

T839 Parts List (IPN 220-01404-03)

How To Use This Parts List

The components listed in this parts list are divided into two main types: those with a circuit reference (e.g. C2, D1, R121, etc.) and those without (miscellaneous and mechanical).

Those with a circuit reference are grouped in alphabetical order and then in numerical order within each group. Each component entry comprises three or four columns: the circuit reference, variant (if applicable), IPN and description. A number in the variant column indicates that this is a variant component which is fitted only to the product type listed. Static sensitive devices are indicated by an (S) at the start of the description column.

The miscellaneous and mechanical section lists the variant and common parts in IPN order. Where possible, a number in the legend column indicates their position in the mechanical assembly drawing.

The Parts List Amendments box below lists component changes that took place after the parts list and diagrams in this section were compiled. These changes (e.g. value changes, added/deleted components, etc.) are listed by circuit reference in alphanumeric order and supersede the information given in the parts list or diagrams. Components without circuit references are listed in IPN order.

Parts List Amendments

C155	Changed from 10n (IPN 015-25100-08) to 100n (IPN 015-26100-08) for T839-20-1020 product type. Circuit reference changed to %C155.	
D101, D105	Removed from the main PCB and replaced by two 1N4148 diodes (IPN 001-50012-00) placed on the D-range PCB: one soldered between PL101 pins 5 and 7 (cathode), the other between PL101 pins 6 and 8 (cathode). To allow external power meters to read zero and still provide meter overvoltage protection (710978).	
D113	Changed from MR750 (IPN 001-00011-60) to MR2520L (IPN 001-00012-90) to provide overvoltage transient suppression (750087/88/89/90/91/92).	
IC204	Changed from LMC622CM to LM358 (710382).	
*L236	Changed from through-hole link (IPN 051-00640-01) to SMD link (IPN 051-00640-02) (710580).	
R123, R158	Changed from 1k resistors (IPN 036-14100-00) to BA592 diodes (IPN 001-10059-20) to allow external power meters to read zero (710978).	
*R206	Changed from 390Ω (IPN 036-13390-10) to 100Ω (IPN 036-13100-10)	} 100k thermistor assembly replaced with 10k item; values of associated components changed accordingly (710394/411/447).
R207, *R208	Changed from 47k (IPN 036-15470-10) to 4k7 (IPN 036-14470-10)	
R209	Changed from 1k5 (IPN 036-14150-10) to 390Ω (IPN 036-13390-10)	
R210	Changed from 4k7 (IPN 036-14470-10) to 390Ω (IPN 036-13390-10)	
*R211	Changed from 56k (IPN 036-15560-10) to 6k8 (IPN 036-14680-10)	
R213	Changed from 3k9 (IPN 036-14390-00) to 560Ω (IPN 036-13560-00)	
*R215	Changed from 100k NTC (IPN 045-06100-05) to 10k NTC (IPN 045-05100-02)	
R218	Changed from 390Ω (IPN 036-13390-10) to 100Ω (IPN 036-13100-10)	
R219	Changed from 100k NTC (IPN 045-06100-05) to 10k NTC (IPN 045-05100-02)	
R220, R222	Changed from 47k (IPN 036-15470-10) to 4k7 (IPN 036-14470-10)	
R224	Changed from 1k5 (IPN 036-14150-10) to 390Ω (IPN 036-13390-10)	
R228	Changed from 4k7 (IPN 036-14470-10) to 390Ω (IPN 036-13390-10)	
R229	Changed from 56k (IPN 036-15560-10) to 6k8 (IPN 036-14680-10)	

Parts List Amendments - Continued

- 258-00010-03 Cooling fan: some T839 PAs may be fitted with a different fan (IPN 258-00010-06). If so, a 100 μ H inductor (IPN 056-00021-02) may be fitted in series in the fan power feed wire with a 10 μ F capacitor (IPN 025-08100-03) fitted in parallel with this inductor (710977).
- 349-00020-36 The two M3x8 Torx screws which secure the module into the rack frame have been replaced by M3x8 Pozidriv screws (IPN 349-00020-55) (750101/2/3/5/6).

Ref	Var	IPN	Description	Ref	Var	IPN	Description
Q136		000-10008-17	(S) XSTR SMD BC817-25 NPN SOT23	R207		036-15470-10	RES M/F 0805 47K 1%
Q137		000-00030-95	(S) XSTR 2N6107 PNP TO220 AF	*R208		036-15470-10	RES M/F 0805 47K 1%
Q201		000-10008-48	(S) XSTR SMD BCW60 NPN SOT23 SS	R209		036-14150-10	RES MF 0805 CHIP 1K5 1%
R101		036-14100-00	RES M/F 0805 1K 5%	R210		036-14470-10	RES M/F 0805 CHIP 4K7 1%
*R102		036-16220-00	RES M/F 0805 220K 5%	*R211		036-15560-10	RES MF 0805 CHIP 56K 1%
R103		036-15330-00	RES M/F 0805 33K 5%	R212		036-15100-00	RES M/F 0805 10K 5%
R104		036-16470-00	RES M/F 0805 470K 5%	R213		036-14390-00	RES M/F 0805 3K9 5%
*R105		036-15150-00	RES M/F 0805 15K 5%	R214		036-14470-00	RES M/F 0805 4K7 5%
*R106		036-15150-00	RES M/F 0805 15K 5%	*R215			available as sub-assembly only - refer to (20) (045-06100-05) in the mechanical parts list
*R107		036-14390-00	RES M/F 0805 3K9 5%	*R216		036-03100-02	RES 100E 1206 200V 250MW RC01
*R108		036-14330-00	RES M/F 0805 3K3 5%	*R217		036-03100-02	RES 100E 1206 200V 250MW RC01
*R109		036-15100-00	RES M/F 0805 10K 5%	R218		036-13390-10	RES MF 0805 CHIP 390E 1%
*R111		036-14820-00	RES M/F 0805 8K2 5%	R219			available as sub-assembly only - refer to (20) (045-06100-05) in the mechanical parts list
*R112		036-14680-00	RES M/F 0805 6K8 5%	R220		036-15470-10	RES M/F 0805 47K 1%
*R113		036-14100-00	RES M/F 0805 1K 5%	R222		036-15470-10	RES M/F 0805 47K 1%
*R114		036-16100-00	RES M/F 0805 100K 5%	*R223		039-05050-00	RES TO22050E 50W MP850
*R115		036-16220-00	RES M/F 0805 220K 5%	R224		036-14150-10	RES MF 0805 CHIP 1K5 1%
*R116		045-04470-00	RES NTC SMD 4K7 5% 20MW	R225		030-03120-00	RES FILM 120E 5% 0.25W 7X2.5
R117		036-16220-00	RES M/F 0805 220K 5%	R228		036-14470-10	RES M/F 0805 CHIP 4K7 1%
R118		036-15270-00	RES M/F 0805 27K 5%	R229		036-15560-10	RES MF 0805 CHIP 56K 1%
R119		036-16470-00	RES M/F 0805 470K 5%	*R230		036-02100-02	RES 10E 1206 200V 250MW RC01
*R121		036-15150-00	RES M/F 0805 15K 5%	R231		030-03120-00	RES FILM 120E 5% 0.25W 7X2.5
*R122		036-14390-00	RES M/F 0805 3K9 5%	*R232		036-02100-02	RES 10E 1206 200V 250MW RC01
R123		036-14100-00	RES M/F 0805 1K 5%	R237		045-04470-00	RES NTC SMD 4K7 5% 20MW
R124		036-16100-00	RES M/F 0805 100K 5%	RV101		042-04500-05	RES PRESET SMD 5K CER 4MM SQ
R125		036-15100-00	RES M/F 0805 10K 5%	RV103		042-05500-05	RES PRESET SMD 50K CER 4MM SQ
R126		036-14100-00	RES M/F 0805 1K 5%	RV105		042-04500-05	RES PRESET SMD 5K CER 4MM SQ
R127		036-15100-00	RES M/F 0805 10K 5%	RV107		042-05500-05	RES PRESET SMD 50K CER 4MM SQ
R128		036-15220-00	RES M/F 0805 22K 5%	RV109		044-04200-03	RES PRE 2K 10 TURN PNL MTG
R129		036-17100-00	RES M/F 0805 1M 5%	RV113		042-06500-05	RES PRESET SMD 500K CER 4MM SQ
R130		036-14220-00	RES M/F 0805 2K2 5%	RV115		042-04220-05	RES PRESET SMD 2K CER 4MM SQ
R131		036-16180-00	RES M/F 0805 180K 5%	SK101		240-10000-05	CONN SMD SKT 8W 2R M-MATCH
R132		036-14100-00	RES M/F 0805 1K 5%	SK103		240-10000-05	CONN SMD SKT 8W 2R M-MATCH
R133		036-15100-00	RES M/F 0805 10K 5%	*SK201		240-02100-44	SKT COAX MINI JACK PCB MT ANG.
R134		036-13470-00	RES M/F 0805 470E 5%				
R135		036-13680-00	RES M/F 0805 680E 5%				
R136		036-15100-00	RES M/F 0805 10K 5%				
R137		036-13470-00	RES M/F 0805 470E 5%				
R138		036-15100-00	RES M/F 0805 10K 5%				
R141		036-15100-00	RES M/F 0805 10K 5%				
R142		036-15100-00	RES M/F 0805 10K 5%				
R143		036-15100-00	RES M/F 0805 10K 5%				
R144		036-15820-00	RES M/F 0805 82K 5%				
R145		036-15470-00	RES M/F 0805 47K 5%				
R146		036-14180-00	RES M/F 0805 1K8 5%				
R148		036-14820-00	RES M/F 0805 8K2 5%				
R149		036-13470-00	RES M/F 0805 470E 5%				
R150		036-12220-00	RES M/F 0805 22E 5%				
R151		036-15100-00	RES M/F 0805 10K 5%				
R152		036-15100-00	RES M/F 0805 10K 5%				
R153		036-14680-00	RES M/F 0805 6K8 5%				
R154		036-14680-00	RES M/F 0805 6K8 5%				
R155		036-13220-00	RES M/F 0805 220E 5%				
R156		036-13100-00	RES M/F 0805 100E 5%				
R157		036-12220-00	RES M/F 0805 22E 5%				
R158		036-14100-00	RES M/F 0805 1K 5%				
R159		036-15100-00	RES M/F 0805 10K 5%				
R160		036-14470-00	RES M/F 0805 4K7 5%				
R161		036-14100-00	RES M/F 0805 1K 5%				
R162		036-17100-00	RES M/F 0805 1M 5%				
R163		036-13680-00	RES M/F 0805 680E 5%				
R164		036-14220-00	RES M/F 0805 2K2 5%				
R165		036-14100-00	RES M/F 0805 1K 5%				
R166		036-13680-00	RES M/F 0805 680E 5%				
R168		036-15100-10	RES M/F 0805 10K 1%				
R169		036-14100-00	RES M/F 0805 1K 5%				
R170		036-14100-00	RES M/F 0805 1K 5%				
R171		036-14100-00	RES M/F 0805 1K 5%				
R172		036-15100-10	RES M/F 0805 10K 1%				
R173		036-13470-00	RES M/F 0805 470E 5%				
R174		036-13220-00	RES M/F 0805 220E 5%				
R175		036-16220-00	RES M/F 0805 220K 5%				
R176		036-15100-00	RES M/F 0805 10K 5%				
R177		036-14470-00	RES M/F 0805 4K7 5%				
R178		036-16100-00	RES M/F 0805 100K 5%				
R179		036-15100-00	RES M/F 0805 10K 5%				
R180		036-16150-00	RES M/F 0805 150K 5%				
R181		036-14560-00	RES M/F 0805 5K6 5%				
R182		036-16100-00	RES M/F 0805 100K 5%				
R183		036-14470-00	RES M/F 0805 4K7 5%				
R184		036-14100-00	RES M/F 0805 1K 5%				
R185		036-03100-02	RES 100E 1206 200V 250MW RC01				
R186		036-13100-00	RES M/F 0805 100E 5%				
R187		036-03150-03	RES 1218 PWR CHIP 150E 20% 1W				
R188		036-13220-00	RES M/F 0805 220E 5%				
R189		036-12100-00	RES M/F 0805 10E 5%				
R190		036-12220-00	RES M/F 0805 22E 5%				
R191		036-14100-10	RES M/F 0805 CHIP 1K 1%				
R192		036-13220-10	RES 0805 220E 1%				
R193		036-12100-00	RES M/F 0805 10E 5%				
R194		036-03220-03	RES 1218 PWR CHIP 220E 20% 1W				
R195		036-14220-00	RES M/F 0805 2K2 5%				
R196		036-13100-00	RES M/F 0805 100E 5%				
R197		036-10000-00	RES M/F 0805 ZERO OHM				
R203		036-02100-02	RES 10E 1206 200V 250MW RC01				
R205		036-02100-02	RES 10E 1206 200V 250MW RC01				
*R206		036-13390-10	RES MF 0805 CHIP 390E 1%				

T839 Mechanical & Miscellaneous Parts (220-01404-03)

IPN	Legend	Description	IPN	Legend	Description
000-00030-95	15	Q137	319-01152-00	23	SHIELD A3M2250 F/THRU MTG
004-00687-02/3	18	#IC201, *#IC202	319-01190-01	3	SHIELD WALL HARM. FILTER
012-04100-05	35	CAP F/THRU 1N SUPPR FLTR S-MTG	319-01201-00	41	SHIELD LID HARM. FILTER
012-04150-01	26	CAP CER F/THRU 1N5 NO LEAD	319-01202-00	4	SHIELD CONTROL CIRCUIT
039-05050-00	11	*R223	319-30064-00	17	SPACER HSINK RF MODULE
045-06100-05	20	ASSY 100K NTC FOR MODULE *R215, R219	345-00040-16	27	SCRW M3X20MM P/POZ ST BZ
051-00005-36	9	*IC203, *IC205	349-00010-59	21	SCRW 6-32 X 3/8 P/PH T/T ZP
051-00006-02		SOLDER SPRING 1.3MM A4M1877 Support for front panel LED solder joints.	349-00020-07	8	SCRW 4-40 X 5/16 P/POZ T/T BLK
051-00642-01	32	COAX SEMI-RIG N-TYPE EXTN	349-00020-08	7	SCRW T/T 4-40X3/8 CSK POZI BZ Secure *IC203/205 couplers to heatsink.
065-00010-13	25	BEAD FER 7D 1.9X0.9X3.8	349-00020-09	13	SCRW T/T 4-40X3/8 IN P/POZ BLK
201-00030-02		WIRE T/C 7/0.2 PVC RED Front panel LEDs.	349-00020-36	47	LIM)SCREW TT M3X8m PANTORX BLK
201-00030-10		WIRE T/C 7/0.2 PVC BLACK Front panel LEDs.	349-00020-43	40	SCRW T/T M4X12MM P/POZ BZ
201-00050-25		AUTO 154 RED 41/0.3 PVC DC+ from D-range PCB.	349-00020-49	38	SCRW T/T M4X35MM P/POZ BZ
201-00050-26		AUTO 154 BLACK 41/0.3 PVC DC- from D-range PCB.	352-00010-04	10	NUT M2.5 MACH HEX ST BZ
206-00010-11		COAX 50 OHM RG316-U PTFE Coax from BNC connector to *SK201.	352-00010-29	46	NUT M4 NYLOC HEX
219-02591-00	22	LOOM RIBBON 8 WAY FOR PA	353-00010-10	12	WSHR M3 FLAT 7MMX0.6MM ST BZ
219-02592-00		CABLE ASSY RG223/U N TO BNC Exciter/PA connecting cable.	356-00010-01	36	TAG SOLDER 3MM SHORT M6132/3.2
220-01402-02	2	PCB T838/9 TEFLON DIRNL COUPLER	356-00010-03	2	TAG SOLDER 3MM LONG M614/3.2
220-01404-03	1	PCB T838/9 PA MODULE DESIGN	356-00010-05	19	TAG SOLDER 4MM LONG M6144/4.2
240-00010-55	24	PLUG 15 W D RANGE W/W PNL MT PL101	357-00010-45	39	CLAMP CABLE 4.8MM P CLIP
240-00100-43		PLG COAX MINI PIN CRIMP 1.5D Coax from BNC connector to *SK201.	360-00010-41	44	BUSH SHORTY BLK
240-02010-54		SKT 15W DRANGE PNL MTG 125 C Matching socket for D-range plug PL101.	362-00010-07	14	GASKET SIL INSULATING TO-220
240-02100-06	31	SKT COAX N TYPE PNL MTG OP-TER	362-00010-13	16	BUSH INSULATING 1.1MM TOP HAT
240-02100-17	33	SKT COAX BNC PNL JAC CRP RG316	362-00010-33	43	GROMMET LED MTG 3MM
240-04020-62		SKT 2 W RECEP SHORTING LINK LINK1	365-00100-20		LABEL WHITE S/A 28X11MM
240-06010-14		CLAMP LATCHING 15 W D RANGE Cover for D-range socket.	365-01391-01		LABEL 30X10.8 T/MARK VOID
240-06010-15	29	BLOCK LATCHING 15W D RANGE	365-01539-00		LABEL WARNING 120W/PWR CLAMP
240-06010-44	30	HOOD CONN UHF & N-TYPE	369-00010-14		TIE CABLE NYLON 100X2.6MM
258-00010-03	37	FAN 12V 119X119X25MM TUBE AX	399-00010-56		BAG PLASTIC 200X250MM
302-05204-00	34	BRKT A3M2314 F/THRU MTG	400-00020-07		SLEEVING 2MM SIL RUBBER
303-23146-00	48	COVER SIDE T838/9 PA	400-00020-30		HEATSHRINK 3MM
308-01007-01	45	HANDLE BASE STATION SERIES II	410-00010-43		PKG T296 AMPAC REF 73-46
308-13122-02	5	HEATSINK T838/9 PA COMPLETE			
308-13125-00	6	HEATSINK T839 COUPLER			
316-06651-00	42	PANEL PA 100W REAR DRV SER II			