To replace lamps, first remove the eight screws securing the PCB, (on the stereo mix meters there are only 4 screws), and the 6 screws that secure the sub-bracket, (4 on the stereo mix meters), the back of the meter is now acessible, and the lamps may be replaced.

It is recommended that both lamps be replaced even if only one has failed, as the remaining lamp will have been overstressed and its life substantially reduced.

# 6.00 GLOSSARY OF TERMS USED

AFL	After fade Listen: This button will "solo" the signal (or ALL with their AFL buttons down) on the monitors, and the feed for this solo is taken AFTER the fader.
Attenuate	To reduce the electrical level or amount of gain.
Auxiliary Send	Extra output from the console, usually used for echo sends and foldback.
Bus	Wire carrying a signal or sum of a group of signals.
Cold	The negative going current of a signal. With 2 signal wires, one is positive going (hot), and the other is negative going.(cold)
Cut	To cut a channel means to turn it OFF.
dB (decibel)	A logarthmic ratio used to represent voltage or power gain. The reference about which the ratio is made is usually stated.
Ground	Earth or screen of a cable when refering to connecting leads.
Group Output	The output of a group bus which is carrying a sum of all the signals assigned to that group number.
Hot	Positive going current of a signal. With 2 signal wires, one is positive going (hot), and the other is negative going.(cold)
Hz	Measurement of frequency (Hertz) 1Hz = 1 cycle per second.
Insert	An insert point allows peripheral equipment to be introduced into the signal path.
Khz	Measurement of frequency expressed to the power of 1000.i.e. 1Khz = 1000 cycles per second.
KOhm	Measurement of electrical resistance expressed to the power of 1000.i.e. 1 KOhm = 1000 Ohms.
Mains	Local Electrical Supply.
Multitrack Logic	Either the multítrack machine's monitor switching or its safe/record switching. Page 45

Ohm	Measurement of electrical resistance.
Overdubbing	The process of recording new tracks on a multitrack tape recorder whilst listening back in synchronisation with previously recorded tracks.
Pan Pot	A pan pot places a signal across two stereo lines (left & right) turning it to the left will send all the signal to the left line, and to the right, all of the signal will be sent to the right side. If the pan pot is left at its centre detent, an equal amount of signal will be fed to both sides and the image in the stereo picture will be central.
PFL	Pre fade Listen: This button will "solo" the signal (or ALL with their PFL buttons down) on the monitors,and the feed for this solo is taken BEFORE the fader.
Phantom Power	A voltage (usually +48 Volts) across the microphone input to power capacitor microphones.
POST	Post means after the fader.
PRE	Pre means before the fader.
Ring	The connecting part in the middle of a stereo jack,(it mates second).
Signalto Noise Ratio	The ratio between the level of signal and the level of unwanted noise.
Sleeve	The connecting part of a stereo jack which mates last and is always earth.
Star Point	A single point to which ALL earths are separately connected.
Sync	To be operating the multitrack machine from the synchronised head. i.e. recording and playing back onto and from the same tape head.
Тір	The connecting part at the end of a stereo jack, (it mates first).
Track Bouncing	Taking a group of previously recorded tracks and recording them as a group onto another track. e.g. bouncing down 4 vocals from 4 tracks to just one track "frees" 3 tracks for fresh recording.
	Page 46

# 7.00 SERIES 500/600 TECHNICAL DESCRIPTION

These are brief technical descriptions of the Series 500 and Series 600 mixing desks. They are very similar in their internal circuitry, the only difference being in the configuration of the output groups. The Series 500 has four double-group output modules fitted, each with their own monitor section, for use primarily with an 8-track tape-machine. The Series 600 has eight single group-modules fitted, but with two tape-return monitor sections and double group-output connectors to allow use of a 16-track machine.

Series 500/600 consoles are fitted with extensive level-switching facilities so that they can be quickly field-modified to allow operation on either +4dBu or -10dBV (Tascam) standards. (See Section 3.02 Interface levels.)

The table below gives a quick guide to the SC numbers and related circuit diagrams.

	PCB No.	Drg No.
500/600 STANDARD I/P PCB 500/600 INPUT REAR CONN PCB	SC1491 SC1502	
500 STANDARD GROUP PCB 500 O/P REAR CONN CCT DIAGRAM	SC1493 SC1504	
600 STANDARD GROUP PCB 600 O/P REAR CONN CCT DIAGRAM	SC1492 SC1503	
500/600 MASTER LH PCB 500/600 MASTER RH PCB	SC1495 SC1494	
500/600 8-WAY LED METER DISPLAY 500/600 6-WAY LED METER DISPLAY 500/600 4-WAY METER DRIVE PCB 500/600 MASTER METER DRIVE PCB	SC1497 SC1498	ED2203 ED2185
500/600 PSU INTERFACE PCB 500/600 MASTER METER PEAK LED PCB 500/600 4-WAY METER PEAK LED PCB		
SERIES 500 BLOCK DIAGRAM SERIES 600 BLOCK DIAGRAM		ED2206 ED2207
800/1600 PSU CCT DIAGRAM		ED2093
Operating Levels		

I/O levels are +4dBu (1.228 Vrms) or -10dBV (-7.5dBu)
Internal nominal level is -6dBu.

#### SERIES 500/600 INPUT CHANNEL

This PCB holds fairly standard circuitry, and only the points of interest are noted.

J11 provides gain switching for the line input. Pushing on the jumper introduces extra attenuation to the line-input pad on the input conn PCB, and provides suitable sensitivity for +4 operation.

The EQ switch (S5) disables the eq stages completely when not pressed in; not only is the EQ bypassed so that the signal flows around it, but signal input to the EQ section is also removed, to minimise the amount of audio current flowing down the earth connections.

The PFL switch (S7) signals a PFL condition to the Solo Enable bus by connecting it to V+ through a 100k resistor (R31). The Solo Enable bus operates as a virtual-earth bus so that there are no transient signals on it that might crosstalk into audio buses.

The circuitry in the dotted box (R60, etc) is an option to allow muting of external devices when the ON switch of the input module is released, via mute busses A,B or via optoisolator IC5.

Extensive changes in the sourcing of the various aux sends are possible by moving jumpers J1-J10, allowing various combinations of pre/post EQ and pre/post fader. (See Section 2.03)

Routing is through the 22k mix resistors, the outward end being grounded when routing switching is released, so that crosstalk cannot occur to the bus across the switch contact capacitance.

## SERIES 500 OUTPUT MODULE (DOUBLE GROUP)

Each module contains two groups, eg the first module holding GP1 and GP2. Only the first will be described; add 100 to get the component numbers for the other.

The group summing amps are of the hybrid discrete/ op-amp type for improved noise performance. R1,C1 and R2,C2 remove any noise from the supply lines, and these components are shared between the two groups. Main negative feedback, to generate the virtual-earth on the bus goes through R5, while R6,R7 provide internal DC feedback to stabilise the operating conditions of TR1 and IC1A. R7,R50 provide bias to set this.

IC2A re-inverts the signal to get it back into phase, and, being a 5532 section, gives the insert output a 600 Ohm drive capability. IC2B is the low-noise fader post-amp. As far as signals going through C13 are concerned, this is a fixed-gain stage (+10dB) as usual. However, S6E is part of the level-change switch; when this is out the signal passes with a full gain through IC1B, which brings the nominal level up to -2dBu, and ensures a low-impedance drive for the EBOS (electronically balanced output stage) IC3. When S6E is in, however, only a fraction of the signal coming from IC2B (set by R14,15,16) reaches IC1B and this gives the lower output level required for -10dBV operation.

The group signal passes through C13 to the monitor source-select (or RET) switch S2. Note that meter source switching is done with a separate section of this switch. Normally (when SUB is not operated) the output from the RET switch is sent through a conventional bass and treble EQ stage (IC5), and from here to the monitor section ON switch and PFL switch.

When the SUB switch is operated, the following changes take place:

- i) The tape-return i/p amp is connected to the monitor section EQ by S1B,S1C, over-riding the position of the TAPE RETURN button. This now only controls the meter source, through S2A.
- ii) The output of the VOL post-amp is routed to the group summing amp, via R47 and S1A.
- iii) The monitor pan pot is connected to the group o/p by S1D, so that the group is routed directly to MIX through it.

#### SERIES 600 OUTPUT GROUP

The circuitry of this is very similar to the Series 500 Group described above, with the difference that there is only one group and two tape-return sections. For example, the first output module holds Group 1 and Tape-Returns 1 and 9.

### SERIES 500/600 MASTER MODULE

This holds all the central functions of the mixing console, and contains two PCB's, the Left and Right-hand.

The LH PCB contains 6 auxiliary master sections, each with AFL facilities. The RH PCB contains the mix sum-amp and o/p stages, the 2-track tape-returns and control-room select switching, the PFL system and the slate oscillator and talk-back system.

#### MASTER LEFT-HAND PCB

This contains six identical aux master sections; only the first is described. The summing amp is a hybrid discrete/op-amp type, designed for very low noise. R3 provides DC feedback to set the op-amp operating conditions, and shunt feedback through R2 generates the virtual-earth on the aux bus.

From this stage the signal (inverted in phase) passes through the master gain pot VR1, and then to an inverting post-amp stage IC2A, with a gain of +10dB. This stage re-inverts the signal to get it back in phase, and a feed is taken off here for the aux metering, and the AFL switch.

The next stage (IC2B) is an inverting amp with switchable gain; shunt feedback is used as the gain switching demands gain in one setting, and attenuation in the other. When jumper J1 is fitted, R12 is shorted out, and the negative feedback around IC2B is increased, reducing the nominal o/p level for -10dBV operation.

From here the signal passes to a standard EBOS circuit for a balanced output drive.

### MASTER RH PCB.

The MIX L & R sum amps are hybrid discrete/op-amp types as described above. R28 ensures that the buses remain at zero DC potential. From here the signal is reinverted by IC2A to get the signal back in phase again; This 5532 stage also permits a 600 Ohm load drive capability when the insert is set to be prefade.

The insert point can be moved pre or post the mix fader by altering the jumpers J10,11,12. All three jumpers are moved as a body; if the three jumpers are not touching each other than it's not right.

IC8A is a conventional postamp with +10dB of gain, and also has a 600 Ohm drive capability for when the insert is postfade.

The signal then passes through R18 to a gain-select stage IC4A, which provides the low-gain (-10dBV) option when J1 is fitted. A conventional EBOS stage (IC5) is then driven via C15.

The EBOS output passes not only to the MIX o/p sockets, but also to the control-room (CRM) select switches, which are S1,2,3,4. Note that the CRM select switch-bank operates fully-balanced, with the balanced input amp IC6 coming after the input has been selected. The gain of this amp can be set by means of jumpers J4,5, which are fitted for +4 mode, and removed for -10 mode. The gain of the inputs is defined by the input resistors eg R25,26 for MIX, or R27,28 for 2-TRACK A. The 2-TRACK C input can have its input sensitivity increased to deal with -10 levels ( eg from cassette decks) independently of the others by adding jumpers J2,3 (See Sect 3.02). This is only applicable when the rest of the 2-track returns are set up for +4dBm.

From IC6 the signal passes to the PFL switcher, composed of FETs F1,F2. The feed to the studio o/p is taken off from just before this point so that the studio feed is not interrupted by use of the PFL/AFL system.

When a PFL or AFL switch is depressed, the Solo Enable bus is connected to V+ via a 100K resistor. IC12 is connected as a virtual-earth stage, and so acts to maintain zero volts on the bus by moving its output negatively, causing zener D5 to conduct and absorb the current injected through the 100K. (R64 ensures that the op-amp is not saturated positively by stray currents when D5 is not conducting) When the op-amp o/p goes negative, TR4 is turned off via R65, and the PFL logic-signal goes high (+16V). TR5 is turned on via R68 and the not-PFL logic-signal goes high. These changes turn off F1 via D1 and allow R40 to keep F2 held on. Therefore the signal from IC6 is ignored, and that from PFL/AFL summing amp IC11 is passed to the CRM system instead. R41 helps absorb FET switching transients.

R42,43 make up the CRM dimming/mono network. When either DIM (S5) or Talkback (TB) is in use R43 is grounded, introducing a drop of approx 20dB. For mono compatibility checks, S10 (MNO) joins the two channels of the CRM feed together.

VR4 is the CRM gain control, feeding headphone amp IC7. This has its output current capability boosted by means of TR2,TR3 transistors, operating in class AB due to biasing diodes D3,D9. R48,49 define the quiescent current, and negative feedback around the o/p transistors is via R46,R45. This stage is capable of driving 8 Ohm headphones to a high level, and R50 is included so that if 600 Ohm phones are then plugged in, the sound levels will be roughly equal.

When headphones are plugged in, the feed to the CRM EBOS and rear panel output sockets is broken by the jack socket normalling contacts and the CRM loudspeakers are muted. When the phones are unplugged, the CRM signal flows through the CRM EBOS stages to provide a balanced 600 Ohm output capability from the rear panel. The studio-speaker feed is taken off IC6 before the PFL switcher, and passes through the ON switch and the studio level control VR5 to inverting amplifier IC9; the TB signal is mixed in at this point when required. From here the signal passes through C36 to the Studio o/p EBOS IC10

The talkback (TB) and slate oscillator (OSC) share the same set of mix resistors and therefore one only can be used at a time. TB always overrides OSC. When neither are enabled, S8C and S9A rest on their back contacts and the mix resistors RIC7, RIC8 are grounded to prevent interbus crosstalk. At the same time, the back contact of S9B gives IC2A 100% negative feedback and prevents oscillation, while C53 is not grounded by S8C and the TB mic amp gain is therfore reduced to unity.

When the oscillator is enabled, S9B allows oscillation to occur and routes IC12A o/p to the level control VR6; R81 makes the law more usable. Simultaneously S9A removes the short from the RICs and the osc signal is slated to the buses. Note that this signal does not go to the studio path. The detailed operation of the oscillator is described below.

When the TB is enabled, S8B switches over to route the mic amp to the RICs, while S8C removes the ground from the RICs and applies it to C53 to allow the full mic gain set up by VR7 to be realised. R85 sets maximum gain and R83,C50 provide smoothed power to the electret microphone.

The oscillator is a modified Wien bridge type giving 700Hz or 10KHz depending on S7. The amplitude-control system (D6,TR7,TR6,F3) appears complex, but is designed to give a very close control of oscillation amplitude without the expense of a thermistor; the amplitude of the two frequencies should differ by less than 0.2dB.

Oscillation amplitude is controlled by adjusting the amount of negative feedback via R73,74, by controlling the resistance of F3.

When the amplitude becomes too great on positive peaks, D6 conducts, turning on TR7, which charges C48. This has a fast-attack, slow-decay action, with decay set by R80. This turns on TR6, which pulls down the voltage on F3 gate, and increases its resistance, and therefore the amount of neg feedback. R75,77 provide distortion cancellation for F3.

#### LED BARGRAPH METER PCBs.

The 6-way and 8-way are identical in operation, each consisting of repeated sections. PR1 sets the calibration, and IC1A,D1,D2 form a precision half-wave rectifier. In VU mode J1 increases the gain of the rectifier stage; J2 provides either fast-attack slow-decay for Peak mode, or integration by R4,C2 in VU mode. IC1B buffers C2 at unity gain, and drives the internal comparators of the 3914 bargraph chips IC2,3. R6,R7 allow this voltage to increase the voltage at the top of the comparator reference ladder as the signal increases, to give a quasi-logarithmic law. D3 drops the +24V supply down to the +18V required by the 3914s, and R8,C3 decouple this supply. R9,10 set LED drive current.

### 8.00 SOUNDCRAFT RECOMMENDED WARRANTY

(This warranty applies to sales within the UK and should form the basis of the warranty offered by the overseas vendor of Soundcraft products.)

`End User' means the person who first puts		means Soundcraft Electronics Ltd. means the person who first puts the equipment
		into regular operation.
`Dealer'	`Dealer'	means the person other than Soundcraft (if
		any) from whom the End User purchased the
		Equipment, provided such a person is
autho		authorised for this purpose by Soundcraft or
		its accredited Distributor.
	`Equipment'	means the equipment supplied with this manual.

- 2. If within the period of twelve months from the date of delivery of the Equipment to the End User it shall prove defective by reason only of faulty materials and/or workmanship (but not faulty design) to such an extent that the effectiveness and/or usability thereof is materially affected the Equipment or the defective component should be returned to the Dealer or to Soundcraft and subject to the following conditions the Dealer or Soundcraft will repair or at its option replace the defective components. Any components replaced will become the property of Soundcraft.
- 3. Any Equipment or component returned will be at the risk of the End User whilst in transit (both to and from the Dealer or Soundcraft) and postage must be prepaid.
- 4. This warranty shall only be available if:
  - a) the Equipment has been properly installed in accordance with instructions contained in Soundcraft's manual; and
  - b) the End User has notified Soundcraft or the Dealer within 14 days of the defect appearing; and
  - c) no persons other than authorised representatives of Soundcraft or the Dealer have effected any replacement of parts maintenance adjustments or repairs to the Equipment; and
  - d) the End User has used the Equipment only for such purposes as Soundcraft recommends, with only such operating supplies as meet Soundcraft's specifications and otherwise in all respects in accordance with Soundcraft's recommendations.

- 5. Defects arising as a result of the following are not covered by this Warranty: faulty or negligent handling, chemical or electro-chemical or electrical influences, accidental damage, Acts of God, neglect, deficiency in electrical power, air-conditioning or humidity control.
- 6. The benefit of this Warranty may not be assigned by the End User.
- 7. End Users who are consumers should note their rights under this Warranty are in addition to and do not affect any other rights which they may be entitled against the seller of the Equipment.

# SERIES 500/600 ACTIVE COMPONENTS PARTS LISTINGS

Input Module - 5	101		
DESCRIPTION		PART NO	QUANTITY USED
Transistor Transistor	2N4403 2SC2240	BD0329 BD0302	2 2
Op-amp Op-amp	TL072 NE5534	BE0413 BE0407	3 1
Diode	1N4148	BA0001	2
<u>Output Module -</u>	5102		
DESCRIPTION		PART NO	QUANTITY USED
Transistor	2N4403	BD0329	2
Op-amp Op-amp	TL072 NE5532	BE0413 BE0428	6 4
Master Module -	5104		
DESCRIPTION		PART NO	QUANTITY USED
Transistor Transistor Transistor Transistor	2N4403 2SC2240 2SA970 J112	BD0329 BD0302 BD0301 BD0322	8 5 3 5
Diode Diode	1N4148 6V2 Zener	BA0001 BB0104	9 1
Op-amp Op-amp Op-amp	NE5532 TL072 TL071	BE0428 BE0413 BE0404	1 4 1 5 1
Meter Drive Asse	embly - MIX		
DESCRIPTION		PART NO	QUANTITY USED
Transistor	2SC2240	BD0302	4
Op-amp	TL072	BE0413	1

Page. 56

Meter Drive Asser	nbly (Series 500) -	GROUP	
DESCRIPTION		PART NO	QUANTITY USED
Transistor	2SC2240	BD0302	8
Op-amp	TL072	BE0413	2
Meter Drive Asser	nbly (Series 600) -	GROUP	
DESCRIPTION		PART NO	QUANTITY USED
Diode	1N4148	BA0001	16
Zener Diode	400mW 6.2V	BB0104	8
Dual Op-amp	TL072	BE0413	8
LED Bar-graph dr:	iver LM3914	BE0427	16
LED array 10-way	DIL Green	JA0017	8
LED array 5-way		JA0018	8
LED array 5-way		JA0019	8
Power Supply Unit	<u>t</u>		
DESCRIPTION		PART NO	QUANTITY USED
Transistor	2SC2240	BD0302	8
Transistor	2SA970	BD0301	8
Transistor	BD135	BD0317	2
Transistor	BD136	BD0311	1
Transistor	TIP2955	BD0315	2
Transistor	TIP3055	BD0316	2
Regulator	LM317T	BE0430	1
Regulator	LM337T	BE0431	1
Regulator	LM338K	BE0438	1
Diode Bridge	KBP02	BC0204	1
Diode Bridge	KBL02	BC0207	2
Diode Bridge	KBPC25-02	BC0208	1
Diode	1N4148	BA0001	11
Zener Diode	400mW 11V	BB0106	1

Page 57

# SERIES 500 CUSTOMER SPARES KIT (Complete Kit Part No.RZ2252)

PART NO.	DESCRIPTION	QUANTITY
BA0001	1N4148 Diode	1
BB0104	Zener Diode 6V2	1
BB0106	Zener Diode 11V	1
BC0204	Bridge Rect. KBP02	1
BC0207	Bridge Rect. KBL02	1
BC0208	Bridge Rect. KBPC25-2	1
BD0301	Transistor 2SA970	2
BD0302	Transistor 2SC2240	2
BD0311	Transistor BD136	1
BD0315	Transistor TIP2955	1
BD0316	Transistor TIP3055	1
BD0317	Transistor BD135	1
BD0322	FET J112	2
BD0329	Transistor 2N4403	2
BE0404	TL071	2
BE0407	NE5534	2
BE0413	TL072	4
BE0428	NE5532	4
BE0430	LM317T	1
BE0431	LM337T	1
BE0438	LM338K	1
DD0321	Alps Mono Fader	1
DD0322	Alps Stereo Fader	1
DF0529	Alps 2 Pole Push Switch	2
DF0530	Alps 4 Pole Push Switch	2
DM1101	Alps 10KBx2	2
DM1102	Alps 10KB	2
DM1103	Alps 10KA	2
DM1104	Alps 10KRD	2
DM1105	Alps 10KAx2	1
DM1106	Alps 10KRDx2	2
FF0614	0.1" 2 way Jumper	10
JA0001	Small Greed LED TLG102	2
JA0002	Small Red LED TLR102	2
JA0003	Large Red LED TLR104	2
JB0122	VU Meter Bulb	4
JD0315	VU Meter	1
KA0027 KA0028	White Fader Knob	1
KA0028 KA0029	Red Fader Knob	1
ZD0305	Yellow Fader Knob	1
ZD0305 ZD0307	3.15A 20mm Fuse 6.3A 20mm Fuse	2 2
200301	0.5A ZUMM FUSE	2

SERIES 600 CUSTOMER SPARES KIT (Complete Kit Part No.RZ2256)

PART NO.	DESCRIPTION	QUANTITY
BA0001	Diode 1N4148	2
BB0104	Zener Diode 6V2	2
BB0106	Zener Diode 11V	1
BC0204	Bridge Rect. KBP02	1
BC0207	Bridge Rect. KBL02	
BC0208	Bridge Rect. KBPC25-2	1 1
BD0301	Transistor 2SA970	2
BD0302	Transistor 2SC2240	2
BD0311	Transistor BD136	1
BD0315	Transistor TIP2955	1
BD0316	Transistor TIP3055	1
BD0317	Transistor BD135	1
BD0322	FET J112	2
BD0329	Transistor 2N4403	2
BE0404	TL071	2
BE0407	NE5534	2
BE0413	TL072	5
BE0427	LM3914	2
BE0428	NE5532	4
BE0430	LM317T	1
BE0431	LM337T	1
BE0438	LM338K	1
DD0321	Alps Mono Fader	1
DD0322	Alps Stereo Fader	1
DF0529	Alps 2 Pole Push Switch	2
DF0530	Alps 4 Pole Push Switch	2
DM1101	Alps 10KBx2	2
DM1102	Alps 10KB	2
DM1103	Alps 10KA	2
DM1104	Alps 10KRD	2
DM1105	Alps 10KAx2	1
DM1106	Alps 10KRDx2	2
FF0614	0.1" 2 way Jumper	10
JA0001	Small Greed LED TLG102	2
JA0002	Small Red LED TLR102	2
JA0003	Large Red LED TLR104	2
JA0017	LED array 10-wy DIL Green	1
JA0018	LED array 5-way DIL Red	1
JA0019	LED array 5-way DIL Green	1
JB0122	VU Meter Bulb	4
JD0315	VU Meter	1
KA0027	White Fader Knob	1
KA0028	Red Fader Knob	1
KA0029	Yellow Fader Knob	1
ZD0305	3.15A 20mm Fuse	2
ZD0307	6.3A 20mm Fuse	2

# SERIES 500/600 SCHEMATICS

ED2212 ED2213 ED2214 ED2215 ED2326	S500/600 INPUT MODULE SIGNAL FLOW DRG S600 GROUP OUTPUT MODULE WITHOUT 'SUB' BUTTON IN S600 GROUP OUTPUT MODULE WITH 'SUB' BUTTON S500 GROUP OUTPUT MODULE SIGNAL FLOW DRG S500/600 STEREO I/P MDL SIGNAL FLOW DIAG
	S500 BLOCK DIAGRAM S600 BLOCK DIAGRAM
ED2162	S500/600 STD I/P CCT DRG
ED2323	STEREO I/P CCT DRG
ED2176	S500 STD O/P CCT DRG
ED2177	S600 STD O/P CCT DRG
ED2174	S500/600 AUX MAST LH CCT DRG
ED2173	S500/600 MAST RH CCT DRG
ED2202	S600 8-WAY LED MTR CCT DRG
ED2203	\$500/600 AUX MAST LED MTR OPT CCT DRG
ED2185	S500 4-WAY VU MTR DRIVE CCT DRG
ED2181	\$500/600 MAST MTR DRIVE CCT DRG
ED2230	S500 REAR CONN DRG
ED2210	S600 REAR CONN DRG
ED2202	METER BRIDGE LED METER PCB