WestwoodOne

DIGITAL AUDIO SERVER
QUICKSTART INSTALLATION
INSTRUCTIONS
Your receiver is programmed for Big D & Bubba on audio & cue relay port 1. Once installed, please contact network support for activation.

INTRODUCTION
This Quick Start guide instructs you on how to quickly set up and start operating your i6420 Professional media server in order to receive WestwoodOne programming. For additional information please go to

www.dg-tech.net

This receiver is a replacement using the same satellite, LNB and dish as your existing receiver. Please expedite the installation of this receiver as it must be installed and online no later the four weeks from the original ship date on your packing list from the manufacturer.

Contact Network Services between 8AM and 10PM Eastern Monday through Friday at (888) 435-7450 for:

- Installation Questions
- Authorization of the receiver after installation.

Installation Instructions

1) Power down old reciever.
2) Move coaxial cable from dish to new receiver (units are shipped with LNB Power on)
3) Move audio from old receivers main audio output to audio 1 for first format connected, audio 2 for second format connected using the DB-9 connectors included with this package.
4) If using AP News connect audio for AP news to AUX AUDIO output (this is a new connection - the old receiver didn't allow both AP and normal program at the same time.
5) Move relay connections from old receiver to new receiver using the supplied DB-37 connectors. Please note **the relay assignments have changed** and are detailed in these instructions.
6) Connect EITHER the Modem connection to a standard phone line using a station suppllied phone cable (a dedicated line is not necessary and can be shared with other devices) OR the WAN connection to the public internet. The receiver is shipped with the WAN port set for DHCP IP address assignment. For a static address please refer to the procedure shown below.
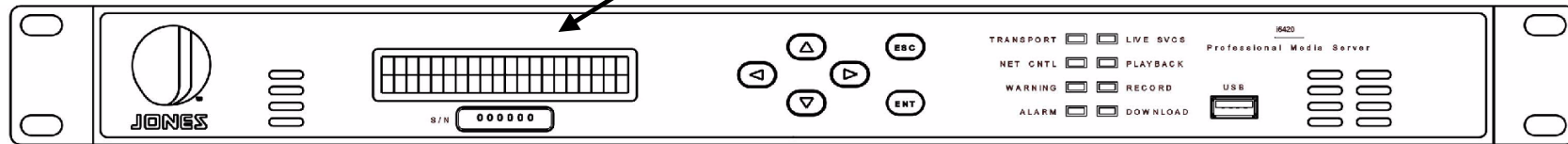
To Authorize this receiver call
888-435-7450
`´´
Authorization available from 8AM to 10PM Eastern.

Normal Operation

EbNo should be above 10 (it is at maximum level at 12.0>)

RF Level should be between 30 and 90 Lower than 30 add an L-Band Line Amplifier. Higher than 90 remove any uncessary L-Band amplifiers.

Your channel selection is set by the network.

Although the relay numbers have changed on this new receiver, the functions and clock locations are identical to the old receiver.

NEW RELAY ASSIGNMENTS

Old JDAR Relay	Relay Description	New i6420 Relay Number
1	Top of Hour	14
2	Legal ID	13
3	Backsell Liner	2
4	Stopset Start 2 Min*	1
5	Return Liner	3
6	Image Liner	4
7	Promo Liner	5
8	Network 1	6
9	Network 2	7
10	Closed Circuit	NA
11	AP Return	11
12	Stopset Start 3 Min*	12

* Stations which carry two minutes of network inventory use relay 1 to trigger location stopset starts. Stations which carry three minutes of network inventory use relay 12.
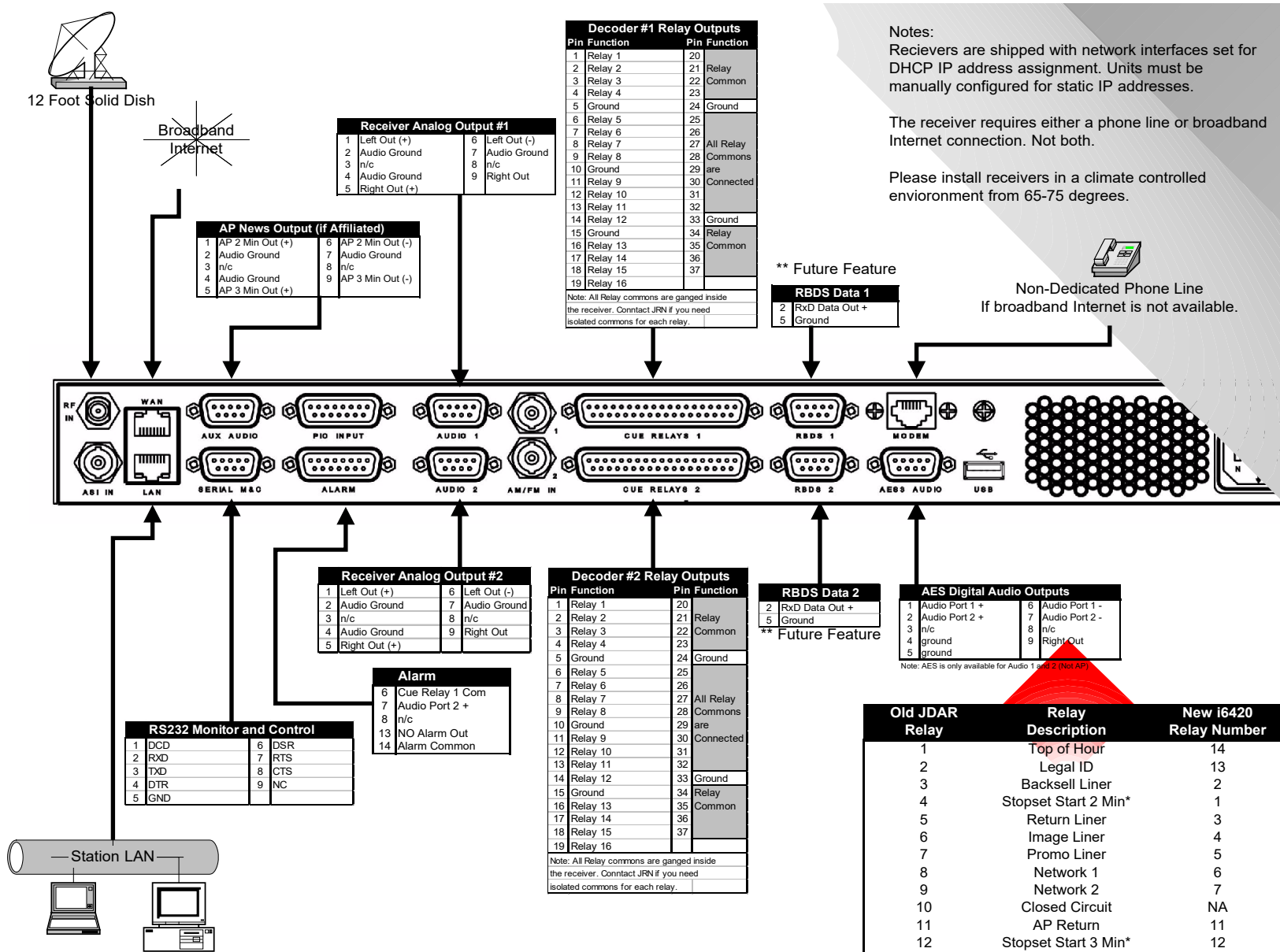
LNB Power (To disable from Factory ON Setting)

From front panel <RIGHT> to "UNIT SETUP" and press <ENT> <RIGHT> to "RF SETUP" and press <ENT> <RIGHT> to "LNB DC POWER" and press <ENT> <RIGHT> to select ON or OFF and press <ENT> <ESC> to return to main display.

To Set WAN IP Address (Static)

From the front panel <RIGHT> to "UNIT SETUP" and press <ENT> <RIGHT> to "IP Setup" and press <ENT> <RIGHT> to "WAN IP Settings" and press <ENT> "WAN Addressing Mode" press <ENT> <RIGHT> to select "STATIC" and press <ENT> <RIGHT> to "WAN/STATIC IP Address" and press <ENT> <LEFT><RIGHT><UP><DOWN> to set the address and press <ENT> <RIGHT> to "LAN Static Netmask" and press <ENT> <LEFT><RIGHT><UP><DOWN> to set the subnet mask and press <ENT>. Press <ESC> four times to return to the top screen.

To Set LAN IP Address (Static)

From the front panel <RIGHT> to "UNIT SETUP" and press <ENT> <RIGHT> to "IP Setup" and press <ENT> <RIGHT> to "LAN IP Settings" and press <ENT> "LAN Addressing Mode" press <ENT> <RIGHT> to select "STATIC" and press <ENT> <RIGHT> to "LAN/STATIC IP Address" and press <ENT> <LEFT><RIGHT><UP><DOWN> to set the address and press <ENT> <RIGHT> to "LAN Static Netmask" and press <ENT> <LEFT><RIGHT><UP><DOWN> to set the subnet mask and press <ENT>. Press <ESC> four times to return to the top screen.

To Set IP Gateway

From the front panel <RIGHT> to "UNIT SETUP" and press <ENT> <RIGHT> to "IP Setup" and press <ENT> <RIGHT> to "Static Gateway Address" press <ENT> <LEFT><RIGHT><UP><DOWN>to set the address and press <ENT>. Press <ESC> four times to return to the top screen.

Indicator	Normal State	Description
Transport	ON	Unit is locked to JRN carrier and is receiving programming.
Net Cntl	FLASHING- commands being received. ON- Command received within last two minutes.	Unit is receiving relay or receiver control information from Jones.
Warning	OFF	Warning indications (minor unit fault) present. See front panel menu for warning details.
Alarm	OFF	Warning indications (major unit fault) present. See front panel menu for warning details.
Live Svs	ON	Receiver decoding live network audio.
Playback	ON	Receiver decoding local audio.
Record	ON during recording	Receiver recording network audio to hard disk.
Download	ON during downloads.	Receiver being sent digital assets via satellite or internet.

12 Foot Solid Dish

Broadband Internet

Receiver Analog Output #1

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 (+)		

AP News Output (if Affiliated)

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 (+)		

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.

RBDS Data 1

2	RxD Data Out +
5	Ground

** Future Feature

Non-Dedicated Phone Line
If broadband Internet is not available.

Rear panel connectors:
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

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 (+)		

Alarm

6	Cue Relay 1 Com
7	Audio Port 2 +
8	n/c
13	NO Alarm Out
14	Alarm Common

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

** Future Feature

AES Digital Audio Outputs

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)

RS232 Monitor and Control

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

Station LAN

Old JDAR Relay	Relay Description	New i6420 Relay Number
1	Top of Hour	14
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4	Stopset Start 2 Min*	1
5	Return Liner	3
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7	Promo Liner	5
8	Network 1	6
9	Network 2	7
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* Stations which carry two minutes of network inventory use relay 1 to trigger location stopset starts. Stations which carry three minutes of network inventory use relay 12.

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 your iPump 6420:

Do not open the iPump 6420's chassis cover.

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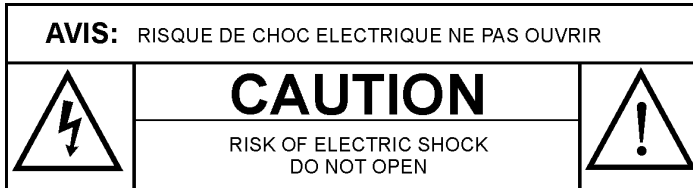
Location and Mounting

The iPump 6420 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 your 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 6420 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.

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 that block the openings on front, side and rear vents may result in overheating and damage to the iPump 6420.

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 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.