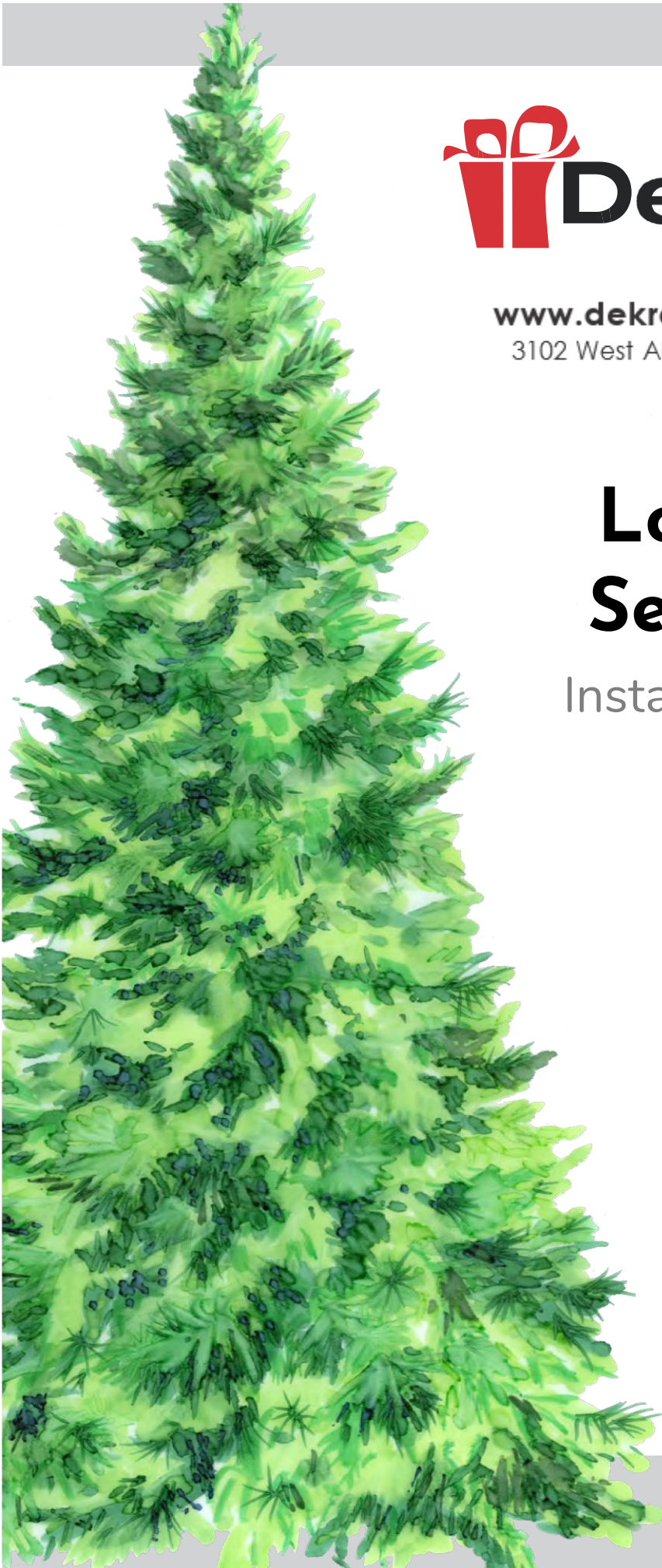




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Low-Voltage Sequoia Tree

Installation Instructions



Introduction

Thank you for purchasing our Low-Voltage Sequoia Tree.

Our team designed and developed this tree to ensure the safety of our customers and yours. This tree is completely powered by 24V electricity and is equipped with IP65 connectors, ensuring no hot lights or water damage all season long.

We designed this tree to optimize ease and efficiency of installation. Follow these installation instructions to reduce your installation time and minimize potential errors.

Best Practices

Before you begin, here are some best practices gleaned from the Dekra-Lite team's 25+ years of installation experience.

1. Verify that all required components are present before assembly.
2. Refer to the **LV Tree Specification Table** on page 5 for tree details.
3. Install your tree on level ground. Be sure to verify that the ground can withstand the weight of the tree plus weight of the ballast (if used).
4. Follow the branching and wiring instructions to prevent overloading electrical circuits and causing electrical shortages and/or fire.
5. Fluff all foliage after removing it from its storage containers to ensure a full and natural look.
6. Consult your local engineer for tree ballasting and anchoring requirements.

Important Information

1. Electricity to each branch is provided via T-socket wire harnesses (T-harnesses) that are pre-installed on the frame. Connect each branch to a T-socket on the pre-installed T-harness (Figure 1).
2. T-harnesses come in sets of 3 T-sockets (3T) and 4 T-sockets (4T). Combinations of 3T and 4T harnesses are used to make up the required number of sockets to match the number of branches for each frame section.
3. 24V current is provided via 300W LED drivers that are designed to be hung at the lowest frame row of the tree (Figure 2).
4. The entire tree is divided in electrical circuits, each supplied by a 300W LED driver, where the total power required for each circuit is no more than 250W (See LV Tree Specification Table on page 5 for specific details).
5. 1M extension wires are provided to connect T-harnesses between frame rows. These are needed for the following connections:
 1. Tree topper to Topper Pole
 2. Frame A to Frame B
 3. Frame B to Frame C
 4. Frame D to Frame E
 5. Frame F to Frame G



LV Tree Specification Table

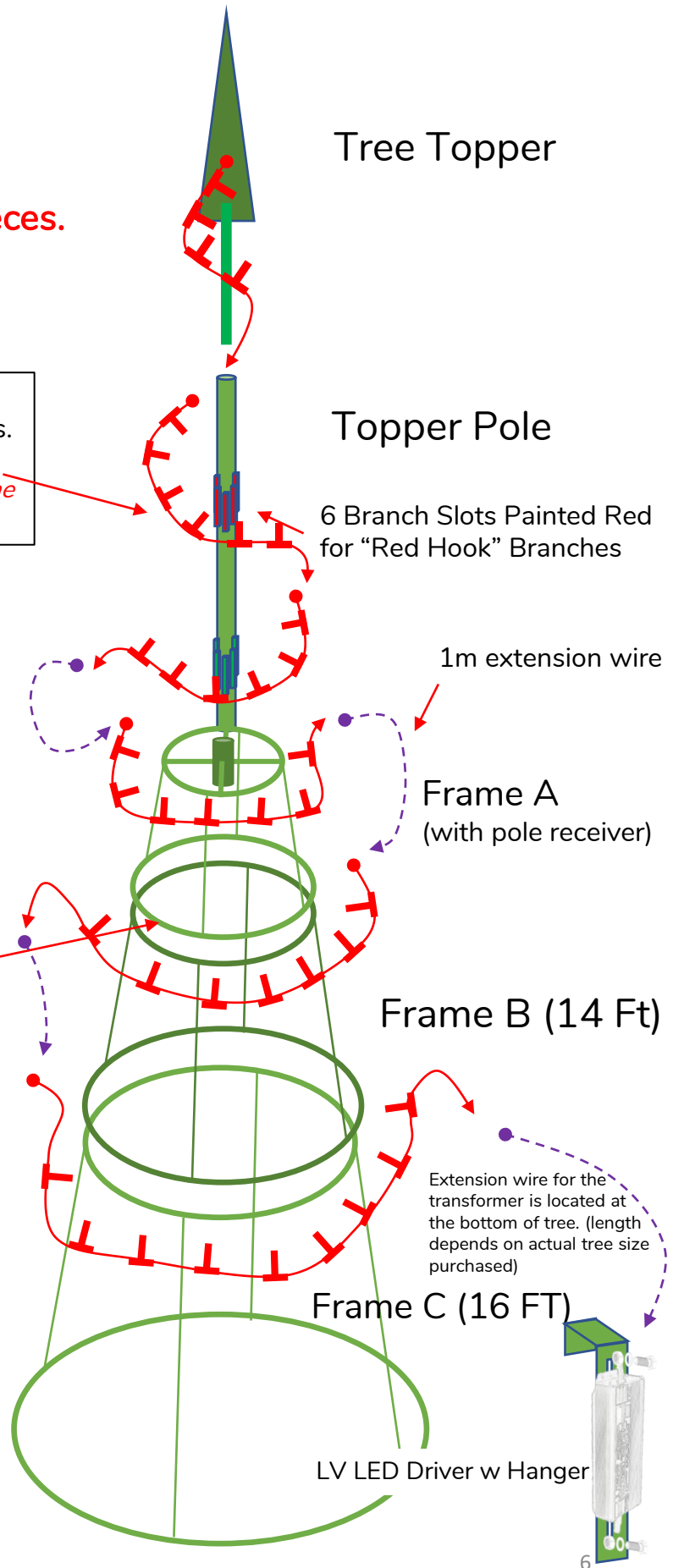
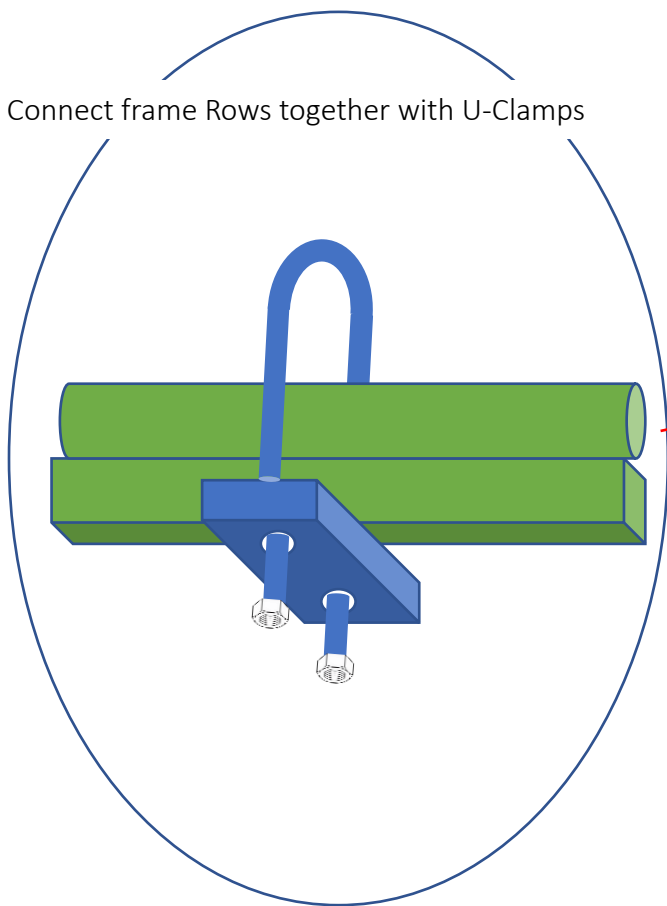
	Frame Row Marking	Tree Diameter w/Branches (Inches)	Tree Diameter Frame Only (Inches)	#Frame Pieces Per Row	# of Rows	#Branches Per Row	#Branches Cum.	#Tips	#Lights Per Row	#Lights Cumulative	#Light Strand/Row (98L)
5	Tree Top							508	392	392	4
8	Special Pole					6	6	1606	588	980	6
10	Special Pole					6	12	2674	588	1568	6
12	A	74	20	1	1	6	18	3742	588	2156	6
14	B	84	30	1	2	8	26	5166	784	2940	8
16	C	94	40	1	3	8	34	6590	784	3724	8
18	D	104	50	2	4	12	46	8726	1176	4900	12
20	E	114	60	2	5	14	60	11218	1372	6272	14
22	F	124	70	2	6	18	78	14422	1764	8036	18
24	G	134	80	2	7	20	98	17982	1960	9996	20
26	H	144	90	4	8	24	122	22254	2352	12348	24
28	I	154	100	4	9	28	150	27238	2744	15092	28
30	J	164	110	4	10	28	178	32222	2744	17836	28
32	K	174	120	4	11	32	210	37918	3136	20972	32
34	L	184	130	4	12	36	246	44326	3528	24500	36
36	M	194	140	4	13	40	286	51446	3920	28420	40

Height (Ft)	Frame Row Marking	#Light Strand/Row (98L)	Watts per Row	Cum. Watts	Amps. Per Row (24V)	Amps. Cum. (24V)	Electrical Circuit Group #	Max Watts Per Circuit	#300W Power Supply (24V)	5M Ext. Cable	10M Ext. Cable	15M Ext. Cable	20M Ext. Cable	1M Ext. Cable		
5	Tree Top	4	24	24	1	1	1	228	1					1		
8	Special Pole	6	36	60	1.5	2.5										1
10	Special Pole	6	36	96	1.5	4										
12	A	6	36	132	1.5	5.5										1
14	B	8	48	180	2	7.5										1
16	C	8	48	228	2	9.5								1		
18	D	12	72	300	3	12.5	2	156	1					1		
20	E	14	84	384	3.5	16						1				
22	F	18	108	492	4.5	20.5	3	228	1					1		
24	G	20	120	612	5	25.5						1				
26	H	24	144	756	6	31.5	4	144	1		1					
28	I	28	168	924	7	38.5	5	168	1		1					
30	J	28	168	1092	7	45.5	6	168	1		1					
32	K	32	192	1284	8	53.5	7	192	1		1					
34	L	36	216	1500	9	62.5	8	216	1	1						
36	M	40	240	1740	10	72.5	9	240	1	1						

LV Sequoia Tree Components & Assembly

Frames for rows A-C are single pieces.

T-socket electrical harness (T-harness). Connect T-harness between rows with 1m extension wires.
Note: The number of T-sockets shown on the T-harness is for illustration and may not correspond to the actual number of T sockets.



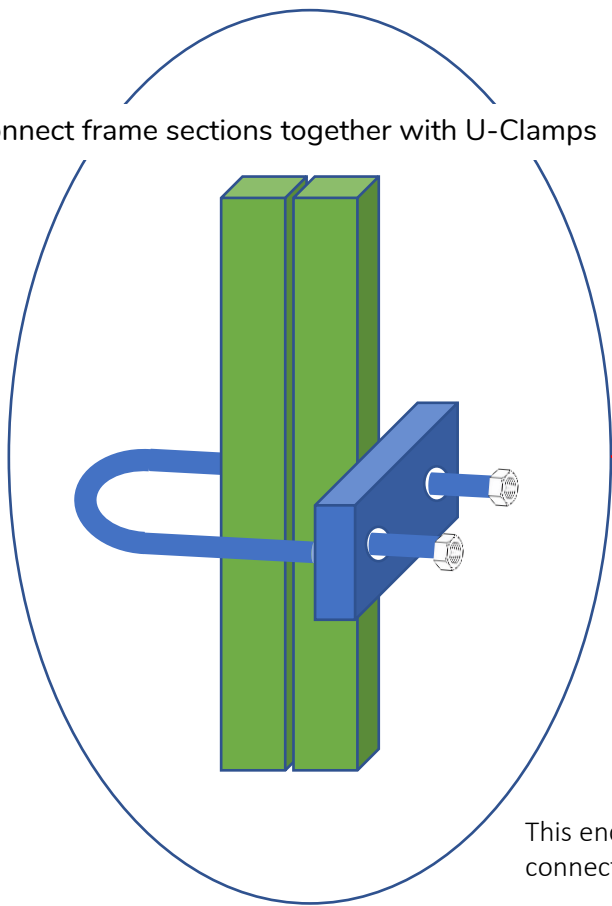
Electrical note:

- 1 x 300W LED driver supports all components from Topper to Frame C.
- Connect all T-harness from Topper to LED driver as shown.

LV Sequoia Tree Components

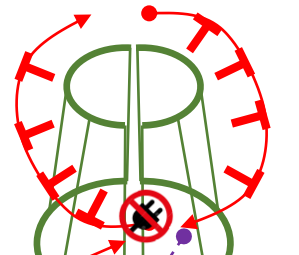
Frames for rows D-G have 2 sections per row.

Connect frame sections together with U-Clamps

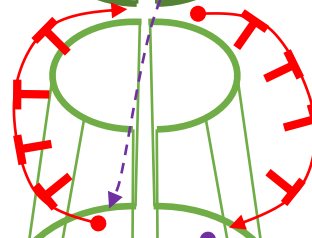


This end is not connected

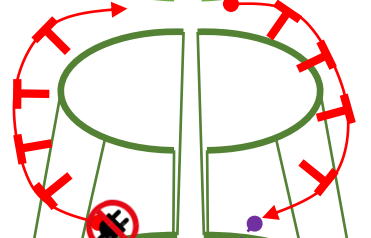
This end is not connected



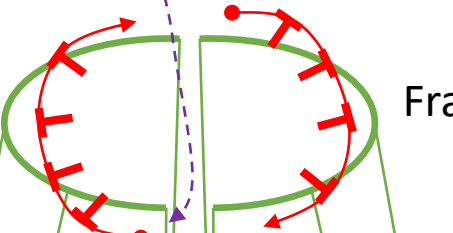
Frame D (18 FT)



Frame E (20 FT)



Frame F (22 FT)



Frame G (24 FT)



LV LED Driver w/ Hanger



LV LED Driver w/ Hanger

Electrical note:

- 1 x 300W LED driver supports all components from frame D and E. Connect T-harnesses in these 2 rows together and to the LED driver as shown.
- 1 x 300W LED driver supports all components from frame F and G. Connect T-harnesses in these 2 rows together and to LED driver as shown.

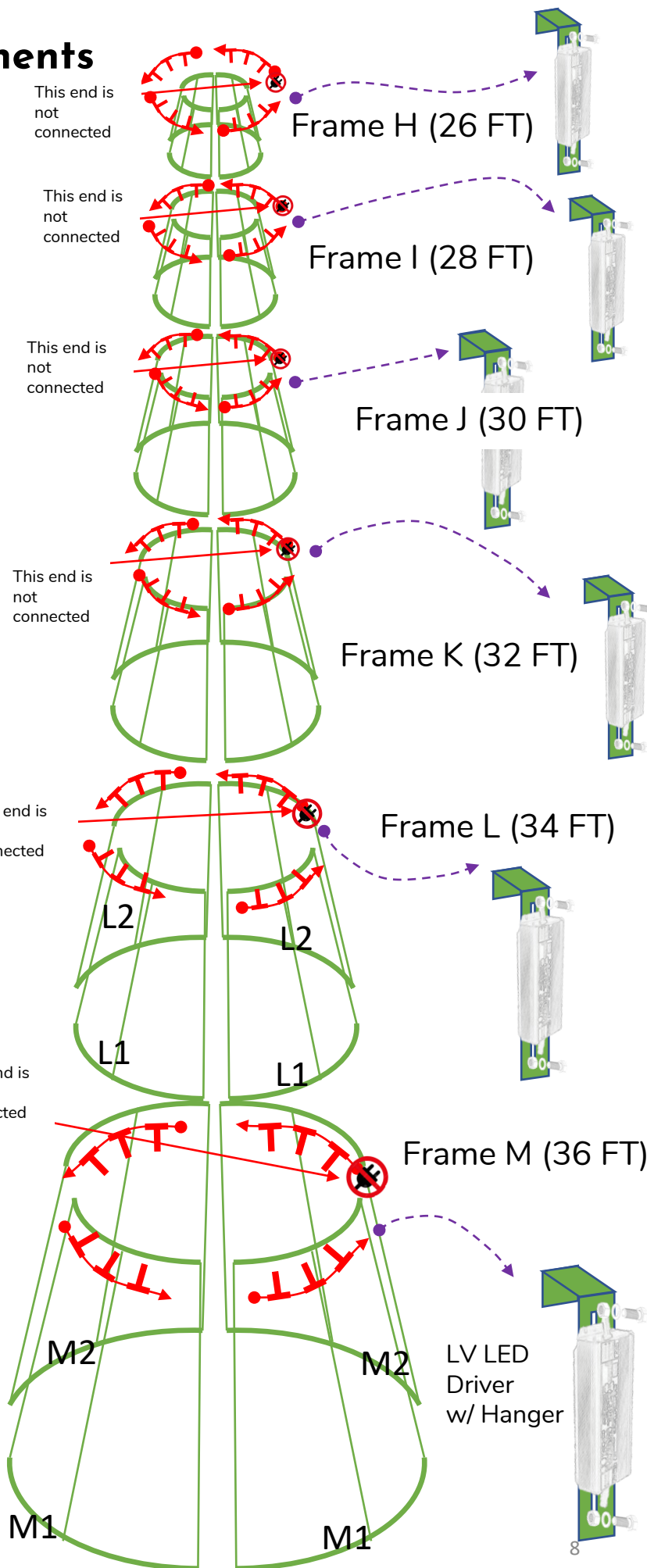
LV Sequoia Tree Components

Frames for rows H-M have 4 sections per row.

Frame sections are marked in pairs with a letter (for the row) and a number (for the pair). 2 x M1 frame sections make a pair.

Always connect frame pairs together before connecting pairs to form the frame row.

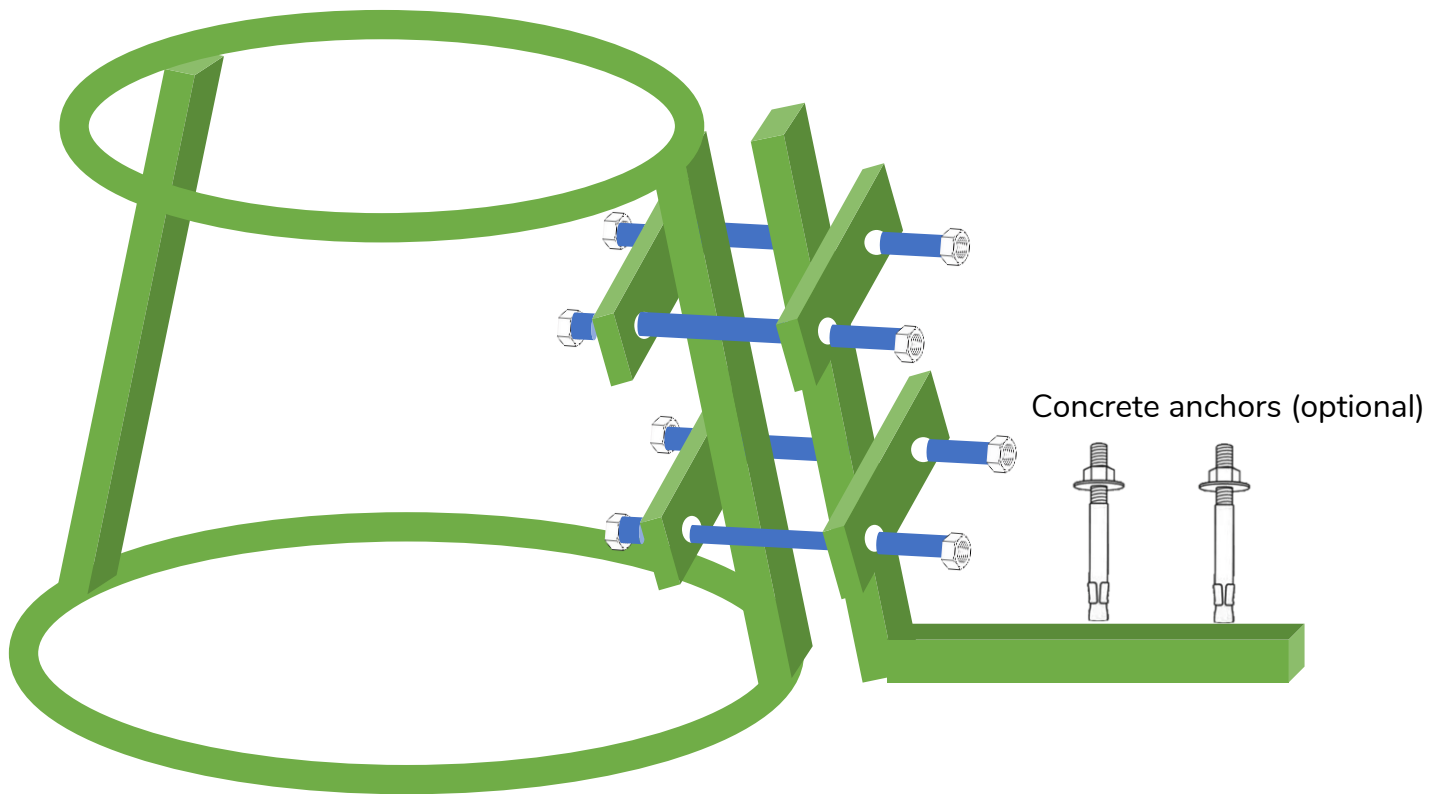
Join T-harnesses together as shown



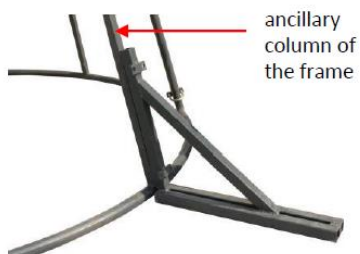
Electrical note:

- Each frame row from H to M is supported by a dedicated 300W LED driver as illustrated for row M.
- Connect T-harness within the same row only and then to LED driver as shown.

Support Legs



Tree Height (FT)	14	16	18	20	22	24	26	28	30	32	34	36
Qty of Legs	4	4	4	4	4	4	4	4	4	4	4	4



a) At bottom row, place the leg at the ancillary column of the metal frame.



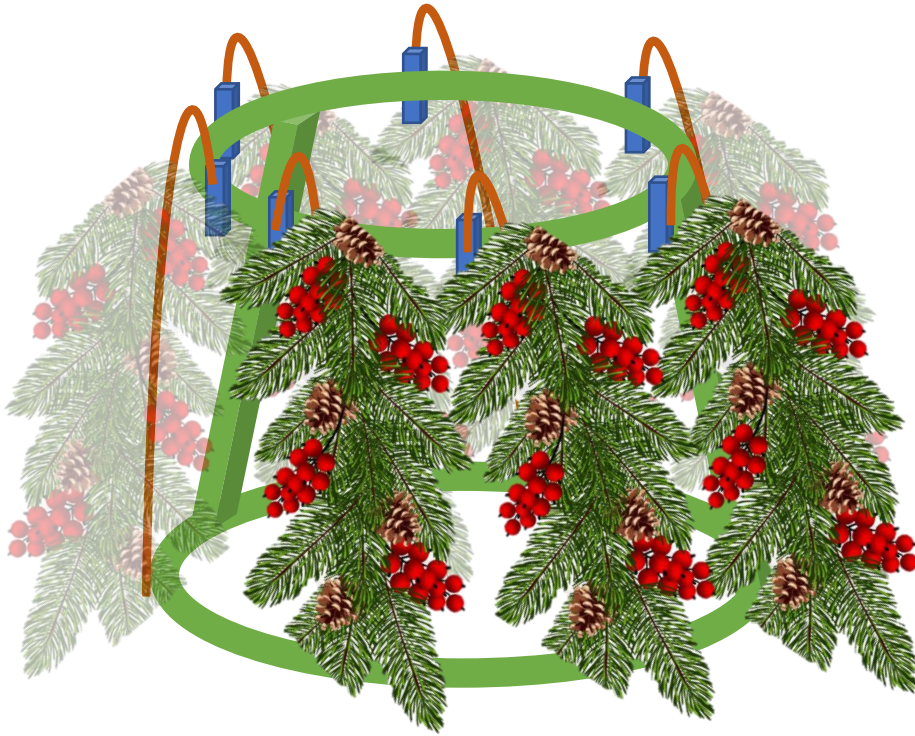
b) Use the two sets of metal plate with bolts and nuts to assemble the leg with the frame, and then tighten with tool such as ratchet spanner



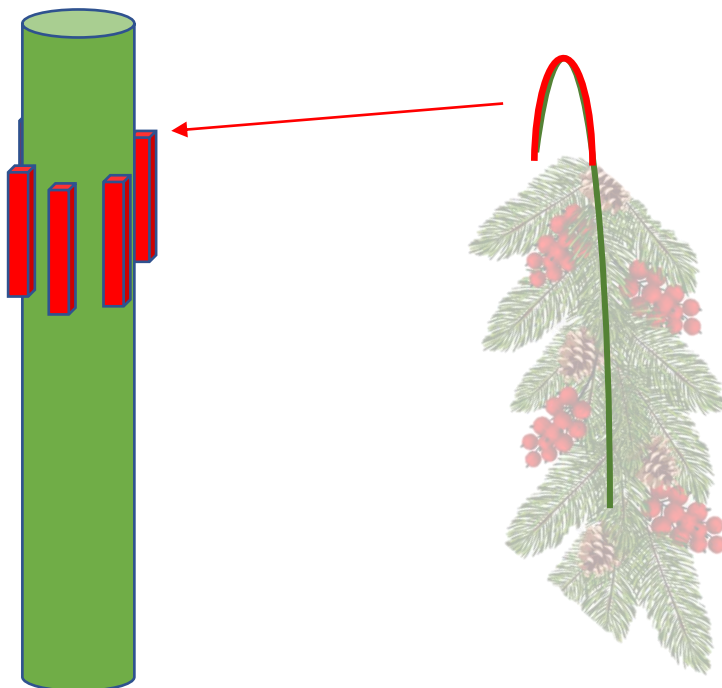
Metal plate with bolts and nuts that come with the supporting legs kit

Branching

1. Fluff branches when removed from storage boxes to make them look full and natural
2. Hook branches into branch slots on each frame.

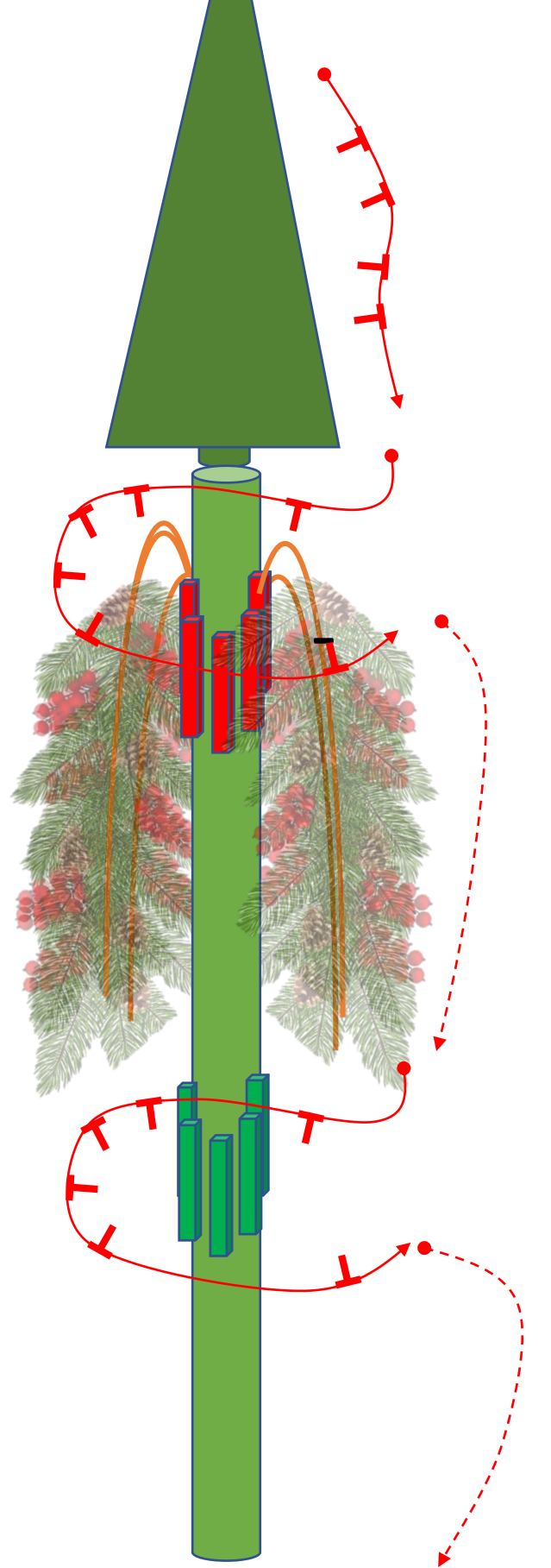


3. Identify 6 special “Red Hook” branches. Install these 6 “Red Hook” branches into the red slots on the upper part of the Topper Pole.



Wiring the Tree

1. Tree Topper - There are 4 light strands in the Tree Topper. Connect each light strand to a T-socket in the T-harness.
2. Topper Pole – Topper pole has 2 sets of 6 branch slots. Each set has its own T-socket harness. Connect branches to T-harness as shown
3. Connect the T-harnesses from Topper to the bottom of the Topper Pole as shown.



Connect to T-harness
on Frame A

Product Images

T-socket harness



Topper Pole



Frame A



Frame B



Frame C



Frame D



Product Images

Using U-Clamps



Example of Topper Pole and Multiple Frame Rows and T Harnesses

