WestwoodOne

WEGENER i6420 DIGITAL AUDIO SERVER QUICKSTART INSTALLATION INSTRUCTIONS

This satellite receiver has been provided for the reception of MRN, WestwoodOne or Compass Sports. Once installed, please contact network support for activation and programming.

INTRODUCTION

This Quick Start guide provides direction on how to quickly set up and start operating the i6420 professional media server in order to receive WestwoodOne programming. For complete information please go to:

www.dg-tech.net

Please expedite the installation of this receiver as it must be installed and online no later than four weeks from the original ship date.

To activate this receiver, please contact WestwoodOne Network Operations Support between 8AM and 10PM ET, Monday through Friday at **(888) 435-7450**; option 1, then option 2. Our operators are available to assist with:

- Installation Questions
- Authorization of the receiver after installation.

INSTALLATION INSTRUCTIONS

1) This receiver should be installed in a location that maintains a consistent temperature of 65-75 degrees with ample ventilation to the front, sides and rear of the receiver.
2) Connect your RG-6 cable from your satellite dish to the RF input on the back of the receiver. If more than one receiver is to be connected, a professional grade splitter with a DC power pass port is recommended.
   a. Note: In a multi-receiver installation, it is recommended to use a professional power inserter and not to power your LNB from the Wegener receiver.
3) Connect your stations broadband network (internet) to the receiver at the LAN port if your network is behind a firewall (common) or the WAN port if outside a firewall (uncommon).
   a. Note: A reliable network connection is **required** to maintain a network "return path" communication with our network in order to ensure proper functionality of the receiver. This is an outbound communication only and must be maintained at all times. Because of this requirement, we are unable to authorize receivers that are not connected with this "return path". If your station does not have public internet access, please contact Network Operations for assistance.
4) Connect the in-house AM or FM signal antenna or an independent AM/FM antenna to the port(s) corresponding with the programs identified on page 1.
   a. Note: This is a **required** connection and must be maintained at all times.
5) Connect your DB9 audio and DB37 relay connectors to the ports corresponding with the programs identified on page 1.
6) Plug the receiver into a reliable, stable and properly grounded power source.
   a. Note: Wegener and WestwoodOne strongly recommend that you use an Uninterruptible Power Supply (UPS) with power line filtering to prevent damage to the unit during electrical storms or power surges. Please be aware that electrical damage caused by lightning or power surges is not covered under the warranty. RF surge filtering is also strongly recommended for this reason.
7) Verify your dish alignment and signal strength by looking at the EbNo and RF levels. EbNo must be at least 9.0 and RF between 20-60 in order to authorize the receiver to ensure reliable operation.
   a. Note: A distribution amplifier is not recommended for main cable runs less than 250 ft. If amplification is necessary to attain minimum specs, a line amp ahead of the splitter yields more favorable results.
   b. Note: Line attenuators to drop RF to within maximum RF levels should be used sparingly to avoid unnecessary noise injection.
8) Once all connections are made, and levels meet minimum specifications, please contact WestwoodOne Network Operations for authorization.

Sports Relay
Pinouts

Pin	Function	Pin	Function	Relay Functions
Motor Racing Network Relays (Use the relay ouput assigned to primary MRN channel 109)				
1	Relay 1	20		Local Stopset Start (Primary Ch. 109)
2	Relay 2	21	Relay Commons	Local Stopset Start (Secondary Ch. 110)
3	Relay 3	22		Legal ID (Primary Ch. 109)
4	Relay 4	23		Legal ID (Secondary Ch. 110)
5	Ground	24	Ground	Not Used
6	Relay 5	25		Not Used
7	Relay 6	26		Not Used
8	Relay 7	27	All Relay	Show Start (Primary Ch. 109)
9	Relay 8	28	Commons are	Show Start (Secondary Ch. 110)
10	Ground	29	connected	Not Used
11	Relay 9	30	(ganged)	Show End (Primary Ch. 109)
12	Relay 10	31		Show End (Secondary Ch. 110)
13	Relay 11	32		Rain Delay Breakaway (Primary Ch. 109)
14	Relay 12	33	Ground	Rain Delay Breakaway (Secondary Ch. 110)
15	Ground	34		Not Used
16	Relay 13	35	Relay Commons	Rain Delay Rejoin (Primary Ch. 109)
17	Relay 14	36		Rain Delay Rejoin (Secondary Ch. 110)
18	Relay 15	37		Not Used
19	Relay 16			Not Used

Note: All relay commons are ganged inside the receiver. Please contact WestwoodOne support if you require isolated commons.

| Pin	Function	Pin	Function	Relay Functions
WWO & Compass Sports Relays				
1	Relay 1	20		Local Stopset Start
2	Relay 2	21	Relay Commons	Liner / ID
3	Relay 3	22		End of Game
4	Relay 4	23		Not Used
5	Ground	24	Ground	Not Used
6	Relay 5	25		Not Used
7	Relay 6	26		Not Used
8	Relay 7	27	All Relay	Not Used
9	Relay 8	28	Commons are	Not Used
10	Ground	29	connected	Ground
11	Relay 9	30	(ganged)	Not Used
12	Relay 10	31		Not Used
13	Relay 11	32		Not Used
14	Relay 12	33	Ground	Not Used
15	Ground	34		Not Used
16	Relay 13	35	Relay Commons	Not Used
17	Relay 14	36		Not Used
18	Relay 15	37		Not Used
19	Relay 16			Not Used

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ShowDirector - Wegener Programming Quickstart

What it is: A web-based solution to the Wegener receiver that provides access to your complete programming schedule and the ability to request new programming or air time changes to existing programming.
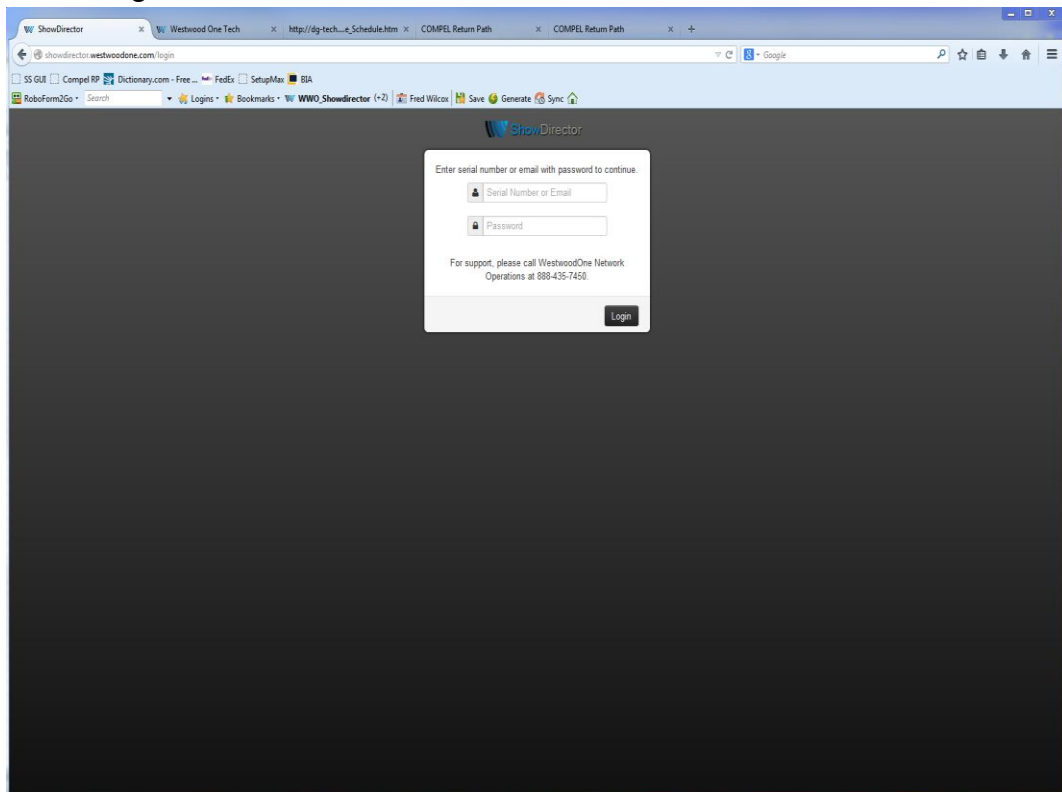
How to use:

1) Browse to http://showdirector.westwoodone.com/login
2) Enter your login credentials:
   a. Login: Serial # of Wegener receiver (located in and just below display panel)
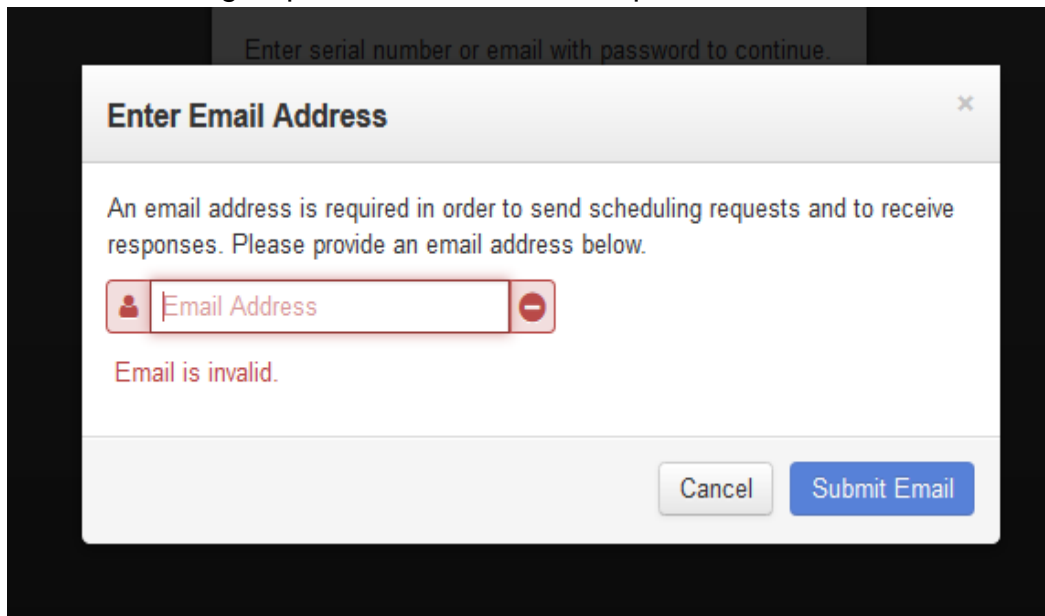   b. Password: Call letters assigned to the receiver (located in the display panel)
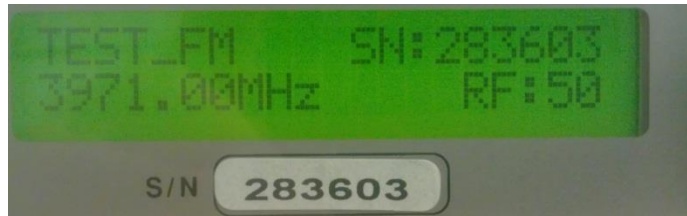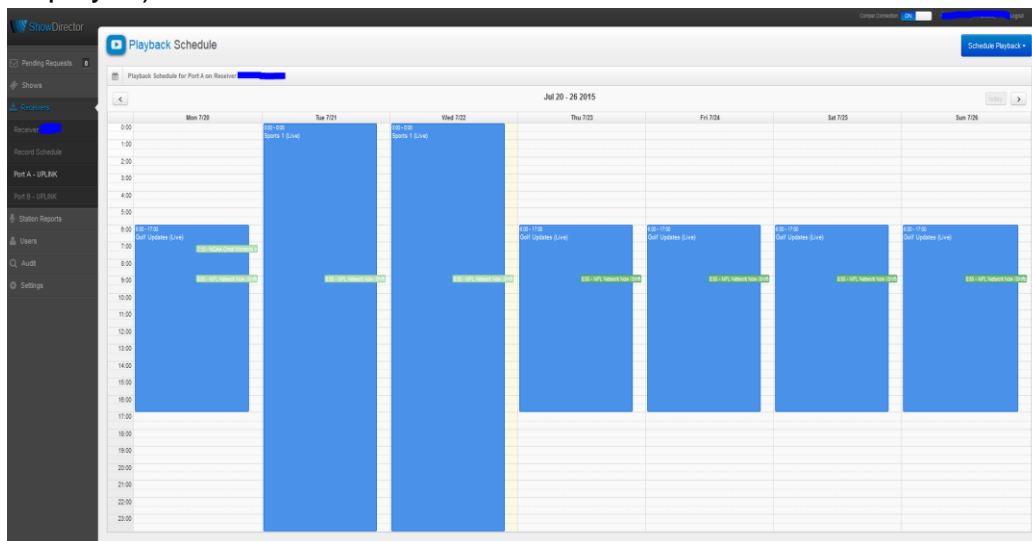

Sample Display Panel

3) Click "Login"

4) If this is your first time logging in, enter a valid email address from which to send scheduling requests and to receive responses.


5) The main page shows the playback schedule for all programming currently active for each active port (inactive ports will not be displayed).


    a. A solid blue indicates an approved live playback while a solid green indicates an approved shifted playback.

    b. A live or shifted playback that is pending approval will display with lighter shaded stripes.

6) To request a new playback, select the "Schedule Playback" drop down menu.
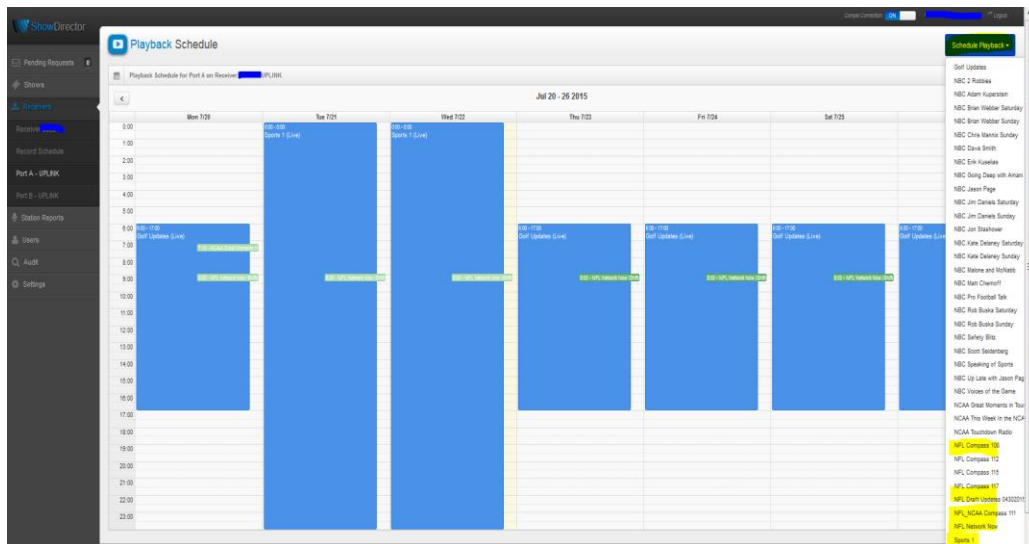
7) Select the show desired to schedule the playback time (only shows with an active contract will be displayed and **playbacks are always scheduled and displayed in Eastern time**).
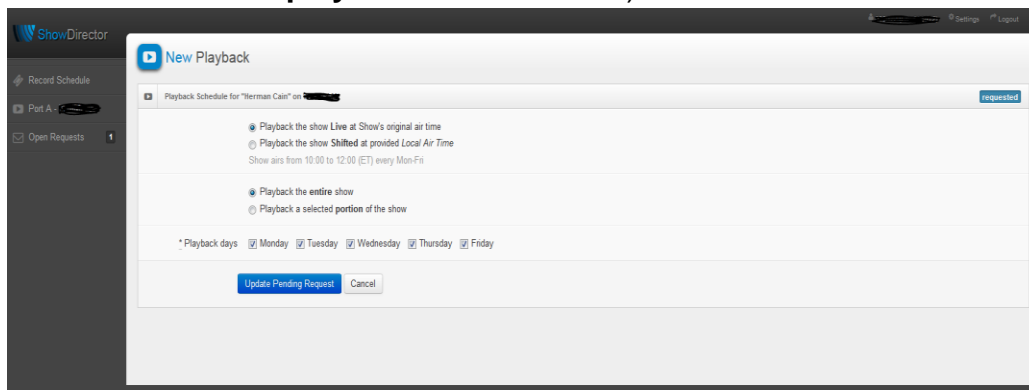
   a. The first section is a choice to playback the live feed or select a time for shifted playback.
   b. The second section is a choice to playback the full show or just a portion of the show.
   c. The third section are the days of playback desired (for weekday feeds you can select a Saturday playback by selecting "Playback the show **Shifted**..."

8) To request a change to an existing playback, left click the desired scheduled playback, select Edit Schedule and adjust the playback times

accordingly.
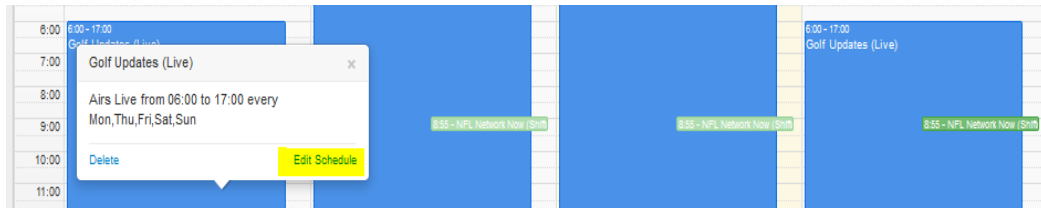
9) If you need to update your email address, simply select the "Settings" link in the upper right corner and re-submit the new address.
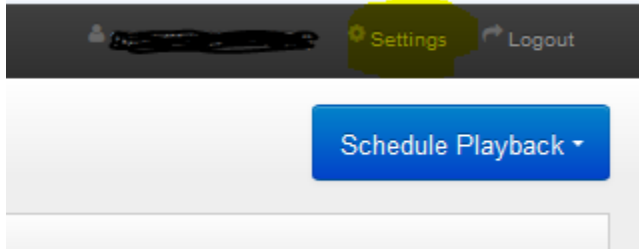
10) If you are missing expected shows in the drop down menu or the port you are trying to program is not active or if you just have general questions, please feel free to contact Network Operations at 888-435-7450, option 1 then option 2 (no need to wait for the prompts).

Common Front Panel Operations

To setup IP address:
1) Use the arrow keys to find Unit Setup, press ENT
2) Find IP Setup, press ENT
3) LAN IP or WAN IP Settings (depending on which the CAT5 is in), press ENT
4) Press ENT to select STATIC or DHCP, press ENT to lock in
5) Use the arrow keys to view IP, netmask & gateway address
  a) To change address, press ENT to bring cursor up
  b) Use the arrow keys to edit digits, press ENT when done to lock in

For technical assistance call: (888) 435-7450, option 1 then option 2

To change Carrier Frequency manually:
If access to this field is denied Contact Network Operations Support at 888-435-7450 option 1, then option 2, further assistance.
1) Use the arrow keys to find Unit Setup, press ENT
2) Find Transport In Setup, press ENT
3) Find Current Channel, press ENT
4) Find Download Frequency, press ENT
  a) To change frequency, press ENT to bring cursor up
  b) Use arrows to edit digits, press ENT when done to lock in.

12 Foot Solid Dish

Requred Broadband Internet

WestwoodOne

Receiver Analog Output #1

Pin	Function	Pin	Function
1	Left Out (+)	6	Left Out (-)
2	Audio Ground	7	Audio Ground
3	n/c	8	n/c
4	Audio Ground	9	Right Out
5	Right Out (+)		

Decoder #1 Relay Outputs

Pin	Function	Pin	Function
1	Relay 1	20	
2	Relay 2	21	Relay
3	Relay 3	22	Common
4	Relay 4	23	
5	Ground	24	Ground
6	Relay 5	25	
7	Relay 6	26	
8	Relay 7	27	All Relay
9	Relay 8	28	Commons
10	Ground	29	are
11	Relay 9	30	Connected
12	Relay 10	31	
13	Relay 11	32	
14	Relay 12	33	Ground
15	Ground	34	Relay
16	Relay 13	35	Common
17	Relay 14	36	
18	Relay 15	37	
19	Relay 16		

Note: All Relay commons are ganged inside the receiver. Conntact JRN if you need isolated commons for each relay.

GPIO Input Connector

Pin	Function	Pin	Function
1	GPIO1 In -	9	GPIO1 In +
2	GPIO2 In -	10	GPIO2 In +
3	GPIO3 In -	11	GPIO3 In +
4	GPIO4 In -	12	GPIO4 In +
5	GPIO5 In -	13	GPIO5 In +
6	GPIO6 In -	14	GPIO6 In +
7	GPIO7 In -	15	GPIO7 In +
8	Ground		

AP News Output (if Affiliated)

Pin	Function	Pin	Function
1	AP 2 Min Out (+)	6	AP 2 Min Out (-)
2	Audio Ground	7	Audio Ground
3	n/c	8	n/c
4	Audio Ground	9	AP 3 Min Out (-)
5	AP 3 Min Out (+)		

AM/FM Antenna for each Audio Port

Note:
Dial up networking no longer supported

RBDS Data 1

2	RxD Data Out +
5	Ground

115 / 230 VAC
1.8 / 1.0 A
50/60 Hz

RF IN — WAN — AUX AUDIO — PIO INPUT — AUDIO 1 — 1 — CUE RELAYS 1 — RBDS 1 — MODEM

ASI IN — LAN — SERIAL M&C — ALARM — AUDIO 2 — AM/FM IN 2 — CUE RELAYS 2 — RBDS 2 — AES3 AUDIO — USB

Receiver Analog Output #2

Pin	Function	Pin	Function
1	Left Out (+)	6	Left Out (-)
2	Audio Ground	7	Audio Ground
3	n/c	8	n/c
4	Audio Ground	9	Right Out
5	Right Out (+)		

Decoder #2 Relay Outputs

Pin	Function	Pin	Function
1	Relay 1	20	
2	Relay 2	21	Relay
3	Relay 3	22	Common
4	Relay 4	23	
5	Ground	24	Ground
6	Relay 5	25	
7	Relay 6	26	
8	Relay 7	27	All Relay
9	Relay 8	28	Commons
10	Ground	29	are
11	Relay 9	30	Connected
12	Relay 10	31	
13	Relay 11	32	
14	Relay 12	33	Ground
15	Ground	34	Relay
16	Relay 13	35	Common
17	Relay 14	36	
18	Relay 15	37	
19	Relay 16		

Note: All Relay commons are ganged inside the receiver. Conntact JRN if you need isolated commons for each relay.

RBDS Data 2

2	RxD Data Out +
5	Ground

AES Digital Audio Outputs

Pin	Function	Pin	Function
1	Audio Port 1 +	6	Audio Port 1 -
2	Audio Port 2 +	7	Audio Port 2 -
3	n/c	8	n/c
4	ground	9	Right Out
5	ground		

Note: AES is only available for Audio 1 and 2 (Not AP)

WestwoodOne Sports Relays

| Pin	Function	Relay Functions	Pin	Function
1	Relay 1	Local Stopset Start	20	
2	Relay 2	Liner / ID	21	Relay Commons
3	Relay 3	End of Game	22	
4	Relay 4	**Future Use	23	
5	Ground		24	Ground
6	Relay 5	**Future Use	25	
7	Relay 6	**Future Use	26	
8	Relay 7	**Future Use	27	
9	Relay 8	**Future Use	28	All Relay Commons are connected (ganged)
10	Ground	Ground	29	
11	Relay 9	**Future Use	30	
12	Relay 10	**Future Use	31	
13	Relay 11	**Future Use	32	
14	Relay 12	**Future Use	33	Ground
15	Ground	**Future Use	34	
16	Relay 13	**Future Use	35	Relay Commons
17	Relay 14	**Future Use	36	
18	Relay 15	**Future Use	37	
19	Relay 16	**Future Use		

Note: All relay commons are ganged inside the receiver. Please contact WestwoodOne support if you require isolated commons.

RS232 Monitor and Control

Pin	Function	Pin	Function
1	DCD	6	DSR
2	RXD	7	RTS
3	TXD	8	CTS
4	DTR	9	NC
5	GND		

Alarm

13	NO Alarm Out
14	NC Alarm Out
15	Alarm Common

Station LAN

Version 2.0 01/31/14

Safety Summary

The iPump 6420 is designed for safe use with few special precautions required of the user. The following items are basic precautions to use when installing and working with the iPump 6420: Do not open the iPump 6420's chassis cover as this will void the limited product warranty.

AVIS: RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR		
⚡	**CAUTION** RISK OF ELECTRIC SHOCK DO NOT OPEN	⚠
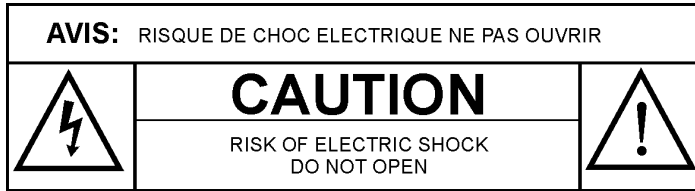
Location and Mounting

The iPump i6420 should be mounted in a standard 19-inch equipment rack. After mounting, maintain a clean, dry environment for the unit.

Precautions
WARNING
This is a Class A product. In a domestic environment this product may cause radio interference for which the user may need to take mitigating action.

DANGER
To avoid damage to this and other equipment, or personal injury, the following items should be strictly observed.

Elevated Operating Ambient
When equipment is installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than the room ambient temperature. Therefore, consideration should be given to the ambient air temperature within the rack, and not just inside the room, when deciding if the maximum recommended ambient operating temperature (TMRA) is being met.

Reduced Air Flow
Equipment should be installed such that airflow required for safe operation of the equipment is not compromised. Units may be stacked with other rack-mount equipment without gaps. However, to ensure adequate air flow, leave rear and front vents unobstructed. Providing1/2 inch clearance for the right side air vents results in a longer product life for the iPump 6420.

Mechanical Loading
Mounting of the equipment in a rack should be such that a hazardous condition is not produced by uneven loading. This unit is not very heavy, but total rack loading must be considered. Also, do not rest any unsupported equipment on the iPump 6420.

Circuit Overloading
Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of circuits could have on over-current protection and supply wiring. Ensure that the total rack or breaker power consumption does not exceed the limits of the ac branch circuit. Appropriate consideration of equipment ratings should be used when addressing this concern.

Reliable Earthing
Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (use of power strips, chassis ground lugs, etc.).

Lithium Battery
Proper disposal and replacement of the motherboard's lithium battery is necessary. Replacing the battery with an incorrect type presents the risk of explosion. Dispose of used batteries according to the package instructions.

Telecommunication Line Cord
To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.

Rack Installation Procedure
The iPump i6420 is sized at 1 RU and will fit an EIA-standard, 19-inch-wide equipment rack.
1)   Install angle brackets or cross-supports capable of supporting both the unit and its connecting cables. Screw or bolt the supports securely to the equipment rack.
2)   Place the iPump 6420 on its supports and use four anchor screws or bolts and nuts to secure the unit's front brackets to the rack.

Do not block any of the ventilation or fan opening on the front, side, or rear of the unit. Support arrangements that do not allow adequate air flow or that block the openings on front, side and rear vents may result in overheating and damage to the iPump 6420.

The front brackets must be secured to the rack. If front brackets are left unsecured, the unit may shift forward and fall from the rack during installation or operation. Failure to secure the front brackets may result in personal injury and/or damage to the equipment.

Locate the iPump 6420 and its cables to avoid impacts, spills, and pulling cables and to ensure sufficient air flow. Failure to locate the iPump 6420 in a proper environment may result in damage to the equipment.