



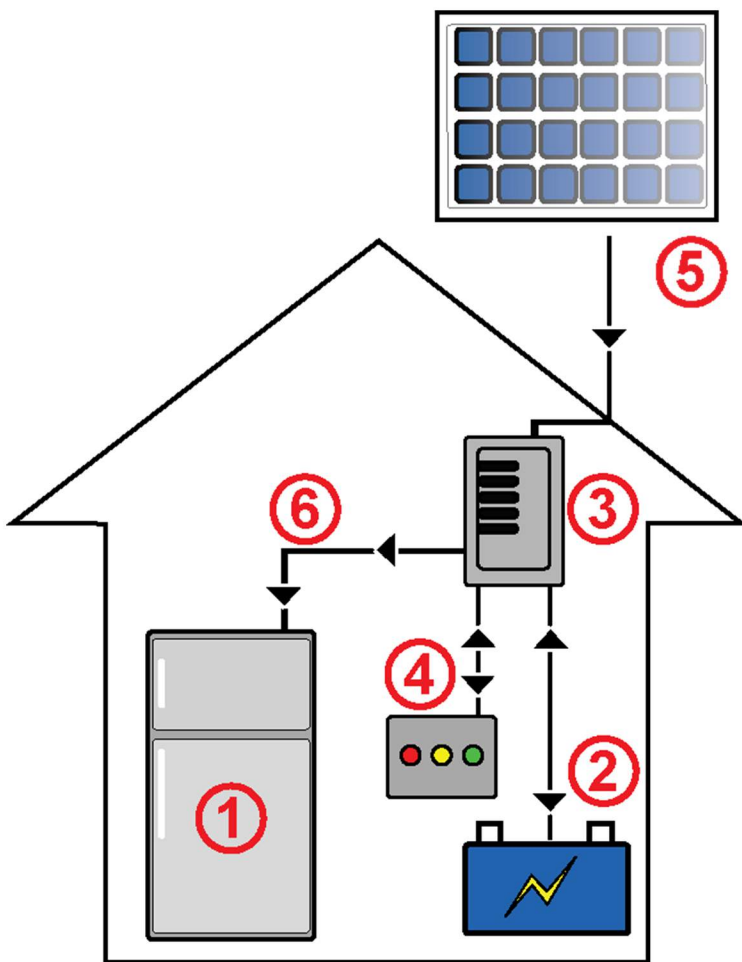
C4P Inc.

DC Appliance Installation Guide

Voltray and SunStar



Installation Guide



1. Unpack your appliance. Do not turn your appliance on unless it has been in the upright position for more than 2 hours.
2. Set up your batteries in either 12 volt or 24 volt configuration. Configuration depends on your system.
3. Install all your proper DC breakers into the breaker box. Ensure your breaker box is properly grounded and that the Appliance breaker is 20 amps.
4. Connect your charge controller to the breaker box system.
5. Setup your solar panels to the system.
6. Ensure all your breakers are set to the off position and connect your system together. Once everything is properly connected and grounded, set your breakers to the on position.

* Please ensure you read all instruction guides to your components and parts prior to the installation of your solar appliance



SunStar DC Chest Freezer Voltray DC Refrigerator



The Voltray DC Refrigerator and SunStar DC Chest Freezer line of products are specially designed DC powered appliances made to maximize the efficiencies of emerging solar and alternative energy markets. With an in-house proprietary DC compressor, our appliances are not only reliable, but, allows for flawless operation through the use of a single 250W solar panel.

Voltray DC Refrigerator

C4P6.1SRVR 6.1 CU.FT.



Product Specifications

Voltage Input	12/24 VDC Automatic Detection
Available Capacity	4.5 Cubic Feet Refrigerator / 1.6 Cubic Feet Freezer
Operating Temperatures	0°C to 10°C / 32°F to 50°F Refrigerator -15°C to -22°C / 5°F to -7.6°F Freezer
Power Input (W)	70-100
Refrigerant R-134a	130g / 0.29lbs
Net Weight	39kg / 86lbs
Exterior Dimension	48.5cm x 52cm x 155cm / 19" x 20.5" x 61"

Energy Consumption Guide (Based on 24 hour time period)

Room(Below)/Operation	(Refrigerator)2°C/35°F	(Freezer)-23°C/-10°F	(Total WHR/AH)
21°C/70°F	361 WHR 28.8AH	209 WHR 16.7AH	570 WHR 45.5AH
32°C/90°F	450 WHR 36.07AH	261 WHR 20.8AH	712 WHR 57AH

Voltray DC Refrigerator

C4P7.4SRVR 7.4 CU.FT.



Product Specifications

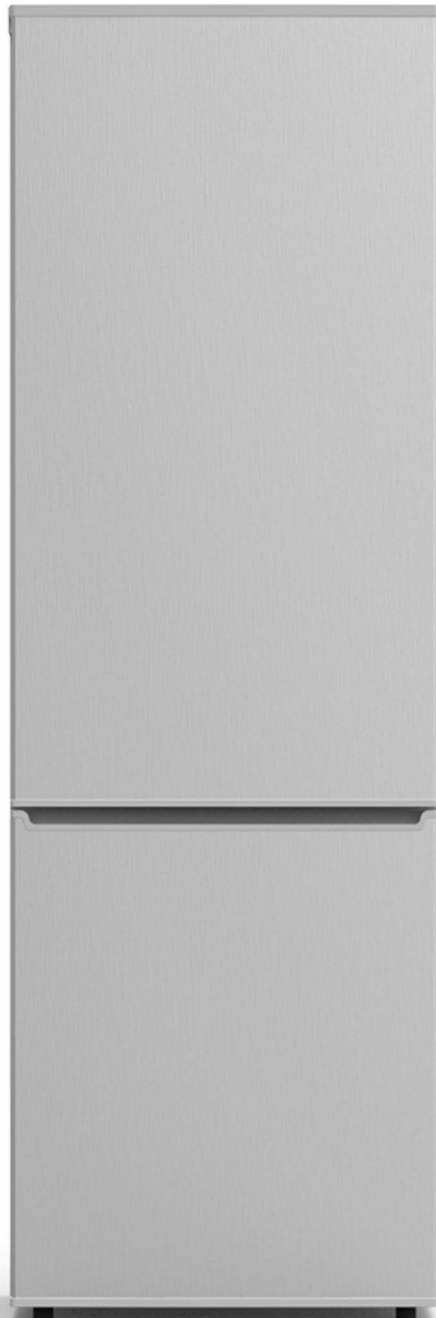
Voltage Input	12/24 VDC Automatic Detection
Available Capacity	5.7 Cubic Feet Refrigerator / 1.7 Cubic Feet Freezer
Operating Temperatures	0°C to 10°C / 32°F to 50°F Refrigerator -15°C to -22°C / -5°F to -7.6°F Freezer
Power Input (W)	73-105
Refrigerant R-134a	155g / 0.34lbs
Net Weight	43kg / 94.6lbs
Exterior Dimension	55cm x 60cm x 142cm / 21.7" x 23.6" x 56"

Energy Consumption Guide (Based on 24 hour time period)

Room(Below)/Operation	(Refrigerator)2°C/35°F	(Freezer)-23°C/-10°F	(Total WHR/AH)
21°C/70°F	361 WHR 28.8AH	209 WHR 16.7AH	570 WHR 45.5AH
32°C/90°F	450 WHR 36.07AH	261 WHR 20.8AH	712 WHR 57AH

Voltray DC Refrigerator

C4P11.1SRVR 11.1 CU.FT.



Product Specifications

Voltage Input	12/24 VDC Automatic Detection
Available Capacity	7.7 Cubic Feet Refrigerator / 3.4 Cubic Feet Freezer
Operating Temperatures	0°C to 10°C / 32°F to 50°F Refrigerator -15°C to -22°C / 5°F to -7.6°F Freezer
Power Input (W)	115-145
Refrigerant R-134a	165g / 0.36lbs
Net Weight	66kg / 145lbs
Exterior Dimension	60cm x 56cm x 185cm / 23" x 22" x 72.8"

Energy Consumption Guide (Based on 24 hour time period)

Room(Below)/Operation	(Refrigerator)2°C/35°F	(Freezer)-23°C/-10°F	(Total WHR/AH)
21°C/70°F	455 WHR 36.4AH	234 WHR 18.72AH	689WHR 55.12AH
32°C/90°F	469 WHR 45.52AH	292.5 WHR 23.5AH	861 WHR 68.9AH

SunStar DC Chest Freezer

C4P9CF 9 CU.FT.



Product Specifications

Voltage Input	12/24 VDC Automatic Detection
Available Capacity	9 Cubic Feet
Operating Temperatures	-15°C to -22°C / 5°F to -7.6°F
Power Input (W)	40 - 100
Refrigerant R-134a	180g / 0.396lbs
Net Weight	60kg / 132lbs
Exterior Dimension	110cm x 80cm x 83cm / 43.7" x 31.6" x 32.7"

Energy Consumption Guide (Based on 24 hour time period)

Room(Below)/Operation	0°C/32°F	-13°C/8°F	-18°C/0°F
21°C/70°F	216 WHR 16.5AH	300 WHR 24AH	374 WHR 28AH
32°C/90°F	272 WHR 20.5AH	376 WHR 28AH	491 WHR 38AH

SunStar DC Chest Freezer

C4P14CF 14 CU.FT.



Product Specifications

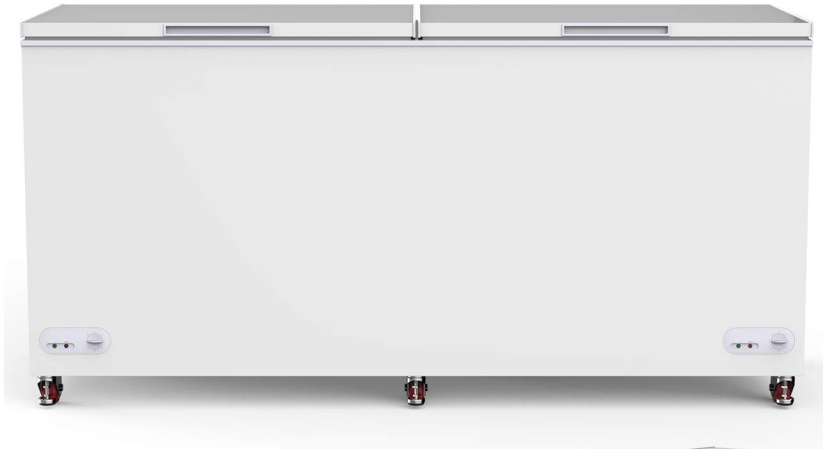
Voltage Input	12/24 VDC Automatic Detection
Available Capacity	14 Cubic Feet
Operating Temperatures	-15°C to -22°C / 5°F to -7.6°F
Power Input (W)	95-150
Refrigerant R-134a	190g / 0.42lbs
Net Weight	85kg / 187.4lbs
Exterior Dimension	136cm x 80.6cm x 96.6cm / 53.5" x 31.7" x 38"

Energy Consumption Guide (Based on 24 hour time period)

Room(Below)/Operation	0°C/32°F	-13°C/8°F	-18°C/0°F
21°C/70°F	306 WHR 25.5AH	444 WHR 37AH	522 WHR 43.5AH
32°C/90°F	384 WHR 32AH	522 WHR 43.5AH	708 WHR 59AH

SunStar DC Chest Freezer

C4P21SF 21 CU.FT.



Product Specifications

Voltage Input	12/24 VDC Automatic Detection
Available Capacity	21 Cubic Feet
Operating Temperatures	-15°C to -22°C / 5°F to -7.6°F
Power Input (W)	120 (60x2)
Refrigerant R-134a	300g (2x150g) / 0.66lbs (2x0.33lbs)
Net Weight	135kg / 297.6lbs
Exterior Dimension	210.5cm x 80.6cm x 95.6cm / 82.9" x 31.7" x 38"

Power Consumption (kwh/24hrs)
1.6kwh (0.8x2)

Solar DC Appliance Kit

Kit - A & Kit - B



Kit 1 - A



- 1 - Solar Appliance
- 2 - 100w Solar Panels
- 1 - 15 amp Charge Controllers
- 2 - US L16 6v 420ahr Batteries
- 1 - 8' 2awg Battery Cable

- 1 - 45" 10/2 Jacketed All Weather Wire
- 1 - Small Baby Midnight Breaker Box
- 3 - Dinrail Midnite Breakers
- 8 - L Mounts for Solar Mounting
- 1 - Prewire and Assembly Time

Kit 1 - B



- 1 - Solar Appliance
- 1 - 100w Solar Panels
- 1 - 15 amp Charge Controllers
- 2 - US Golf Cart 6v 232ahr Batteries
- 1 - 8' 2awg Battery Cable

- 1 - 45" 10/2 Jacketed All Weather Wire
- 1 - Small Baby Midnight Breaker Box
- 3 - Dinrail Midnite Breakers
- 4 - L Mounts for Solar Mounting
- 1 - Prewire and Assembly Time

Solar DC Appliance Kit

Kit - A & Kit - B



Kit 2- A



- 1 - Solar Appliance
- 2 - 185w Solar Panels
- 1 - 30 amp Charge Controllers
- 4 - US Golf Cart 6v 232ahr Batteries
- 3 - 8' 2awg Battery Cable

- 1 - 45" 10/2 Jacketed All Weather Wire
- 1 - Small Baby Midnight Breaker Box
- 3 - Dinrail Midnite Breakers
- 8 - L Mounts for Solar Mounting
- 1 - Prewire and Assembly Time

Kit 2 - B



- 1 - Solar Appliance
- 1 - 200w Solar Panels
- 1 - 15 amp Charge Controllers
- 2 - US L16t 6v 420ahr Batteries
- 1 - 8' 2awg Battery Cable

- 1 - 45" 10/2 Jacketed All Weather Wire
- 1 - Small Baby Midnight Breaker Box
- 3 - Dinrail Midnite Breakers
- 4 - L Mounts for Solar Mounting
- 1 - Prewire and Assembly Time

C4P Specialty DC Compressor

C4P20DC - C4P65DC



The C4P Specialty DC Compressor series is an efficient and unique product aimed to leverage quality and value. These are high performance marine duty compressors made to operate in a variety of environments. The C4P Speciality DC Compressors become the only choice when our partners look for the most reliable quality and toughest enduring products.

Compressor:	C4P20DC	C4P25DC	C4P35DC	C4P65DC
Displacement (cm ³):	2.0	2.5	3.5	6.5
Operating Voltage (VDC):	10.9 - 17 22.7-31.5	10.9 - 17 22.7-31.5	10.9 - 17 22.7-31.5	10.9 - 17 22.7-31.5
Cooling:	Static/Fan	Static/Fan	Static/Fan	Static/Fan
Weight (kg):	4.3	4.3	4.5	5.8
Weight of controller (kg):	0.4	0.4	0.4	0.4
Motor Type:	BLDCM	BLDCM	BLDCM	BLDCM
Refrigerant:	R134a	R134a	R134a	R134a
Power Supply (VDC):	12/24	12/24	12/24	12/24

Voltray Portable Fridge-Freezer

C4P60COVR - C4P28COVR



The Voltray line of Portable AC/DC Fridge-Freezers is a unique and one of a kind food storage system. Our compressor driven chest type fridge-freezers are ideal for mobile applications. They are the perfect companion to any extended trip where refrigeration becomes essential to, otherwise, a perfect outing.

Ideal for :

- Camping trips
- Use in a Recreational Vehicle (RV)
- On a Boat
- Shopping for groceries
- On long or extended trips

Features :

- The industry's only removable bi-directional lid
- Digital temperature control dial
- AC/DC power input
- Automatic 12V/24V switch
- Automatic low voltage shutoff
- Bottom facing drainage spout for defrosting

Voltray Portable Fridge-Freezer

C4P60COVR - C4P28COVR



Item No.	C4P28COVR	C4P35COVR	
Connection voltage:	DC 12/24V	DC 12/24V	
Max. Power consumption:	12v~3.2A/24v~1.6A	12v~3.8A/24v~1.9A	
Cooling capacity:	-22°C to +10°C	-22°C to +10°C	
Category:	1	1	
Energy efficiency class:	A++	A++	
Gross volume:	28L/29.6 Quarts	35L/37 Quarts	
Climate class:	N, T	N, T	
Ambient temperature:	+16°C to +43°C	+16°C to +43°C	
Noise emission:	43 dB(A)	43 dB(A)	
Dimensions(LxWxH) in cm:	55.7x37.4x36.7	55.7x37.4x40.7	
Carton Dimensions(LxWxH) in cm:	62.3x43.3x44.5	62.3x43.3x48.5	
New Weight:	12.0kg	13.0kg	
Gross Weight:	14.0kg	15.0kg	
Item No.	C4P40COVR	C4P50COVR	C4P60COVR
Connection voltage:	DC 12/24V	DC 12/24V	DC 12/24V
Max. Power consumption:	12v~4.3A/24v~2.1A	12v~5A/24v~2.5A	12v~5.25A/24v~2.6A
Cooling capacity:	-22°C to +10°C	-22°C to +10°C	-22°C to +10°C
Category:	1	1	1
Energy efficiency class:	A++	A++	A++
Gross volume:	40L/42.3 Quarts	50L/52.8 Quarts	60L/63.4 Quarts
Climate class:	N, T	N, T	N, T
Ambient temperature:	+16°C to +43°C	+16°C to +43°C	+16°C to +43°C
Noise emission:	43 dB(A)	43 dB(A)	43 dB(A)
Dimensions(LxWxH) in cm:	71.38x44.9x42.6	71.4x45.24x46.85	71.4x45.34x52.35
Carton Dimensions(LxWxH) in cm:	72.0x48.2x48.0	72.0x48.2x52.2	72.0x45.34x52.35
New Weight:	18.5kg	19.5kg	21.5kg
Gross Weight:	20.0kg	21.0kg	23.0kg

MSRP Price List

Voltray and Sunstar



Voltray DC Solar Refrigerators

6.1 cuft.	\$1899.00
7.4 cuft.	\$1999.00
11.1 cuft.	\$2199.00

SunStar DC Solar Chest Freezer

9 cuft.	\$1799.00
14 cuft.	\$2299.00
21 cuft.	\$3625.00

Kit 1A	-	MSRP
9 cuft.		\$4969.99
6.1 cuft.		\$5106.99
7.4 cuft.		\$5231.99

Kit 2A	-	MSRP
11.1 cuft.		\$6847.99
14 cuft.		\$6924.99

Kit 1B	-	MSRP
9 cuft.		\$4653.99
6.1 cuft.		\$4790.99
7.4 cuft.		\$4915.99

Kit 2B	-	MSRP
11.1 cuft.		\$5438.99
14 cuft.		\$5360.99

Voltray Portable Units

28L	\$549.00
35L	\$589.00
40L	\$669.00
50L	\$739.00
60L	\$799.00

All prices are in USD