



Integration Note

Manufacturer:	ELAN
Model Number(s):	DT22/DT11
Core Module Version:	4.0 Build 1599 or newer
Comments:	CODE: 1.1.1.8, Boot: 1.0.0.1.
Document Revision Date:	1/28/2013

OVERVIEW AND SUPPORTED FEATURES

The DT22 is a dual AM/FM tuner capable of playing two separate stations at the same time. The tuner includes an RS-232 or Ethernet connection which is used to connect to the **g!** system and provide communications, enabling reliable two-way control.

The DT22 also supports two external Sirius tuner inputs for satellite radio, for a total of 2 independent AM/FM and 2 independent Sirius sources out of 1 DT22.

THE TUNER SUPPORTS THE FOLLOWING FEATURES:

AM/FM Tuner: The built-in **g!** AM/FM tuner interface is automatically enabled.

Satellite Tuner: Control of the external Sirius modules is available via the standard satellite tuner interface in **g!**.

Basic Tuning Control: Arbitrary station selection, seek & tune up/down, and band control is available.

Presets: Global **g!** favorites, or presets in the unit may be read in and accessed in **g!**.

THE TUNER SUPPORTS THE FOLLOWING FEATURES:

Any feature not specifically noted as supported should be assumed to be unsupported.
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INSTALLATION OVERVIEW

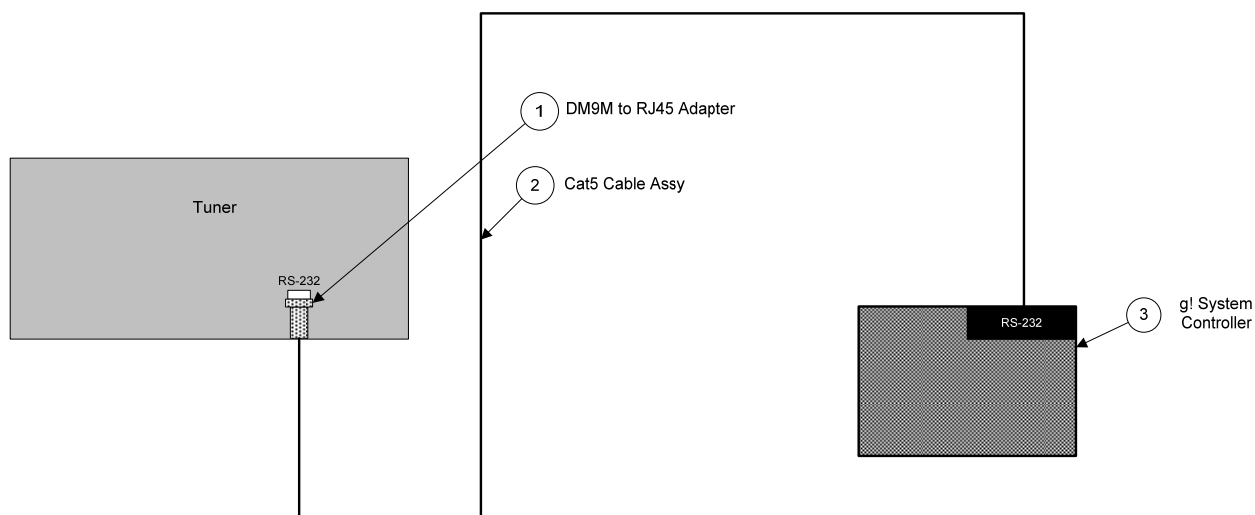
1. During the rough-in phase install the necessary power and A/V cabling for the tuner.
2. Also during the rough-in phase, run a Cat5 wire from the location of the tuner back to the Network Assembly of the **g!** system to provide the serial or Ethernet connection needed to control the tuner. Refer to the *RS-232 Connection Options Integration Note* for other serial connection options.
3. Install the tuner and other home audio or theater components.
4. Test the tuner with the audio / video equipment to ensure that the stations tune and play correctly.
5. Connect the **g!** system to the tuner electrically. See the connection diagram for more information.
6. Configure the **g!** system for the tuner and confirm communication between the tuner and the **g!** system controller.
7. Test the system by changing stations from the Viewer interface.

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CONNECTION DIAGRAM: SERIAL CONTROL



BILL OF MATERIALS

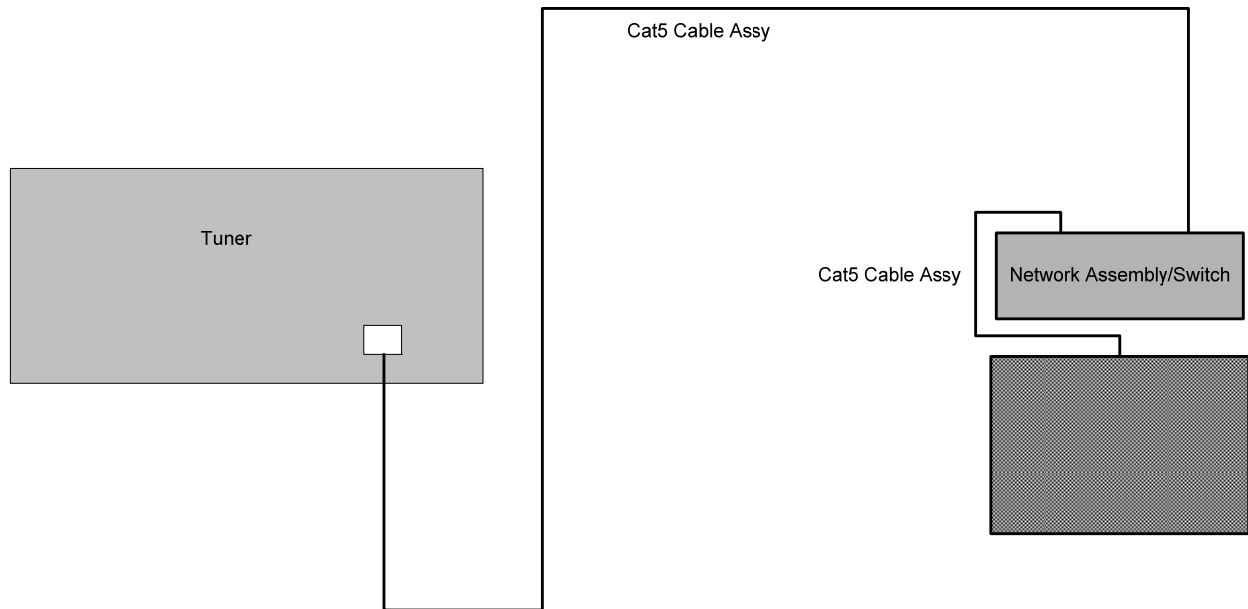
#	Device	Manufacturer	Part Number	Protocol	Connector Type	Notes
1	DB9M to RJ45 Adapter	ELAN	HA-CB-307	RS-232	DB-9 Male X RJ-45 Female	
2	Cat5 Cable Assy.	Installer	N/A	RS-232	RJ-45 Male X Wire	
3	g! System Controller	ELAN	Various (e.g. HC12)	RS-232	RJ-45	

TUNER PROGRAMMING –SERIAL

To setup RS-232 control, you must enable **Unsolicited Feedback** and configure the **Baud Rate**. To do this, open the hidden door on the right front of the unit.

1. Turn the tuner off by pressing and holding the [tuner] button until "Unit Off" is displayed on the LCD.
2. Press and Hold the [left] and [right] arrows until the Setup menu appears.
3. Enter RS-232 settings.
4. Select Baud Rate and note the number. The Baud Rate setting must match the setting in **g!**. (Default: 115200). Note if you will be serial controlling via SerialBrick or Global Cache, it is recommended to set this to 57600. It may also be desirable to set a lower baud rate on long cable runs.
5. Select Unsolicited Feedback and change to Enabled, then **save** edits.
6. Save all changes and exit the menu.
7. Turn the tuner back on by pressing the Tuner button.

CONNECTION DIAGRAM: ETHERNET CONTROL



TUNER PROGRAMMING –ETHERNET

To setup Ethernet control, you must setup a Static IP address. To do this, open the hidden door on the right front of the unit.

1. Turn the tuner off by pressing and holding the [tuner] button until "Unit Off" is displayed on the LCD.
2. Press and Hold the [left] and [right] arrows until the Setup menu appears.
3. Enter Ethernet.
4. Set Configuration Type to Static.
5. Select Static Parameters and enter the desired IP Address. It is recommended to set the first unit to 192.168.0.55, the second to 192.168.0.56, and so on.
6. Enter a net mask of 255.255.255.0.
7. Enter a gateway of 192.168.0.1 (default router IP address).
8. Save all changes and exit the menu.
9. Turn the tuner back on by pressing the Tuner button.

g! CONFIGURATION DETAILS

The following table provides settings used in the **g!** Configurator. Please refer to the **g! Configurator Reference Guide** for more details.

- “<Select>” Select the appropriate item from the list (or drop-down) in the Configurator.
- “<User Defined>”, etc. Type in the desired name for the item.

Devices	Variable Name	Setting	Comments
Communication Devices	Name	<User Defined> (Default: Elan DT22 AM/FM Tuner)	
	Type	Serial Port or Ethernet	
	Communication Type	ELAN DT22 AM/FM Tuner TYPE	TYPE= Serial or Ethernet, as appropriate
	Location	<User Defined> (Not Required)	
	COM Port or IP Address	<Select> /<User Defined>	Select Com Port or enter IP address
Audio Tuners	Name	<User Defined> (Default: Elan DT22 AM/FM Tuner)	Add AM/FM Tuner twice for 2 tuner sources
	Device Type	Elan DT22 AM/FM Tuner	
	Location	<User Defined> (Not Required)	
	COM Device	<Select> (Default: Elan DT22 AM/FM Tuner)	
	Tuner ID	<Select>	See Note 2 below
Audio Tuners	Name	<User Defined> (Default: Elan DT22 Sirius Tuner)	Add SiriusTuner twice for 2 tuner sources
	Device Type	Elan DT22 Sirius Tuner	
	Location	<User Defined> (Not Required)	
	COM Device	<Select> (Default: Elan DT22 Sirius Tuner)	
	Tuner ID	<Select>	See Note 2 below
<Audio Zone Controllers>	Add an Audio Zone Controller: refer to the Integration Note for your particular receiver or zone controller. (See Note 1)		
Notes:			
1. You must add an Audio Zone Controller to get a tab in the Viewer interface.			
For compatible receivers and zone controllers, refer to the Integration Note for the particular system.			
For a single zone where the source is connected to a basic amp, refer to the Single Zone Audio Integration Note.			
2. See table below for configuring the DT22 Tuner IDs:			

	DT11/DT22 AM/FM 1	DT22 AM/FM 2	DT11/DT22 Sirius 1	DT22 Sirius 2
Unit ID 1	1	2	1	2
Unit ID 2	3	4	3	4

COMMON MISTAKES

1. Setting Sirius Tuner ID's incorrectly. If you have a single chassis, there is no conflict between having AM/FM Tuner ID 1 and Sirius Tuner ID 1 as they are discrete tuners. Only use Tuner ID's 3 & 4 if using daisy-chain serial control (on the second chassis).
2. Failing to enable Sirius tuner module in the Tuner. Sirius Tuners can be disabled in the same setup menu arrived at when you configure the Ethernet or Serial control options.