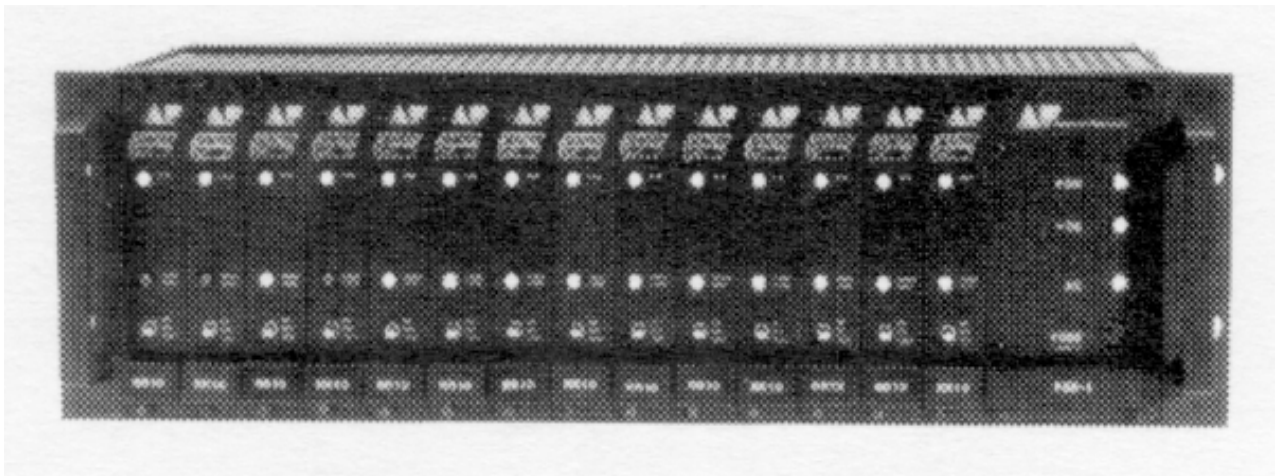
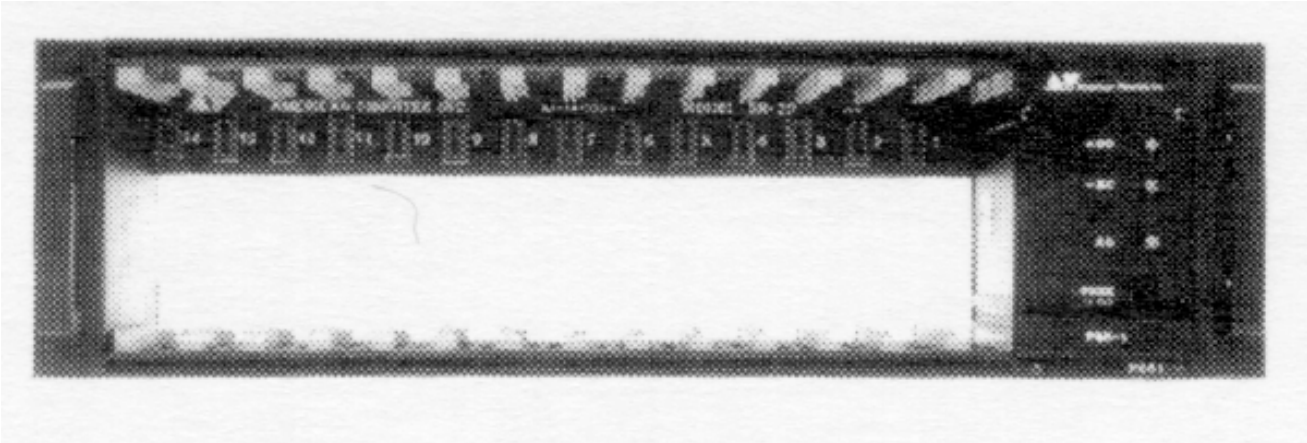




120 Belmont Drive  
Somerset, NJ 08873-1204

***American Fibertek***

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SR-20, SR-20 R,  
PSR-1, PSR-1M, PSR-1S  
Sub-Rack, Power Supply  
Instruction Manual

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<b>Specifications SR-20, SR-20R</b>		
Plug-in Cards	SR-20	14

Plug-in Cards	SR-20R					11
Size						19" x 5 ¼" x 9"
Weight						4 ½ lbs.
<b>Specifications PSR-1, PSR-1M, PSR-1S</b>						
		Min	Typ.	Max		
Line Voltage	115VAC	108	115	128	Volts AC	
Line Voltage	230VAC	207	230	253	Volts AC	
Current	115VAC			0.80	A	
Current	230VAC			0.40	A	
Frequency		47		63	Hz	
Power				100	Watts	
Operating Temperature						0 to 50 °C
Operating Humidity						0 to 90% non Condensing
Weight						10 lbs.

## LIFETIME WARRANTY INFORMATION

American Fibertek, Inc warrants that at the time of delivery the products delivered will be free of defects in materials and workmanship. Defective products will be repaired or replaced at the exclusive option of American Fibertek. A Return Material Authorization (RMA) number is required to send the products back in case of return. All returns must be shipped prepaid. This warranty is void if the products have been tampered with. This warranty shall be construed in accordance with New Jersey law and the courts of New Jersey shall have exclusive jurisdiction over this contract. **EXCEPT FOR THE FOREGOING WARRANTY, THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, EXPRESSED OR IMPLIED, WHICH EXTENDS BEYOND THE WARRANTY SET FORTH IN THIS AGREEMENT.** In any event, American Fibertek will not be responsible or liable for contingent, consequential, or incidental damages. No agreement or understanding, expressed or implied, except as set forth in this warranty, will be binding upon American Fibertek unless in writing, signed by a duly authorized officer of American Fibertek.

## INSTALLATION AND OPERATION INSTRUCTIONS SR-20, SR-20R Sub-rack Frame

## FUNCTIONAL DESCRIPTION

The SR-20 sub-rack is a standard 19" x 5.25" frame designed to accommodate up to fourteen fiber optic plug-in cards along with a PSR series power supply. The SR-20R Redundant Power Supply frame can accommodate up to eleven plug-in cards.

## SYSTEM COMPATIBILITY

Any plug in card with the model number beginning with the letter "R" can be inserted into any of the fourteen application slots on the left-hand side of the SR-20. (Eleven slots for the SR-20R.)

## INSTALLATION

THIS INSTALLATION OF THIS UNIT SHOULD BE MADE BY A QUALIFIED SERVICE PERSON(S) AND MUST CONFORM TO ALL LOCAL CODES.

The SR-20 may be mounted, using standard hardware, in an upright position, with the backplane upward, inside the cabinet (see diagram below). It is important, as with any electronic equipment, to provide sufficient airflow to prevent over heating in the cabinet. At least 1 7/8" (1RU) of space should be allowed above and below the SR-20 to provide air flow. If more than one SR- 20 is installed, forced airflow may be necessary depending upon the number of plug-in cards used in the over-all installation. It is necessary to add a 1RU fan unit at the top of every three SR-20 sub-racks with 1U spacing between them.

All applications cards are inserted in a similar manner. Any card may be used in any slot. Insert the card all the way until the edge fingers meet the internal bus connector and the front panel is even with the front of the sub-rack. Then secure the ¼ turn fasteners by pushing with a small screwdriver, turning the screw 90 degrees clockwise and releasing pressure.

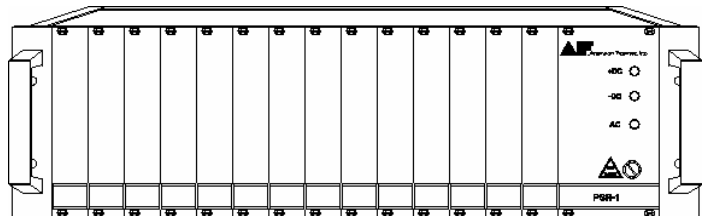
## POWER SUPPLY

The far right hand position of the SR-20 is only compatible with a PSR series plug in power supply. Please refer to PSR-1 or PSR-2 instructions. The SR-20R allows for two power supplies operating as automatic takeover redundant supply configuration. A PSR-1 Master and PSR-1 Slave or two PSR-1H power supplies are required for this feature. For details, see the PSR-1 instructions or consult the factory.

## SERVICE INFORMATION

Please refer all service inquiries to:

AMERICAN FIBERTEK, INC  
120 Belmont Drive  
Somerset, NJ 08873  
Phone (732) 302-0660  
FAX (732) 302-0667  
E-mail [techinfo@americanfibertek.com](mailto:techinfo@americanfibertek.com)



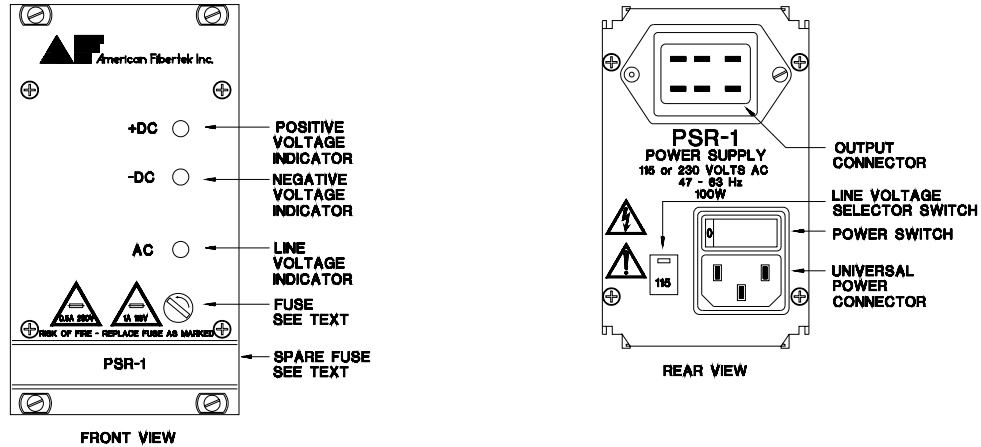
## INSTALLATION AND OPERATION INSTRUCTIONS PSR-1, PSR-1M, PSR-1S Plug-in Power Supplies

## SYSTEM COMPATIBILITY

Up to fourteen plug in cards can be powered by the PSR-1.

## LINE VOLTAGE

The input line voltage should be a nominal 115 VAC or 230 VAC, 47 - 63 Hz power source, properly grounded and conforming to all local codes. A universal power connector is provided on the rear of the unit to facilitate connection to the power mains.



## INSTALLATION

This installation should be made by a qualified service person. All wiring methods should be in accordance with the National Electric Code, ANSI/NFPA 70. Before inserting the PSR-1 the line voltage selector switch must be set to the proper line setting. A small screwdriver may be used. The unit slides in and is locked into place by four ¼ turn fasteners. The line cord is then plugged in from the rear. Be sure that the power switch is in the off (O) position before connecting the power source.

## OPTIONS

Optional features include redundant supplies with automatic take-over. An SR-20R is required for this feature. Also two supplies (master and slave) are required. The Master supply powers the system as the Slave monitors the power bus. In the event of an over voltage or under voltage condition, the Slave supply will disconnect the Master from the bus.

## CONTROLS AND INDICATORS

Front panel LEDs indicate positive (+DC) and negative (-DC) voltages and the AC line (AC) being present.

Also available on the front panel, is the line fuse. A 5 X 20 millimeter fast blow type should be used. There is a spare fuse behind the front handle. It is accessible by removing the supply and sliding the plate to either side. Insert the handle cover back to the original position and replace the unit. Qualified personnel should only attempt fuse replacement.

**CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE FUSE. For 115VAC operation a 1A fuse is required. For 230VAC operation a 0.5A fuse rating is required.**

The ON/OFF switch is located on the rear of the unit. Be sure the switch is in the off (O) position before connecting to the power source. Please note that this supply is intended to be used with, and only when inserted into, an SR-20 or SR-20R sub-rack frame. Even though the output connector is recessed, there is potential for high current at the output.

The sub-rack SR-20 is supplied with a three-conductor power cord. The Ground conductor is directly connected to the chassis. See safety instructions.

## REDUNDANT OPERATION

A Master supply will not function without a Slave supply present. The Master and Slave supplies may be inserted into either of the two power supply slots provided by the SR-20R (See INSTALLATION section). Due to the space required for the second PSR, the SR-20R will only accommodate eleven plug-in applications cards.

To turn the system "ON" it is necessary to turn the master supply on first. The slave supply is then powered and will monitor the master supply output.

Linear voltage sensing in the slave supply monitors both polarities of the master output. In the event of master supply failure, the slave supply will take over, disconnecting the master supply from the distribution bus in the rear of the sub rack frame.

When the slave supply takes over its LED indicators will illuminate. The LED indicators on the master supply may or may not have its LEDs on.

Upon replacing a failed master or to reset the system the following steps are to be taken:

1. Be sure both master and slave are properly inserted into the sub rack frame.
2. Apply power to the master supply.
3. Turn slave "OFF" for 5 (five) seconds.
4. Apply power to the slave supply. (The LEDs should not illuminate.)

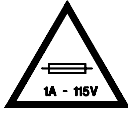
## SERVICE INFORMATION

In the event of required service to this unit; please direct all inquiries to:

American Fibertek, Inc.  
120 Belmont Drive  
Somerset, NJ 08873

Phone: (732) 302-0660  
FAX (732) 302-0667  
E-mail: [techinfo@americanfibertek.com](mailto:techinfo@americanfibertek.com)

## GRAPHICAL SYMBOLS



Replace with same type fuse only.  
1A 115V Fast Blow.  
0.5A 230V Fast Blow.



DO NOT open case.  
No user servicable parts inside.



DO NOT open case.  
Risk of electric shock.

