

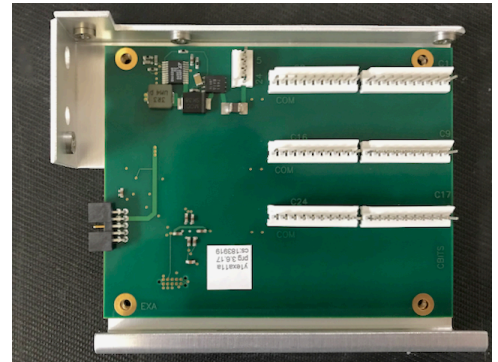
DESCRIPTION

This application note describes hardware installation and software control settings for the Control Bits (Cbits) Pod in a Cassini pod fixture.

NOTE: Requires fixture equipped with RIFL Pod carrier PCB for installation and control.

INSTALLATION

Before installing any hardware in a Cassini fixture, the fixture must be powered down, removed from the test system, and placed in a static-free work environment.



The RIK0290A must be installed on a module card as shown in Figure 1.

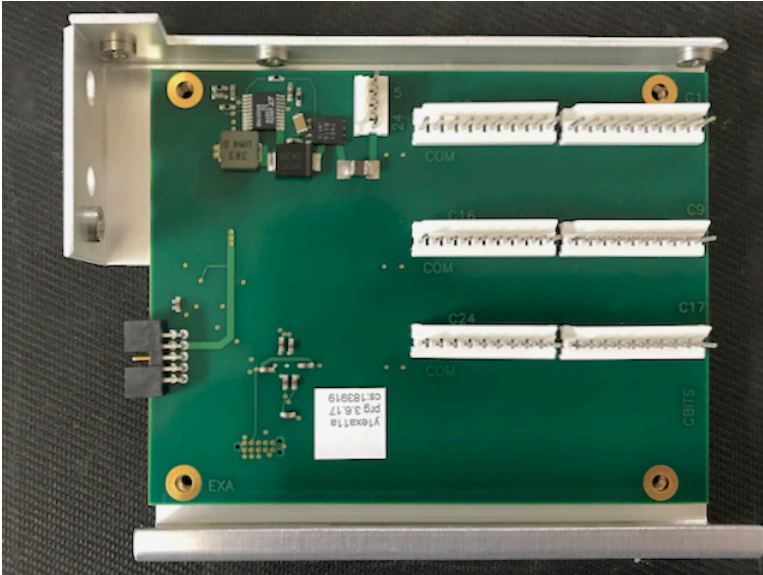


Figure 1

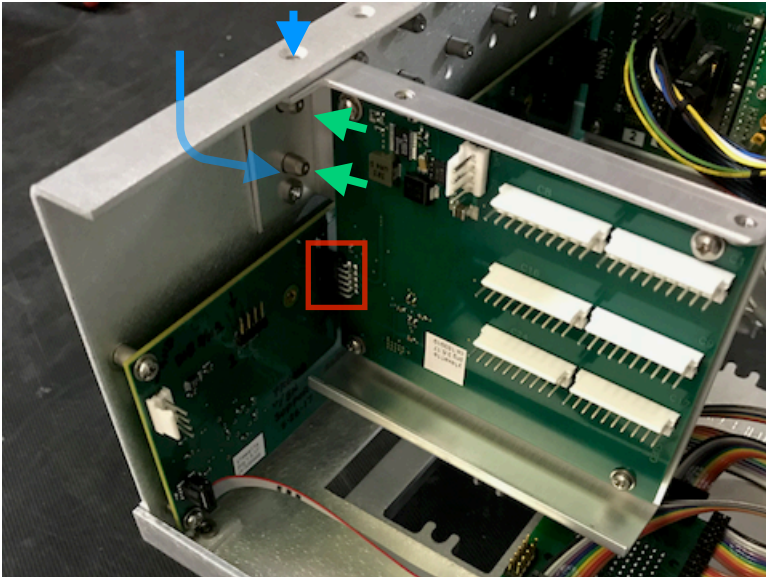
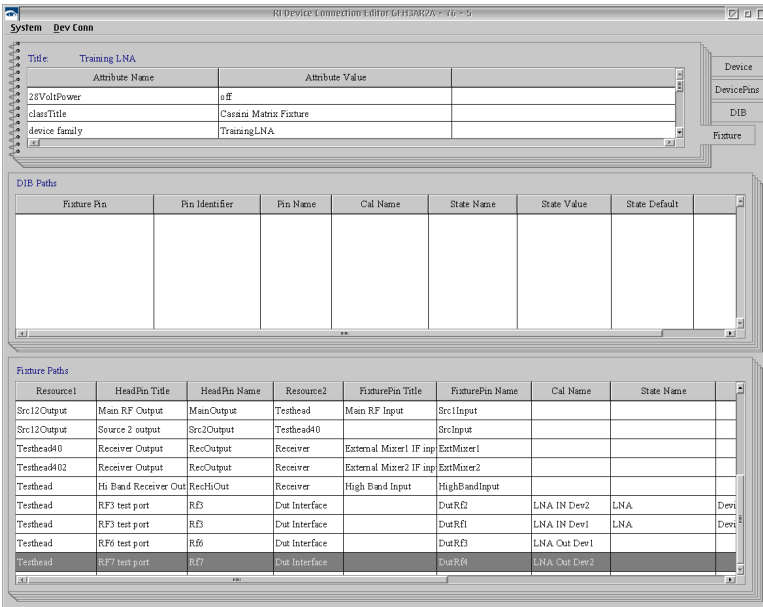


Figure 2

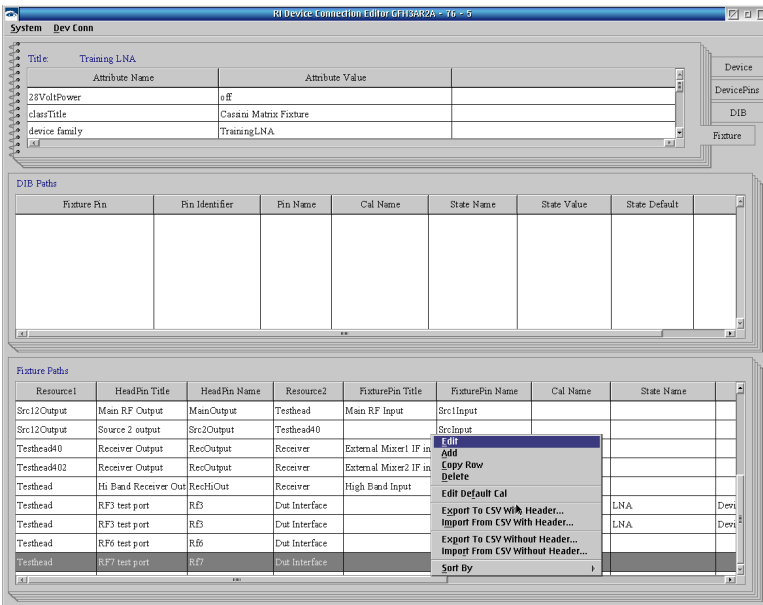
The module card is then connected to the pod carrier as shown in Figure 2. The card is inserted using the guide pins (green arrows) to align the card's power/RIFL connector with the carrier's mating RIFL slot (red). The module card is secured with two #4-40 screws (blue arrows). Note the module card location on the pod carrier (see Reference section) for programming in the Software Control section.

SOFTWARE CONTROL



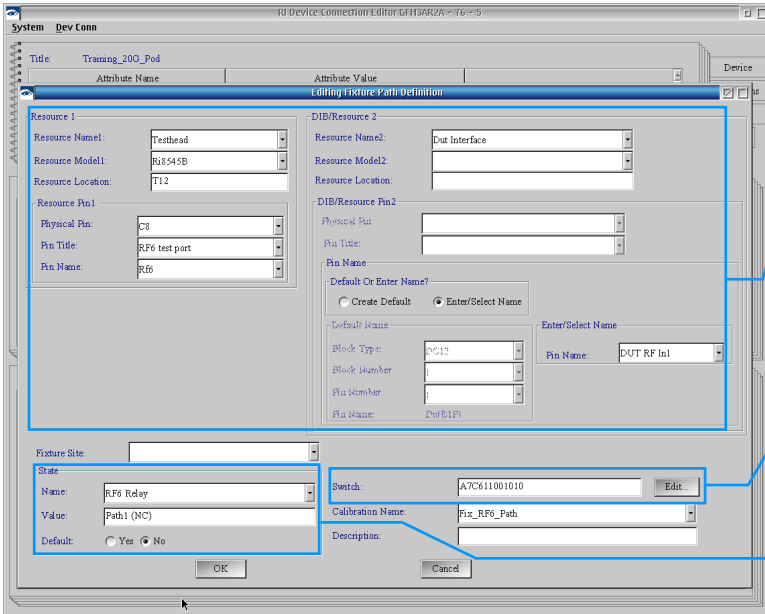
The software controls for the Cbits module are designated in Fixture Path in the Device Connection Editor as shown in Figure 3.

Figure 3



To add or modify a switch control in an RF path, right click in the Fixture Path table at the bottom of the window and select:
 'Edit' to modify the currently selected path.
 'Add' to create a new path.
 'Copy Row' to create a new path from an existing path/port.
 See Figure 4.

Figure 4



The upper fields: Resource1, and DIB/Resource 2 define the resource endpoints of the RF path. In this example, the test head RF7 port is being routed to a pin in the device interface designated: 'DutRf7.'

The Switch field contains the command string for the control bit settings.

The 'State' fields define the parameters of the software button used in graphical test plans and instrument control windows that represents the control bit states.

Figure 5

Fixture

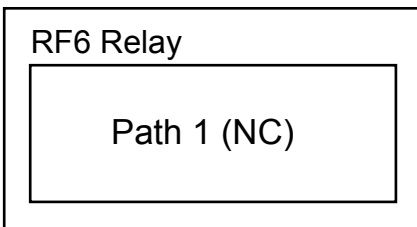
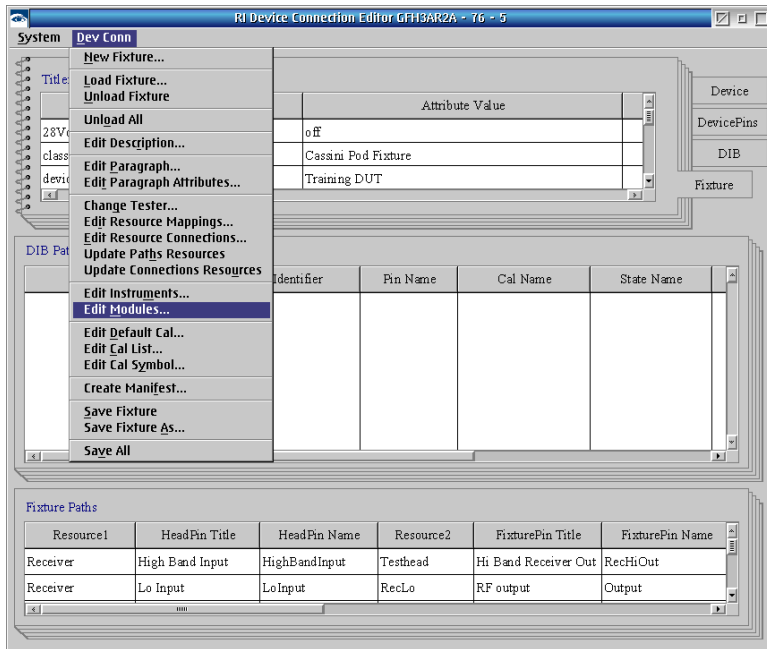


Figure 6

From the example shown in Figure 5, a button is created from the path definition (Figure 6), with Owner: 'RF7 Relay' (*State Name*) and Value: 'Path 1' (*State Value*), representing the command string 'A7C611001010' for setting the control bit states.

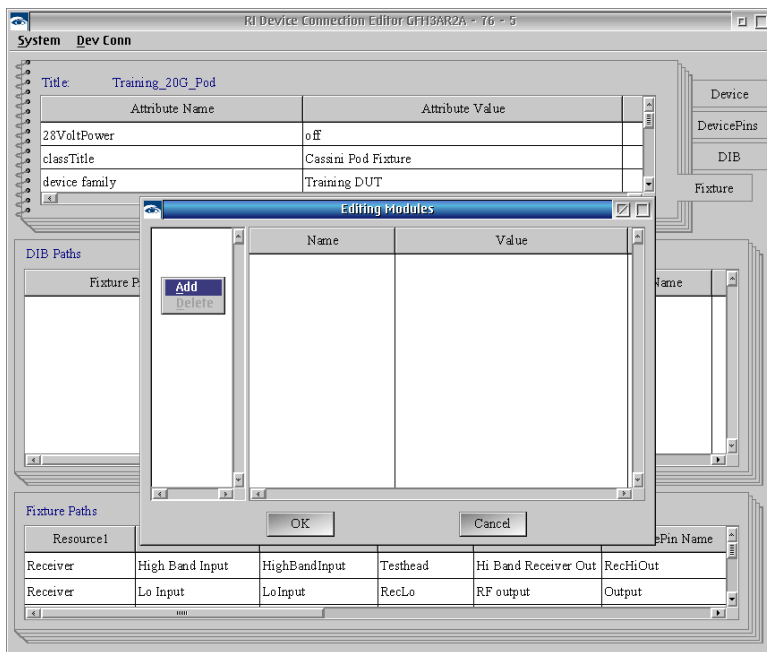
Pod Carriers

Pod Fixture Carriers require software patch 'GF10RC2A.288 Pod Style Fixture Support' [version 65 or later].



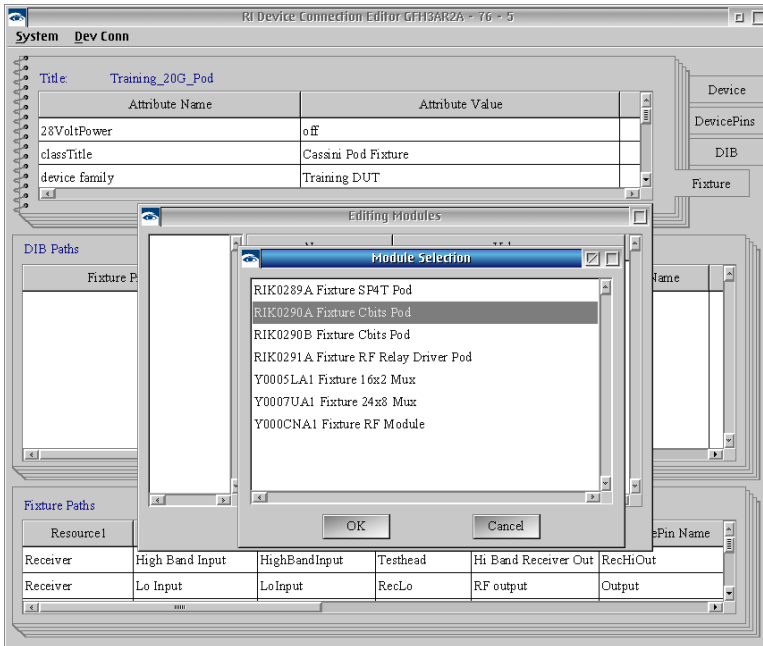
Pod module card locations must be added to the fixture definition using the Device Connection Editor. With the desired fixture definition loaded, select **Dev Conn > Edit Modules...** from the menu options as shown in Figure 7.

Figure 7



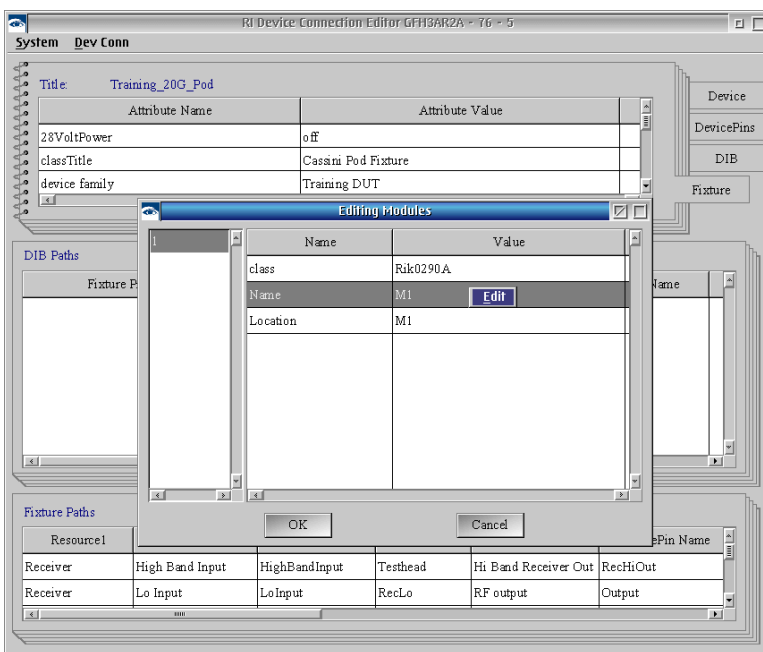
Right click in the left pane of the Editing Modules window and select **Add** from the pop-up menu options as shown in Figure 8.

Figure 8



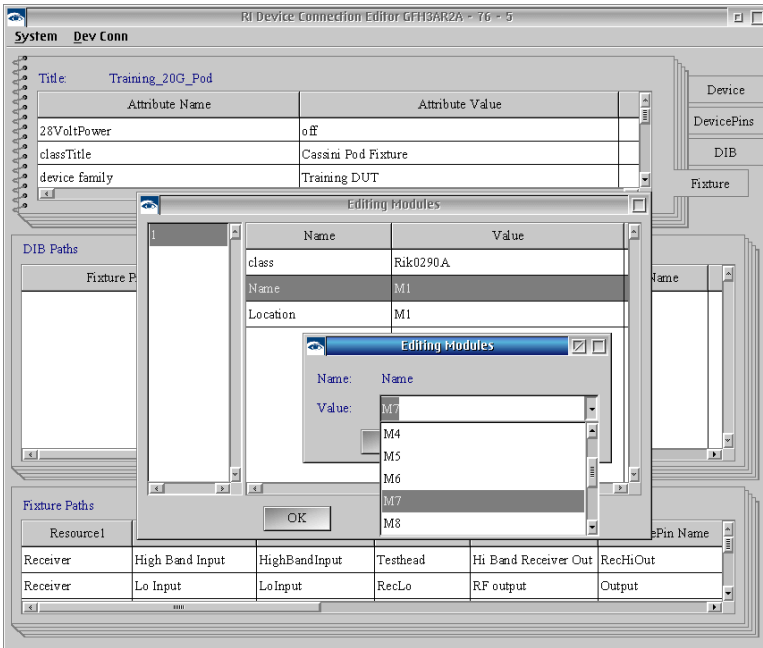
In the Module Selection window, left click on the 'RIK0290A Fixture Cbits Pod' module from the list to highlight it and click **OK** as shown in Figure 9.

Figure 9



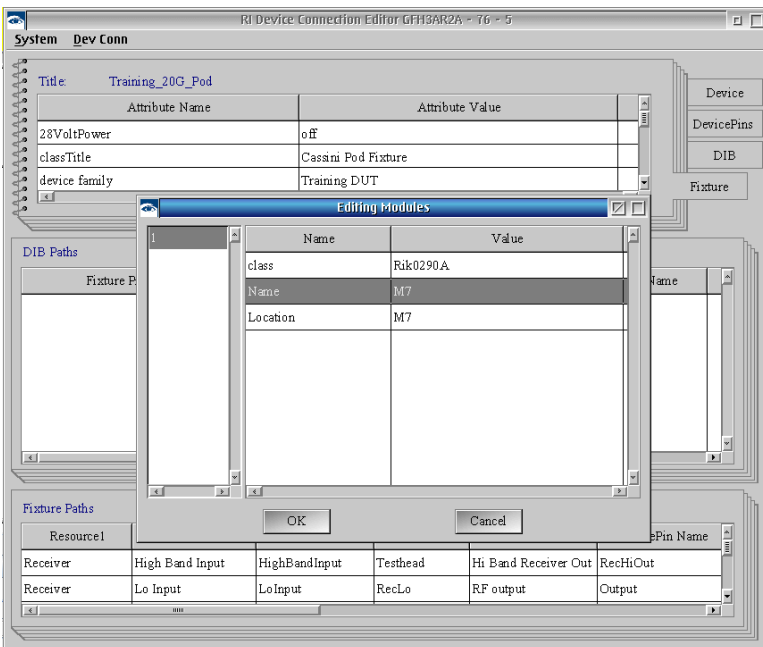
The module is added to the Editing Module list with a default location of M1. To specify a different location on the carrier board, left click on the *Name* or *Location* field to highlight it and then right click and select **Edit** from the pop-up menu options as shown in Figure 10.

Figure 10



From the Editing Modules pop-up window select a location from the drop-down list and click **OK** to update the location value as shown in Figure 11.

Figure 11



The *Name* and *Location* fields are locked to each other and should now reflect the updated location selected as shown in Figure 12. Click **OK** to finalize the module information.

Figure 12

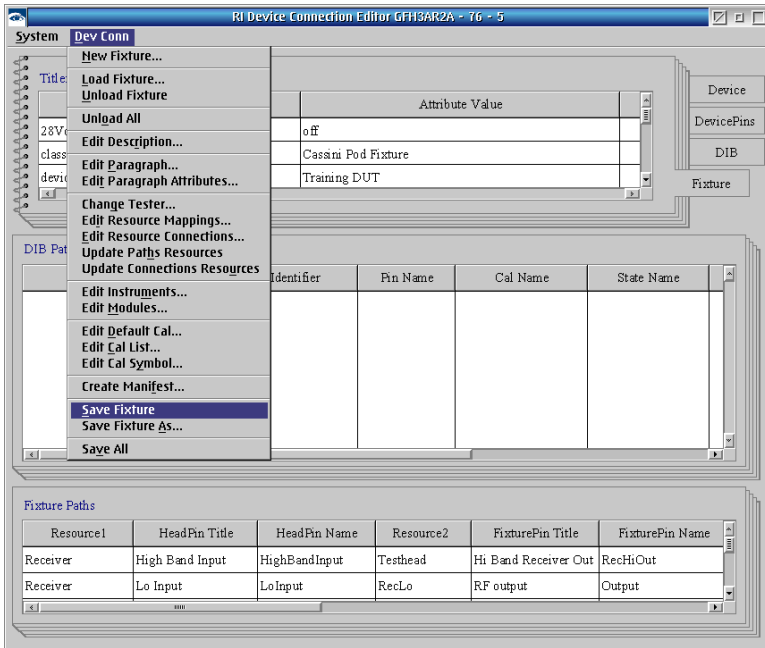
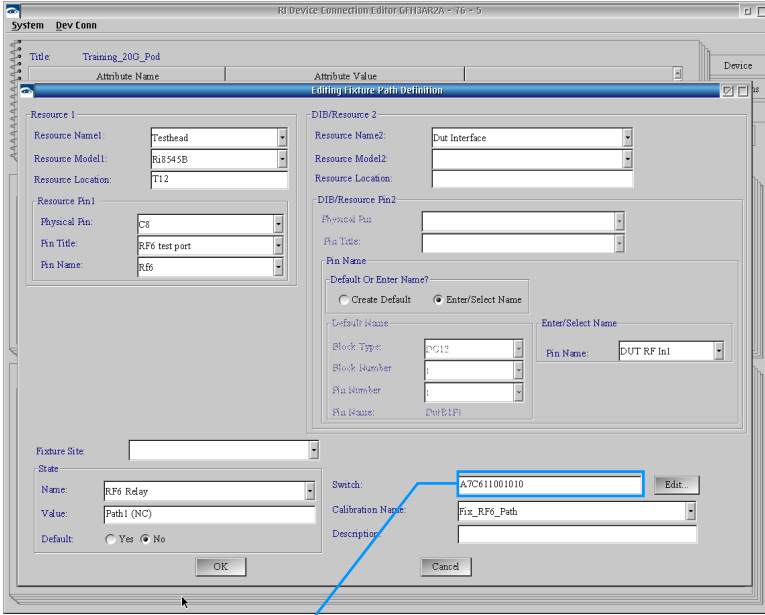


Figure 13

Save the fixture definition with the updated module information by selecting **Dev Conn > Save Fixture** from the menu options as shown in Figure 13.

Note: If a fixture definition is already loaded into the System Configuration, it must be removed and re-checked into the System Configuration for the updated fixture definition to take effect.

For Pod fixtures, the control bit commands are as follows:



A7C6=11001010

Control Bit Command — set by indicating the common port, an equal sign, and the connecting port for the associated SP4T switch on the module card. In the example above, J3 (common) is connected to the J1 port on switch 2. See the pod module card reference for switch1 and switch 2 positions.

Start Location — value defines the first control bit that is being referenced in the Control Bit Command. A value of C6 indicates the following Control Bit Command starts at Cbit 6.

Module Address — defines the target module card in the pod fixture carrier for which the following command string applies. In the above example, the number '7' denotes module slot M7.

Action Command — denotes a module command string follows.

NOTE: Only a single action command is required for compound command strings.

NOTE: Cbit commands for multiple bits or across multiple pods can be expressed by using semicolons between command strings to create compound commands, i.e. - the above example could also be expressed as the command: A7C6=1; 7C7=1; 7C8=0; 7C9=0; 7C10=1; 7C11=0; 7C12=1; 7C13=0

REFERENCES

Fixture Pod Carrier

