### INTERNATIONAL DATACASTING

# Net Manager™

## **Network Management - Satellite IP Video and Data Networks**

# The Net Manager is a highly reliable GUI-driven network management system designed to control DVB/IP satellite receivers using in-band communications.

Service providers often have deployed an extensive network of satellite receivers and are then faced with the daunting task of having to upgrade and reconfigure receivers already deployed and operational in a network. From satellite providers shuffling segment allocations that require new frequency assignment programming to network operators changing the carrier symbol rates to accommodate additional bandwidth, it is sometimes necessary to re-program carrier parameters for each receiver. Net Manager helps operators address these challenges.

Net Manager is IDC's next generation network management system designed to work with IDC's portfolio of audio, video and data products. Featuring a Web-based GUI for operator-friendly local and/or remote operation, this robust system supports multiple languages. Delivered on a highly integrated hardware/ software platform.

With the ability to interface and control individual receivers, groups of receivers and entire networks via the satellite link, Net Manager securely maintains configuration information for each receiver. The audio, data and control outputs of SuperFlex<sup>®</sup> Pro Series<sup>™</sup> Receivers, as well as their receive frequencies and demultiplexer parameters can be administered by Net Manager remotely.

Net Manager is also capable of sending upgrades in a foreground queue or continuous background queue.

Net Manager generates a UDP/IP multicast data stream which is injected into the DVB carrier by an IP Encapsulator. This data stream is then received and interpreted by the satellite receivers as it contains addressing, authorization and routing information.

All receivers tuned to the DVB carrier receive the Net Manager control data stream. They decode addressing information within the IP data stream to determine which data to extract and use for configuration.

Each SuperFlex Pro Series Receiver contains a unique IDC address, and may also be a member of one or more receiver groups. Each Net Manager message contains either an individual IDC receiver address or a group address allowing for efficient configuration updates to as many or as few receivers as needed.

As a background task, Net Manager continuously transmits each receiver's configuration; ensuring the proper network configuration. The Net Manager message addressed to any specific receiver includes a sequence number that increments whenever a change in configuration occurs. This allows the receiver to optimize its handling of Net Manager messages.



#### Features

- Minimize the cost of reconfiguring the network
- Change receiver configurations remotely over the satellite link
- Web-based GUI
- .NET/WSDL API for remote control and integration
- SNMP Daemon for terrestrial network configuration
- Change RF parameters on the fly without shutting down the network
- Easy to use point and click GUI
- Individual or group addressability
- In band receiver upgrades

# **TECHNICAL SPECIFICATIONS**—Net Manager

POWER REQUIREMENTS				
Supply Voltage	100 to 240 VAC, +6%, -10%, 50 or 60 Hz			
PHYSICAL PARAMETERS				
Chassis	1U rackmount server platform			
Dimensions (H, W, D)	5.4 cm x 48 cm x 40 cm (1.75" x 19" x 16")			
Weight	8.5 kg (18 lbs.)			
ENVIRONMENTAL CONDITIONS				
Operating Temperature	0° to 50° C (32° to 122° F)			
Storage Temperature	-20° to 70° C (-4° to 158° F)			
Humidity	Maximum 90% relative, non-condensing			





[Logout]			DATACAST			
[DVI	3/Carrier]   [Receiver List]	[Receiver Group	os]   [Logging]	[Receiver Upgrade]   [Utilit	ies]   [NetMan	ager Config]
Receiver List			Edit R	leceiver Record		
Show Selected	IDC Receiver Address:	b800293956		Receiver Name:	3109 ProAudio	
Add Receiver	Description:	3109 ProAudio		Receiver Type:	SFX Series Receiv	ver
Edit Selected	Serial Number:	02123154		Transport Standard:	DVBS&S2	
elete Selected earch Receiver	L-Band (sat0) IP:	10.0.41.57		L-Band (sat0) Netmask:	255.0.0.0	
Set Defaults	Net 1 (eth0) IP Mode:	Set Locally	-			
Add Receiver using Defaults	Net 1 (eth0) IP:			Net 1 (eth0) Netmask:		
	Net 2 (eth1) IP Mode:	Set Locally				
Back to main	Net 2 (eth1) IP:			Net 2 (eth1) Netmask:		
Send Update	Set Default Gateway:	Set Locally	•	Upgrade Application Mode:	AUTO	•
	Default Gateway:			Redundancy Support:	O ON @ OFF	
Static R	Static Routing:	Set Locally	•	Async Port:	ON OFF	
				Sync Port:	O ON OFF	
				Net Port:	ON OFF	
		Carriers	PIDS	Groups FlexKey	A/V Decoders	
	int 1999225791 bytes		el 2 sent 330 bytes			10 sec
Database:	Disabled U	Database:	Disabled			Change Ti



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