Technical Bulletin

# Channel Mapping the Com1000 using EPG generated PSIP Data

Eliminate digital sub-channel numbers using this technique



PDDi Communication Systems, Inc. 40 Greenwood Lane Springboro, Ohio 45066

PH: 937-743-6010 FX: 937-743-5664

http://www.pdiarm.com

# Channel Mapping the Com1000 Headend

# Channel Mapping the Com1000 Headend

Many hospitals are switching to Com1000 headends to provide patients with HD picture content at a lower cost compared to local town cable company offerings. One of the challenges patients face during their stay is the ability to enter whole channel numbers instead of learning a new set of hospital channels and sub-channels. As an example, a national news channel such as CNN is located on channel 96 in the patient's home, but instead is located on channel 97-1 at the hospital. Fortunately, the Com1000 provides a channel mapping capability that is often overlooked, which allows remapping of channel 97-1 to channel 96, eliminates the "-1" sub-channel number entry requirement, and provides a familiar channel number to which the patient is accustomed.

# **Overview**

The Com1000's Electronic Program Guide (EPG) generates PSIP information that contains virtual channel tables. With proper EPG programming, all digital channels with sub-channel numbers can be remapped to whole channel numbers\*.

### **Procedure**

This bulletin assumes you have already setup a full channel table of digital channels on a Com1000 and also an Electronic Program Guide (EPG) for those channels. Please refer to the Com1000 Integrator's Manual for installation instructions regarding the configuration of channels and setup of the EPG.

The remainder of this procedure explains the channel mapping process.

1. Open the EPG guide and locate the channel listings.

DirecTV C	OM1000	)	technicolor
Commands: Discover Scan, Ref	PairingInfo, Tu esit, Duplay, Su	neAll, Help Isfo, HealthInfo, EPG	i Syring ATSC: 401, QAA
Electronic	Program	Guide Dis	play
Dest19:	192 188 6 2		5041391 <b>29</b> 10
DestPorti	53		
Timesused(fret:	5	Parific"Simunte	in").Centeel=6:Bestern=5
Lynore261)	ά.		
LogoTftpdervarIF:			
LogoPilecane: The format is display UK display The chasels and p	(Number]-minis] s shumber-minor Nov ort are used for	170x40 J4Mpp Imp mjorSimber-[pinorHis Chas Event info chas PUTP minis presents	bitmap file der[-[hdiad] chasmis por main port m. Set to -1 to disable
97-2 300-6505-ad 1 98-2 302-6505-ad 1 98-2 303-65055-ad 1	34 49 53		
Submit Query Ep	gLood <- Scad	nirrantly playing ch	• annels.



CAUTION: this bulletin should only be implemented by a Servicer / Installer / Integrator with prior experience and competence with the Technicolor Com1000 product.

\* Please consult the TV manufacturer and verify that your TV model supports EPG channel mapping. For this example, only 4 channels are listed in the guide.

#### 97-1 202-65535-HD 1 33

Channel 97-1 is tuned to  $\text{DirectTV}^{\text{®}}$  channel 202 (CNN), is an HD resolution channel, tuner is located in chassis 1 at port 33.

#### 97-2 350-65535-SD 1 34

Channel 97-2 is tuned to DirectTV<sup>®</sup> channel 350 (CSP1 "C-Span"), is an SD resolution channel, tuner is located in chassis 1 at port 34.

#### 98-1 282-65535-HD 1 49

Channel 98-1 is tuned to DirectTV<sup>®</sup> channel 282 (APL "Animal Planet") is an HD resolution channel, tuner is located in chassis 1 at port 49.

#### 98-2 353-65535-SD 1 50

Channel 98-2 is tuned to Direct  $TV^{\otimes}$  channel 353 (BTV "Bloomberg TV"), is an SD resolution channel, tuner is located in chassis 1 at port 50.

Display of the current channel guide (EPG) verifies the same channel information.

RECTY	DIRECTV Guide	PD		
Mon 1/20	10:30a	11:00a 11:30a		
97-1 CNN	CNN Newsroom	Legal View With Ashleigh Banfield		
97-2 CSP1	< Key Capitol Hill Hearings			
38-1 APL	< Treehouse Mast	Treehouse Masters		
18-2 BTV 6	< Poker Night on	Inside eBay: A Bloomberg West Special		
	DON'T JUST	WATCH TV. DIRECTV.		
17-1 CNN	< CNN Newsroom	Legal View With Ashleigh Banfield		
17-2 CSP1	< Key Capitol Hill Hearings			
18-1 APL	< Treehouse Mast	Treehouse Masters		
38-2 BTV	< Poker Night on	Inside eBay: A Bloomberg West Special		

2. For this example, the channels will be remapped as follows:

Channel 97-1 becomes 96 Channel 97-2 becomes 97 Channel 98-1 becomes 98 Channel 98-2 becomes 99 Modify the channel listings in the EPG involves selecting a main channel number and eliminating the sub-channel number by replacing the "-sub channel" with "-0". For this example, channel numbers are emphasized to note changes.

**97-1** 202-65535-HD 1 33 becomes **96-0** 202-65535-HD 1 33 Channel 97-1 is assigned the virtual channel 96.

**97-2** 350-65535-SD 1 34 becomes **97-0** 350-65535-SD 1 34 Channel 97-2 is assigned the virtual channel 97.

**98-1** 282-65535-HD 1 49 becomes **98-0** 282-65535-HD 1 49 Channel 98-1 is assigned the virtual channel 98.

**98-2** 353-65535-SD 1 50 becomes **99-0** 353-65535-SD 1 50 Channel 98-1 is assigned the virtual channel 99.

Pressing the "Submit Query" button will upload the new channel guide. A picture of the modified Electronic Program Guide shows the changes.

# DirecTV COM1000



Commands: Discover, PairingInfo, TuneAll, Help Scan, Refresh, Display, SvaInfo, HealthInfo, EPG, Syslog, ATSC, 401, QAM

#### Electronic Program Guide Display

Pacific=8;Mountain=7;Central=6;Eastern=5 170x60 24bbp bsp bitmap file ] majorNumber-[ninorNumber]-[bd]sd] chassis por NMyChan_Event_info chassis port or PSIP guide generation. Set to -1 to disable
Pacific=S;Mountain=7;Central=6;Eastern=5 170x60 24bbp bmp bitmap file 1 majorNumber-[minorNumber]-[hd]sd] chassis por NMyChan_Event_info chassis port or PSIP guide generation. Set to -1 to disable
170x60 24bbp bmp bitmap file ] majorNumber-[minorNumber]-[hd]sd] chassis por NMyChan_Event_info chassis port or PSIP guide generation. Set to -1 to disable
170x60 24bbp bmp bitmap file ] majorNumber-[minorNumber]-[hd]sd] chassis por NMyChan_Event_info chassis port or PSIF guide generation. Set to -1 to disable
170x60 24bbp bmp bitmap file ] majorNumber-[minorNumber]-[hd]sd] chassis por NMyChan Event_info chassis port or PSIP guide generation. Set to -1 to disable
] majorNumber-[minorNumber]-[hd]sd] chassis por NMyChan_Event_info chassis port or PSIP guide generation. Set to -1 to disable
-

A quick look at the TV's displayed EPG indicates successful channel remapping.

DIRECTV	DIRECTV Guide	P
Mon 1/20	11:00a	12:00p
96 CNN	Legal View With Ashleigh Banfield	Around the
97 CSP1	< Key Capitol Hill Hearings	Key Ca C
98 APL	Treehouse Masters	Treehouse N
99 BTV	Inside eBay: A Bloomberg West Special	Brink
	DON'T JUST WATCH TV. 🔜	DIRECTV_
96 CNN	Legal View With Ashleigh Banfield	Around the V
97 CSP1	< Key Capitol Hill Hearings	Key Ca Co
98 APL	Treehouse Masters	Treehouse M.
99 BTV	Inside eBay: A Bloomberg West Special	Brink

Now, perform an Auto Channel Search on the TV to learn the new channel table. Once completed, verify the new channel number changes, by tuning to a new whole number channel, press the "OK" button to verify the channel information in the About Box located at the bottom of the TV's screen.

In the picture below, CNN channel 97-1 is remapped to channel 96.



# Troubleshooting

- 1. *TV still displays old channel number.* Perform an Auto Channel Search to re-learn the TV to the new channels.
- TV displays new channel number, but picture is black or gray with pixilation.
  Verify the TV's "Proldiom" is set to "Free to Guest".
- 3. Unable to modify Com1000 EPG. Check the Integrator's Manual for suggestions.

4. Unable to setup channels in the Com1000. Check the Integrator's Manual for suggestions.

# SUMMARY

The Com1000 provides added versatility by remapping channels using PSIP data. Fortunately, PDI televisions use PSIP for channel setup and can utilize this added capability of channel mapping\*. Hopefully this new technique will prove useful and become a necessary technique of the knowledgeable installer.

# DISCLAIMER

This bulletin contains technical information provided without charge and should not be interpreted as a PDi Communication System authorization to perform either product service or product installation work for hire. No compensation either financial or material will be awarded.

The author and publisher have used their best efforts in preparing this bulletin. PDi Communiation Systems, Inc. make no representation or warranties with respect to the accuracy or completeness of the contents of this bulletin and specifically disclaim any implied warranties of merchantability or fitness for any particular purpose and shall in no event be liable for any loss of profit or any other damages, including but not limited to special, incidental, consequential or other damages. The information contained herein is believed accurate, but is not warranted, and is subject to change without notice or obligation.

# **For More Information**

If you have questions, please contact PDi's Technical Support department at 937-743-6010 Option 2.

\* Please consult the TV manufacturer and verify that your TV model supports EPG channel mapping.