

*Omit 8 Tower Rigs No change 665 7/11d
2531 27*

PROPOSED LIGHT CONSOLE. DRURY LANE THEATRE. 24/10/43. FPB/FPB.

General. There are 212 dimmer ways with space for 12 spares, in addition there are 6 'setter' units, each consisting of a pair of clutches with potentiometers & return springs only. The dimmers will mostly have their pair of contactors or N.E.I. relays mounted on the dimmer frame itself; only the 30 amp. contactors will be mounted on a separate panel. This means that 2/3 of the dimmer bank will be constructed in a similar manner to Bristol, though Drury Lane being a 4 tier job it will need to be more substantial; strutting to the walls will be permissible, and the bank must be dismantled to get it in the room.

There will be three distinct groups of shafts known as Masters 1, 2, & 3. Each to be driven by a motor (or pair of motors slow & fast) to give dimmer speeds of 6 secs. to 45 secs. in 9 steps. The motors are non-reversing and the shaft always revolves at the 45 secs. speed.

All dimmers are wired in the phase side, there are no neutral fuses. The supply is 230/400 and the total dimmer bank load is approximately 1,000 amps. per phase.

WORKS COST. approx. only, but including overheads.

2	Triple M.G. sets giving 150 Amp. at 15v & 20 amp. at 200v. D.C.	£185 £130 ea	170	0	0
2	Remote control push button starters.		260	0	0
63	200v. motors (or pairs with freewheels) size suitable to drive 80 dimmers each.	£30 pt.	180	0	0
63	Sets of 9 contactors (or relays) and speed control resistances.	£11/15/- set	70	10	0
34	Type A.1. Sunset dimmers, 100 contact.	£2/15/0 ea	93.	10	0
122	Type A. " " "	£2/5/- ea	274	10	0
12	Type D. " " "	£3/10/- ea	42	0	0
22	12 Kw. tapped transformers. <i>Greenham</i>	£30 ea	660	0	0
44	6 Kw. commutators, brush-gear etc. (in pairs for transformers above)	£22	968	0	0
212	pairs of limit switches & fixings.	18/- pt.	190	15	0
212	potentiometers complete with fixing.	6/6 ea	68	18	0
168	pairs of clutches complete with wheels, flexes, & condensers. terminal blocks.	2-150 set	464	0	0
44	pairs of double magnet clutches complete.	3-150 set	165	0	0
244	N.E.I. D.P. relays.	at 15 0	183	0	0
34	normally open 15 amp. S.P. contactors.	£1-9-0 less 5%	101	15	0
34	" closed " " "	£1-14-0 less 5%			
55	" open 30 amp. " "	£1-8/3 less 7 1/2%	248	5	3
55	" closed 30 amp. " "	£2/5/9 less 7 1/2%			
100	30 amp. Slydlok fuses.	46/- doz	18	13	4
360	15 amp. " "	26/10 doz	40	5	0
24	5 amp. " "	21/10 doz.	2	3	8
	Framework, shafts, & bearings.		200	0	0
	Wiring & troughs for same. <u>Excluding</u> all made up multi-core cables & wiring.		100	0	0
	<i>Erection & Testing on Site</i>		200	0	0
	TOTAL.		3781	5	3

30/11/43.

Proposed Light Console. Drury Lane Theatre.

The figures are (except console) Works cost plus
100% overheads.

Full Scheme	Initial Scheme		Full Scheme.			Initial Scheme.		
			£.	s.	d.	£.	s.	d.
2	2	M.G. sets giving 150 amp. at 15v. D.C. Remote control starters.)	170.	0.	0.	170.	0.	0.
6	6	200v. D.C. Shaft Motors.	180.	0.	0.	180.	0.	0.
6	6	Sets of 9 step speed controls.	70.	10.	0.	70.	10.	0.
6	6	Double Settercircuits with clutches.	36.	0.	0.	36.	0.	0.
34	40	A.l. Sunset. 100 contact dimmers.	93.	10.	0.	110.	0.	0.
122	84	A. Sunsets " " "	274.	10.	0.	189.	0.	0.
12.	22	D. " " " "	42.	0.	0.	77.	0.	0.
44	13	6 kw. Tapped Transformers.)	968.	0.	0.	286.	0.	0.
44	13	Commutators & brush gear.)						
212	157	Pairs of Circuit switches & fixings.	190.	18.	0.	142.	0.	0.
212	157	Potentiometers with fixings.	68.	18.	0.	51.	0.	0.
168	144	Pairs of clutches with wheels, flexes, condensers & terminal blocks.	464.	0.	0.	398.	0.	0.
44	13	Pairs of double magnet clutches complete.	165.	0.	0.	49.	0.	0.
244	176	N.E.I. D.P. relays.	183.	0.	0.	132.	0.	0.
34	38	Normally open 15 amp. S.P. Contactors.)						
34	38	Normally closed ditto.)	101.	15.	0.	114.	0.	0.
55	33	Normally open 30 amp. ditto.)						
55	33	" closed " " ")	248.	5.	3.	148.	0.	0.
100	33	30 amp. Slydlok fuses.	18.	13.	4.	6.	5.	0.
360	240	15 amp. " " "	40.	5.	0.	26.	10.	0.
24	24	5 amp. " " "	2.	3.	8.	2.	3.	8.
		Framework shafts & bearings.	200.	0.	0.	200.	0.	0.
		Wiring & troughs for same (internal), excluding L.V. multicore cables & wiring.	100.	0.	0.	100.	0.	0.
		Erection & Testing on site.	200.	0.	0.	200.	0.	0.
		Three Manual Console & relays.	1000.	0.	0.	1000.	0.	0.
		L.V. Wiring.	50.	0.	0.	50.	0.	0.
			<u>24,867.</u>	<u>8.</u>	<u>3.</u>	<u>23,737.</u>	<u>8.</u>	<u>8.</u>

NOTE: In some cases circuits have been omitted altogether from the initial scheme, and in others dimmers substituted for transformers etc., which explains why sometimes the figures in the second column are higher than those in the first.