# **NEC MPD-DTi**

# IPTV tuner module for NEC large-screen LCD displays

Add a new and exciting dimension to your digital signage. With the MPD-DTi tuner module, your NEC large-screen LCD display can be transformed into a captivating source of entertainment with the ability to run high-definition broadcasts and other network programming. Supporting Unicast RTP or Multicast RTP, this tuner will fit any UTP infrastructure streaming an IPTV signal as well as standard VHF/UHF antenna or cable TV service signals over coax.

#### **Specifications for MPD-DTi**

TV	
System	ATSC/NTSC/Clear QAM
Channel Coverage	VHF: 2 - 13 ch
	UHF: 14 - 69 ch
	CATV: 1 - 125 ch ATSC (8VSB): 2 - 69 ch
	Digital Cable (Clear 64/256 QAM): 1 - 135 ch
Format Doording	2.9.(4. 642.6 (6.64. 6.)226 (7.41)
Format Decoding Video	MDEC 3 MD O LILI LA DOMI
Video	MPEG-2 MP@HL and MP@ML H.264/AVC main and high profile to level 4.1
	VC-1 advanced profile @ level 3
	VC-1 simple and main profile
Audio	AAC LC, AAC LC+SBR Level 2, AAC+Level 2, AAC+Level 4
	Dolby Digital, Dolby Digital Plus*
	MPEG I Layer1, 2, 3 (MP3) Windows Media Audio (WMA)
	Williadws Media Addio (WMA)
IPTV	
Streaming Type	Unicast, Multicast
Network Protocol	TCP/IP, UDP/IP, IPv4, HTTP 1.1, DNS Client, DHCP Client
Streaming Protocol	RTP (Real-time Transport Protocol)
Multicast Protocol	IGMP v2/v3
Interface	
Antenna Input	F Type Connector x 1
Video Output	Composite Video RCA Connector x 1
Audio Output	Digital Audio S/P DIF Optical Connector x 1
Ethernet	RJ-45 Ethernet Port x 1 (10/100 Mbps Fast Ethernet)
USB	USB (for service use only)
OSD Language	English/French/Spanish
Power Supply	+ 16VDC@600mA (from option slot interface)
Power Consumption	9.6W
Operational Environment	
Temperature	5 - 40°C / 41 - 104°F
Humidity	20 - 80% (without condensation)
Storage Environment	
Temperature	-10 - 60°C / 14 - 140°F
Humidity	10 - 90% (without condensation)
Dimensions (W x H x D)	
Net	6.1 x 1.6 x 11.1 in. / 155.5 x 40.5 x 281.5mm
Gross	8.6 x 3.4 x 14.5 in. / 218 x 86 x 369mm
Weight	
Net	2.6 lb. / 1.2 kg
Gross	3.3 lb. / 1.5 kg
Complied Regulatory and Guidelines	FCC : Class B, Canadian DOC : Class B
Accessories	User manual
Limited Warranty	3 years, parts and labor
, , , , , , , , , , , , , , , , , , ,	* Dolby Digital: Manufactured under license from Dolby Laboratories.

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# **Product Highlights**

- □ Supports multiple video and audio codec along
   with MPEG transport or program streams
- a Auto scan function allows you to automatically scan for available ATSC/NTSC channels pending the source (air or cable)
- DTV signal strength easily recognizes the strength of your digital signal
- Parental controls allows you to safeguard what is seen by blocking programs based on rating or channel
- Easily manipulate the style, size, font, and color of your closed captioning
- DHCP or statically assign an IP address easily from the on-screen display of your monitor

# **Key Markets**

# **Applications**

- □ Lobbies/waiting rooms
- ¤ Public information
- **¤** Entertainment
- ¤ Healthcare
- ¤ Corporate



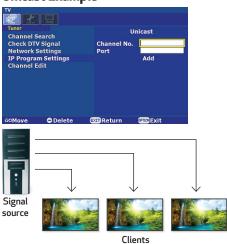
#### What is IPTV?

Internet Protocol television (IPTV) is the delivery of programming by video stream encoded as a series of internet protocol packets (data packets). IPTV primarily uses multicasting with Internet Group Management Protocol (IGMP) and Real Time Transport Protocol (RTP). Compatible video compression standards include H.264, Windows Media Video 9, VC1 and MPEG-2. With the ability of category 5 cabling infrastructures and Internet protocol, video signals can be broadcast over greater distances. Moving video across your network using data packets enables you to control the quality of service, points of viewing as well as enhancing the user experience. The options are endless.

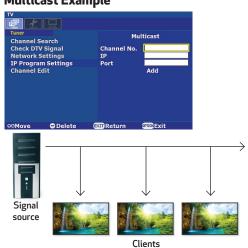
#### What is the difference between unicast and multicast?

Along with standard NTSC/ATSC/Clear QAM signals over coax, the NEC MPD-DTi allows the communication of your signal from the source via unicast or multicast communications across UTP category cable. Unicast can be seen as a one-to-one relationship. A new signal of the data is required for each end-user on a network even though the content remains exactly the same. This is often termed as a point-to-point relationship and translates into an increase in bandwidth needed to run the same signal to multiple locations. In contrast, multicast is the communication between a single sender and multiple receivers on a network requiring one stream of content for all end users. In this scenario, multicast remains bandwidth-efficient because it requires only one stream of data for these multiple locations.

# **Unicast Example**

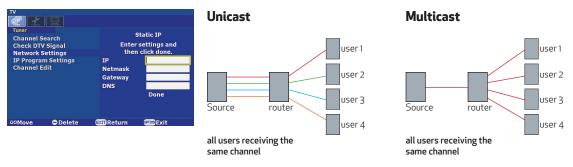


#### **Multicast Example**



#### How do I set up an IPTV network?

Similar to most IP-enabled devices on your network, you can set up your IPTV with all the necessary Internet protocol information. IPTV runs over an IP network, which means it will work over your existing home or office Ethernet network. In simple environments, you need a device housing and distributing your content along with a router or a switch to reach multiple locations. The diagram below shows a simple setup scenario. For more complex networks, see your system administrator for details.



#### **NEC Displays Supported**



46" V462 55" V551 65" V651



# **NEC S Series**

40" S401 46" S461 52" S521



# **NEC P Series**

40" P401 55" P551 40" P402 55" P552 46" P461 70" P701

46" P462 52" P521



#### **NEC X Series**

46" X461UN 46" X461UNV 46" X462UN 55" X551UN 46" X461HB

46" X461HB





