
VISTA 5 M2, SW V4.5, DIFFERENCES AND NEW FEATURES

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Meterbridge Installation (Option)

Please Note

This option can only be used for Vista 5 M2 consoles, i.e. with SW versions 4.5.03 and up. If your console should not be a Vista 5 M2, it has to be electrically upgraded to M2 before, please contact your distributor.

Contents of the Kit

- Meterbridge (32 or 42 fader version, depending on your console)
- 6 screws M4
- 2 Cat5 link cables (30 cm/1 m)
- DVI cable (1.8 m)
- Power-on link cable DB9 (0.5 m)
- This installation instruction sheet

Required Tools

- 2.5 mm Allen key
- 3 mm Allen key

Mechanical

Important



For attaching the meterbridge to the console, you will need the assistance of one or, even better, two additional person(s). Ask them to proceed with care in order not to damage any surface or screen.

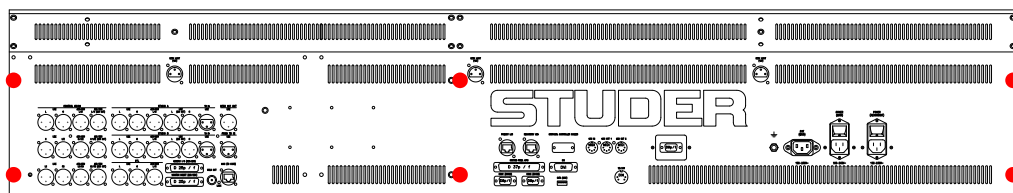
Switch the console off and place it in such away that its rear side can easily be accessed.

Remove any cabling from the console's rear side that might get in your way during installation.

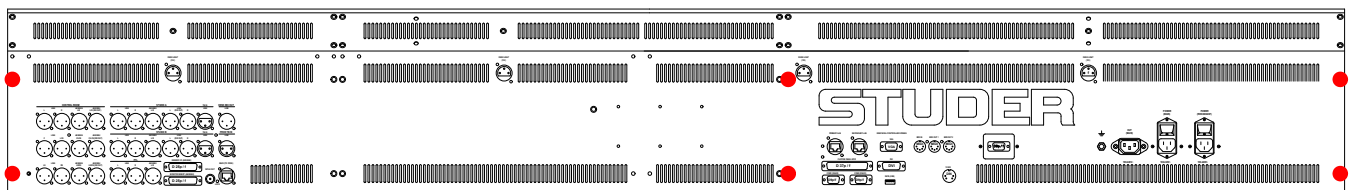
Disconnect and remove the GC screen from the console. Use a 3 mm Allen key. This screen will no more be used since one of the meterbridge screens is provided for this purpose.

Remove the 6 countersunk-head screws at the rear of the console, marked in red in the picture below. Use a 2.5 mm Allen key. These screws will no more be used.

32-fader console:



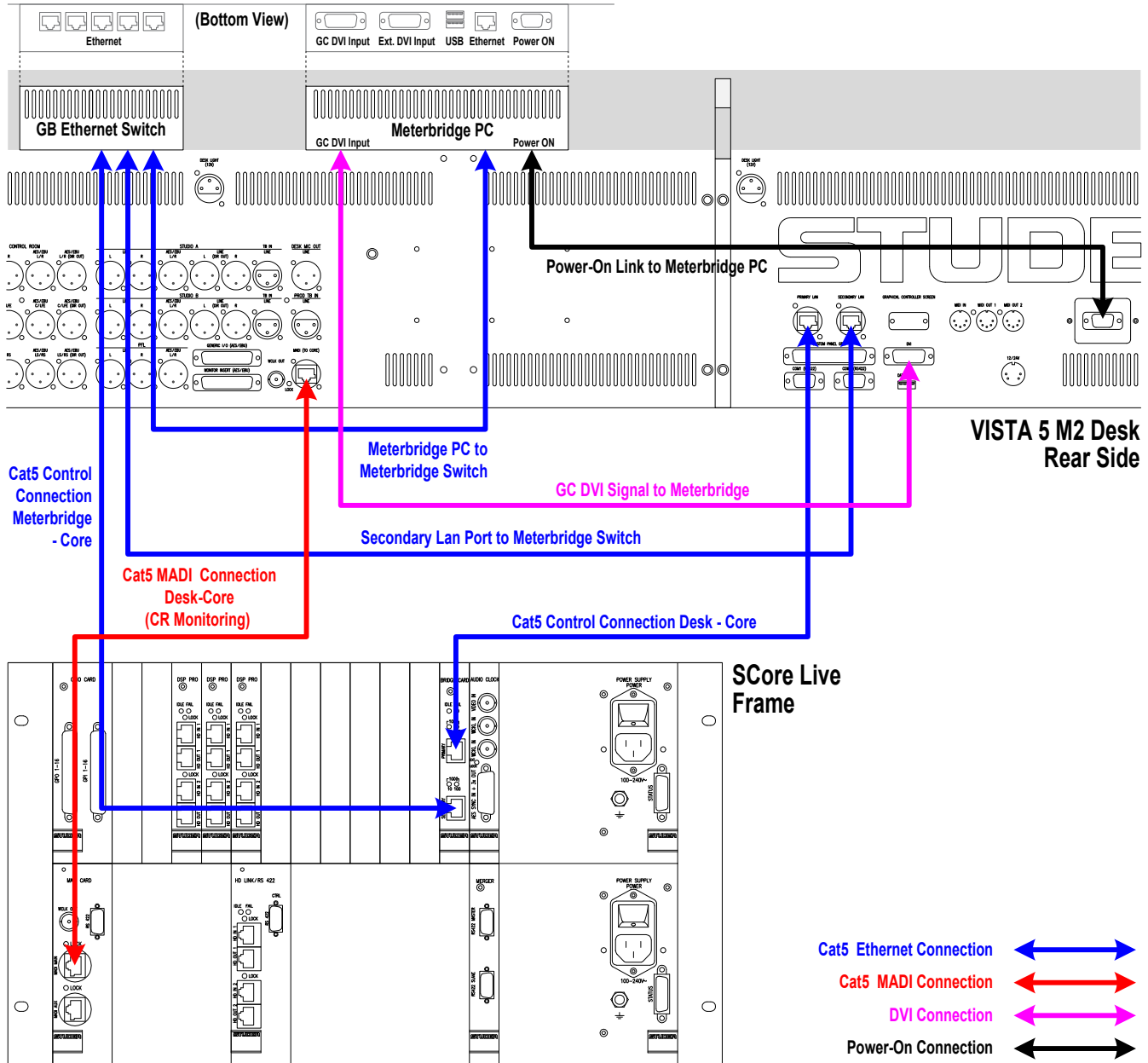
42-fader console:



With your assistant(s), set up the meterbridge at the console's rear side. Provisionally fix it at the extreme left and right with one of the new screws each in the upper of the two holes. Use a 3 mm Allen key. Do not tighten these screws completely. Then insert the remaining new screws and tighten them all.

Electrical

1. Wire the system according to the diagram below.
2. Connect the mains cable attached to the meterbridge to the mains outlet at the console's rear side.



Configuration

For correct operation of the TFT meters, open the `D950system.ini` file and add `HasTFTMeters=Yes` in the `[d950systeminfo]` area.

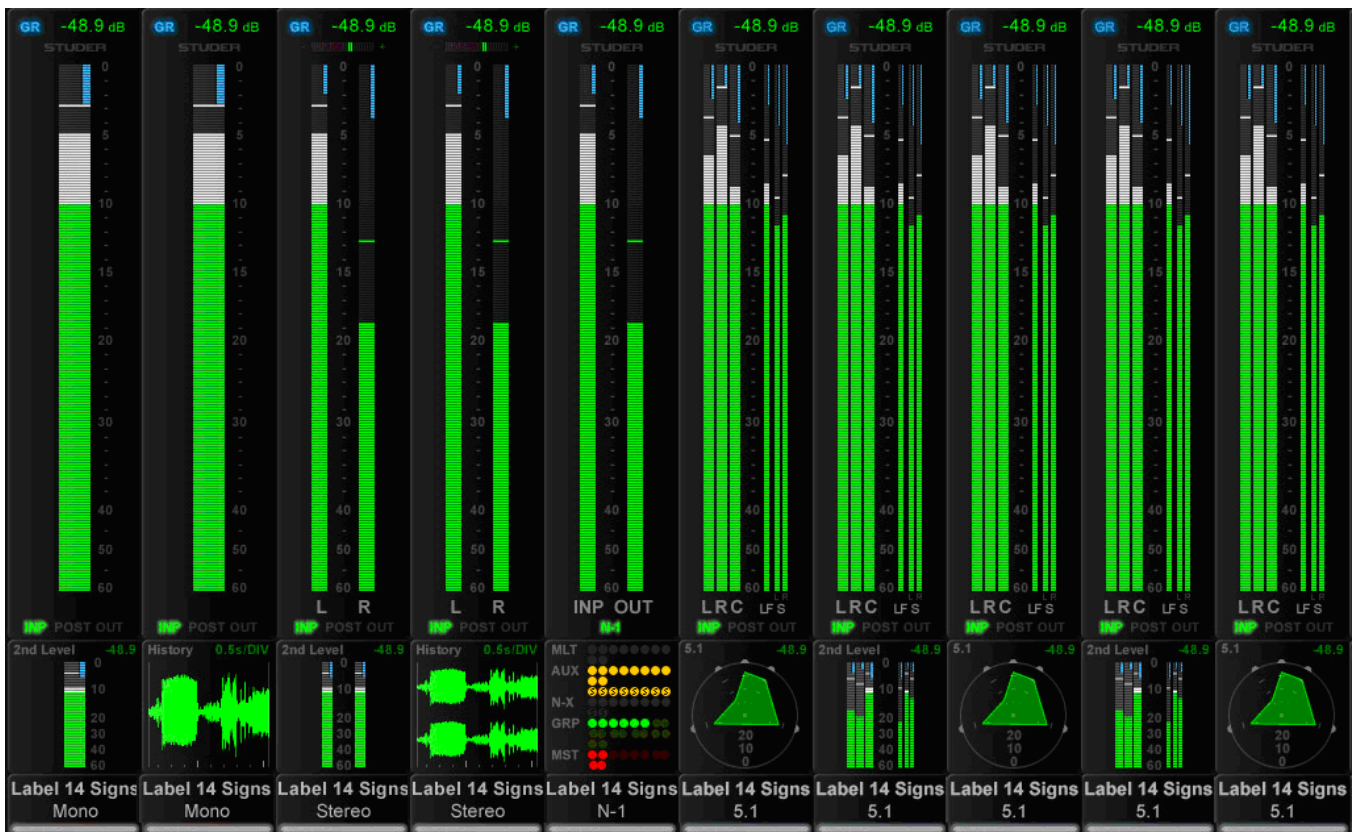
System Start

Once this all is done, the Vista 5 M2 can be started as usual, as described in this manual. The meterbridge will automatically start up with the console.

TFT Level Meters

Depending on console size, the TFT meterbridge features either three or four screens dedicated to the metering. An additional screen is used for displaying either the GC information of the desk control PC, the metering PC or an external DVI signal; selection from these signals is done with the 3 keys located just below this screen labeled **GC**, **INT** and **EXT**.

The metering PC also features two USB sockets where a keyboard and a mouse may be connected whenever it needs to be operated separately (e.g. for a SW update).



For all possible channel types the metering goes with it – from mono over stereo to 5.1, always in the same space. Priority was to have as large a bar graph meter as possible. In order to bring in more information, a lower area is configurable that enables displaying different options, depending on the channel type. It can bring a surround image view or what is called the ‘history diagram’ of incoming or outgoing signal waveforms. This shows the history of the signal and makes it easy to spot anomalies in the audio signal, such as overloads or signal loss.

When focusing on some important channels, one might miss what’s going on somewhere else. If suddenly hearing something strange, with the history feature a quick look across the console is sufficient to see what happened, and where. Another option in the lower portion of the TFTs is a bus assignment view, giving an overview of the channel’s current bus assignment, e.g. on a single channel where bus assignment is changed frequently.

The control bay metering differs from the meter screens on the fader bays; it is mainly made to show output channels. For the control bay meters different views are available. This view can be switched to a predefined meter view to

see e.g. all auxiliary outputs – or to all groups, all programme masters, direct outputs, bus outputs, N–1s, matrix channels, etc.

In addition there are user pages assignable to whatever is desired via the strip set-up. There are four configurable user pages. One of them has ten slots in one row, the next one has 20 slots in two rows, and the next two have 40 half-width slots in two rows. So if calling up page four, there are 40 meters, and they can be virtually anything. The two meter slots at the right of the control bay TFT screen continuously show PFL and CR levels.

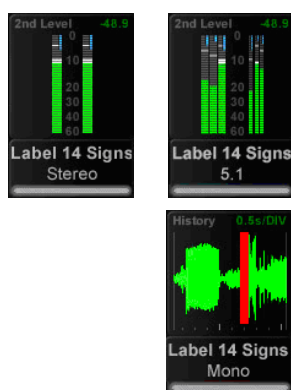
The illustration on the previous page is an example of a meter screen with mono, stereo and surround channels, as well as different views in the lower area – such as metering of the L2 channel, history, bus assignment and surround view. Further information is displayed as well, such as gain reduction or surround signal type.

Level Meters

The level meter bargraphs indicate digital peak values including headroom of mono, stereo, 5.1 and N–1 channels. The meter scale always is in dB_{FS} with 0 dB_{FS} at the top, with an additional overload segment clearly indicating overloads. Stereo meters feature a correlation meter on top of the meter bars, both on stereo inputs as well as on stereo master channels.

Above the level bargraph area gain reduction meters are added. Clipping is displayed by turning the white bargraph section (i.e., the segments above the headroom threshold) over to red. The meter tap point can be selected from input, post fader and direct output level of the corresponding channel.

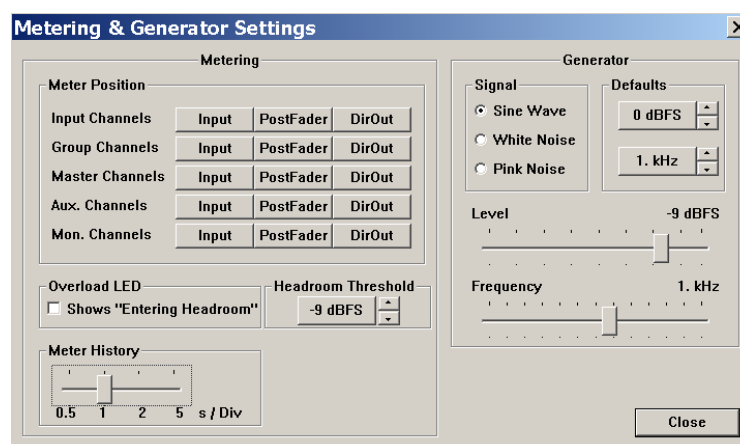
It is possible to use the red overload indicator above the meters to indicate a level just entering the configured headroom, rather than clipping. This is set in the GC's 'Meter/Generator' window.

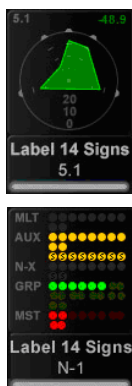


The area below the large bargraphs provides additional visual information, depending on the channel type and on what the operator prefers to see.

When the desk is in 'two layer' mode, a smaller bargraph meter of the L2 channel (e.g. a spare microphone) is always shown.

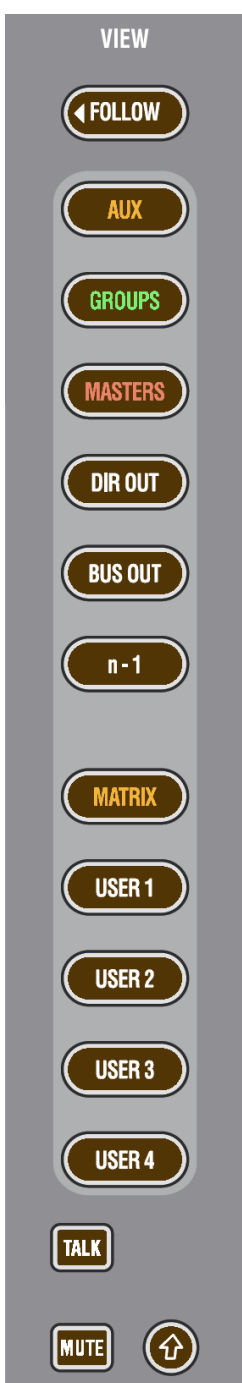
Furthermore there is the option to display the audio waveform of the signal that has passed the channel, so the operator can see the history of the audio back to a configurable time of up to 50 seconds. The waveform of the audio-signal not only gives very clear information about signal loss or overload (which colours that part of the waveform in red) but also indicates the character of the signal, as in the age of DAWs most operators are used to interpret signals by looking at their waveform. The speed of the meter history view can be set in the Metering & Generator Settings window, as shown below.





Surround channels come per default with a surround image view in the lower area, offering a spatial visualization of the surround signal. It allows spotting anomalies in a surround signal much faster than any other method.

Alternatively, a bus assign view can be selected on any channel, giving a nice overview of the bus routing right below the bargraph meters. This may not be sensible for every channel but is useful for the ones where the bus assignment is changed frequently.



Control Bay

The control bay TFT metering is of multiple use. The **VIEW** keys together with the \hat{u} (shift) key allow switching between different views. All **VIEW** keys are of the momentary/latching type.

The **FOLLOW** key displays the metering that belongs to the channel assigned to the desk surface.

Then, there are view keys for all different type of master channels: Aux, Groups, program Masters, Matrix, etc., as well as output meter views of multitrack and n-1/x busses.

Moreover, there are four user keys that allow displaying any choice of channels of the mixing console on the four user pages. For assignment there is a page on the GC's Strip Setup window that lets assign up to 10 channels on the **USER 1** page, up to 20 channels in two rows on the **USER 2** page, and a maximum of 40 half-width channels in two rows on both the **USER 3** and **USER 4** pages.

The two meter slots at the right of the control bay TFT screen, however, continuously show PFL and CR levels.

TFT Meter Setup

Strip Setup Window

If the 'Fader Bays' or 'Control Bay' tab is active, every channel displayed on the console surface also has a *slow* meter in the strip setup window that is a slow indication of signal activity at this channel's input. Color is used to identify the channel's status. A blue meter bar means that the channel has its fader open and is switched on. If the meter bar is gray, then the channel has a signal associated with it, but either the channel fader is closed or the channel is muted (off). If the meter bar is red, the channel currently is in overload status.

The screenshot shows a software window titled "C:\D950PROJECTS\Demos\Demo7\perfect peter.xml" with a close button. The window is divided into six sections, labeled SECTION 1 through SECTION 6. Each section contains a grid of channel strips. Each strip has a vertical meter bar on the left and a text label on the right. The meter bars are colored blue, gray, or red. The labels include various channel names like "Dia Left", "Inp m 51", "Aux m 1", "Fader Bay Meters", etc. At the bottom of the window, there is a toolbar with buttons for "Fader Bays", "Control Bay", "Viconics Views", "Fader Bay Meters", "Control Bay Meters", "Load...", "Save", "Save As...", and "Show Inherited Labels" (checked).

Section	Channel Label	Meter Color
SECTION 1	Dia Left	Blue
	Dia SLeft	Blue
	Dia Cnt1	Blue
	Dia SRight	Blue
	Dia Right	Blue
	Dia Cnt2	Blue
	Dia Cnt3	Blue
	Dia Cnt4	Blue
	Fx Left	Blue
	Fx SLeft	Blue
	Fx Cnt	Blue
	Fx SRight	Blue
	Fx Right	Blue
	Fx LFE	Blue
Fx Right 2	Red	
SECTION 2	Inp m 51	Blue
	Inp m 52	Blue
	Inp m 53	Blue
	Inp m 54	Blue
	Inp m 55	Blue
	Inp m 56	Blue
	Inp m 57	Blue
	Inp m 58	Blue
	Inp m 59	Blue
	Inp m 60	Blue
	Inp m 61	Blue
	Inp m 62	Blue
	Inp m 63	Blue
	Inp m 64	Blue
SECTION 3	Dia Left	Blue
	Dia SLeft	Blue
	Dia Cnt1	Blue
	Dia SRight	Blue
	Dia Right	Blue
	Dia Cnt2	Blue
	Dia Cnt3	Blue
	Dia Cnt4	Blue
	Fx Left	Blue
	Fx SLeft	Blue
	Fx Right	Blue
	Fx LFE	Blue
	Fx Left 2	Blue
	Fx Right 2	Blue
SECTION 4	Aux m 1	Blue
	Aux m 2	Blue
	Aux m 3	Blue
	Aux m 4	Blue
	Aux m 5	Blue
	Aux m 6	Blue
	Aux m 7	Blue
	Aux m 8	Blue
	Aux s 1	Blue
	Aux s 2	Blue
	Aux s 3	Blue
	Aux s 4	Blue
	Aux s 5	Blue
	Aux s 6	Blue
Aux s 7	Blue	
Aux s 8	Blue	
SECTION 5		
	SECTION 6	

Fader Bay Meters

The default assignment of the TFT meters to the fader channel strips is 1:1. This may be modified by the system administrator only; if not logged in as system administrator, the 'Fader Bay Meters' tab is not displayed, and meter assignment is restricted to the control bay.

Assignment is done in the strip setup window. First, click the 'Fader Bay Meters' tab. The window changes to the view shown below. Entering channels is done with the same mechanism as is used for the assignment of channels to bays.

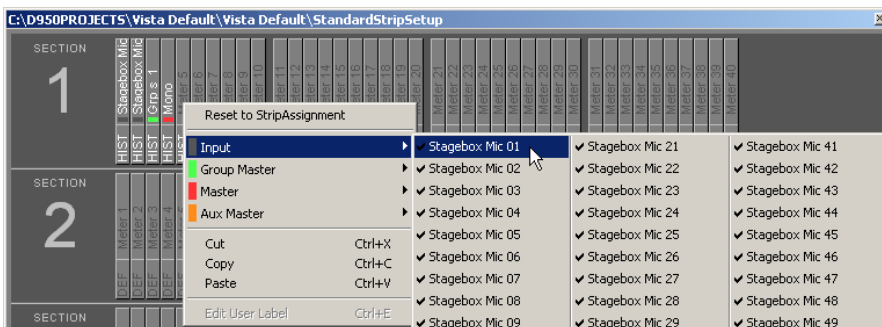
Changes in the channel assignment may be easily reset to the default setting by selecting 'Reset to StripAssignment'.

Lower Meter Area

The default settings of the lower meter area are labeled 'DEF'. These are the history view for mono and stereo channels, and the surround view for 5.1 channels.

When right-clicking into the lower meter area, the display mode of the lower part of the meter can be selected ('HIST' for the history display, 'BUS' for bus assignment view, 'SRND' for surround view, and 'L2' for layer 2 view). Options not available for a particular channel type will be grayed-out.

Changes made here may also be reset to the default setting by selecting 'Reset to StripAssignment' after a right-click in the upper meter area.



Control Bay Meters

Click on the 'Control Bay Meters' tab. The window changes to the view shown below. Entering channels is done with the same mechanism as is used for the assignment of channels to bays.

After selecting one of the 'USER' fields, the view corresponding to the user keys can be defined.

Please note that the two meters at the far right of the control bay are *always* used for PFL and CR monitoring and cannot be assigned to a channel.

