

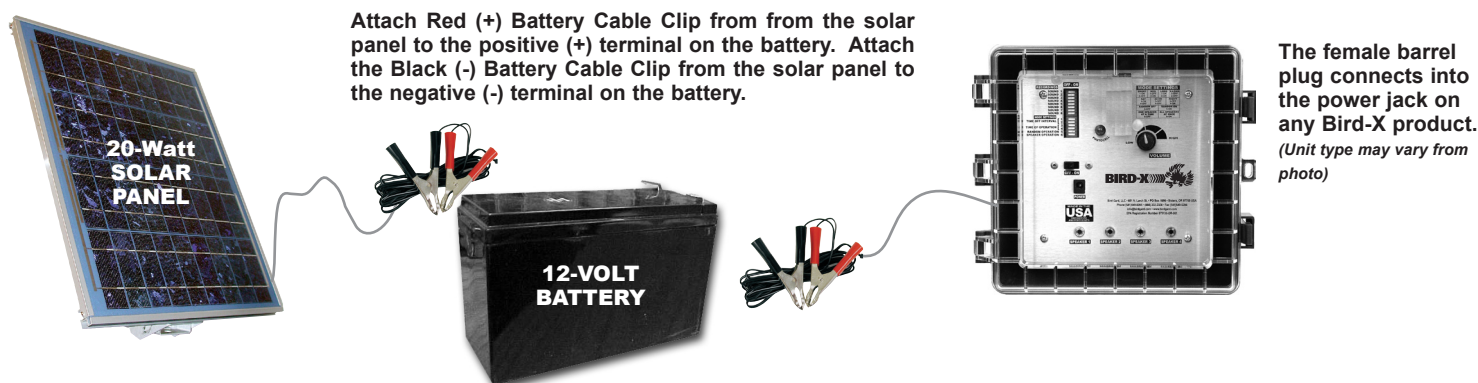
20-Watt Solar Panel Instructions

The 20-watt solar panel with mounting kit is designed to keep a 12-volt storage battery fully charged throughout the critical growing, ripening or operational season without the need to replace or recharge the battery. The solar panel and stainless steel mounting bracket is made to exacting standards and is designed to withstand the rigors of some of the harshest environments while continuing to perform efficiently. The solar panel circuitry is environmentally protected by glass within a metal frame for moisture resistance and superior structural strength in a rugged aluminum frame.

Included with the complete 20-watt solar panel is an attached battery cable with clips for easy connection to a 12-volt battery. Use the special battery cable with clips assembly to attach to your 12-volt battery. *Also available is an optional brushed aluminum mounting bracket and mounting kit hardware. This mounting bracket and mounting kit hardware is sold separately and enables your 20-watt solar panel to be easily attached to the mounting bracket and to most surfaces.*

CONNECTING

Attach the 20-watt solar panel to any 12-volt battery by connecting the wires from the solar panel and attached battery cable with clips assembly to the appropriate terminals on your battery—black battery clip to the negative (-) terminal and the red battery clip to the positive (+) terminal of the battery. Lastly, insert the female barrel plug into the power jack on your Bird-X product. This correct attachment procedure will ensure that your 12-volt battery remains fully charged. **NOTE: Each solar panel must be used with a 12-volt battery (40 amp hour or greater or 400 cold cranking amps).**



MAINTENANCE

The 20-watt solar panel requires no special maintenance. Occasional cleaning with a mild solution of soap and water is recommended. Do not use hard abrasive cleaners, pads or solvents. Any cracks or minor breaks in the glass surface should be repaired immediately using transparent silicon caulking material. This is a temporary solution. Water or moisture leakage must be stopped or damage to your solar panel may occur. Check all connections regularly for corrosion or poor contact points. Clean or grease as needed.

Site Latitude and Tilt Angle Guidelines:

<u>Site Latitude:</u>	<u>Tilt Angle:</u>
0° to 15°	15°
15° to 25°	Same as Latitude
25° to 30°	Latitude + 5°
30° to 35°	Latitude + 10°
35° to 40°	Latitude + 15°
> 40°	Latitude + 20°

20-Watt Solar Panel Contents:

<u>Component Item</u>	<u>Quantity</u>
20-Watt Solar Panel with Ring Terminal Connectors with Attached Battery Cable with Clips Assembly	1
<u>Optional Mounting Bracket & Hardware (Sold Separately)</u>	<u>Quantity</u>
Brushed Aluminum Mounting Bracket with Hardware	1
Package of Mounting Kit Hardware	1



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(For Bird-X, Inc.)