DC50Xu DTA
DC50Xu Overview

Standard Definition only adapter for encrypted services

- Simple channel up/down via RCU
- Channel 3/4 RF output
- No Out-Of-Band signaling
- No Pay Per View
- No Video On Demand
- No Program Guide
- No RADD impact
DC50Xu Accessories

External IR Receiver
  • For remote DTA placement

External Power Supply
  • Narrow design does not take up multiple sockets on a power strip

Remote Control Unit (RCU)
DC50Xu Front and Rear Panels

- **POWER LED**: Lights when your digital adapter is fully on.
- **CABLE IN**: From cable service provider.
- **TO TV**: RF output to the TV.
- **IR IN**: Infra-red input from the optional remote eye.
- **CHANNEL 3/4**: Switch for tuning your digital adapter.
- **POWER INPUT**: Make this connection last of all.

**IR RECEIVER (behind screen)**: Receives infra-red signals from your remote control.

*Note: IR receivers are typically found behind the screen of electronic devices and allow the remote control to function by emitting IR signals.*
DC50Xu  Diagnostics

Front panel LED Diagnostic information provided via flash patterns
  • Hunting
  • Awaiting CVT message
  • Code download
  • Content being received but DTA not authorized
  • Fault condition

On-screen Display Diagnostics enabled via remote control
  • DTA Unit ID
  • H/W and S/W versions
  • Power and Signal to Noise levels
  • Code download status
  • Activation status
DC50Xu  Front Panel Indicator

The front panel light blue Indicator Light will flash to signal the state of the adapter

• One long continuous blink, indicates adapter is in boot / hunt mode and does not have QAM lock. Verify connectivity.
• Two short blinks indicate the device is pending initialization and requires activation command.
• Three short blinks indicates device is in code download mode, and a download is pending.
• Continuous short blinks - the adapter is in trouble mode.
• LED on. The adapter is in normal operations mode.
DC50Xu Diagnostics

• Press and hold the Info Key for 5 seconds to access the DTA Diagnostic menus.
• Use the channel up and down arrows to navigate thru the 9 DTA Diagnostic menus.
DTA Diagnostics: General Info

- For Pace DTA’s the Vendor Name will always display Pace.
- The Hardware Version is a hard coded value that reflects the hardware operating system.
- The Unit Address is displayed on the General Info page.
DTA Diagnostics: DTA Status

• Activated. This field will reflect if the DTA is active and available for subscription services. YES / NO

• The Activated DTA state should reflect “YES”, if the DTA Activated State reflects “NO” – Send additional activation command to the DTA.

![DTA Status Table]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activated</td>
<td>YES</td>
</tr>
<tr>
<td>DTA Mode</td>
<td>Normal Operations</td>
</tr>
<tr>
<td>Turn On QAM (MHz)</td>
<td>363.000</td>
</tr>
<tr>
<td>Timeout Value</td>
<td>3</td>
</tr>
<tr>
<td>Timeout Counter</td>
<td>3</td>
</tr>
<tr>
<td>Site Error Count</td>
<td>0</td>
</tr>
<tr>
<td>Configured LocID</td>
<td>0x00000001</td>
</tr>
<tr>
<td>Controller LocID</td>
<td>0x00000001</td>
</tr>
<tr>
<td>System Time</td>
<td>15 Dec 2011 14:50:04</td>
</tr>
<tr>
<td>Time Zone</td>
<td>-5</td>
</tr>
<tr>
<td>Daylight Savings Entry</td>
<td>11 Mar 2012 02:00:00</td>
</tr>
<tr>
<td>Daylight Savings Exit</td>
<td>04 Nov 2012 02:00:00</td>
</tr>
<tr>
<td>Last Addressable Timestamp</td>
<td>00:00:00</td>
</tr>
<tr>
<td>Last to return, info to exit</td>
<td></td>
</tr>
</tbody>
</table>
DC50Xu  Diagnostics: DTA Status

• Hunt Mode – DTA is hunting for a control channel (aka turn on QAM, TOQ).
• Pending Initialization – waiting for connect message and virtual channel table to be built.
• Code Download – DTA is downloading latest firmware.
• Normal Operations – DTA is fully configured, connected and channel table built.

![DTA Status](image)
DC50Xu Diagnostics: DTA Status

• Turn On QAM (TOQ) data frequency in MHz

• Timeout Value indicates when it is time to move to the next frequency to continue hunting for the TOQ.

• System time displays the time received from the network. This will include time zone and daylight savings offsets.
DC50Xu  Diagnostics: MSO Info

• MSO Info provides the Cable Operators contact and other information.
• Configurable by the MSO through the DAC
DC50Xu  Diagnostics: Tuner Status

• The fourth page of the DTA Diagnostics contains the current channel video and audio state in real time.

• The Tuned Frequency is the In-Band Tuned Frequency and display the current tuned to frequency.

![Tuner Status](image.png)
DC50Xu  Diagnostics: Tuner Status

• The Power Level will display the signal level of the currently tuned frequency.
• The Signal-to-Noise or SNR, reflects the current SNR level for the tuned frequency.
DC50Xu Diagnostics: Current Channel Status

• The fifth page of the DTA diagnostics provides all of the currently tuned channels.
• The current Virtual Channel (VC), Tuned Frequency and Modulation 256/64 QAM.
DC50Xu  Diagnostics: Current Channel Status

• The Program Number
• Video and Audio PID reflect the current video and audio PID values in hexadecimal.
• Audio User Muted is the audio muted.  YES / NO
DC50Xu Diagnostics: Virtual Channel Map

• The sixth page of the DTA diagnostics provides the complete Channel Table.
• Display total number of channel in the map.
• Channel up and down to scroll the complete channel map.
DC50Xu  Diagnostics: Virtual Channel Map

• Provides the virtual channels in order of lowest to highest.
• Source ID, Source Name, QAM and Program Number.
• Services with * are hidden channels.

![Channel Map Table]

CH+/- to Scroll, Last to return, Info to exit (*=Hidden)
DC50Xu  Diagnostics: Received Messages

- The seventh DTA diagnostic pages provides all of the Received Message data.
- Message Counter can be reset by holding the zero 0 key on the remote.
DC50Xu Diagnostics: Code Objects

- The eight DTA diagnostic pages provides the Code Objects (software) that are currently on the adapter.
- Provides Firmware Version, Object Name.
- The * will identify the Active Code Object.
DC50Xu Diagnostics: Code Download

- The ninth DTA diagnostic pages provides the Code Download status in real time.
- The front panel of the adapter will blink three times during a download.
- Code Download status will reflect the current download status.
DC50Xu Diagnostics: Code Download

- The ninth and final DTA diagnostic pages provides the Code Download status in real time.
- Code Download status will reflect the current download status
- If there is a software download pending, the adapter will reflect “Loading” and then “Successful” after the download is complete.
DTA Diagnostics: Code Download

• If no new software download is available the adapter will reflect “Not attempted.”

• If there is a problem with the download, the adapter will display one of the following faults in the Code Download Status field.

  • Cannot find DSMCC PID
  • Cannot Locate Code Image
  • File Download failure
  • Not Enough Memory
  • Code Verification Failure
Factory Reset

• You can reset the DTA to its original factory settings by following the steps below:

1. Enter diagnostics
2. Within 2-seconds, press 1-3-7-9 [there is a 2-second timeout between key presses].
   • This will clear the configuration (incl. TOQ) and channel table of the DTA.