

**Datatek RouteMaster**

**V 1.4.2**

**22-January-2004**

This document is intended as a basic introduction to the functions of the RouteMaster program.  
The current HELP file information is also included in this PDF document.

# Index

## 1. Installation

- 1.1 Software
- 1.2 Serial Cable

## 2. General

## 3. Operation Guide

- 3.1 File Organization
- 3.2 Save Config to disk
- 3.3 Restore Config from disk
- 3.4 Router Config Edit
  - 3.4.1 General
  - 3.4.2 Router Destination Config
  - 3.4.3 Router Source Config
  - 3.4.4 Router Rename Sources / Destinations
- 3.5 LCL: Linked Command List
- 3.6 Control Panels
  - 3.6.1 Global Update
  - 3.6.2 Panel Files
  - 3.6.3 D-2460 series: Button Per Source XY panels
  - 3.6.4 D-2860 series: LCD Button XY menu panels

## 4. Advanced Features

- 4.1 Multiple Routers
- 4.2 Status Page - Setting Stored Views
- 4.3 Communications Options
- 4.4 Log Changes to File - optional
- 4.5 New Features - Recent
- 4.6 Version History

# 1. RouteMaster Installation

## 1.1 Software

Program Version and date: **V1.4.2 22-Jan-2004**  
Installation disk set date: **22-Jan-2004**

This release of RouteMaster is for Windows-95/98, NT, 2000-professional, and XP.

Install as follows:

- Insert CD in CD drive
- Close all windows applications;
  - from the 'START' menu choose: **run | (CD drive letter):\RMSetup14.exe**
- follow the directions - make note of the install directory
  - (default is c:\Program Files\Datatek)

Do not run RouteMaster until finishing the steps below:

From the Customer Specific RM disk if provided (or Customer user folder on CD), copy the directories and files to the installed RouteMaster directory. This will quickly get RouteMaster set to the way it was at router final test. These files are not required, just helpful. This will result in the following directory structure:

```
..\RouteMaster    routmstr.exe (required - program)
..\RouteMaster\config demo_dtk.cfg (demo router config file)
                  demolink.lcl (demo link command list)
                  jxxxxxx.cfg (custom: router config)
                  jxxxxxx.rms (custom: setup colors, preferences)
..\RouteMaster\panel 2xxxxxxx.txt (panel table doc - for Notepad etc)
                  2xxxxxxx.Axx (custom: panel tbl .Axx - .Dxx)
..\RouteMaster\image jxxxxxx.img (custom: xpnt configuration image)
```

Run RouteMaster... (see section at end of document for PC -to- Router cable pinout)

If file: RouteMaster\config\jxxxxxx.rms exists:

**\config\????.rms**      RouteMaster setup file for column names/colors etc  
read in RouteMaster: **File | Read RM Setup file | Browse to find file**

RouteMaster defaults to 38400 baud on PC COM1. Note that D-2800 port 2 and D-2600 is 9600 baud; you may change baud rate and COM port at:

<b>RM Options</b>	<b>  Preferences</b>	<b>  Communications</b>
Comm Port	[ 1 ]	or select desired PC COM port
BaudRate	[38400]	or 9600 if D2600 or D2800 port-2
Timeout	[250 ]	mS (PC Anywhere works with 250)

You may want to set RM for the following to obtain best screen:  
**RM Options | Preferences | Status Screen** (remove ✓ from the following)  
 Auto TAKE and PRESET columns  
 Show only active levels  
 Show only active destinations

Select 'OK'.

The width of the status screen columns may be adjusted by dragging at the top bar: suggest Take, Clear, and Level 4-7 columns be set for 1-character width. This will be retained by RM (until new .rms file read).

It is also suggested that the control panel management be setup as follows:

**RM Options | Preferences | Panel Login**  
 Login Control Panels (verify box is checked)  
 Startup Options: Background update after startup (not selected)  
 Startup Options: Complete update at startup (selected)  
 Panel Self Login: Upload to panel if file present (not selected)  
 Panel Self Login: Download from panel if file not present

`\config\???.cfg`

Router configuration, source / destination names and mapping read file into RouteMaster and Upload to Router as follows:

**File | Read Config file...** (browse to find file)

In "Upload to Switcher" window - select **(!)Both | Upload now**

`\config\???.lcl` Link List, Source Exclusions and Triggered events (optional file)

read file into RouteMaster and Upload to Router as follows:

**System Configuration | Edit Linked Command List**

**File | Read LCL file** (browse to file file)

**File | Upload to Router**

Other .RMS files exist in the CONFIG directory. The router ID shown by RouteMaster title bar gives eprom version and recommended setup file ie: '2815x v13\_ yymmdd \* DEE jxxxx' would mean use DEE.rms.

Others are available some are listed below;

Files will be added as required. Letter designations are:

V = analog Video	D= Digital video / SDI
A_= analog Stereo(2ch)	E= AES/EBU asynchronous
M = analog Mono Audio	S= AES/EBU synchronous (w/src process)
P= Port (ES-BUS/RS422 data)	

DA	. rms	Di gVi d, Aud. ch1/2
DA_A_	. rms	Di gVi d, Aud. ch1/2 Aud. ch3/4
DA_TP	. rms	Di gVi d, Aud. ch1/2, TC, Port
DEEA_P	. rms	Di gVi d, AES/EBU, AES/EBU, Aud. ch1/2, Port
DEPE	. rms	Di gVi d, AES/EBU, Port, AES/EBU
DSVP	. rms	Di gVi d, AES/EBU synchronous, anal ogVi d, Port
DVA_	. rms	Di gVi d, anal ogVi d, Aud. ch1/2
DVA_A_	. rms	Di gVi d, anal ogVi d, Aud. ch1/2, Aud. ch3/4
P	. rms	Port
V	. rms	anal ogVi d
VA_	. rms	anal ogVi d, Aud. ch1/2

VA_A_	.rms	anal ogVi d,	Aud. ch1/2,	Aud. ch3/4
VA_A_V	.rms	anal ogVi d,	Aud. ch1/2,	Aud. ch3/4, Key
VA_DETP	.rms	anal ogVi d,	Aud. ch1/2,	Di gVi d, aes/Ebu, TC, Port
VA_DS	.rms	anal ogVi d,	Aud. ch1/2,	Di gVi d, AES/EBU synchronous
VA_DTEP	.rms	anal ogVi d,	Aud. ch1/2,	Di gVi d, TC, aes/Ebu, Port
VA_P	.rms	anal ogVi d,	Aud. ch1/2,	Port
VS_P	.rms	anal ogVi d,	AES/EBU synchronous,	Port

RouteMaster now may be used for router operation and programming.  
The 'options' menu allows further user setting of RouteMaster preferences.

## Internet and email

This software can be downloaded from our web space. See the download area of our web site:

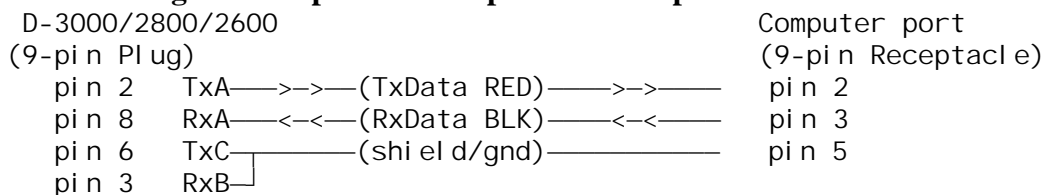
**[www.datateknj.com](http://www.datateknj.com)**

Please let us know your email address. We will keep you informed when new versions are available for download.

Please send email to **[routemaster@datateknj.com](mailto:routemaster@datateknj.com)**

## 1.2 Serial Cable - RouteMaster to Computer:

### RS-232 Cable Wiring: for computer with 9 pin 'D' serial port



### D-3000, D-2800, and D-2600 RS-232 / RS-422 Serial Control Connections

#### Rear panel RS-232 Compatible Data Connection

Pin #	D-3000/2800/2600 Designation	Computer/Terminal Designation
=====	=====	=====
(1)	Frame GND	Frame GND
(6)	Transmit Common	Signal GND
(2)	Transmit 'A'	RXData
(7)	Transmit 'B'	
(3)	Receive 'B'	
(8)	Receive 'A'	TXData
(4)	Receive Common	
(9)	Frame GND	
(5)	Not Used	

#### Rear panel RS-422 Data Connection

Pin #	D-3000/2800/2600 Designation	Computer/Terminal Designation
=====	=====	=====
(1)	Frame GND	Frame GND
(6)	Transmit Common	Signal GND
(2)	Transmit 'A'	RXdata 'A'
(7)	Transmit 'B'	RXdata 'B'
(3)	Receive 'B'	TXdata 'B'
(8)	Receive 'A'	TXdata 'A'
(4)	Receive Common	Signal GND
(9)	Frame GND	Frame GND
(5)	Not Used	

Mating connector is Amphenol 17-20090-1 or equivalent (9-pin plug with 4-40 retaining screws).

## 2. General Description

The RouteMaster program connects to a Datatek D-2600, D-2800, or D-3000 routing switcher for the purpose of status, control, and configuration. The crosspoint status is shown allowing the crosspoints to be switched. The program can show all of the control panels attached to the system. The programming of the control panels can be changed. The source and destination names of the router can be changed. The current status of any or all crosspoints can be saved to an IMAGE file and retrieved later.

### Program Startup

As the program starts, it retrieves the *configuration* information for the destination and sources. This configuration information consists of the name and the physical assignments of each source and destination. It then gets the crosspoint status for each destination. This status information is put into the status grid on the screen. After this is done, the program finds all control panels attached to the system. After this, the initial startup screen closes showing the status screen.

### Crosspoint status and switching

The status screen shows the crosspoint status of the entire router in a scrollable grid. By clicking on this grid, sources can be selected and then switched to by pressing one of the red TAKE buttons. The *Lock* column shows if a control panel has locked a destination. Locking a destination disables another control panel from changing the source. To lock a destination from the program, double click in the lock column for the destination to be locked. Crosspoint presets can be made on any number of destinations and then switched individually by pressing the take button for the destination or all together by pressing the *Take All* button on the left side of the screen.

### Panels | Panel Management

By clicking on the **Panels** menu item at the top of the screen and then the **Panel Management** sub-item, you will see a tree display of all the control panels connected to the router. From here you can upload, download, and edit the control panel information. This information is stored in the panels and can also be saved on the local disk drive. These files can be edited to change the programming of the panels and then sent back to the panels. This display shows the panel ID of each panel along with the file name and the panel identification string. A red X indicates that there is no file present for the panel. A red check mark indicates that a file is present but the panel ID strings do not match. A green check mark indicates that the file is present and panel ID strings are the same. To upload, download or edit a panel file, right click on the panel and select from the list. If the selected panel is a D-2460 pushbutton type, you will have the option of graphically editing the panel file. Later sections describe the graphical editing abilities in more detail.

## **Panels | Virtual Panel**

Selecting this allows you to select a control panel file and use it as a virtual control panel on the computer screen. Any number of panels may be used at a time. The current version of RouteMaster can only use D-2460 pushbutton and D-2860 LCD panels as virtual panels. Other panels will be added in future versions.

## **System Configuration | Edit Destination Configuration** **System Configuration | Edit Source Configuration**

The System Configuration menu item allows you to change the source and destination names and their physical configuration. This is described in the router instruction manual.

## **System Configuration | Upload...**

This is used to send the configuration information to the router. This must always be done after editing the source or destination configuration. It is also a good idea to save this information in a file. See below

## **File | Read Config file...** **File | Save Config file as...**

This is used to read and save files containing system configuration information.

## **File | Read Image file...** **File | Save Image file as...**

The current status of any or all of the destinations can be saved in an image file. This can be retrieved later and sent to the router. To select destinations, click on the Gray cell at the left edge of the status grid of a destination to mark. To mark a group of destinations, you may drag across a group of cells or click on one and SHIFT click on another to select all in between. CTL click can be used to add to an existing selection. To save this selection, click the File menu item and then Save Image File. You will then be prompted for a file name. To recall an image file, select the Read Image File item from the File menu. Then select the desired file. This will then be sent to the router immediately.

## **Options | Preferences**

This lets you set details for the Status Screen, Communications, Directories, Editing, and Panel Login.

## **Options | Columns Setup**

This lets you change the names and colors for the columns in the Status Screen

## **Options | Mode Names Setup**

Here you edit the mode names for each level.

## **Special | Restart RouteMaster**

This allows you to restart the program without getting out of the program and clicking on the RouteMaster icon again.

## **Special | Reset Tie Lines**

This clears the tie lines to the selected router. This is only useful where multiple routers are connected together with Tie Lines. Otherwise, it has no effect.

## **Special | Send Commands Manually**

This gives you direct access to the router. Any commands entered here are sent to the router exactly as typed. This should only be used by advanced users or at the specific request of Datatek.

### 3. Operation Guide

This section gives step-by-step procedures for some typical operations.

#### 3.1 File Organization

A quick review of RouteMaster file folder organization is helpful to fully understand some of the operations. The default RouteMaster folder is typically located in folder:

**C:\Program Files\Datatek\RouteMaster**

This will vary depending on how RouteMaster was installed. This text will refer to this path as:

**...\RouteMaster**

Some of the folders installed are:

<b>...\RouteMaster\config</b>	contains files used for configuring the router control modules
.cfg	text file with source and destinations names and crosspoint mapping.
.lcl	text file with Linked Command List (not used in some systems). .lcl provides crosspoint Exclusions and allows a command to Trigger other command(s).
.rms	routemaster setup file, set colors and column names for routemaster.
<b>...\RouteMaster\panel</b>	contains files used for control panel configuration.
.a00 - .a31	each panel in the system should have a file in this folder. The
.b00 - .b31	extension is determined by the control panel's XY coax panel ID
.c00 - .c31	(address). Most systems have 4 XY coax lines (A, B, C, D) and each
.d00 - .d31	coax allows ID# 00-31.

**Datatek recommends that backups of known working files be made of these folders and their sub-folders and stored in safe location(s). Consider making one copy on backup folders in the PC with RouteMaster and a 2<sup>nd</sup> set away from this PC. This allows recovery if someone saves a 'bad' configuration to disk.**

## 3.2 Save the current configuration to disk:

### 3.2.1 Router:

a) restart RouteMaster (this will make certain RouteMaster has read in the latest config.)

b) save .cfg to disk (.cfg has source/dstn names and crosspoint mapping).

**File | Save Config File as...**

Pick a file name in folder ...\\RouteMaster\\config and press **[save]**

c) if this system uses Linked Command List (.lcl) file for Exclusions or Triggers...

save .lcl file to disk:

**System Configuration | Edit Link Command List**

RouteMaster reads the list from the router and displays the LCL EDIT window

LCL EDIT: **File | Save LCL file**

Pick a file name in folder ...\\RouteMaster\\config and press **[save]**

LCL EDIT: **[Cancel]** to close the LCL EDIT window.

### 3.2.2 RouteMaster:

a) RouteMaster settings are saved in the 'windows' registry. The parameters may also be saved to disk to allow transfer to another computer as follows:

**File | Save RM Setup File**

Pick a file name in folder ...\\RouteMaster\\config and press **[save]**

### 3.2.3 Control Panels:

Each control panel has a panel config file. The Panel Management menu handles most control panel items. Most panels are edited in RouteMaster and then uploaded to the panel, therefore RouteMaster probably has the latest version of the panel files. If desired panel file(s) can be saved by:

a) View the present list of panels:

**Panels | Panel Management**

the control panel management window appears with a tree diagram of panels that are presently in the system. This window may be refreshed by:

CtlPnlManage: **File | Re-initialize Panel List**

b) Highlight panels to download (save) using the left mouse button, use keyboard [ctrl] key to add panel(s) to the list.

CtlPnlManage: **File | Download from panel(s)...**

Leave the  Use the default names and directory checked.

**[Download]** the panel files will be downloaded.... wait until complete.

## 3.3 Restore a saved configuration from Disk:

### 3.3.1 Router:

a) read the .cfg file from disk into RouteMaster (.cfg has src/dstn names & xpoint mapping):

**File | Read Config File...**

Pick a file name in folder ...\\RouteMaster\\config and press **[open]**

acknowledge read complete, press **[ok]**

b) send the config to the router:

select radio button:  **Both**

and press **[Upload Now]**

there is no need to reset the standby controller, press **[ok]**

c) if this system uses Linked Command List (.lcl) file for Exclusions or Triggers...

read the .lcl file from disk:

**System Configuration | Edit Link Command List**

RouteMaster reads the list from the router and displays the LCL EDIT window

LCL EDIT: **File | Read LCL file**

Pick a file name in folder ...\\RouteMaster\\config and press **[open]**

LCL EDIT: **File | Upload LCL to router**

select radio button:  **Both**

and press **[Upload Now]**

there is no need to reset the standby controller, press **[ok]**

LCL EDIT: **[Cancel]** to close the LCL EDIT window.

### 3.3.2 RouteMaster:

a) RouteMaster settings are saved in the 'windows' registry. The parameters may also be updated from disk to allow transfer from another computer as follows:

**File | Read RM Setup File**

Pick a file name in folder ...\\RouteMaster\\config and press **[open]**

## 3.3 Restore a saved configuration from disk: (continued)

### 3.3.3 Control Panels:

a) View the present list of panels:

**Panels | Panel Management**

the control panel management window appears with a tree diagram of panels that are presently in the system. This window may be refreshed by:

CtlPnlManage: **File | Re-initialize Panel List**

Each panel has a mark in front of it:

- ✓ green check: header of file and panel IDS string match
- ✓ red check: header of file and panel do not match
- ✗ red X: no file has been found for this panel.

b) Highlight panels to upload (restore) using the left mouse button, use keyboard [ctrl] key to add panel(s) to the list. Only the panels with a check mark may be uploaded.

CtlPnlManage: **File | Upload to panel(s)...**

Leave the  Use the default names and directory checked.

**[Upload]** the panel files will be uploaded.... wait until complete.

## 3.4 Router Configuration Tables (.cfg):

### 3.4.1 General Information:

The Router Configuration has a table for sources and a table for destinations. Each table has a line for each system.source (or system.destination). The line has 9 fields (ie it is a 9 column table) with 8 character name and then crosspoint mapping for each of the 8 possible system levels. System names and levels are the logical sources and destinations; physical names and levels refer to the actual router hardware.

**Names** must be the full 8-characters, use the space character to keep the required number of characters. Names with spaces leading, trailing or both are valid. Keep the main part of the name (alpha group) in the same character locations; this will make programming the XY keypad control panels easier (typically the D2850 series panel).

Recommended	NOT recommended
12345678	12345678
VTR- 1	VTR- 1
VTR-10	VTR- 10
COLORBLK	COLORBLK
DAWS- 1A	DAWS-1A
DAWS-21B	DAWS-21B

Reserved characters; should NOT be used in names:

- . point: special meaning for up/downloading tables.
- , comma: delimiter in .CFG file and panel tables; will corrupt the tables.
- \_ underscore: used by control panels to show user entry locations, tieline sources will not be found if \_ is in the name

Special characters; use only when feature is active/desired:

- ~ tilde: special use: 1st character of Source/Dstn name: TieLine management.
- # pound: 1st character of Destination name: dstn may be used for bit flag(s), any value may be written to these sources; NOT sent to xpnts via COM (status sent to PORT(s) and XY-coax. Used for communication between devices: Virtual Tally can use 'flags' to operate UnderMonitorDisplay colors.
- MNTR The name: 4-spaces+MNTR is reserved for the Dstn Monitor function.

## 3.4 Router Configuration Tables (.cfg): (continued)

### 3.4.2 Destination .cfg:

Access the destination table using RouteMaster menus:

**System Configuration | Edit Destination Configuration...**

This .cfg shows physical ddd/L mapped to provide: system dstn d002, d003 = sdi only, d032, d033 = aes only  
bold lines indicate sections not shown.

system dstn#	dst_name	lvl-0 sdi	lvl-1 aes 1/2	lvl-2 aes 3/4	lvl-3	lvl-x
0	VTR 1	0/0	0/1	0/2		
1	VTR 15	1/0	1/1	1/2		
2	MONI TOR1	2/0				
3	MONI TOR2	3/0				
4	AUX 1	4/0	4/1	4/2		
5	AUX 2	5/0	5/1	5/2		
6	AUX 3	6/0	6/1	6/2		
32	AUDMI X 1		2/1	2/2		
33	AUDMI X 2		3/1	3/2		
198	198					
199	MNTR	2046/0	2046/1	2046/2		

**dst\_name:** 8 characters, see previous 3.4.1 General Information page for guidelines.

**physical\_dstn:** each level column gets physical\_dstn entries. These are of the form: **ddd/l**

**ddd** is the physical dstn# (hardware dstn address)

**/l** is the physical level# (hardware level address)

Make certain that a specific physical **ddd/l** value is **only used ONCE** in the table. If it appears multiple times, the hardware is being updated by multiple SYSTEM destinations. This will give meaningless results since it is likely the destinations will have different sources selected. This restriction does not apply to the SYSTEM SOURCE configuration table; physical sources can be used as many times as desired.

The last line is special use: MNTR is for the destination monitor switch (if equipped).

The length of the table (# of lines) is determined by the EPROM defaults supplied with the system. Edit the dst\_name and crosspoint mapping as desired. Also see **Inserting a Line** below.

When editing is complete, exit menu: **[OK]**

Do you want to Upload now? **[Yes]**

select radio button:  **Both**

then press **[Upload Now]**

there is no need to reset the standby controller, press **[ok]**

## 3.4 Router Configuration Tables (.cfg): (continued)

### 3.4.2 Destination .cfg: (continued)

#### Inserting a Line:

If it is desired to 'insert' a line within the table, a portion of the table must be moved. This is done with a copy and paste operation to move a block of lines down one line; then edit the duplicate line to be the desired new source.

1. Identify the block of lines to move. The start of it is where the new line will be added, the end will be just above an unused line since it will be overwritten.
2. Use the left mouse button and drag to highlight the block to move (can also drag along the left system# column). The entire block must be highlighted, not just one column.
3. **CTRL-C** copies the block to the clipboard.
4. Position the cursor one line down from the start of the highlighted block **CTRL-V** will paste.
5. Edit the line at start of block to obtain the new source or destination line.

This can be practiced, the **[Cancel]** button can always be pressed to discard the 'practice' session.

## 3.4 Router Configuration Tables (.cfg): (continued)

### 3.4.3 Source .cfg:

Access the source table using RouteMaster menus:

**System Configuration | Edit Source Configuration...**

This .cfg shows physical sss/M mapped to provide: system src s002, s003 = sdi only, s032, s033 = aes only  
bold lines indicate sections not shown.

system src#	src_name	lvl-0 sdi	lvl-1 aes 1/2	lvl-2 aes 3/4	lvl-3	lvl-x
0	VTR 1	0/0	0	0		
1	VTR 15	1/0	1	1		
2	CAMERA 1	2/0				
3	CAMERA 2	3/0				
4	AUX 1	4/0	4	4		
5	AUX 2	5/0	5	5		
6	AUX 3	6/0	6	6		
32	AUDMI X 1		2	2		
33	AUDMI X 2		3	3		
249	249					
250	- - -					
251	srcdummy	0/0	0	0		

**src\_name:** 8 characters, see prior 3.4.1 General Information page for guidelines.

**physical\_src:** each level column gets physical\_src entries. These take the form: **sss/M**  
**sss** is the physical src# (hardware src address)  
**/M** is the mode for those levels with modes (see below)

The last two lines are special use:

- - - reserved for systems with PORT router (used for IDLE condition)  
srcdummy used by RouteMaster & Linked Command List as 'wildcard' source (all match)

The length of the table (# of lines) is determined by the EPROM defaults supplied with the system.  
Edit the src\_name and crosspoint mapping as desired.

Also see Inserting a Line at the end of section 3.4.2

When editing is complete, exit menu: **[OK]** Do you want to Upload now? **[Yes]**  
select radio button:  **Both** then press **[Upload Now]**  
there is no need to reset the standby controller, press **[ok]**

## 3.4 Router Configuration Tables (.cfg): (continued)

### 3.4.3 Source .cfg: (continued)

**Caution:** Do not put **sss/M** in level columns that do not have modes; just put the physical\_src# **sss**. Failure to follow this rule can cause the router to convert your entry to a large number (probably 4096) and prevent proper operation. The best guideline to use is to make new entries in a column like the previous ones.

**Modes:** The routers use Modes to select special types of operations of the destination. This can be confusing since modes control the operation of the destination, but they are part of the source configuration table. The answer is that different sources can put the destination into different modes. A study of the available modes will make this evident. For example some sources can turn SDI reclocking off if the source signal is a non-lockable rate (like 50 Mb/S). Analog audio modes are used to handle mono and stereo paths in the same router.

The table below summarizes the mode function: the output module(s) used will determine if mode switching is available. Bold is the default.

SDI - Recl ock D3014, D2822, D2622	Stereo - 2 chnl D2814	Port (see PORT section) D2817 D2617
-----	-----	-----
<b>sss/0 Mb/s 270</b>	<b>sss/0 nml L/R</b>	sss/0 off
sss/1 HDTV 360	sss/1 swap R/L	sss/1 pri mCTLD
sss/2 NTSC 143	sss/2 MonL L/L	
sss/3 PAL 177	sss/3 MonR R/R	sss/3 mstrCTLG
sss/4 RCLK OFF	sss/4 Msum L+R	
	sss/5 Roff L/-	sss/5 sec_ctld
	sss/6 Loff -/R	sss/6 idle
	sss/7 off -/-	

HDSDI - Recl ock (Mul i Rate)  
D3012A

-----  
**sss/0 RCLK ON** auto locks to: 143, 270ASI, 270, 360, 540, 1485 Mb/S  
sss/4 RCLK OFF

## 3.4 Router Configuration Tables (.cfg): (continued)

### 3.4.4 Rename a Source (or Destination):

In many cases a Source (or Destination) can be renamed by editing the .cfg file and uploading it to the router. This is certainly the first step. Some control panels may need specific instructions.

#### Router:

Revise the name in the source or destination .cfg:

Source: see section 3.4.3

Destination: see section 3.4.2

Refer to the specific instructions below for control panels. The section **3.6.1 Global Update** has information to review panel XY programming options.

#### D-2850 Series AlphaNumeric XY Keypad Panels:

**Global Update = True:** (default) The panels will update their panel resident configuration. In most cases it will be desirable to save the revised panel resident configuration to disk, see section 3.2

If the source or destination name changes revise the spacing of Alpha groups or add Alpha groups the individual panels will need to be edited using RouteMaster menu:

**Panels | Panel Management**

**Global Update = False:** (user selection) This option requires that panel files be edited anytime there are name changes in the .cfg uploaded to the router.

#### D-2860 Series LCD Button Panels:

This series of panels have individual LCD displays in each button of the control panel. The panels are usually programmed in a tree type menu structure that groups sources (or destinations) of similar type into a menu page. Therefore this panel treats **Global Update** a little differently. If a source is moved to a new System.Source# but the spelling/spacing is kept the same, the panel will update as expected. The button for this source (or destination) will remain in the same place on the panel; the system address for that button will be automatically updated. If a new source is added or spelling is changed, the panel will need to be edited using RouteMaster Panel Management.

**Global Update = False:** (user selection) This option requires that panel files be edited anytime there are name changes in the .cfg uploaded to the router.

### 3.5 LCL: Linked Command List (.lcl):

The Linked Command List (LCL) is uploaded to the router control modules and provides additional features such as:

- Exclusion:** Prevent a crosspoint from closing, I.E. a device from selecting itself.
- Trigger/Link(s)** when a **Trigger** command is issued the programmed **Linked** commands will also be executed. There can be 1 or more **Links** associated with a single **Trigger**.
- Destination Shadow** is a special use of the **T/L** commands using wildcards for the sources that allows a destination to follow another; the shadow destination may be overridden and select a different source.
- Inclusion** Have the same form as Exclusion and are really the inverse function. When placed at the end of a destination's list, only the preceding commands and the commands specifically listed using the Inclusion command will be executed. If a destination is only allowed to select a very few sources, this is the easiest choice.

To access the LCL use:

RouteMaster menu: **System Configuration | Edit Link Command List**

Typical editing:

Add a new **Trigger/Link** or **Exclusion**:

go to bottom of table, highlight the "\*" or "END"

press the **[Insert]** button.

Enter the letter T or E

Enter the destination (use pull down menu)

Check the level(s) to be used as a Trigger/Exclusion

Enter the source (pull down menu)

"srcdummy" is a wild card and will match any source.

If doing E then done, If doing T/L enter Link(s)

Enter the destination (use pull down menu)

Check the level(s) to be used as Link (does not have to match T levels)

Enter the source (pull down menu)

"srcdummy" as a T and L source provides **Destination Shadow**

Done: The LCL must be in system destination order, therefore RouteMaster will sort as lines are added.

When done with LCL editing, upload to the router:

LCL edit menu: **File | Upload LCL to Router**

Also save to a new disk file:

**LCL edit menu: File | Save LCL file**

A sample LCL window with some typical entries follows on the next page:

	T	Dest	Level s 01234567	Source	L	Dest	Level s 01234567	Source	
1	E	VTR 1	XXX. ....	VTR 1					OK
2	T	VTR 1	XXX. ....	CAMERA 1	L	VTR 1	.XX. ....	AUDMI X 1	
4					L	AUX 1	.XX. ....	AUDMI X 1	
5	E	VTR 15	XXX. ....	VTR 15					
6	T	VTR 15	X. ....	CAMERA 1	L	VTR 15	.XX. ....	AUDMI X 1	Insert
8	T	VTR 15	X. ....	CAMERA 2	L	VTR 15	.XX. ....	AUDMI X 2	
10	I	MONI TOR1	X. ....	CAMERA 1					Remove
11	I	MONI TOR1	X. ....	CAMERA 2					
12	T	AUX 1	X. ....	srcdummy	L	AUX 2	XXX. ....	srcdummy	Cancel
14	T	AUX 3	X. ....	srcdummy	L	AUX 2	XXX. ....	srcdummy	
16	E	AUDMI X 1	XXX. ....	AUDMI X 1					
17	E	AUDMI X 2	XXX. ....	AUDMI X 2					
END	*	?? USED							

This example LCL shows features using the example sources and destinations from sections 3.4.2 and 3.4.3. Actual LCL tables could be more elaborate (and more realistic).

LCL#

- 1 Exclusion: dstn VTR 1 cannot select source VTR 1
- 2-4 Trig/Link: when dstn VTR 1 (levels 0 or 1 or 2) selects CAMERA 1 the following switches:  
 dstn VTR 1 (levels 1,2) selects source AUDMI X 1  
 dstn AUX 1 (levels 1,2) selects source AUDMI X 1
- 5 Exclusion: dstn VTR 15 cannot select source VTR 15
- 6-7 Trig/Link: when dstn VTR 15 (level 0) selects CAMERA 1  
 dstn VTR 15 (lv 1,2) selects AUXMI X 1
- 8-9 Trig/Link: when dstn VTR 15 (level 0) selects CAMERA 2  
 dstn VTR 15 (lv 1,2) selects AUXMI X 2
- 10-11 Inclusion: dstn MONI TOR1 can only select sources CAMERA1 and CAMERA2
- 12-13 Destination Shadow (T/L): dstn AUX 2 follows (shadows) dstn AUX1
- 14-15 Destination Shadow (T/L): dstn AUX 2 follows (shadows) dstn AUX3
- 16 Exclusion: dstn AUDMIX 1 cannot select source AUDMIX 1
- 17 Exclusion: dstn AUDMIX 2 cannot select source AUDMIX 2

## 3.6 Control Panels:

### 3.6.1 Global Update:

Uploading a configuration (.cfg) file to the router updates the router source names, destination names and crosspoint mapping. While the upload is occurring the router is broadcasting the names and source/destination system# to all control panels via the XY-coax control lines. Normally the panels will update their panel resident configuration from this information. This is useful if the panel configurations and the router.cfg file use the exact same spelling and spacing for all of the source and destination names (recommended). This allows routine source/destination name changes, moves or additions (additions when the alpha group exists ie have VTR 1 - VTR 19 and are adding VTR 43) without having to edit the AlphaNumeric XY control panel(s). This is referred to as **Global Update** and is enabled / disabled in the individual control panel files. For a typical 2850 series panel the panel file looks like this for the default **Global Update = True**:

```
.IDS
2850 v25_ 020429 * 2850KPAD (Axx) template 29apr2002

.CFG
[GLOBAL=T]; =T default (=F names not updated from 2815x cfg upload)          (optional line)
[PLEV_MNTR=00000011] ;set dstn MNTR to lvls 0,1 (sdi, aes)                  (optional line)

.KEY
```

The line with [GLOBAL=T] may also be missing to select the default Global Update enabled. If this is not the desired operation, [GLOBAL=F] may be used to disable Global Update. When disabled, the panel will ignore all source and destination name updates from the XY coax during a RouteMaster upload of the .cfg to the router. The panel will still accept panel file uploads using RouteMaster panel management. This means that if Global Update is disabled, changes in source/destination names must be made in each control panel file and then uploaded to the panel using RM Panel Management. Note that the .CFG line does not need to be present when none of the optional lines follow.

It should be noted that the panel configuration is stored in 2 places. The panels have a configuration file stored in **panel resident memory** (battery RAM or FLASH depending on the panel model). This allows the panels to rapidly start from a power down condition. It is the panel resident memory that the Global Update selection refers to. The original **panel file** on the PC with RouteMaster is never updated when a router .cfg file is uploaded. The best way to update these files (if desired) after a .cfg file upload to the router with global update enabled, is to download the appropriate panel files (panel to PC disk) using RouteMaster Panel Management.

## 3.6 Control Panel: (continued)

### 3.6.2 Panel Files:

The control panels have panel resident configuration information that is stored in the panel's battery backed RAM or FLASH memory (depends on control panel model). There are panel disk files on the RouteMaster/panel folder of the PC. Generally these are the same, but the panel resident configuration may be modified by uploading a new configuration (.cfg) to the router.

RouteMaster can give a View the present list of panels:

**Panels | Panel Management**

the control panel management window appears with a tree diagram of panels that are presently in the system. This window may be refreshed by:

CtlPnlManage: **File | Re-initialize Panel List**

Each panel has a mark in front of it:

- ✓ green check: header of file and panel resident IDS string match
- ✓ red check: header of file and panel resident IDS string do not match
- ✗ red X: no file has been found for this panel.

Sometimes the firmware has been updated in the control panel and the existing disk files are from an older (compatible) version. This will give the indication:

- ✓ red check: header of file and panel resident IDS string do not match

If this file is attempted to upload to the panel using RouteMaster

**Panels | Panel Management | Upload...**

the warning message: "UPLOAD PANEL AND FILE ARE NOT THE SAME TYPE" appears.

This and similar messages will appear if a panel file is being uploaded to the wrong type of control panel. If it is really the wrong type of panel, do not upload the file, the panel will not accept it and will revert to factory defaults. Sometimes this message is a result of the panel file header not matching the firmware version of the panel being addressed. A portion of a 2850 series panel file illustrates this (other panels are similar):

```
. | IDS  
2850 v25_ 020429 * 2850KPAD (Axx) template 29apr2002
```

The string in red (the IDS up to the \*) must match in the panel file and the panel firmware IDS string to avoid this message. The warning message could be ignored, the upload will usually work with differing firmware versions of the same panel type. To avoid this message, edit the panel file IDS up to the \* to match the actual panel. This is visible in the panel management window, or the panel file can be downloaded to a scratch file and this part of the IDS may be cut a pasted into the actual panel file.

As additional information, the first string of characters following the \* provides RouteMaster with the default name to save the panel file with during a download of panel to PC. This must use valid filename characters and includes characters up to the first space. The default file name for the above IDS string would be 2850KPAD.axx; the extension .axx is the panel ID letter (coax A/B/C/D) followed by the 2 digit panel ID number (00 - 31).

## 3.6 Control Panel: (continued)

### 3.6.3 D-2460 series: Button Per Source XY Panels:

This series of panels have programmable illuminated buttons. RouteMaster allows graphical editing of the panel function and has a 'print button label' function to allow creating updated button labels. RouteMaster also allows the panel configuration files to be run as a **virtual panel** in a RouteMaster window; this allows the panel configuration file to be debugged or used for convenience.

Each button may be programmed for one of the following operations:

Source Select	press to select the desired source.
Destination Select	press to select the desired destination (not needed on a 1 dstn panel)
Level Enable	press to select a single level, default is all levels follow.
Lock/Unlock	protect destination
Table Select	the panel may have more than one table (a practical max. is 2) I.E. a 2461-80 button panel may be programmed for 160 sources; Table-0 has 80 sources and 80 "shifted" sources in Table-1.

Not Used

Refer to the following pages for views and descriptions of the menu pages.  
The **D-2460 Series Instruction Manual** also has additional information.

These panels can be edited using RouteMaster Panel Management using menus:

**Panels | Panel Management**

The list of panels is displayed; edit the panel by:

a) double click the desired panel in the tree menu

or

b) Control Panel Manage: **Edit | Edit panel info...**

If the panel is presently **not connected** to the system or the panel is used as a **virtual panel** edit by:

**Panels | Panel Management**

Control Panel Manage: **Edit | Edit unassociated panel file**

## D-2460 Graphical Control Panel Edit

On this form, the functions of the buttons and other panel functions can be programmed.

The sections of this screen are as follows:

The Buttons at the top of the screen represent the buttons on the control panel. Clicking on each button will bring up a window to select the function of the button. The [D-2460/1 Button Function Edit](#) topic discusses the details of programming the individual buttons.

[Panel Table Selection](#)

[Panel level / Matrix level Assignments](#)

[IDS Version number and User comment](#)

[Primary and Secondary Destination select](#)

[Print Button Labels](#)

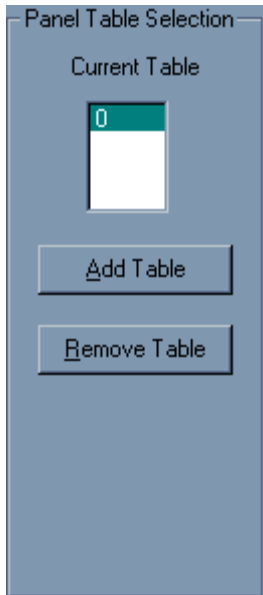
[Edit Relay Table](#)

[Test Panel](#)

[Back to main RouteMaster help page](#)

## Panel Table Selection

This section allows you to add, remove, and select which panel table you are currently editing.



The image shows a dialog box titled "Panel Table Selection". It has a light blue background and a title bar. Inside the dialog, there is a label "Current Table" above a text input field containing the number "0". Below the input field are two buttons: "Add Table" and "Remove Table".

Click in the **Current Table** box to select the table to be worked on. Click here before clicking the Remove Table button

Clicking the **Add Table** button will add a new table to this panel. The added panel will be a copy of the last existing table.

Clicking the **Remove Table** button will remove the currently selected table. Be sure to click a button in the Current Table text box before clicking this button.

# Panel level / Matrix level Assignments

Here the association of panel levels to Matrix levels is assigned.

The screenshot shows a window titled "Panel level / Matrix level Assignments". It contains a grid with 8 columns and 8 rows. The columns are labeled "Matrix" (vertical), "sdi", "Aud 1", "Aud 2", "Level 3", "Level 4", "Level 5", "Level 6", and "Level 7". The rows are labeled "Panel" (vertical), "V-05", "A1", "A2", "A3", "FUT", "FUT", "FUT", and "FUT". Checkmarks are present in the following cells: (V-05, sdi), (V-05, Level 4), (A1, Aud 1), (A2, Aud 2), (A3, Level 3), and (A3, Level 4). The "FUT" rows are dimmed.

Panel	Matrix	sdi	Aud 1	Aud 2	Level 3	Level 4	Level 5	Level 6	Level 7
V-05		✓				✓			
A1			✓						
A2				✓					
A3					✓	✓			
FUT									
FUT									
FUT									
FUT									

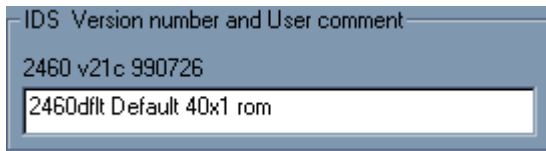
Each row is for one Panel Level and is associated with one Level Button on the panel. Most D-2460/2461 panels will only have four panel levels. In this case, the last four rows will be dimmed out and cannot be used. To add additional levels, it is necessary to add Level buttons in the button assignment section. When level buttons are added, the associated level row in this section will become active.

The column of names are the Panel Level names. These can be up to four characters. These names are saved in the panel file and become the default names for the level buttons.

Each column is associated with one Matrix control level. Level 0 is the left most column. Level 7 is the right most column. A check mark indicates that the Matrix level will switch when the Panel level is selected.

The names above the columns contain the level names and colors as shown on the main RouteMaster status screen.

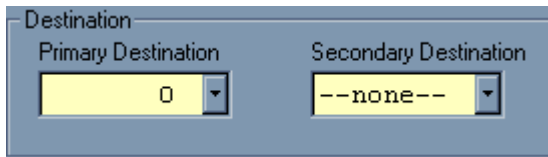
## IDS Version number and User comment



The image shows a screenshot of a software window titled "IDS Version number and User comment". The window has a blue header bar with the title. Below the header, there are two text input fields. The first field contains the text "2460 v21c 990726". The second field contains the text "2460dflt Default 40x1 rom".

This text box can be used for any user comments. RouteMaster uses the first text in this line to determine the panel file name. The file name will contain all characters up to the first space. In the case above, the panel file generated will be **2460dflt.xxx** where **xxx** will be the Panel ID.

## Primary and Secondary Destination select

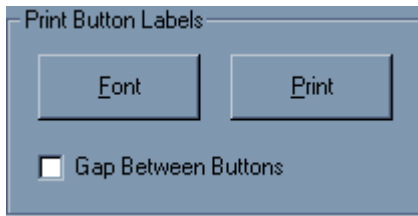


The **Primary Destination** and **Secondary Destination** boxes are used when there are no buttons that are programmed to select a destination. The three most used configurations are as follows:

- \* Single Destination panel. The **Primary Destination** box is set to the desired destination. The **Secondary Destination** box is set to **--none--**. All buttons are programmed as sources on the Primary Destination.
- \* Dual Destination panel. An example would be a 40 button panel programmed to work as a 20x2 panel where the top row of buttons switches the Primary Destination and the bottom row of buttons switches the Secondary Destination. The **Primary Destination** box and the **Secondary Destination** box are each set to a destination. In this example, the top row of buttons are set for the Primary Destination and the bottom row of buttons are set for the Secondary Destination.
- \* Multiple Destination panel with Destination buttons. An example would be a 32x32 panel. Both the **Primary Destination** and **Secondary Destination** boxes are set to **--none--**. The top two rows of buttons are programmed as sources. The bottom two rows of buttons are programmed as destinations. In this case, a destination button is pressed to select the destination to switch. The panel would remain on that destination until another destination button is pressed.

See also [D-2460/1 Button Function Edit](#)

## Print Button Labels



The **Font** button brings up a screen to select the font and other characteristics of the text.

The **Print** button will print the labels on the default printer.

If the **Gap** check box is checked, there will be a small gap between the printed labels. If unchecked, there will be no gap between labels.

A page of labels for any of the D-2460/246 series of control panels will fit on one half of a sheet. The sheet can be put back into the printer up side down and a second set of labels could be printed on the same sheet.

## **Edit Relay Table**

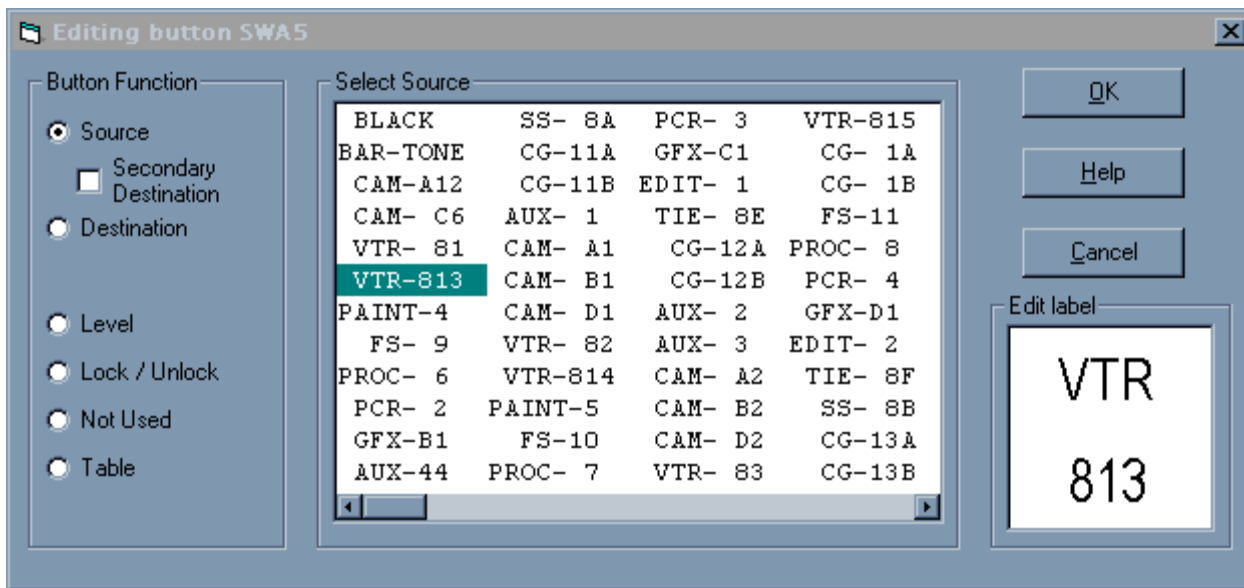
This button brings up a screen to edit the functionality of the opto inputs and relay outputs if installed. This button is only visible if the panel file contains a .RLY section.

## Test Panel

The **Test Panel** button will remove the edit screen and bring up a virtual control panel with the current programming. This virtual panel will function exactly as a real panel with the following exceptions:

- \* The Panel ID shown in the Lock column of the Main RouteMaster status screen will be the ID of RouteMaster.
- \* The indication on the buttons will show the programmed function. It was not practical to show the label as it would be printed.

## D-2460/1 Button Function Edit



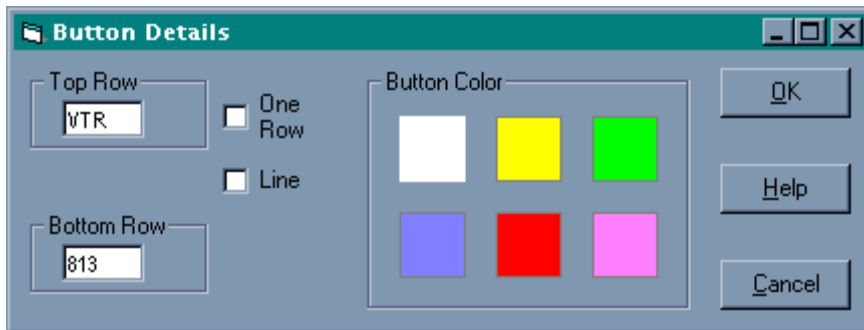
This help topic can be brought up by pressing the Help button or pressing <F1> while working in the above displayed window.

The area in the center that is labeled **Select Source**, changes as appropriate for each function. As you select functions on this window, the **Edit Label** area will change according to your selection. You can click in the **Edit Label** area to modify the details of the button label.

The radio buttons in the **Button Function** area selects the following functions:

- \* **Source**. Pressing a Source button on a control panel will switch the current destination to the programmed source. If the **Secondary Destination** box is unchecked, the source button will switch the **Primary** destination of the panel. If checked, the source button will switch the **Secondary** destination of the panel. After selecting the **Source** button, the center of the window will show a list of available sources. Select the desired source in the list. See the [Primary and Secondary Destination select](#) topic for more details.
- \* **Destination**. Pressing a Destination button on a panel will set the destination being controlled. After selecting the **Destination** button, the center of the window will show a list of available destinations. Select the desired destination in the list.
- \* **Level**. Pressing a Level button on the panel will set the current level being indicated or to be switched. After selecting the **Level** button, the center of the window will show a list of available levels. Select one from the list. The levels assignments are set in the [Panel level / Matrix level Assignments](#) section on the Graphical Edit screen.
- \* **Lock / Unlock**. Pressing the Lock button on a panel will toggle the **Locked** status of the destination.
- \* **Not Used**. A button selected as **Not Used** will have no function.
- \* **Table**. Pressing a Table button on the panel selects which button Table to be used. See the [Panel Table Selection](#) for a details of Button Tables.

## 2460 Button Details



The button label can have either one or two rows of text. If two rows are selected, you also have the option of inserting a line between the rows. The button labels can be printed from the [Graphical Edit Screen](#). The colors selected here are only used for Virtual Panels.

## 3.6 Control Panel: (continued)

### 3.6.4 D-2860 series: LCD Button XY Menu Panels:

This series of panels have LCD buttons; each button has an LCD display with programmable text and backlighting colors. RouteMaster allows graphical editing of the panel function. RouteMaster also allows the panel configuration files to be run as a **virtual panel** in a RouteMaster window; this allows the panel configuration file to be debugged or used for convenience.

Each button may be programmed for one of the following operations:

- Source: Has the name or number of a source to select. Press to select the source.
- Soft.Source: Upon entering a menu, this button will be configured to match the present active source for the active destination. Important feature for a panel with many menu pages.
- Enable Src: If present on a menu page, provides protection against accidental switches. Hold this button to activate switching when source buttons are pressed.
- Destination: Has the name or number of a destination to select. Press to select the dstn.
- Soft Dstn: Upon entering a menu, this button will be configured to match the present active destination; provides an indication of the destination being controlled.
- Menu: Provides a jump to another menu page. There can be any number of menu buttons on a single menu. Caution: all menu pages must have at least 1 menu button, otherwise they become a dead end with no way to navigate away from that menu page.
- Soft Menu: Upon entering a menu, this button will be configured to jump back to the previous menu. This is particularly useful on a utility menu page, perhaps a menu with level buttons, mode buttons and/or destination select buttons.
- Level: Toggles a router level active / inactive.
- Query Level: May be placed on the menu page that has level buttons. When pressed it causes the level buttons to display the source name that the level is switched to; this allows breakaways to be displayed.
- Mode: Selects the destination mode for those levels that have modes. This is used for SDI to select reclocking rate or reclocking off; also for analog stereo audio.
- Lock: Protects the destination so that it may not be accidentally switched.
- Off: Configured inactive in this menu. The button is dark and has no function.

Refer to the following pages for views and descriptions of the menu pages.  
The **D-2860 Series Instruction Manual** also has the complete information.

## 3.6 Control Panel: (continued)

### 3.6.4 D-2860 series: LCD Button XY Menu Panels: (continued)

These panels can be edited using RouteMaster Panel Management using menus:

**Panels | Panel Management**

The list of panels is displayed; edit the panel by:

a) double click the desired panel in the tree menu

or

b) Control Panel Manage: **Edit | Edit panel info...**

If the panel is presently **not connected** to the system or the panel is used as a **virtual panel** edit by:

**Panels | Panel Management**

Control Panel Manage: **Edit | Edit unassociated panel file**

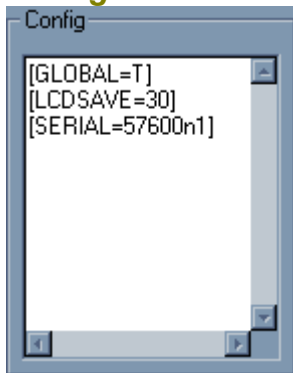
## D-2860 LCD Series Control Panel Programming

The D-2860 series of panels contain buttons that are programmable for function, colors and displayed text. This help topic explains the functions of each section of the Graphical Programming Interface.

The different sections are as follows:

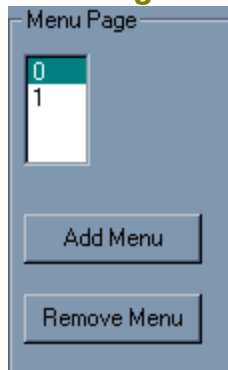
[IDS Version number and User comment](#)

### **Configuration Variables**



These are explained in the Control panel instruction manual.

### **Menu Page**



This selects which menu you are working on. Selecting a different menu page changes the buttons to those of the selected menu. Clicking the Add Menu button will add a blank set of buttons. It will become the highest numbered menu. Clicking the Remove Menu button will remove the currently selected menu. It will adjust any existing menu buttons on existing menu pages to point to the new location as any menu pages above the menu page moved. Any menu buttons that refer to the removed menu will be reset to menu 0.

### **Button Definition**

Button Definition

- Source       Enable
- SoftSource     Query
- Destination
- Soft Destination
- Level
- Menu
- Soft Menu
- Mode
- Lock Unlock
- Button Not Used

This defines the function performed by the button. Making a selection here sets the default colors for the selected function. The details of the button are selected in the next section.

### Button Details

Button Details

Active Color      Inactive Color

Select Source      Override Button Text

16     

Levels

sdi	Aud 1	Aud 2	Aud 3	Aud 4	Level 5	Level 6	Level 7
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The items in this section change as appropriate for each button function. You may change the colors from their defaults by clicking on the Color buttons and making a choice from the window that pops up. The Levels section selects the levels that the button acts on when the button is pressed.

## 4.1 Multiple Routers Usage

RouteMaster allows the user to have multiple routers connected to a single PC. The program uses a file described below to specify connection and other information about connected routers. If this file does not exist, RouteMaster starts its normal way. If this file does exist, it presents the information to the user to select which router to start.

The file is named Routers.lst. It contains three items for each router.

1. The router name which is presented to the user to select from. This can be any description you would like.
2. The working directory for the router. Each router can work in a different directory. This allows each router to have a totally different set of panel and other files.
3. The Router Settings Name. This name is used for saving the settings in the Windows Registry. The easiest thing to do is to use the same name as the last directory portion of the working directory.

There is a file installed in the RouteMaster directory named xRouters.lst.

This file may be used as a template for creating a file to use. To use this file, Make a copy of it without the "x" in front (Routers.lst).

Then edit the new file.

The first time RouteMaster starts with the Routers.lst file, You will need to select the COMM port, baud rate, and other settings. When RouteMaster shuts down, these settings will be saved and will be recalled the next time the router is selected at RouteMaster startup.

Following is the xRouters.lst file with comments added.

```
. RNM
D2800 Network Distribution Router Name
. DIR
c:\MyFiles\RM\Ndis working Directory
. RSN
Ndis Router Settings Name
. RNM
D2800 Central Switching
. DIR
c:\MyFiles\RM\CentSw
. RSN
CentSw
. RNM
D2600 Edit Room 1
. DIR
c:\MyFiles\RM\ER1
. RSN
ER1
```

## Views

VIEWS allows the user to select the destinations to view at one time on the status screen.



The VIEW options are as follows:

All destinations.

Only Active destinations.

Destinations switched to a specific source.

Named views

### ALL DESTINATIONS

This selection shows all destinations in the software tables in the router.

### ACTIVE DESTINATIONS

This shows only destinations that are active.

### SPECIFIC SOURCE

This selection will only show destinations with a selected source in use. This will add or remove destinations as any level of a destination switches on or off of the selected source.

To use this function, click into the text box below the **Source in use** button. Then select the source to show.

### NAMED VIEWS

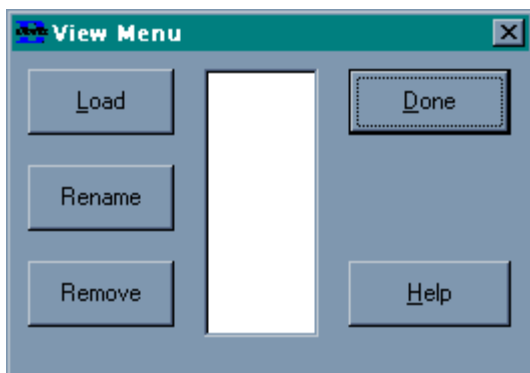
This allows you to **Load** destination lists from disk files. For example, you could have a list of destinations that are all VTR machines, or destinations used by particular studios.

To use this, first you save a view list file. This is done by clicking and dragging the cursor through the destination numbers at the left of the status grid. You can use Ctrl-Click and Ctrl-Drag to add to the selection. Then right click on the selection and then save the list to a file.

Once view lists have been saved, use the **View Menu** button on the main status screen to load and name the views.

The other buttons allow you to **Rename** and **Remove** views in the list.

Click **Done** when finished

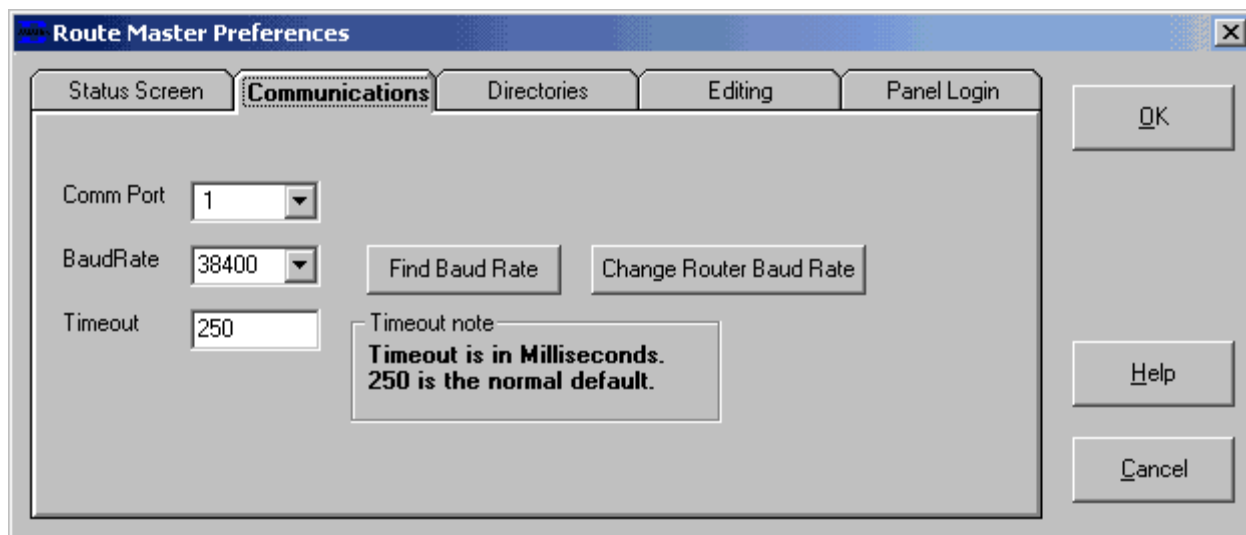


When loading a view, the default name will be the file name. This will be limited to eight characters in length.

At that point, click on the text box below the **Dest views** button. This will show you the list of view files that you have loaded. Select from this list to show only the included destinations.

## Communications

The communications tab in the Preferences screen allows you to set the communication parameters between RouteMaster and the router.



The **Comm Port** box will show all available ports on the computer. Any ports already used will be listed as IN USE.

The **Baud Rate** box selects the setting of the COM port on the PC.

The **Timeout** box selectw the timeout for communications to the router. This is normally 250 milliseconds. This only needs to change if the router is connected through a remote port or through a set of modems to a remote router.

The **Find Baud Rate** button will look for the router using all available baud rates on the selected COM port.

The **Change Router Baud Rate** button sends a command to the router to change IT'S baud rate. This change will take effect ONLY AFTER the router is reset.

To change the baud rate of the router, first click the **Change Router Baud Rate** button and select the desired baud rate. Then go to the router and press the reset buttons on the controller module. Reset BOTH controllers if two are installed. After the router has been reset, change the **Baud Rate** selection or hit the **Find Baud Rate** button.

## LOG function

The log function is an enhanced feature that is enabled when a LICENSE.DAT file is purchased from Datatek. The log function uses a LOG.LST file that contains a list of destination names to save crosspoint status changes for. This file can be generated from the FILE menu on RouteMaster.

To generate the LOG.LST file, highlight the destinations to be logged by clicking the gray box with the destination number on the left side of the status grid. Any combination of destinations can be selected. When all of the desired destinations are selected, Click on the **File** menu and then select **Save Log List File**. This will save a list file in the RouteMaster IMAGE folder. This is also where the log files will be saved.

It will save one log file for each day. The file will be named with the date as the first part of the name and **.log** as its extension. The date format will depend on your system's settings. Whenever any of the destinations in the log list change their status, it creates a line containing the changes. Each item on the line is separated by a comma. This will allow the file to be read into a program such as Microsoft Excel for processing.

The items on each line are as follows:

1. Date
2. Time
3. Destination name
- 4-11 The 8 character source name for eight router levels. If these levels have modes, then there will be a / followed by the numeric mode for that level. If a level is not present, there will be consecutive commas.
- 12 Name of control panel that made the switch. Port1 and Port2 are the serial ports on the router.

Following is a short example of a log file.

```
10-03-2003,11:16:27, 0, 3/0, 3/0, 3, 3, 3,,,,Port1
10-03-2003,11:16:32, 4, 31/0, 31/0, 31, 31, 31,,,,Port1
10-03-2003,11:18:37, 0, 44/0, 44/0, 44, 44, 44,,,,A02
10-03-2003,11:18:54, 7, 18/0, 18/0, 18, 18, 18,,,,A02
10-03-2003,11:19:22, 0, 44/0, 44/0, 44, 44, 44,,,,A02
10-03-2003,11:19:46, 1, 77/0, 77/0, 77, 77, 77,,,,pnl:-A18
10-03-2003,11:19:54, 8, 34/0, 34/0, 34, 34, 34,,,,pnl:-A18
10-03-2003,11:19:56, 9, 66/0, 66/0, 66, 66, 66,,,,pnl:-A18
10-03-2003,11:23:34, 3, 3/0, 3/0, 3, 3, 3,,,,VTR 22 -
10-03-2003,11:23:35, 4, 4/0, 4/0, 4, 4, 4,,,,VTR 22 -
10-03-2003,11:23:58, 7, 7/0, 7/0, 7, 7, 7,,,,MSTR Ctl
10-03-2003,11:23:59, 8, 8/0, 8/0, 8, 8, 8,,,,MSTR Ctl
```

## New Features

### **Version 1.4.1 Build 28-OCT-2003**

- \* When logging the MNTR destination, it uses dest names instead of source names.
- \* MultiRouter feature now works if restarting RM without exiting. Previously, it worked if you exit, but not if restart from menu.

### **Version 1.4**

- \* In ENHANCED mode, RouteMaster can save a log or crosspoint changes. A file named LOG.LST contains a list of destinations to save status changes for. To use this feature, a LICENSE.DAT file is required. A personalized license file can be purchased from Datatek to enable the enhanced mode. Contact Datatek for details. This is the first of the PAID enhanced features for RouteMaster.

### **Version 1.3.3**

- \* Default speed now 38400 Baud. Was 9600
- \* Repaired bugs in LCL edit
- \* Added Query and Enable buttons in D-2860 LCD panels
- \* LCD panel edit now uses default level and mode names
- \* GPI edit for 2460 and 2860 panels uses words inputs and outputs instead of relays and optos
- \* RM will not hang if saved com port number no longer exists

### **Version 1.3.2**

- \* Fixed missing COM ports in COMMUNICATIONS dialog when some COM port numbers were skipped over. RouteMaster now correctly finds all COM ports up to COM16.

### **Version 1.3.1**

- \* Reload Virtual Panels on startup. If a virtual panel was active when shutting down RouteMaster, it will be restarted on power up of RouteMaster

### **Version 1.3**

- \* Graphical editing of new D-2860 series of LCD button control panels.

### **Version 1.2**

- \* Communications setup now finds all available COM ports on the PC.
- \* Can try all available Baud rates to communicate to router.
- \* Change router communication speed.
- \* Added VIEWS to allow the user to view certain destinations instead of all destinations at the same time.
- \* Saving an IMAGE file now saves the mode.

## 4.6 Version History

RouteMaster Version 1.4.2 Build 22-JAN-20036

- Improve Labels: Relay/Opto table now lists input and output correctly
- Improve: Source list now sorts according to selection in Preferences.

RouteMaster Version 1.4.1 Build 29-OCT-2003

- Improve: When logging the MNTR destination, it uses dest names instead of source names.
- Fix: MultiRouter feature now works if restarting RM without exiting. Before, it worked if you exit, but not if restart from menu.

RouteMaster Version 1.4 Build 03OCT2003

- Add: Log feature. license.dat required for log function
- This saves status of selected destinations to a daily log file.

RouteMaster Version 1.33 Build 08AUG2003

- Add: Default speed now 38400 Baud. Was 9600
- Fix: Repaired bugs in LCL edit
- Add: Added Query and Enable buttons in D-2860 LCD panels
- Improve: LCD panel edit now uses default level and mode names
- Improve: GPI edit for 2460 and 2860 panels uses words inputs and outputs instead of relays and optos
- Fix: RM will not hang if saved com port number no longer exists

RouteMaster Version 1.32 Build JUN2003

- Fix: Repaired search for COM ports. If there were a "hole" in available port numbers, it would stop looking correctly. Now correctly finds all ports between 1 and 16.

RouteMaster Version 1.31 Build 04FEB2003

- Add: Save last virtual panel loaded when shutting down. Power up RouteMaster with last loaded virtual panel.

RouteMaster Version 1.3 build 21JAN2003

- Add: Graphical edit of D-2860 series of LCD button Control Panel config.
- Add: Simple logging function. Needs paid enhanced UNLOCK file to use

RouteMaster Version 1.2 build 09OCT2002

- Add: Communications TAB now finds all available COM ports
- Can change Router baud rate
- Can automatically find router baud rate
- Add: Has Destination Views to easily select destinations to show on the main status screen
- Improve: Image Save now saves mode

RouteMaster Version 1.0.1 build 07DEC2000

- Multiple router can now handle up to 32 routers in list.
- List larger and easier to read.
- Send commands manually window now adjustable size.

RouteMaster Version 1.0 build 25OCT2000

- Add: Help file. It includes the new features for this version
- Previous features will be added soon.
- Add: Graphical editing of D-2460/2461 series panels
- Add: Virtual panels. Any 2460/1 type panel can be used as a virtual panel

on the screen. Any number can be available at the same time.  
Improve: Main status grid, now a larger more easily scrollable list  
for selecting sources.

RouteMaster Version 0.P5 build 15MAR2000

Fix: Version 0.P3 and 0.P4 did not work with NT-4.  
Gave router not found error message.

RouteMaster Version 0.P4 build 16DEC99

Fix: fixes alphanumeric source list selection in Status Screen tab of  
Options|Preferences menu item. It would show error then dump out  
Re-compile with latest maintenance update of compiler.

RouteMaster Version 0.P3 build 21OCT99

Fix: Panel Management for slow (486/33MHz) computer,  
COM port input buffer could overflow if downloading a large file.  
Increased the input buffer size to give PC more processing time.

RouteMaster Version 0.P2 build 12OCT99

Fix: Installation problem where \panel, \config, and \image directories  
were incorrectly put in the <WINDOWS SYSTEM> directory.  
For this installation, only the destination of these  
directories is changed.

The program is listed as P2 06OCT99. This is the same as previous

RouteMaster Version 0.P1 build 06OCT99

Fix: two minor problems with Link List edit.  
1. First cell in new line did not receive focus after insert. It  
was necessary to click on cell before typing letter  
2. Got stuck in loop if enter letter that was not T, E, L, or I

RouteMaster Version 0.P build 27SEP99

Fix: install errors, one file missing, one file not registered properly.  
Add: panel names can be changed in the router. These names are used  
for error messages to the panels and in the LOCK column on the  
main status grid. These names can be uploaded and downloaded to  
and from a file on the main file menu. The names can be  
individually changed by right clicking a panel in the PANEL  
window.

RouteMaster Version 0.N build 03SEP99 32 bit

Add: Routers.LST file to allow you to select from multiple routers.  
Each can have different settings.

Fix: Multiple panel download works correctly again (all panels)

Fix: Panel upload after selecting alternate file now works

Fix: Link Command List, LCL; edit had insert bug and  
Cursor returns to arrow after Reading LCL file

Fix: Level 7 now shows correctly

Add: edit CFG asks to read CFG file if no router connected and will not  
prompt to upload CFG to router if no router connected

RoutMstr V0.M2 build 11mar1999 32 bit (16-bit no longer supported)

Changed Timeout to be entered as Milliseconds instead of decimal  
seconds. fixed error when changing baud rate from 38400. It previously  
crashed.

RoutMstr V0.M build 05JAN1999 (16 and 32 bit)

Add Dstn Monitor Switcher Control (double click dstn name in status display).

Add "I" (include) to linked list edit & removed 8-link limit.

Confirmed read LCL file OK with spaces in src names & tab at end with tvn and mdr lcl files.

Restart RM confirmation message box now reads "RouteMaster" instead of "router".

Background 1 second interval tally now works.

Fix 'run time 9' error at beginning. Loss of comm or timeout, does not crash. The timeout for reply is now variable.

Changed N, 8, 1 to N, 8, 2 Then OK if router with 2 stop bits.

Trap bad panel path or name, so do not dump out of RM

When uploading panel files, it compares panel type and version and warns user

Trap file not found error if upload to panel with file not there so it does not crash.

In Panel display, no more RED X if "\* xxxxxx" contains lower case letters since file names would not match.

Keep IDS and file name correct in panel tree if upload new file.

Fix manual commands. Now re-enables tally/change timer when exit through "X" in corner.

Fix read RM Setup file. It now changes column headings.

Fix download to full or write protected floppy dump out.

Can now edit panel file independently of panel.

Add control panel templates and samples to installation disk set.

RoutMstr v0.L build 12aug98 (32 & 16 bit)

Link\_List: fix read file error: (sources read from .LCL file were blank), build 06jan98 expected a comma after the source name (in .lcl file) .LCL file format unchanged.

Link\_List: fix edit / upload / download leaving the 'busy' curser until a take operation; Normal curser now restored.

16-bit version now 3-disks (build 06jan98 was missing a file)

RoutMstr v0.L build 06jan98 (32 & 16 bit)

Panel\_Manage: disabled if router does not support it (ie D-2400)

Panel\_Manage: fix 'green check' for panel file match after upload

Config: update RM screen with new names after read .CFG file & upload to router.

Config: Detect .CFG upload not allowed when using 2426EMU (adds router PORT(s)). The 2426EMU emulator does not support PROGRAMMING functions.