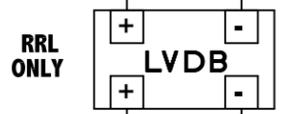
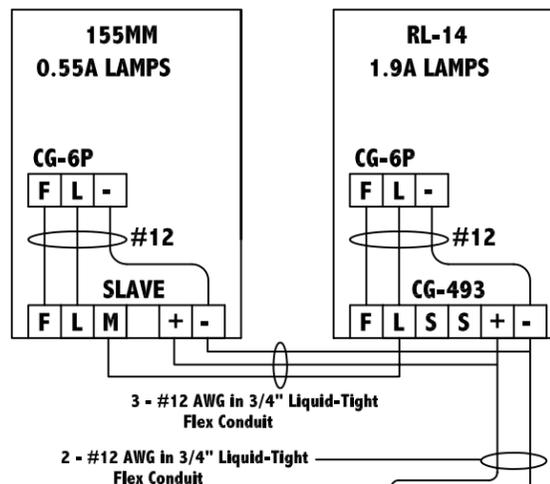


**ADDITIONAL LT
OPTION**

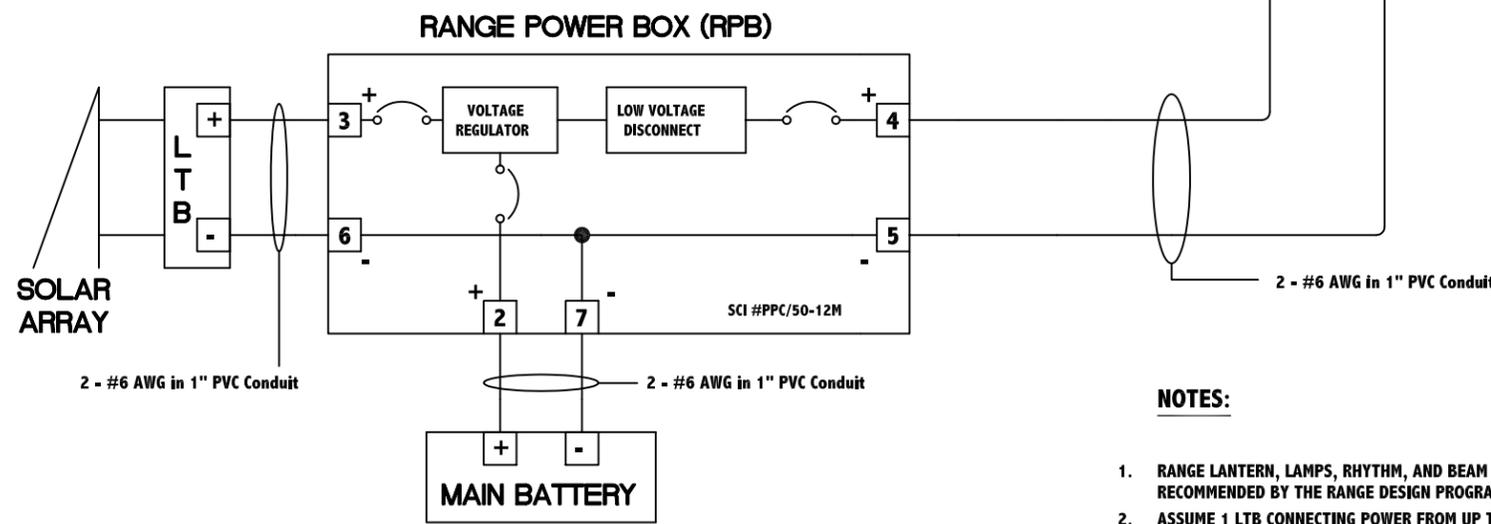
RANGE LT



POINT TO POINT WIRE RUNNING LIST			
FROM	WIRE SIZE (AWG)	MAX DISTANCE (FT)	TO
LOCAL TERMINAL BOX (+)	6	23	RANGE POWER BOX, 3(+)
LOCAL TERMINAL BOX (-)	6	23	RANGE POWER BOX, 6(-)
RANGE POWER BOX, 2(+)	6	15	MAIN BATTERY (+)
RANGE POWER BOX, 7(-)	6	15	MAIN BATTERY (-)
RANGE POWER BOX, 4(+)	6*	115	LOW VOLTAGE DROP BOX (+)
RANGE POWER BOX, 5(-)	6*	115	LOW VOLTAGE DROP BOX (-)
LOW VOLTAGE DROP BOX (+)	12		RANGE LT, CG-493 (+)
LOW VOLTAGE DROP BOX (-)	12		RANGE LT, CG-493 (-)
RANGE LT, CG-493 (F)	12		RANGE LT, CG-6P (F)
RANGE LT, CG-493 (L)	12		RANGE LT, CG-6P (L)
RANGE LT, CG-493 (-)	12		RANGE LT, CG-6P (-)
ADDITIONAL LIGHT OPTION			
NIGHTTIME RANGE LT, CG-493 (L)	12		ADDITIONAL LT, SLAVE (M)
NIGHTTIME RANGE LT, CG-493 (+)	12		ADDITIONAL LT, SLAVE (+)
NIGHTTIME RANGE LT, CG-493 (-)	12		ADDITIONAL LT, SLAVE (-)

* FOR RFL, THE MAX DISTANCE FROM RPB TO RANGE LT IS 46.3 FT FOR #12 AWG.

BILL OF MATERIALS			
ITEM	TYPE	SOURCE OF SUPPLY	QUANTITY
SOLAR PANEL (35-WATT)	G-SEC QPL 401A	ELC	SEE NOTE 2
LOCAL TERMINAL BOX	LTB	G-SEC	1
RANGE POWER BOX	SCI #PPC/50-12M	G-SEC	1
LOW VOLTAGE DROP KIT	LVDK	G-SEC	1
RANGE LT, RL-14	CARLISLE & FINCH	ELC	SEE NOTE 1
12VDC FLASHER	CG-493 / CG-181	ELC	1
12VDC LAMPCHANGER	CG-6P	ELC	1
LAMPS	12VDC, 1.9A	ELC	6
MAIN BATTERY, LEAD ACID SIX 2-VOLT CELLS	FULMEN	EXIDE	1



NOTES:

- RANGE LANTERN, LAMPS, RHYTHM, AND BEAM WIDTH DETERMINED BY INTENSITIES RECOMMENDED BY THE RANGE DESIGN PROGRAM.
- ASSUME 1 LTB CONNECTING POWER FROM UP TO 10 35W PANELS. THE BATTERY SIZE, NUMBER OF PANELS & TILT ANGLE SHALL BE DETERMINED BY THE SOLAR DESIGN PROGRAM.
- WIRE SIZES ARE BASED ON MAXIMUM ANTICIPATED LOADS. WIRES MAY BE RESIZED ONLY IF LOAD & CHARGING CIRCUIT VOLTAGE DROPS DO NOT EXCEED 0.35V & 0.75V, RESPECTIVELY.
- ALL WIRE RUNS SHALL BE ENCLOSED IN APPROPRIATELY SIZED RIGID OR LIQUID-TIGHT FLEX CONDUIT AS INDICATED TO FORM A WEATHERTIGHT SYSTEM AND PROTECT ELECTRICAL COMPONENTS FROM THE ELEMENTS.

B	1/05	JTG	ADD ADDITIONAL LIGHT OPTION	KMD
A	8/03	JTG	ADDED CONDUIT, NOTE 4 AND CHANGE CG-181 TO CG-493	KMD
REV.	DATE	APPR.	DESCRIPTION	BY
DESIGNED:	STH		U.S. COAST GUARD HEADQUARTERS CIVIL ENGINEERING STANDARD AID TO NAVIGATION SOLAR 24 HOUR RANGE (RANGE CATEGORY S-24)	
DRAWN:	STH			
TRACED:				
CHECKED:	KA/STH			
REVIEWED BY:				
	H.R. CLEVELAND			
	G-SEC-2A			
	L.E. JAEGER			
	G-SEC-2			
REVIEWED BY:		APPROVED:	CAPT J.A. RAUCH	DATE 5/8/97
			CHIEF, OFFICE OF CIVIL ENGINEERING	
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. TOLERANCES: DIM.			DRAWING NUMBER 140502	REV. B
ANG.			SCALE: NONE	SHEET 1 OF 1