



DTVGuide

Multi-Format EPG Scheduler and Delivery Service

User Guide



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Overview

DTVGuide Important Notices

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The information in this document is subject to change without notice.

This document was created by Adtec Digital Engineering Staff. For product support, call 615-256-6619, or visit www.adtecinc.com and click on "Support".

This is **Version 1.7.2** of this manual.

What is DTVGuide?

DTVGuide is Adtec Digital's web-based dynamic electronic program guide scheduler and delivery service for broadcast, digital cable, and IPTV applications. With DTVGuide, you can create and upload your own electronic program guide data, or use formatted EPG data from any of the growing list of program content providers for **free**. DTVGuide integrates seamlessly with Adtec's DTA multiplexer, and can be used with third party PSIP and SI generators (requires integration).

Why Use DTVGuide?

There are several reasons to consider DTVGuide as your source for program guide information:

- unlike traditional PSIP and SI injection systems, there is no equipment to purchase and maintain.
- DTVGuide integrates seamlessly with Adtec's multiplexers, and will be able to integrate with Adtec encoders.
- DTVGuide supports automated listing upload via dedicated email inbox - your program listings are automatically processed and downloaded.
- you can continue to use accounts with Tribune, TitanTV or EPG Sales (Europe) with DTVGuide - or mix and match DTVGuide content with these media service providers for maximum Return-On-Investment.

What Formats Does DTVGuide Support?

DTVGuide's format scheme is a variant of ATSC XML, which can be used in both ATSC and DVB environments coupled with the Adtec multiplexer.

Supported Devices

Adtec Digital currently supports DTA3050 series multiplexing devices with DTVGuide:

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Getting Started - The DTVGuide User Interface

Logging Into DTVGuide

Logging into DTVGuide can be done from any Internet-connected computer (Windows, Mac, Linux) using the following browsers:

- Firefox 3.0+ (Preferred) <http://www.mozilla.org>
- Internet Explorer 7 and above <http://www.microsoft.com>
- Safari 3 and above <http://www.apple.com>

Point your browser to the following address: <http://adtecdigital.com/DTVGuide>

The screenshot shows the DTVGuide web application. At the top is a blue header with the 'DTV Guide' logo. Below the header is a navigation bar with three tabs: 'Satellites' (selected), 'Providers', and 'Channels'. On the left side, there is a login form with fields for 'User:' and 'Password:', a language selector with 'EN' and 'ES' options, and a 'Login' button. To the right of the login form is a search bar with 'Find' and 'Reset' buttons. The main content area displays a 'Satellite List' table.

Name	Position
ABH	ABH
AEDsd	AWSDaws
AMAZONAS	61.0 W
AMAZONAS	61.0 W
AMC 6	72.0 W
BRASILSAT B3	84.0 W
BRASILSAT B4	70.0 W
GALAXY 16	99.0 W
GALAXY 16	99.0 W
GALAXY 28	89.0 W
Galaxy 6	345

Once the page loads, use the user name and password provided by Adtec Customer Service in order to gain access to the site. Choose your language (English or Spanish), and click the Login button.

Once logged in, you will find two option selections in the left hand pane of the UI:

- Account Tab - Account Settings
- Devices Tab - Device and Channel Configuration

Account Settings Tab Configuration

From the account settings tab, you can easily configure several options for DTVGuide, including:

- Changing your account password
- Changing your contact information
- Configuring your account settings for external media service providers (Tribune, TitanTV, etc.)
- Enable or disable email error reporting

The screenshot shows the DTVGuide web interface. At the top is a blue header with the "DTV Guide" logo. Below the header is a black sidebar containing a "Manage" menu with options: "Devices", "Account" (highlighted with a right-pointing arrow), and "Logout". Below the menu, the sidebar displays the user's login information: "Logged in as: Adtec Digital", "Bill Rice - Adtec Digital", "Support", and the phone number "615-256-6619". The main content area is titled "Manage > Account". It features two sections: "Customer" and "Media Service". The "Customer" section contains fields for "Company Name" (Adtec Digital), "Address" (400 Russell St), "City" (Nashville), "State/Province" (TN), "Zip" (37206), "Country" (USA), and a "Password" field (masked with dots). The "Media Service" section includes checkboxes for "Tribune" and "TitanTV", both of which are checked. Below these are two authorization sections: "Tribune Authorization" and "TitanTV Authorization". Each section has fields for "Host", "User", "Password", "Confirm Password", and an "Enable" checkbox.

DTV Guide

Manage

- Devices
- Account ▶
- Logout

Logged in as:
Adtec Digital
Bill Rice - Adtec Digital
Support
615-256-6619

Manage > Account

Customer

Company Name: State/Province:

Address: Zip:

City: Country:

*Password:

Media Service

Tribune ☒ TitanTV ☒

Tribune Authorization:

Host: User: Password: Confirm Password: Enable: ☐

TitanTV Authorization:

Host: User: Password: Confirm Password: Enable: ☐

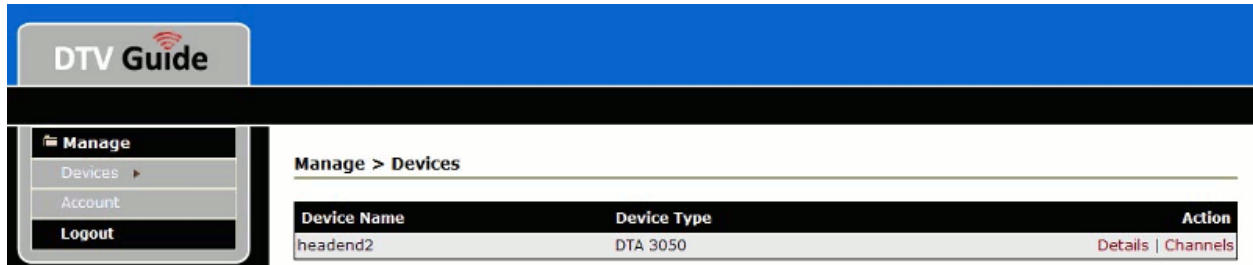
While logged into DTVGuide, your user information will be displayed under the menu options. This information is only visible to you when you are logged into the system.

Changes made to this page after saving are effective immediately, except for changes made to the Media Service section. Allow 24 hours for changes to take effect on the server. See the section of this manual on configuring your chosen media service provider for more information if you plan to use pass through data from Tribune Media or TitanTV.

Devices Tab Configuration

Clicking on the **"Devices"** tab will bring you to the list of configured devices that were created by an Adtec administrator for your account. These can be DTA3050 multiplexers or DTVManage middleware servers. For each device there are three sections of information available:

- The Device Name
- The Device Type
- Action area



Device Name: The Device Name area is the virtual name that is given to the DTA or DTVManage device, and is configurable under the "Details" hyperlink.

Device Type: The Device Type is the kind of device named in the line item, which can be either a DTA3050 or DTVManage server. This is not an editable field and is assigned to the device when your account is created by an Adtec administrator.

Action Area: The action area is made up of two parts: the **Details** link and the **Channels** link. Both areas have specific functions for the configured device.

Details: The Details area is made up of the following options. Some will be grayed out as read-only:

Manage > Devices > DTA 3050

Details	
Device Name:	<input type="text" value="DTA 3050"/>
Serial:	<input type="text" value="114A7"/>
Time Zone:	<input type="text" value="(GMT-05:00)"/>
FTP Password:	<input type="password" value="....."/>
Device Type:	<input type="text" value="DTA 3050"/>
Number of Days in Cache EPG:	<input type="text" value="7 Days"/>
Daylight Savings:	<input type="checkbox"/>
Confirm Password:	<input type="text"/>

Detail	Definition
DEVICE NAME	the virtual name you want to give to your device. It can be any name you choose, and will not affect the operation of either DTVGuide or the device being configured
DEVICE TYPE	the type of device defined when the device was added to your account by the Adtec administrator. It cannot be changed.
SERIAL	the serial number assigned to your device by Adtec customer support. See section on configuring Adtec products for more information on how to find the serial number of your device before setting up your account.
NUMBER OF DAYS IN CACHE EPG	throttles how many days of EPG data to send to your DTA device. This setting is variable from one day up to 7 days, depending on your individual needs. It is recommended that fully loaded DTAs not cache more than 3 days of EPG data to prevent bogging down the processor. Light loads (broadcasters with 10 or less services) should be able to take advantage of the full 7 days of data. Changes to this setting will be effective immediately for the next time your DTA connects to download data, and will become permanent unless you change it again.

TIME ZONE	defines the timezone that you wish to view EPG data in from the DTVGuide interface. All data is stored in GMT and delivered in this format to your device where the local timezone applies. This setting only affects viewing EPG data in DTVGuide.
DAYLIGHT SAVINGS	a checkbox that is manually selected whenever your local area switches over to DST from standard time. This flag, when enabled, will shift program listing information inside of the DTVGuide user interface only forward by 1 hour, but it will not affect data being fed for download by your DTA. The actual EIT data is handled in UTC time, and local offsets are applied by your DTA.
FTP PASSWORD/CONFIRM PASSWORD	Important: applies to DTA 6.03.x firmware users only - 6.02.x DTA firmware users skip this section and input a 6 character password if prompted -the password your DTA device will use to handshake with the DTVGuide server as it logs in to retrieve listings data. This password must match the one given to your DTA multiplexer in order for the device to be recognized at time of log-in.

Channels The channels area is where you configure your virtual channels to match your DTA or DTVManage device, and the EPG source assigned to each channel. For more information on configuring this area of your device, see the section of this manual about configuring virtual channels.

Configuring Virtual Channels

Virtual channels are the representation of the channel lineup that you have assigned in the device you choose to set up to access listings from DTVGuide. They are, in essence, a mirror image of the channel mapping page of the Adtec DTA3050 multiplexer or the channel configuration inside your DTVManage middleware server. Having virtual channels allows DTVGuide to effectively match the correct EPG data to the right placeholder on your device, and still retain your unique naming conventions for each configured channel. For example, you might have a channel called "Home Shopping Network" mapped as one of your service outputs on a DTA, but another DTVGuide user may use just "HSN". Because these names are virtual, there are almost unlimited possibilities on how you decide to name your channels individually.

To configure a virtual channel, navigate to the **CHANNELS** area of your device by clicking on the **DEVICES** tab while logged into your DTVGuide account, and choose a device that has been provisioned to you by an Adtec administrator. If you do not see any devices in this area, please contact Adtec technical support for assistance.

From this view, you can view the channel number, channel name, and EPG source, plus link to areas where you can edit channel properties and view program guide data for your channel

Manage > Devices (DTA 3050) > Channels

				Add Channel	Cancel
Number	Name	Source	Action		
1	CNN	DTVGuide	[Edit Program Data X]		
2	Headline News	DTVGuide	[Edit Program Data X]		
3	TBS East	DTVGuide	[Edit Program Data X]		
4	TBS HD East	DTVGuide	[Edit Program Data X]		
5	TBS West	DTVGuide	[Edit Program Data X]		
6	TBS HD West	DTVGuide	[Edit Program Data X]		

Adding a New Channel

From the **CHANNELS** page of your device, click on the button for **ADD CHANNEL** at the top of the selection area, and you will be prompted to enter a name and a channel number for your new channel. The name and the channel number must match **exactly** to your device's mapping page (DTA3050 or DTVManage) in order to be valid.

Once you've assigned a name and channel number to your new virtual channel, you must pick a source for the EPG from a drop-down selection box. Your choices will be either:

- Manual
- DTVGuide
- Tribune
- TitanTV
- EPG Sales

Depending on what media services you are provisioned for. DTVGuide and Manual are options available to all users

Editing an Existing Channel

From the main **CHANNELS** page of your device, you will see a link to **EDIT** the properties of your configured virtual channel. This view is only present after you have added at least one virtual channel to your device. This dialog is the same as the **ADD CHANNEL** dialog, but with the pre-populated areas of your channel already filled in. You can edit the channel name, channel number or EPG source values from this area.

Channel Info

* Name:

CNN

* Channel Number:

1

Source:

DTVGuide

Source Channel: CNN

Change

Save


Cancel

Viewing Program Guide Information on your Channel

From the main CHANNELS page of your device, you will see a link to PROGRAM DATA that will take you to a grid line-item view of all the programs currently available for your virtual channel. The amount of data displayed does not always represent the actual data being fed to your DTA or DTVManage device - it is a visual representation to show you that there is data, and allows you to validate program dates and times for accuracy.

Program Information for CNN

Cancel

Select Date: 2009-12-23  Get Data									
Start	End	Title	Episode Title	Description	Show Type	Critique	Symbols	Action	
12:00 AM	1:00 AM	Larry King Live						[View]	
1:00 AM	3:00 AM	Anderson Cooper 360						[View]	
3:00 AM	4:00 AM	Larry King Live						[View]	
4:00 AM	5:00 AM	Lou Dobbs Tonight						[View]	
5:00 AM	6:00 AM	CNN Newsroom						[View]	
6:00 AM	9:00 AM	American Morning						[View]	

Getting Started - The DTVGuide User Interface

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Configuring Tribune Media Service

DTVGuide supports pass-through of TMS data over FTP using your individual TMS login credentials. Accessing the area to input credentials can be done from the DTVGuide User Interface under the **ACCOUNT** tab.

Things you will need to establish **before** setting up TMS access through DTVGuide: 1. A TMS account (username and password) 2. Formatted data in the following files, as defined by the TMS specification v5.2:

- FILE1=dgprogrec.txt
- FILE2=dgstatrec.txt
- FILE3=dgskedrec.txt
- FILE4=tranrec.txt

Once you have a valid set of credentials and EPG data in the above file formats on the TMS FTP server, you are ready to set up the account with DTVGuide.

Setup

From the **ACCOUNT** tab, select the Tribune checkbox and type in the following information into the provided fields:

Host: The FTP address where TMS stores your data

User: Your TMS username

Password: Your TMS password

Confirm Password: type in your TMS password again

Enable: Check this box to enable fetching of your TMS data

Once your TMS data is enabled, allow for 24 hours before your data is downloaded and available. DTVGuide makes a nightly download of all TMS data, after which it will be available to your device(s)

The screenshot shows the DTVGuide web interface. On the left is a sidebar with a 'Manage' menu containing 'Devices', 'Account', and 'Logout'. Below the menu, it says 'Logged In as: Adtec Digital Bill Rice - Adtec Digital Support 615-256-6619'. The main content area is titled 'Manage > Account'. It has two sections: 'Customer' and 'Media Service'. The 'Customer' section contains fields for Company Name (Adtec Digital), Address (400 Russell St), City (Nashville), State/Province (TN), Zip (37206), and Country (USA). There is a password field with masked characters. The 'Media Service' section has checkboxes for Tribune (checked) and TitanTV (checked). Below these are two authorization sections. The 'Tribune Authorization' section has fields for Host, User, Password, Confirm Password, and an Enable checkbox. The 'TitanTV Authorization' section has similar fields, with the Enable checkbox also present.

Configuring Virtual Channels

Once your valid TMS data is downloaded, it is immediately available to your DTVGuide account. Channels are configured by assigning a name and channel number that mirror the mapping page setup of your Adtec DTA3050 multiplexer. Names and numbers must match exactly (including case) for your device to recognize and download the appropriate channel data.

Selecting a source from the **SOURCE** drop-down combo box will open a search box at the bottom of the screen. All channels

currently provisioned to you by TMS will be available from this dialog box.

Select the TMS channel you wish to associate with your virtual channel and click on the **SAVE** button to retain your changes. Your changes are immediately reflected in the DTVGuide user interface, and will be downloaded to your DTA device next time it connects to the server.

Edit Channel: CNN

Channel Info

* Name:

CNN

* Channel Number:

1

Source:

Tribune

Source Channel: CNN

Change

Save

Cancel

Guide Data

Find a Channel:

cnn

Go

Channels:

CNN En Espanol- Mexico and US

CNN HD

CNN HD

City:

GA

State/Province:

Country:

United States

Zip:

30303

Configuring TitanTV Media Service

DTVGuide supports pass-through of TitanTV data over FTP using your individual TitanTV login credentials. Accessing the area to input credentials can be done from the DTVGuide User Interface under the **ACCOUNT** tab.

Things you will need to establish **before** setting up TitanTV access through DTVGuide: 1. A TitanTV account (username and password) 2. Formatted data in PMCP format for Adtec (contact your sales representative at TitanTV to confirm)

Once you have a valid set of credentials and EPG data in the above file formats on the TitanTV FTP server, you are ready to set up the account with DTVGuide.

Setup

From the **ACCOUNT** tab, select the TitanTV checkbox and type in the following information into the provided fields:

Host: The FTP address where TitanTV stores your data

User: Your TitanTV username

Password: Your TitanTV password

Confirm Password: type in your TitanTV password again

Enable: Check this box to enable fetching of your TitanTV data

Once your TitanTV data is enabled, allow for 24 hours before your data is downloaded and available. DTVGuide makes a nightly download of all TitanTV data, after which it will be available to your device(s)

The screenshot shows the DTVGuide web interface. On the left is a sidebar with a 'Manage' menu containing 'Devices', 'Account', and 'Logout'. Below the menu, it says 'Logged in as: Adtec Digital Bill Rice - Adtec Digital Support 615-256-6619'. The main content area is titled 'Manage > Account'. It has two sections: 'Customer' and 'Media Service'. The 'Customer' section contains fields for Company Name (Adtec Digital), Address (400 Russell St), City (Nashville), State/Province (TN), Zip (37206), and Country (USA). There is a password field with masked characters. The 'Media Service' section has checkboxes for 'Tribune' and 'TitanTV', both of which are checked. Below these are two authorization sections, one for Tribune and one for TitanTV. Each section has fields for Host, User, Password, Confirm Password, and an Enable checkbox.

Configuring Virtual Channels

Once your valid TitanTV data is downloaded, it is immediately available to your DTVGuide account. Channels are configured by assigning a name and channel number that mirror the mapping page setup of your Adtec DTA3050 multiplexer. Names and numbers must match exactly (including case) for your device to recognize and download the appropriate channel data.

Selecting a source from the **SOURCE** drop-down combo box will open a search box at the bottom of the screen. All channels currently provisioned to you by TitanTV will be available from this dialog box.

Select the TitanTV channel you wish to associate with your virtual channel and click on the **SAVE** button to retain your changes. Your changes are immediately reflected in the DTVGuide user interface, and will be downloaded to your DTA device next time it connects to the server.

Channel Info

* Name:

WKMG-3

* Channel Number:

73

Source:

TitanTV

Source Channel: K2

Change

Guide Data

Find a Channel:

wkm

Go

Channels:

WKMG 10-3

WKMG 10-2

WKMG 10-5

WKMG 10-4

WKMG 10-6

WKMG 10-3

City:

State/Province:

Country:

Save

Cancel

Configuring EPG Sales Media Service

DTVGuide supports pass-through of EPG Sales data by provisioning access through Adtec's European distributor Tantec NO.

Before setting up EPG Sales access through DTVGuide, you will need to establish the following:

- An EPG Sales account (username and password), set up through Tantec NO.
www.tantec.no | +47 64 83 81 00

Once you have a valid account set up through Tantec NO, and your account has been provisioned by an Adtec administrator, you are ready to set up DTVGuide.

Setup

Once your EPG Sales data is enabled, allow for 24 hours before your data is downloaded and available. DTVGuide makes a nightly download of all EPG Sales data, after which it will be available to your device(s)

Configuring Virtual Channels

Once your valid EPG Sales account is validated by an Adtec administrator, data is immediately available to your DTVGuide account. Channels are configured by assigning a name and channel number that mirror the mapping page setup of your Adtec DTA3050 multiplexer. Names and numbers must match exactly (including case) for your device to recognize and download the appropriate channel data.

Selecting a source from the **SOURCE** drop-down combo box will open a search box at the bottom of the screen. All channels currently provisioned to you by EPG Sales will be available from this dialog box.

Select the EPG Sales channel you wish to associate with your virtual channel and click on the **SAVE** button to retain your changes. Your changes are immediately reflected in the DTVGuide user interface, and will be downloaded to your DTA device next time it connects to the server.

Edit Channel: BBC HD

Channel Info

* **Name:**

* **Channel Number:**

Source:

Source Channel: **BBC HD UK**

Guide Data

Find a Channel:

Channels:

Building Listings Manually and Uploading to DTVGuide

DTVGuide Templates for Manual Listings

Adtec has generated templates that allow you to create, edit and email program listings for your virtual channel directly to the DTVGuide server without ever having to log into your account after initial setup. If you choose this option, you must follow the procedure below in order to get set up:

Create a Virtual Channel Name

Before you begin uploading program listings to Adtec, you must create a virtual channel name to be used for your channel. Your virtual channel can be any combination of letters, numbers, and some special characters (like dashes), but there are limits. Once you have established a name you would like to use, you must contact Adtec customer support with your request. Only an Adtec administrator can add your virtual channel to the database for security reasons. Adtec administrators are technical support representatives, and can be contacted via email at support@adtecinc.com

An example of a virtual channel name would be: **ADTEC-DT** (the same name as the template).

Once your virtual channel has been created by the Adtec administrator, you must also create it as a virtual channel for your device.

For more information on configuring virtual channels, please see the section of this manual on configuring virtual channels.

Email Your Listings to Adtec

Emailing your listings to Adtec requires specific formatting of the email itself. Ensure these preconditions exist before attempting to email listings to Adtec:

1. Your virtual channel has been created by the Adtec administrator
2. Your device has been configured to receive data from your virtual channel
3. You have filled out the CSV or XLS template and submitted it to **content@adtecinc.com** for a test run and have verified that data exists on your virtual channel

For more specific instructions on sending completed programming listing data to Adtec, see the section on Sending Completed Listings to Adtec.

Choose an Upload Template

Adtec provides two different upload templates for use: **CSV** or **XLS**, which can be downloaded from the Adtec website:

Both templates are the same except for the filetype. Once you choose one, do not rotate templates - stick with the one you have chosen. DTVGuide's templates support the following information:

Attribute	Flag
Date:	The date your show will air
StartTime	The time when your show will start
EndTime:	The time when your show will end
ShowName:	The name of your show (i.e. "Seinfeld"; 256 characters max length)
EpisodeTitle:	The title of the episode (256 characters max length)
Description:	The long description of the show (1024 characters max length)
Rating:	MPAA Rating
Language:	Y or N for explicit language content
SexualContent:	Y or N for explicit sexual content
Violence:	Y or N for violent content
ShowType:	Type of show description (i.e. "series")
Review:	Reviews (can be 1 star to 5 stars "****")
Cast1:	Cast Member/Actor
Cast2:	Cast Member/Actor
Cast3:	Cast Member/Actor
ReleaseYear:	Year of Release
ClosedCap:	Y or N for closed captioning
Stereo:	Y or N for stereo sound
HD:	Y or N for High Definition
Premiere:	Y or N for episode premiere/new episode

Follow the Template Format

DTVGuide's example templates already contain the necessary formatting that is used when data is uploaded to the server. Formatting is as follows:

File format: * virtualchannelname.xls or virtualchannelname.csv; examples: *ADTEC-DT.csv, ADTEC-DT.xls

Enter data up to **14** days of programming in the template, making sure to use timeslots of **0 (midnight)** to **23 (11pm)** for each day entered into the template.

Clear data from the template on columns that you are not planning on using, but do **not** delete the columns.

Important: Failure to follow these rules will result in unsuccessful uploading of your program data.

Sending Listings To Adtec

To send your completed listings to Adtec, first verify the following items:

1. Adtec has created your DTVGuide account and all virtual channels you plan on uploading data to have been added to our database.
2. You have sent one template as a test to verify data is received and displayed for your virtual channel in your DTVGuide account

If you have confirmed the items above, please send your listings to the following email address:

content@adtecinc.com

This is Adtec's dedicated inbox for receiving and parsing program listings. If you send an email to this address before the above conditions are met your email domain will be **blocked** to prevent spam.

Ensure your email is:

- formatted with the virtual channel name in the **SUBJECT** line of the email.
- sent from the email **DOMAIN** that you plan to send all of your listing emails from.
- registered with Adtec.

Separate multiple virtual channel attachments with a **comma (,)** in the **subject** line:

- **Example:**



Note: Messages from Gmail, Yahoo, Hotmail or other public domain email accounts will **not** be accepted to prevent spam.

Troubleshooting Issues

Problem	Solution
I just created my DTVGuide account and set up Tribune/TitanTV/EPG Sales, but I do not see data yet.	It takes 24 hours from account creation before Media Service data becomes available to you. DTVGuide will log in using your credentials once a day to download the latest program listings.
There are programs missing from my lineup.	Program listing content is processed as received from our program providers. If DTVGuide is not displaying certain information for a particular program or network, it is because that information is not available.
Which template should I use for uploading my own listings? CSV or XLS?	Either is fine. For those who do not have Microsoft Excel(R), a free version of office-application software is available from OpenOffice.org that can handle either format. Note: .XLS is the filename extension used by Microsoft's Excel (R) spreadsheet software. .CSV is the filename extension used by OpenOffice.Org's "Calc" spreadsheet software.

DTVGuide Configuration with Adtec Products

DTA Multiplexer Configuration

This section provides instructions for setting up DTA3050-series multiplexers to connect and download program listing data from DTVGuide. If you need additional assistance, please contact Adtec customer service during normal business hours.

Things to Consider Before Setup:

- What version of DTA firmware am I using? There are two branches to consider: 6.02x and 6.03x - and you can determine what version of DTA firmware your device has been installed with by connecting to the device via telnet and issuing the command "banner" without quotation marks.
- What timezone is my DTA in, and does my geographical region recognize daylight savings time?
- What is my broadcast channel name?
- What is my broadcast service ID?
- Do I have an NTP Server to synchronize to?
- Do I have a DTA already in service, and is my firmware up-to-date?

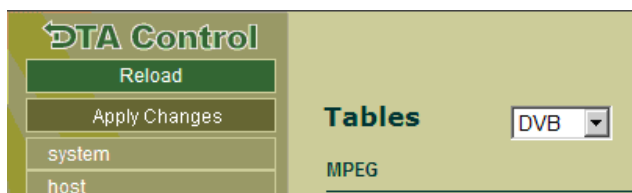
Setup Procedures for 6.02x DTA Firmware (Default Factory and Most DVB customers)

Serial Number for new accounts

Please telnet to the device and issue the command '*.sysd mfg' to get the serial number. This serial # will be used by Adtec when creating new DTVGuide Accounts.

```
*.sysd mfg
OK
Product Name=dta
Part Name=PC4911
Date=2008-06-12@14:58
Serial Number=0000010E83 <----- Your serial #
MicroMonitor Version=2008-01-21@10:56
CPLD Version=2008-01-21@10:53
hde Params
Model=PIO
FwRev =2007
SerialNo =20080313 380179C1
```

Step 1 - Verify DVB tables are selected on the 'tables' page of DTAControl



Step 2 - Configure HTTP String for DTA/DTVGuide connectivity

Users **must** enter the following string when telnetted into their DTA in order to correctly receive data

While Telnetted into your DTA device, type the following command:

```
* gul -c http://64.16.187.122:8080/dtvGuide/Admin?serial=XXXXXX&method=getSourceCache
```

Please note - serial=XXXXXX equals the serial number assigned by Adtec customer support to your DTVGuide account. The HTTP string shown above *is not* configured by default in the DTA.

Step 3 - Configure NTP Connection

While Telnetted into your DTA device, type the following command:

*.sysd nip 0 x.x.x.x – where x.x.x.x is the IP Address of a linux based NTP Server

Step 3 - Configure Your DTA's Time Zone

While Telnetted into your DTA device, type the following command:

*.sysd tiz EST-5EDT,M3.2.0/2,M11.1.0/2

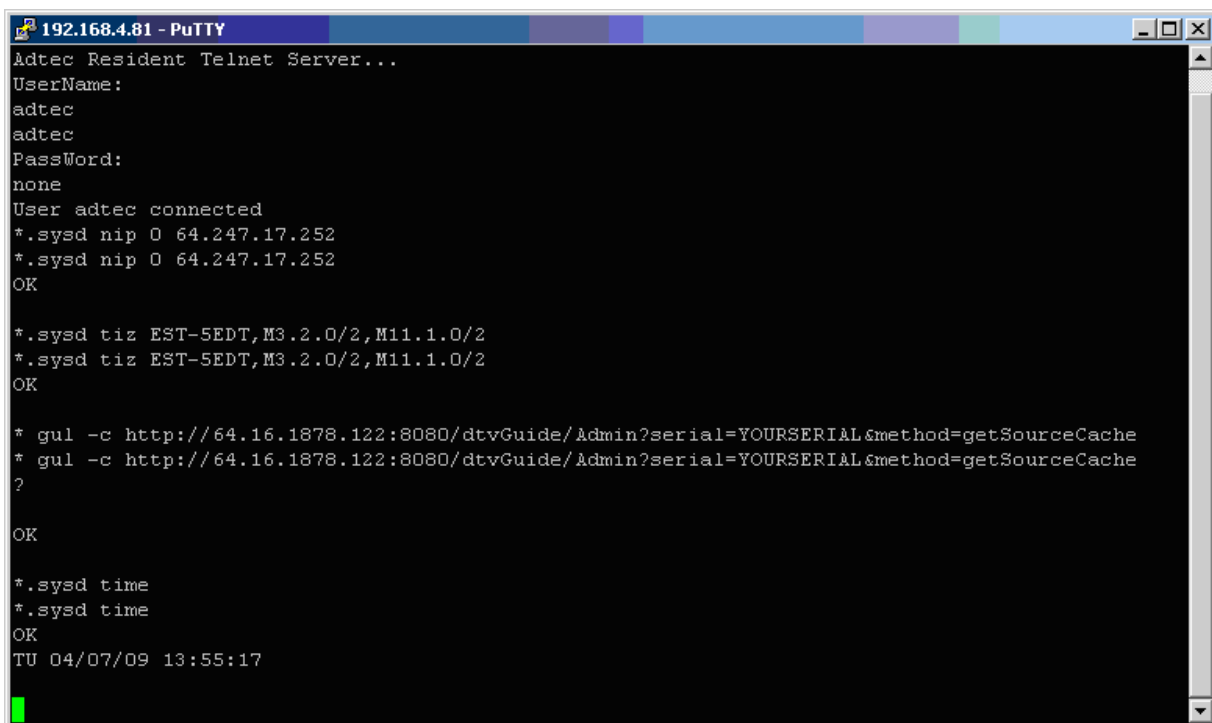
Time Zone settings that can be used with the current daylight savings rules. If you do not use daylight savings, please use "UTC-X" or "UTC+X" where X is your GMT Offset.

- EST-5EDT,M3.2.0/2,M11.1.0/2 Eastern
- CST-6CDT,M3.2.0/2,M11.1.0/2 Central
- MST-7MDT,M3.2.0/2,M11.1.0/2 Mountain
- PST-8PDT,M3.2.0/2,M11.1.0/2 Pacific

Step 4 - Force the DTA to Download Content

While Telnetted into your DTA device, type the following command:

* gul -f



```
192.168.4.81 - PuTTY
Adtec Resident Telnet Server...
UserName:
adtec
adtec
Password:
none
User adtec connected
*.sysd nip 0 64.247.17.252
*.sysd nip 0 64.247.17.252
OK
*.sysd tiz EST-5EDT,M3.2.0/2,M11.1.0/2
*.sysd tiz EST-5EDT,M3.2.0/2,M11.1.0/2
OK
* gul -c http://64.16.1878.122:8080/dtvGuide/Admin?serial=YOURSERIAL&method=getSourceCache
* gul -c http://64.16.1878.122:8080/dtvGuide/Admin?serial=YOURSERIAL&method=getSourceCache
?
OK
*.sysd time
*.sysd time
OK
TU 04/07/09 13:55:17
```

The Channel Name added in the DTVGuide web interface **must** match the Channel name within your DTA Mappings. If not login to DTA (pw: USER) or DTVGuide and rename accordingly. Please let Adtec support know if you are using our "Manual" guide data email process.

You should now have EIT information in your stream.

GUL Settings for DTA

- * gul -f - forces new data download
- * gul -c - configures get cache address
- * gul -p - configures period for downloading of new data

Setup Procedures for 6.03x DTA Firmware (ATSC and Redundant MUX Customers)

Serial Number for new accounts

Please telnet to the device and issue the command `*.sysd mfg` to get the serial number. This serial # will be used by Adtec when creating new DTVGuide Accounts.

```
*.sysd mfg
OK
Product Name=dta
Part Name=PC4911
Date=2008-06-12@14:58
Serial Number=0000010E83 <----- Your serial #
MicroMonitor Version=2008-01-21@10:56
CPLD Version=2008-01-21@10:53
hde Params
Model=PIO
FwRev =2007
SerialNo =20080313 380179C1
```

Step 1 - Configure DTVGuide FTP User and Password

Users **must** configure an FTP password for the DTA as of 6.03.XX firmware revisions. The password can be set in DTV Guide in the Manage -> Devices -> Details area. Please type in the desired FTP password. This is the same FTP password that is used when configuring the CPW.

It takes up to 20 minutes for program to become available when sending emails with automated listing template files. Tribune/TitanTV data will be available to be used the following day at 6AM EST. With Program Data available you can now configure the DTA for injection. Please configure network settings (IP, Subnet mask, and Gateway IP) from the front panel. Please telnet to the DTA, port 23, username: 'adtec' password: 'none' for time/ntp/guide configuration. Adtec recommends time synchronization to an NTP server. Any command without an argument shows the current setting.

Step 2 - Configure NTP Connection

While Telnetted into your DTA device, type the following command:

```
*.sysd ntp 0 x.x.x.x – where x.x.x.x is the IP Address of a linux based NTP Server
```

*Step 3 - Configure Your DTA's Time Zone *

While Telnetted into your DTA device, type the following command:

```
*.sysd tiz EST-5EDT,M3.2.0/2,M11.1.0/2
```

Time Zone settings that can be used with the current daylight savings rules. If you do not use daylight savings, please use "UTC-X" or "UTC+X" where X is your GMT Offset.

- EST-5EDT,M3.2.0/2,M11.1.0/2 Eastern
- CST-6CDT,M3.2.0/2,M11.1.0/2 Central
- MST-7MDT,M3.2.0/2,M11.1.0/2 Mountain
- PST-8PDT,M3.2.0/2,M11.1.0/2 Pacific

Step 4 - Configure the DTVGuide IP Address

While Telnetted into your DTA device, type the following command:

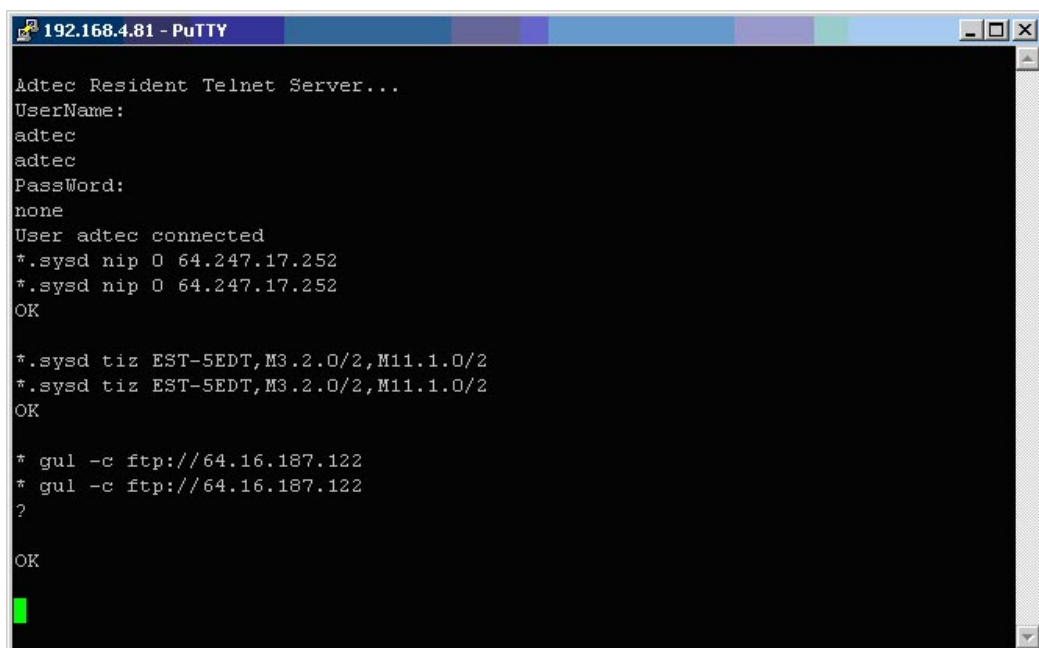
```
* gul -c ftp://64.16.187.122 * cpw username,password
```


Please note that username **is not** the DTVGuide username. It is the serial # of your DTA. The password *is not* configured by default. Please set a password in DTVGuide under the Devices > Details tab.

Step 5 - Force the DTA to Download Content

While Telnetted into your DTA device, type the following command:

```
* gul -f
```

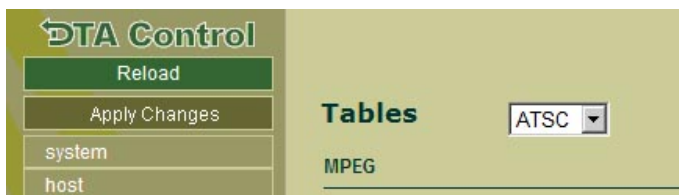


```
192.168.4.81 - PuTTY
Adtec Resident Telnet Server...
UserName:
adtec
adtec
PassWord:
none
User adtec connected
*.sysd nip 0 64.247.17.252
*.sysd nip 0 64.247.17.252
OK

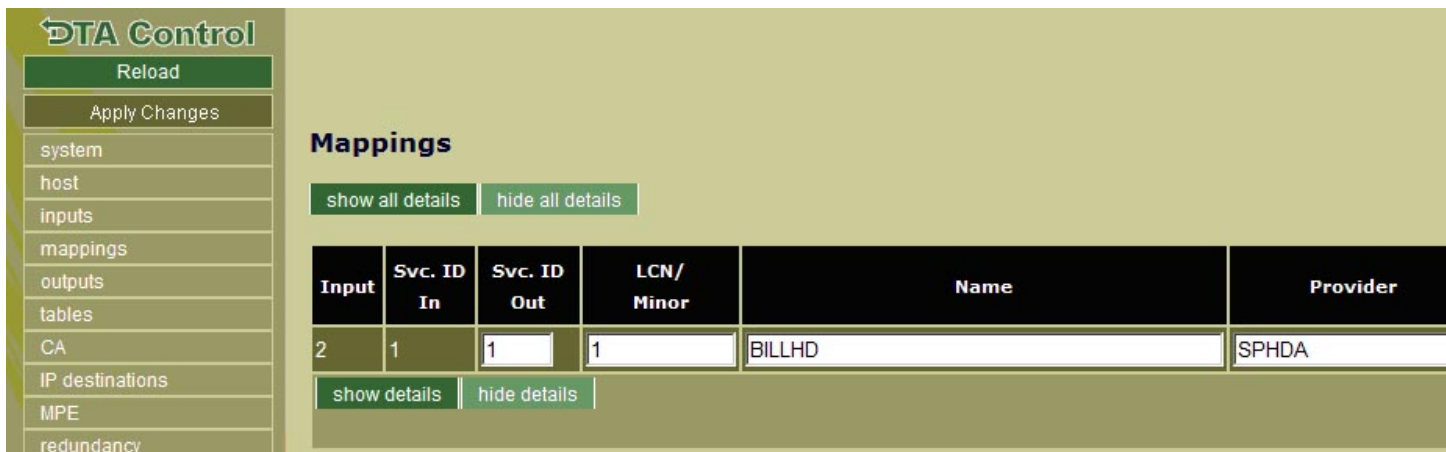
*.sysd tiz EST-5EDT,M3.2.0/2,M11.1.0/2
*.sysd tiz EST-5EDT,M3.2.0/2,M11.1.0/2
OK

* gul -c ftp://64.16.187.122
* gul -c ftp://64.16.187.122
?
OK
```

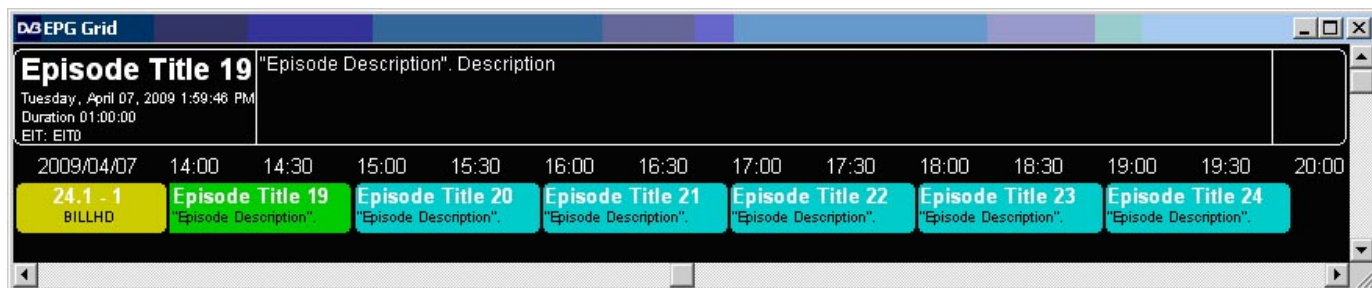
Step 6 - Verify ATSC tables are selected on the 'tables' page of DTAControl



The Channel Name added in the DTVGuide web interface **must** match the Channel name within your DTA Mappings. If not login to DTA (pw: USER) or DTVGuide and rename accordingly. Please let Adtec support know if you are using our "Manual" guide data email process.



You should now have EIT information in your stream.



GUL Settings for DTA

- * gul -f - forces new data download
- * gul -c - configures get cache address
- * gul -p - configures period for downloading of new data

Third Party Device Integrations with DTVGuide

DTVGuide supports outside access via external API, however devices must be provisioned by an Adtec administrator. There is an integration fee charged at time of setup for all non-Adtec devices, but there is no charge for access to DTVGuide's service or the listing content we support from our programming provider partners. Please call Adtec's sales office for more information on this feature, or email sales@adtecinc.com for assistance

Note: Adtec Digital does not offer internal integration services with third party devices - that responsibility lies with the product manufacturer to incorporate the Adtec schema into their device(s). Support from the external API is considered "as is" functionality.

Third Party Device Integrations with DTVGuide

DTVGuide supports outside access via external API, however devices must be provisioned by an Adtec administrator. There is a recurring fee charged at time of setup for all non-Adtec devices, but there is no charge for access to DTVGuide's listing content from our programming provider partners. Please contact Adtec's sales office for more information on this feature, or email sales@adtecinc.com for assistance

Note: Adtec Digital does not offer internal integration services with third party devices - that responsibility lies with the product manufacturer or systems integrator to incorporate the Adtec schema into their device(s). Support from the external API is considered "as is" functionality.

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Appendix

Contacting Customer Support

Adtec Digital's Support Services Technical Support and Customer Service includes troubleshooting product/system functional operations concerning Adtec equipment, embedded systems and single device issues; Service Order generation, processing and tracking; Warranty claim processing; and on-site system evaluation and maintenance. Technical Support plans do not include customer training programs. Programs incorporating customer training are defined in the Training Services Policy. Customer Services technicians provide limited instruction during a support call/email/fax in order to facilitate checking for proper equipment operation.

Telephone and Email Support

- **Telephone:** 615-256-6619 ext. 166
- **Email:** support@adtecinc.com
- **Internet:** www.adtecdigital.com/support

Adtec Digital offers telephone, email and fax support, warranty and service related inquiries during normal business hours: 9:00am to 5:00pm Central Standard Time (CST), Monday through Friday, holidays excepted. Support Requests can also be submitted on-line.

All inquiries will be processed in the order in which they are received and by the criteria outlined in the Call Response Order. Inquiries and inquiry responses made after 5:00 PM (CST) weekdays, Saturday, Sunday or on an Adtec-recognized holiday will be processed the next business day in the order received.

Callers on hold and returned calls will be prioritized by the following criteria:

- Priority-24 Subscription Customers
- Standard-Priority Subscription Customers
- All customers that have purchased Installation & Training, within 90 days of the installation
- Adtec Certified Operators (ACO)
- Limited Level Support, Warranty & Service Requests
- Multi-device system installations that have purchased Installation & Training from Adtec
- Distributors
- System Integrators
- Multi-device systems
- Single device users

Information needed for Support To help expedite the troubleshooting process, please be prepared to provide the following information to the support representative:

- **Product(s) affected:** please provide a list of the Adtec Products involved including the Revision Number for each affected product.
- **Description of the Problem:** please include a detailed description of the problem. Include the approximate time and day the problem occurred, the spot ID of the material being inserted and what the operator reported about the incident. It is also helpful to note any recent changes to the system. More information is always better than too little information.
- **Your Contact Data:** please include contact information so we can reach you to discuss how to fix the problem, additional troubleshooting steps that are required or to gather more complete information regarding the problem. Please include your facility name (or call letters), your name, title, email address, telephone number, hours of work, and other contact persons if you are not available.

Advanced Support Plans

In addition to our basic Inquiry Response Policy, Adtec offers two advanced levels of priority inquiry support:

Standard-Priority and **Priority-24**. The Standard-Priority & Priority-24 plans provide guaranteed* response times with the Priority-24 plan offering after hours and holiday support. Standard-Priority support is included with the Adtec Certified Operator (ACO) training. Contact Adtec Sales to upgrade your current support plan.

Standard-Priority Support Plan Description

Customers can improve upon our normal call processing times and can expedite inquiry support responses through our subscription Standard-Priority service plan. Under this plan all telephone inquiries are guaranteed* a telephone response of no

more than 4 hours after they are received (within the designated hours of operation). Telephone inquiries received by 4:00 PM (CST) on weekdays- excluding Adtec holidays- are guaranteed a same-day telephone response. However, inquiry responses may be made after hours until 8:00 PM (CST). Email and fax inquiries are limited in scope to normal business hours, excluding holidays. Standard-Priority customers are entitled to a 10% discount on site visit and training charges after the initial system/product installation and training. Standard-Priority customers also receive a 3-day turnaround time guarantee* on warranty and non-warranty repairs on Adtec manufactured equipment, excluding Studio Encoders.

Priority - 24 Support Plan (24 Hour) Description

In addition to our Standard-Support plan, after hours, weekend and holiday support is available with the **Priority-24** support plan. This plan is a subscription only service available for service inquiries 24 hours a day, 7 days a week. All telephone inquiries are guaranteed* a telephone response time of no more than 2 hours. Email and fax inquiries are limited in scope to normal business hours, excluding holidays. Calls after 5:00 PM will be forwarded to a Customer Services representative on call. **Priority-24** customers are entitled to a 25% discount on site visit and training charges, after the initial system/product installation and training. **Priority-24** customers also receive a 1- day turnaround time guarantee* on warranty and non-warranty repairs on Adtec-manufactured equipment, **excluding** Studio Encoders.

Plan Comparisons

Feature/ Plan Name	Priority-24	Standard Priority	Limited
Hours	24 Hours/Day; 7 Days/Week	9:00 AM – 5:00 PM, (U.S. Central Standard Time), Excludes Weekends & Holidays	
Call Response Time	Same day- 2 hours (1st in order of call list)	Same Day: 4 Hours (2nd in order of call list)	48 Hours
Discounted Site Visits	25%	10%	None
Discounted Training	25%	10%	None
Repair Service	Guaranteed* 1 Day Turnaround	3 Day Turnaround	None

* A one-month free service extension will be awarded if Adtec fails to meet its service guarantee.

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Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'. This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

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