WEGENER PROFESSIONAL AUDIO SERVER QUICKSTART INSTALLATION INSTRUCTIONS

This equipment has been provided for the reception of:
WestwoodOne or Satellite Services Programming
Once installed and ready for authorization according to the instructions in this guide, please contact our Network Operations Center between the hours of 9a-6p ET Monday-Friday at:

(888) 435-7450; Press option 1, then 2 or email
noc@westwoodone.com

To avoid potential delays, please expedite the installation of this receiver as it must be installed and online within two weeks from the original ship date.

INTRODUCTION
This quickstart guide provides basic setup direction to start operating the Wegener professional media server and receive programming audio and automation relays. For additional feature functionality and usage, program scheduling instructions, show clocks and other technical help, please see applicable guides posted on our technical site located at:

https://technology.westwoodone.com

This server 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.

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INSTALLATION INSTRUCTIONS

1) Connect your coaxial cable (minimum RG-6) from your satellite dish to the RF input (ANT IN) on the back of the receiver. If more than one receiver is to be connected, a professional grade passive splitter with a DC power-pass output is recommended.
    a. Note: In a multi-receiver installation, it is also recommended to use a professional LNB power inserter and not to power your LNB from a receiver.
2) Connect your station's broadband network (internet) to the receiver using the RJ-45 "LAN" port. A reliable network connection is **required** to maintain a network "return path" communication with our network to ensure proper functionality of the receiver and provide technical support. Per your affiliate agreement, this connection must be maintained at all times.
    a. To ensure full functionalities for all features including IP backup, network ports 53, 123 & 443 are also required. 443 is used as a secure diagnostic access for in-depth troubleshooting.
    b. It is also recommended to use 1.1.1.1 as primary DNS and 8.8.8.8 as secondary.
3) Connect the in-house AM and/or FM signal antenna or an independent AM/FM antenna to AM and/or FM input(s).
    a. Note: This is a **required** connection for all programs represented by WestwoodOne and must be maintained at all times.
4) Connect your DB9 audio, DB37 relay and DB9 GPI (Local 24/7 Only) connectors to the ports corresponding with the program(s) identified on page 1 of this document.
5) Plug the receiver into a reliable, stable and properly grounded power source.
    a. 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.
6) Verify your dish alignment and signal strength by looking at the EbNo and RF levels via the front panel display. EbNo must be at least 10.0 dB and RF between 20-60 to authorize the receiver.
    a. A distribution amplifier is not recommended for main cable runs less than 250 ft. If amplification is necessary to attain minimum specs, an inline amp ahead of a passive splitter yields more favorable results.
    b. Line attenuators to drop RF to within specified RF levels should be used sparingly to avoid unnecessary noise injection and should not be used if using a distribution amplifier. Naturally dropping RF by adding cable and/or removing amplification yields more favorable results.
7) Once all connections are made, and levels meet minimum specifications, please contact WestwoodOne Network Operations for authorization.

Wegener Model i8640

Common Front Panel Operations

To setup IP address:
1) Press L/R arrows to Unit Setup, press ENT
2) Press L/R arrows to IP Setup, press ENT
3) Press ENT for LAN IP Settings
4) Press ENT again to unlock (STATIC or DHCP will flash)
5) Press L/R arrows to select STATIC or DHCP then press ENT to lock
6) Press L/R arrows to view IP, NetMask & Gateway addresses
   a) To change the STATIC IP address, press ENT to show cursor
   b) Press U/D arrows to edit digits
   c) Press L/R arrows for next digit, press ENT when done to lock in

To change Carrier Frequency manually when necessary (rare):
If access to this field is denied Contact Network Operations Support at 888-435-7450 option 1, then option 2, for further assistance.
1) Press L/R arrows to Unit Setup, press ENT
2) Press L/R arrows to Transport In Setup, press ENT
3) Press L/R arrows to Current Channel, press ENT
4) Press L/R arrows to Download Frequency, press ENT
   a) To change Frequency, press ENT to show cursor
   b) Press U/D arrows to edit digits
   c) Press L/R arrows for next digit, press ENT when done to lock in
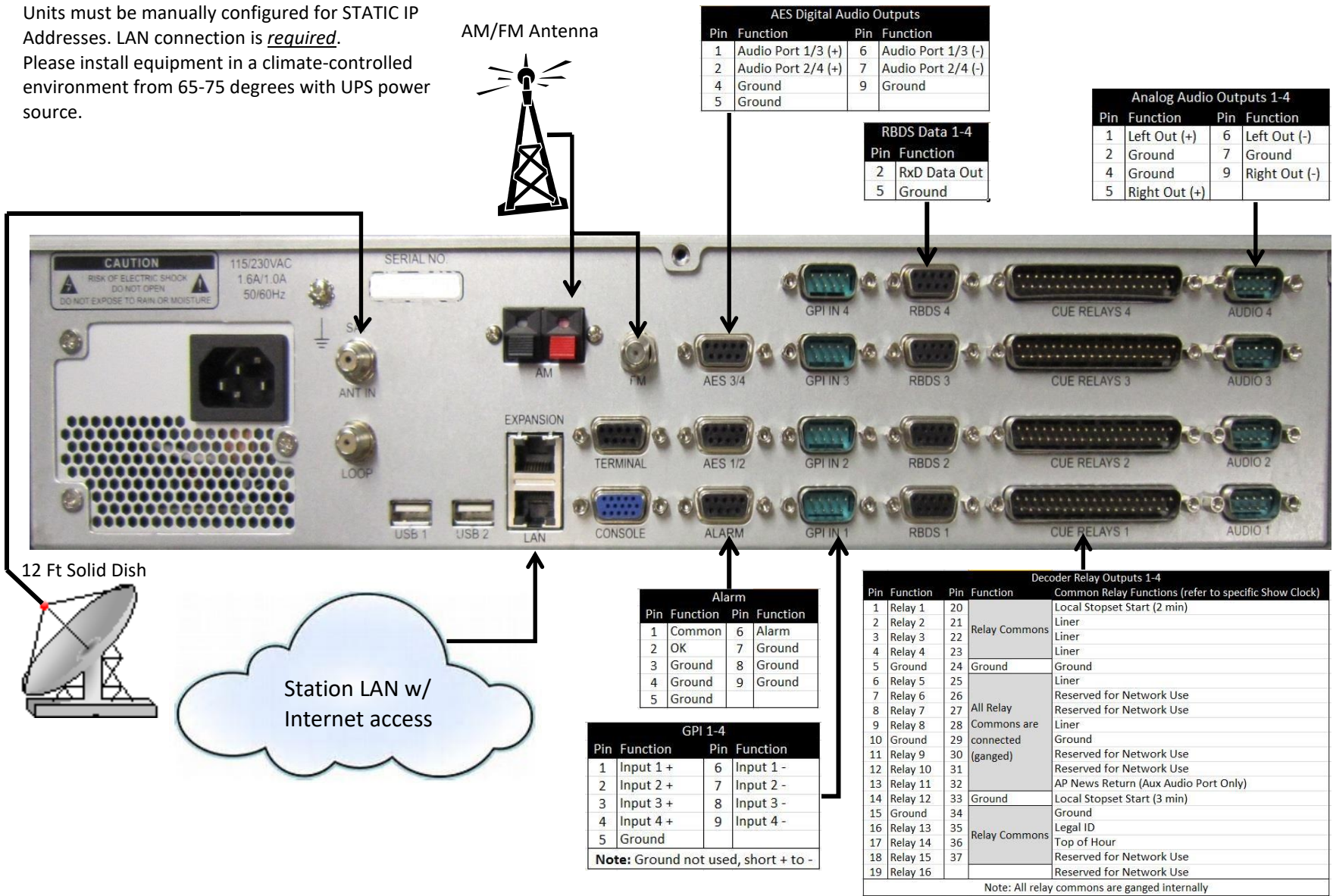
For technical assistance call: (888) 435-7450, option 1 then option 2

WARNING

Removable hard drives are **<u>NOT</u>** hot swappable and damage will occur if removed while the unit is powered up. Please contact our support hotline for directions should service become necessary.
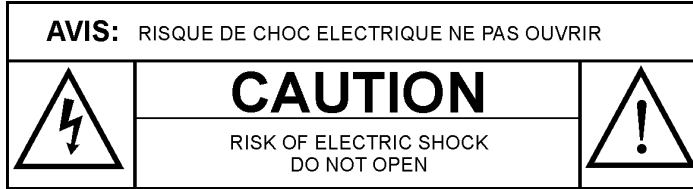
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Notes: Equipment is shipped with network interfaces set for DHCP IP address assignment. Units must be manually configured for STATIC IP Addresses. LAN connection is _required_. Please install equipment in a climate-controlled environment from 65-75 degrees with UPS power source.

AM/FM Antenna

AES Digital Audio Outputs

Pin	Function	Pin	Function
1	Audio Port 1/3 (+)	6	Audio Port 1/3 (-)
2	Audio Port 2/4 (+)	7	Audio Port 2/4 (-)
4	Ground	9	Ground
5	Ground		

RBDS Data 1-4

Pin	Function
2	RxD Data Out
5	Ground

Analog Audio Outputs 1-4

Pin	Function	Pin	Function
1	Left Out (+)	6	Left Out (-)
2	Ground	7	Ground
4	Ground	9	Right Out (-)
5	Right Out (+)		

12 Ft Solid Dish

Station LAN w/ Internet access

Alarm

Pin	Function	Pin	Function
1	Common	6	Alarm
2	OK	7	Ground
3	Ground	8	Ground
4	Ground	9	Ground
5	Ground		

GPI 1-4

Pin	Function	Pin	Function
1	Input 1 +	6	Input 1 -
2	Input 2 +	7	Input 2 -
3	Input 3 +	8	Input 3 -
4	Input 4 +	9	Input 4 -
5	Ground		
Note: Ground not used, short + to -			

Decoder Relay Outputs 1-4

Pin	Function	Pin	Function	Common Relay Functions (refer to specific Show Clock)
1	Relay 1	20		Local Stopset Start (2 min)
2	Relay 2	21	Relay Commons	Liner
3	Relay 3	22		Liner
4	Relay 4	23		Liner
5	Ground	24	Ground	Ground
6	Relay 5	25		Liner
7	Relay 6	26		Reserved for Network Use
8	Relay 7	27	All Relay	Reserved for Network Use
9	Relay 8	28	Commons are	Liner
10	Ground	29	connected	Ground
11	Relay 9	30	(ganged)	Reserved for Network Use
12	Relay 10	31		Reserved for Network Use
13	Relay 11	32		AP News Return (Aux Audio Port Only)
14	Relay 12	33	Ground	Local Stopset Start (3 min)
15	Ground	34		Ground
16	Relay 13	35	Relay Commons	Legal ID
17	Relay 14	36		Top of Hour
18	Relay 15	37		Reserved for Network Use
19	Relay 16			Reserved for Network Use
Note: All relay commons are ganged internally				

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Safety Summary

The iPump i8640 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 i8640: Do not open the iPump i8640's chassis cover as this will void the limited product warranty.

AVIS: RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR		
⚡ (warning symbol)	**CAUTION** RISK OF ELECTRIC SHOCK DO NOT OPEN	⚠ (warning symbol)

Location and Mounting

The iPump i8640 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. Providing 1/2 inch clearance for the right side air vents results in a longer product life for the iPump 8640.

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 8640.

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 i8640 is sized at 2 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 8640 on its supports and use four anchor screws or bolts and nuts to secure the unit's front brackets to the rack.

WARNING
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 which block the openings on front, side and rear vents may result in overheating and damage to the iPump 8640.

WARNING
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.

WARNING
Locate the iPump 8640 and its cables to avoid impacts, spills, and pulling cables and to ensure sufficient air flow. Failure to locate the iPump 8640 in a proper environment may result in damage to the equipment.

WARNING
The hard drives are **<u>NOT</u>** hot swappable and permanent damage will occur if removed while the unit is powered up. Please contact our support hotline for directions if service becomes necessary.