ID: 7-04
Description: Manual

File 2016-05- Page 12 of 22 Report Reference # E158873-A146-UL
E158873 13
Vol. X1
Sec. A146
MIS-05
Issued:
2016-05-13

sue Date:

Revision 2016-05-
Date 13

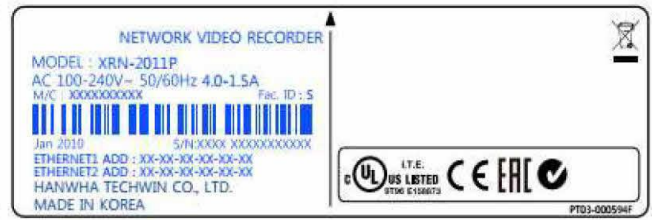
The following supplement has been removed from this report:

Enclosure: Misc
ID: 7-05
Description: Circuit Diagram - RTC battery

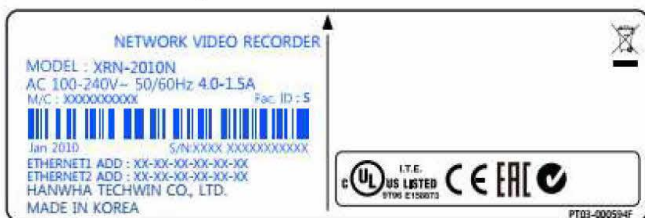
Wisenet



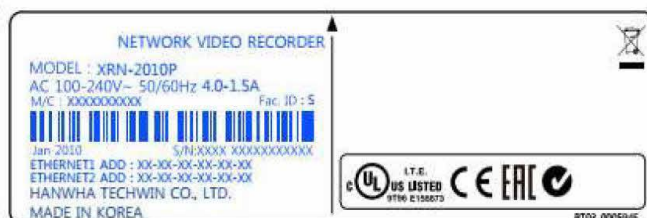
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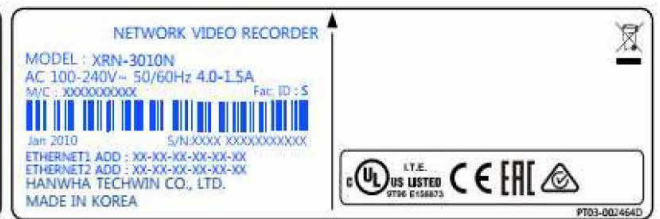


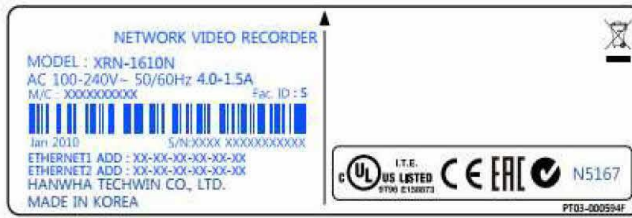
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WISENET**WISENET**

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WISeNET

NETWORK VIDEO RECORDER

MODEL : XRN-2010P/DM

AC 100-240V~ 50/60Hz 4.0-1.5A

M/C : XXXXXXXXXXXX

Fac. ID : S



Jan 2010

S/N:XXXX XXXXXXXXXXXX

ETHERNET1 ADD : XX-XX-XX-XX-XX-XX

ETHERNET2 ADD : XX-XX-XX-XX-XX-XX

HANWHA TECHWIN CO., LTD.

MADE IN KOREA



PT03-000554F

WISeNET



WiseNET

NETWORK VIDEO RECORDER

MODEL : XRN-3010A

AC 100V-240V ~ 50/60Hz 4.0-1.5A

M/C : XXXXXX XXXXX Fac. ID : D



Nov 2018

S/N : XXXX XXXXXX XXXXX

ETHERNET1 ADD. : XX-XX-XX-XX-XX-XX

ETHERNET2 ADD. : XX-XX-XX-XX-XX-XX

MADE IN KOREA

Hanwha Techwin Co., Ltd.



WISENET**NETWORK VIDEO RECORDER****MODEL : XRN-2011A****AC 100V-240V ~ 50/60Hz 4.0-1.5A****M/C : XXXXXXXXXX Fac. ID : D****Nov 2018****S/N : XXXX XXXXXXXXXXXX****ETHERNET1 ADD. : XX-XX-XX-XX-XX-XX****ETHERNET2 ADD. : XX-XX-XX-XX-XX-XX****MADE IN KOREA****Hanwha Techwin Co., Ltd.**

PT03-002663D

WISENET

NETWORK VIDEO RECORDER

MODEL : XRN-2010A

AC 100V-240V - 50/60Hz 4.0-1.5A

M/C : XXXXXXXXXXXX

Fac. ID : D



Nov 2018

S/N : XXXX XXXXXXXXXXXX

ETHERNET1 ADD. : XX-XX-XX-XX-XX-XX

ETHERNET2 ADD. : XX-XX-XX-XX-XX-XX

MADE IN KOREA

Hanwha Techwin Co., Ltd.



WISeNET

NETWORK VIDEO RECORDER

MODEL : XRN-1610A

AC 100V-240V - 50/60Hz 4.0-1.5A

M/C : XXXXXXXXXXXX Fac. ID : D



Nov 2018

S/N : XXXX XXXXXXXXXXXX

ETHERNET1 ADD. : XX-XX-XX-XX-XX-XX

ETHERNET2 ADD. : XX-XX-XX-XX-XX-XX

MADE IN KOREA

Hanwha Techwin Co., Ltd.



Issue Date: 2016-05-13

Page 1 of 3

Report Reference #

E158873-A146-UL

Revision Date: 2018-12-12

Test Record

Test Record No. 1

All tests were conducted under the CB Scheme, issued by UL International Demko A/S, CB Certificate Number DK-54017-UL (Test Report Ref. No. C16O026-A0C0), dated 2016-05-03.

Issue Date: 2016-05-13

Page 2 of 3

Report Reference #

E158873-A146-UL

Revision Date: 2018-12-12

Test Record

Test Record No. 2

No tests were considered necessary due to model name change.

Test Record No. 3

- No tests were considered necessary for UL/CSA national deviation based upon previous evaluation under CB Scheme. The CB Scheme test certificate (DK-54017-A1-UL), report ref. no. C16O026-A1C0 dated 2016-05-25 and test certificate (DK-54017-A2-UL), report ref. no. C16O026-A2C0 dated 2017-06-20 and test certificate (DK-54017-A3-UL), report ref. no. C16O026-A3C0 dated 2018-12-04 were prepared by UL International Demko A/S.