

PVBX Switch Setup Software



Overview:

The PVBX Switch is setup, administered and controlled by the PVBX Controller. The controller is a Windows 2000 Server running a web host and the PVBX engine.

The PVBX Setup can be run from any workstation or from the controller itself with nothing more than a web server.

Note: We used the address <http://localhost/> for documentation purposes. You can use the address you set up for the switch, and do all of the setup from a different workstation.

Go to <http://localhost/setup>

Login with the user name **Admin_PVBX** and the password **letmein**

Important: for security reasons the password on this NT user needs to be changed, please do so when you get a chance. Do not loose your password.

You should now have access to the PVBX Switch setup.

PVBX Setup:

- **PVBX Map**
Defines the inputs and the outputs of the PVBX Switch
Used during initial setup or anytime to add a cameras, VCRs, Monitors or any A/V devices to the PVBX
- **Users**
Defines who can access the system and what rights they have.
Users can have individual rights or inherit rights from a group.
- **Macros**
Defines groupings of inputs or outputs
Macros are used by **actions** or **events** when there is a need to use a number of devices together. One example would be a global announcement. You would want to connect a single camera to a group of monitors. Another example would

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be a sequence of cameras, such as sending a security sweep to a security VCR.

- **Actions**

Defines either one time or repeating actions a user has available.

Users directly control the PVBX through **actions**. **Actions** connect inputs (or input macros) to outputs (or output macros). An example would be to connect a single playground camera or view a sequence of playground cameras to a single classroom monitor.

More Setup:

The following editors are not under the **PVBX Setup** menu but are found on the **Main** page under **Tool Box** for anyone with Administrator or better rights.

- **Scheduled Events**

Define scheduled events (Supervisor or better rights).

An **Event** is set up to do scheduled **actions**, such as sending a sequence of parking lot cameras to a security VCR starting at 3:00 PM and ending at 6:00 AM every weekday.

- **Emergency Event Edit**

Define where a camera goes in an emergency event.

This mode can be used by a teacher to notify others of an emergency situation.

Their classroom camera is sent to a set of monitors, such as the principal's office, teachers' lounge, security & medical staff, and recorded on a VCR.

- **Media Library Editor**

Define what is in the **Media Library** (VCR, DVD, etc) and who has rights to view and control the media.

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PVBX Map:

X	Edit	Description	Com	Box	Nbr	I/O	Input Link	VCR Code	Show	Delete
	[EDIT]	Bob Counts Camera	1	A	8	Input	none	none	No	[DELETE]
	[EDIT]	Bob Counts' Office	1	A	4	Output	Bob Counts Camera	none	Yes	[DELETE]

Description of items on page:

- **Back to Setup Menu**: takes you back to setup menu
- **ADD NEW ITEM**: Add a new
- List By **Name** | **Box**: Sort items by name or number
- **PVBX BOX REPORT**: shows the PVBX map in printable format
- **X**: Is this Output in use, shows X if it is. (useful for troubleshooting)
- **Edit**: Edit this entry, **[EDIT]**
- **Description**: Name of item
- **Com**: Controlling computer number (1 in most systems)
- **Box**: Box letter (A – H) (A is 1st box, B is expansion box)
- **Nbr**: A/V number (1 – 32)
- **I/O**: Input/Output
- **Input Link**: Shows what camera is tied to what room
- **VCR Code**: Media Devices remote control code
- **Show**: Show this in Room Listing yes/no
- **Delete**: Remove this item **[DELETE]**
- **Global Connect**: Located near bottom of page. (useful for troubleshooting)

To add new items to the map is quite simple, just click **ADD NEW ITEM**
The link is located top left

- **Description**
Please enter something descriptive (limit 50 characters)
Examples: Room 222, North Hallway, South Parking Lot Camera,
Library #1: Emerson VCR, X-Link A into B
- **Computer**
The PVBX System is defined by
Computer – Box – A/V Number – Input/Output
(Example: 1-A-32-I)
In most cases there will only be one controlling computer so leave this as 1.
- **Box**
Each controlling computer can control up to 8 boxes. In most cases there is only one box so leave this as “A”. Note: Each controlling computer must start with an “A” box. (The “A” box is also the only box with IR output, but more on that

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later)

- **A/V Number**
The Inputs and Outputs have the Audio and Video (A/V) paired together. You will need to make sure you have the audio and video plugged into the same A/V Number. Inputs are cameras and media devices, and Outputs are monitors and recording devices.
- **Show in Room Listing?**
This is for *Outputs only*. When you login to the system you will be prompted to select a room. This tells the switch where to direct the video connection. The user will see the description you typed in above, so remember to use something easy to understand. Examples: Teachers' Lounge, Bob's Office, Room 222, or Chemistry Lab.
- **VCR Code**
If this is an Input for a media device and its IR controlled select *Yes* for "Is this a VCR/DVD?" Answering *Yes* will allow this to show up in the Librarian's media list (more on that later). If you know the device's remote control code, select it now. You can always edit this later or have the Librarian do it.

Note: we have use the generic term VCR to also include other media device types, such as DVD, DSS, DVR, Laser discs, Cable Boxes, Audio devices, etc.

- **Cross Link**
If you only have one box, select *No*.
If you are linking more than one box together answer, *Yes*.
You will need to **EDIT** to complete this step.
We suggest waiting on this step until you have entered in all of the items.
- **Input Link**
This is for when you want to tie an input to an output.
You must set this to use the video intercom or any **action** with an input of *User Select – Current Room*.
Example: Room 222 output (monitor) and Room 222 Camera (input)
You will need to **EDIT** this item to set it.
We suggest waiting until you have entered in all your items, before you do your linking.

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To modify an item just click on **EDIT** next to the entry

The editable items are the same as what you did for **ADD NEW ITEM** except for the following:

[ADD NEW ITEM]						
X	Edit	Description	Com	Box	Nbr	I/O
	[EDIT]	Bob Counts Camera	1	A	8	Inp
	[EDIT]	Bob Counts' Office	1	A	4	Out
	[EDIT]	James Chopping Camera	1	A	1	Inp

- Input Link**
 This is for when you want to tie an input to an output.
 You must set this to use the video intercom.
 Example: Room 222 (monitor, output) and Room 222 Camera (input).
 Suggest waiting until you have entered in all your items, before you do your linking.
- Cross Link**
 This is for when you want to tie PVBX boxes together in a larger system.
 Select *Yes* if this is a cross link.
 Suggest waiting until you have entered in all your items, before you do your linking.

Here is an example for cross linking using a labeling scheme:
X-Link A23I to B31O is an Input on Box A
 we would select **X-Link B31O to A32I** an Output on Box B

Important: For every cross link connection you will need 1 Output and 1 Input on each Box. For video intercom between boxes you will need a minimum of 2 cross link connections (2 inputs and 2 outputs)

Note: Make sure you think through your layout before you do your cross linking. Try to put the most used connections on a single box. Increasing the number of cross links allows for more functionality between PVBXs, but also reduces the number of inputs and outputs available on both PVBX boxes.

Global Connect

Global Connect

Input	Output	Send
1-A-6: Shane Armstrong Camera <input type="button" value="v"/>	1-A-3: Programming Department <input type="button" value="v"/>	<input type="button" value="DO IT"/>

Global Connect lets you connect any one **Input** to any one **Output**. (Useful for troubleshooting) It uses the PVBX map you just created. Select from the **Input** list, then select from the **Output** list, and finally click the **DO IT** button. The connection created will use a *3-High* priority (more on priorities later). When you want to release or *blank* an **Output** select *Blank Screen* from the **Input** list.

Input

Blank Screen

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Users:

[ADD NEW USER]									
Edit	Rights	User Name	Full Name	I/O	Last In Time	Last In Where	Session Limit	Delete	
[EDIT]	[RIGHTS]	Admin	Setup Administrator	Out	1/3/2003 11:12:45 AM	none	0	[DELETE]	
[EDIT]	[RIGHTS]	bcounts	Bob Counts	In	1/3/2003 11:12:57 AM	Bob Counts' Office	60	[DELETE]	

Description of items on page:

- **Back to Setup Menu**: takes you back to setup menu
- **ADD NEW USER**: Add a new user
- **Edit**: Edit user's Information, [\[EDIT\]](#)
- **Rights**: Edit a user's rights [\[RIGHTS\]](#)
- **User Name**: Name user logs in with
- **Full Name**: Full name of the user
- **I/O**: Is this user logged in or out
- **Last In Time**: The last time this user logged in
- **Last In Where**: What room the user was last logged in to
- **Session Limit**: time in minutes, user can be logged in, zero is no limit.
- **Delete**: Remove this user, [\[DELETE\]](#)

To add new user to the system, just click **ADD NEW USER**

To edit a user's information just click **EDIT** next to their name

Both **EDIT** and **ADD NEW USER** have the same entries

- **User Name**
Enter in a unique user name. Must be at least 3 characters long. Please use only letters and numbers (A – Z, 0 – 9), no spaces. Case does not matter (Zz).
- **Password**
Enter in the password for this users. Must be at least 4 characters. Please only use letters and numbers (A-Z, a-z, 0 – 9), no spaces. Case sensitive. ("Z" is not the same as "z").

Note: The password is encrypted after you save it. If a user forgets their password, you will need to just give them a new one with [EDIT](#).

- **Full Name**
What is this users full name. This will show up when they login and help you maintain the system, especially if they use a user name that isn't related to their name. Example: "Michelle Green" could have the user name "Red"
- **Session Limit**
How many minutes this user is allowed to stay logged in. For no session limit

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enter in 0 (zero).

Important: Setting a session limit is important if you plan to use the video intercom functions. Especial if you have users who just close their web browser without logging out.

Important: There is a 12 hour global session limit for everyone.

Note: Logging someone out does not affect PVBX Switch status. If they are watching a movie and logoff; they will still be able to watch the movie, just not control it.

Added Administrative Feature:

If you want to log someone out of the system you can just click **EDIT** and click the **SAVE** button (without making any changes). This will reset their account.

Setting a Users Rights

Click on **RIGHTS** next to their name.

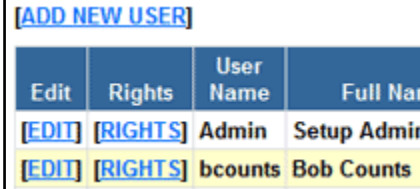
- **User Groups**

List will show a list of the groups this user belongs to. To remove a group, click the **checkbox** next to the group you want to remove and then click the **Delete** button.

- **Add Group**

Just select what group you want to add to this user and click the **ADD** button We have provided some pre-defined rights groups for your: (Listed in rights priority)

- **System Administrator**
Full Rights, Can do everything
- **Administrator**
Full Rights, Can do almost everything
- **Supervisor**
Limited Full Rights, Can do a almost everything
- **Head Librarian**
Has full edit control of media library
- **Librarian**
Has limited edit control of media library



ADD NEW USER			
Edit	Rights	User Name	Full Name
EDIT	RIGHTS	Admin	Setup Admin
EDIT	RIGHTS	bcounts	Bob Counts

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- **Teachers, Coaches, Staff**
Limited Rights
- **Public**
No Rights, Limited access

Note: **System Administrator**, **Administrator**, and **Supervisor** inherit the rights below them. You only need to set a user with any one of them, no other group is needed. **Head Librarian** and **Librarian** do not inherit any rights; you will need to add another group for other rights.

- **New Group**
You can create a new custom group, just type in a unique name and click the **ADD** button. This new group will also show up in the **Add Group** list for future users.

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Macros:

Edit	Description	I/O	Delete
[EDIT]	All Monitors	Output	[DELETE]
[EDIT]	Emergency Event	Output	[DELETE]
[EDIT]	View All Cameras	Input	[DELETE]

Description of items on page:

- **Back to Setup Menu**: takes you back to setup menu
- **ADD NEW ITEM**: Add a new macro
- **Edit**: edit macro, [EDIT]
- **Description**: macros name
- **I/O**: macro type Input or Output
- **Delete**: remove macro, [DELETE]

To add new macro to the system, just click **ADD NEW ITEM**

To edit a macro just click **EDIT** next to their name

When creating a new macro you will first need to type in the name of the macro and what type it is, input or output after that **ADD NEW ITEM** and **EDIT** are the same.

- **Macro**
Enter in a unique name that best describes this macro. Example: Security Sweep, Hallway Scan, etc. If you make a change to this field, click on the **Save This** button
- **I/O**
Is this an *Input* or *Output* macro. An *Input* macro will group together cameras, and an *Output* macro will group together monitors. If you make a change to this field, click the **Save This** button
- **Macro Item**
This shows the list of what items are in the macro with the delay between them. The sequence is in the order displayed (First in / First out). To remove an item, click the **checkbox** next to the name and click the **Delete** button.

Macro: Security Sweep
I/O: Input
Save This
Macro Items: This macro uses these items:
 Parts Room Camera | Delay: 1
 Loading Dock Camera | Delay: 1
 Tech Room Camera | Delay: 1
Delete
To remove, check and click Delete.
Add Item: Delay in Secods (0 no delay): 0
Bob Counts Camera
ADD
Add this item to macro.

Note: All *Output* macros will have a delay of 0 (zero) or no delay.

- **Add Item**
If this is an *Input* macro you can put in the number of seconds between each item. For example you may want a sweep of all the parking lot cameras with a 5 second delay before switching to the next camera.

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Note: Don't set an *Input* macro with 0 (no delay). One second is good for a quick view of cameras, five seconds is good for security sweeps.

The drop down list will show all the available inputs or outputs depending on what type of macro this is.

Make your selection and then click the **ADD** button.

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Actions:

[ADD NEW ACTIONS]					
Edit	Rights	Description	Repeating	Priority	Delete
[EDIT]	[RIGHTS]	Announcement Off	No	2	[DELETE]
[EDIT]	[RIGHTS]	Announcement On	No	2	[DELETE]
[EDIT]	[RIGHTS]	View All Cameras	Yes	6	[DELETE]
[EDIT]	[RIGHTS]	View Back: Loading Dock	No	5	[DELETE]

Description of items on page:

- **Back to Setup Menu:** takes you back to setup menu
- **ADD NEW ACTIONS:** Add a new action
- **Edit:** edit action, [\[EDIT\]](#)
- **Rights:** who has what rights to do this action, [\[RIGHTS\]](#)
- **Description:** name of action
- **Repeating:** Is this a repeating action
- **Priority:** What priority level is this action
- **Delete:** remove action, [\[DELETE\]](#)

To add new macro to the system, just click [ADD NEW ACTIONS](#)

To edit a macro just click [EDIT](#) next to its name

When creating a new action you will first need to type in the name of the action then click the **SAVE** button; after that [ADD NEW ACTIONS](#) and [EDIT](#) are the same.

- **Action Name**
This is the description of the action, use something descriptive yet short.
This is the name users will see displayed under **Actions** and **Repeating Actions** on the **Main** page. Example: View South Hallway.
- **Input**
Select the input item or input macro for this action, if you want to use the current rooms (where user logged into) camera select *User Select – Current Room*
- **Output**
Select the output item or output macro for this action, if you want to use the current rooms (where user logged into) camera select *User Select – Current Room*
- **Repeating**
Is this a repeating action? Use this with an Input macro, like a security sweep, its on until the user turns it off or it reaches a 12 hour timeout.
- **Priority**
Set to:

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- 0 - Override
- 1 - Highest
- 2 - Higher
- 3 - High
- 4 - Medium High
- 5 - Medium
- 6 - Medium Low
- 7 - Low
- 8 - Lower
- 9 - Lowest

Priorities define what can overwrite a current output. For example if you set an action to display something to the lunchroom monitor at Priority 5 only actions or events with a priority of higher than 5 (4 – 0) can overwrite it.

Do not set anything to **0 - Override** except emergency or administrative actions or events, since it can overwrite anything. Use **1 - Highest** or **2 - Higher** for supervisor actions like important announcements. It is recommended you set normal actions up at **5 – Medium**.

The only exception to priorities is control in the room a user logs into. All actions in the room are automatically set at **3 – High**. This basically gives the user full control of their actions for their monitor and prevents interruption by scheduled events or out of room actions, unless that event or action has a higher priority of 2, 1 or 0.

- **Blank Screen**

Sends the command to the Output item or Output macro to release their inputs and Blank the screen (Monitor goes dark). This also will release all priority limitations to that monitor.

Use **RIGHTS** to set what rights group can use this Action.

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Scheduled Events:

Scheduled events are not under **PVBX setup** menu, but under the **Main** page of the PVBX. Login as Supervisor or better and under **Tool Box** you will see **Scheduled Events**

ADD NEW EVENT							
Edit	Description	Start	End	Repeat	How	Priority	Delete
EDIT	Security Sweep	1/3/2003 5:00:00 PM	1/4/2003 6:00:00 AM	True	W	6	DEL

Description of items on page:

- **Back to Main**: takes you back to main page
- **Refresh This Page**: refreshes the page.
- **ADD NEW EVENT**: Add a new action
- **Edit**: edit action, [**EDIT**]
- **Description**: name of event
- **Start**: Time event will begin.
- **End**: Time even will end.
- **Repeat**: Will this event repeat
- **How**: How will this event repeat
- **Priority**: What priority level is this action
- **Delete**: remove action, [**DEL**]

To add new event to the system, just click **ADD NEW EVENT**

To edit an event just click **EDIT** next to its name

The **ADD NEW EVENT** and **EDIT** are the same.

- **Name**
Type in a descriptive and unique name for this event
- **Start Date & Time**
Enter in the Date and Time you want this event to automatically begin. Start time must be less than Stop time. Enter in with the format 01/12/2003 5:00:00 PM or 01/12/2003 17:00:00.
- **Stop Date & Time**
Enter in the Date and Time you want this event to automatically begin. Stop time must be greater than Start time. Enter in with the format 01/12/2003 5:00:00 PM or 01/12/2003 17:00:00. Stop date must be less than 24 of Start date.
- **Repeat**
Does this even repeat, then select Yes. How does it repeat: Hourly, Daily, Weekly*, Monthly, Yearly. If you selected Weekly* you can check off what days of the week you want to have this repeat on. Not selecting a day will result

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in a Weekly (1 week from Start time) repeat.

- **Input**
Select which input item or input macro you want to use.
- **Output**
Select which output item or output macro you want to use.
- **VCR Record**
If you want to record this event and the recording device is in the media library, select it from the drop down list. Check if you want this to automatically record at start time, automatically stop and stop time or automatically rewind after automatic stop.
- **Event Priority**
Set the priority for this event. For more on priorities see the information under Actions. Suggest setting this to 6 or lower, especially if this event outputs to a monitor.

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Emergency Event Edit:

When someone clicks on the Emergency Mode link on the Main page, this event is launched. Emergency Mode was setup to help a teacher in an emergency in the classroom.

- **Name**
Name of emergency event.
- **Output**
Select an output item or output macro you want the emergency event to connect to. The emergency event automatically uses the current room's camera as the input.
- **VCR Record Control**
This will control a recording device in the rack (VCR, DVR). You will still need to define an "output" for this device. This only sends the RECORD and STOP commands to the device. STOP is sent when the Emergency Mode is terminated.

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Media Library Editor:



View	Edit	Rights	Clear	VCR	Box	Title	Start	End	P	S	R	Remove	Universal Remote
Add New Device													
VIEW	EDIT	RIGHTS	CLEAR	A-1	1 [A]	MT			N	N	N	DEL	Play ▶ ◀ ⏮ ⏭ ⏪ ⏩ ⏹
VIEW	EDIT	RIGHTS	CLEAR	A-2	1 [A]	Its A Wonderfull Life	Mon 1/4/03 8:00:00 AM	Mon 1/4/03 5:00:00 PM	N	N	N	DEL	Play ▶ ◀ ⏮ ⏭ ⏪ ⏩ ⏹

Note: The generic term VCR applies to all media devices

Description of items on page:

- **Back to Main**: takes you back to main page
- **Refresh This Page**: refreshes the page.
- **ADD NEW DEVICE**: Add a new controllable VCR
- **View**: view this VCR on your monitor, [[VIEW](#)]
- **Edit**: edit VCR entry, [[EDIT](#)]
- **Rights**: Set who can view and control this VCR, [[RIGHTS](#)]
- **Clear**: Free up this VCR, [[CLEAR](#)]
- **VCR**: Tells which VCR this is, what IR cable is attached to it.
- **Box**: What controlling computer and box this VCR is controlled from.
- **Title**: Name of the media (i.e. Movie title).
 - **Note:** if **MT** is shown under **Title** then that VCR is free (MT = Empty)
- **Start**: Starting date and time the media is available.
 - **Note:** if **always** is shown under **Start** then this VCR is always available to whoever has rights to view it with no date or time limitations.
- **End**: Ending date and time.
- **P**: Auto Play. (Y or N)
 - **Note:** this VCR will automatically **PLAY** at start time.
- **S**: Auto Stop. (Y or N)
 - **Note:** this VCR will automatically **STOP** at end time.
- **R**: Auto Rewind (Y or N)
 - **Note:** this VCR will automatically **REWIND** after **STOP** at end time.
- **Remove**: Remove this device, [[DEL](#)]
- **Universal Remote**: Device control panel.

The **Media Library Editor** is available to anyone with **Librarian**, **Head Librarian**, and **Supervisor** or better rights. **ADD NEW DEVICE** and Remove [[DEL](#)] Device options are not available to someone with **Librarian** rights.

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To add a new device click on **ADD NEW DEVICE**

- **PV BX INPUT**
Select from the PV BX Map which input this VCR belongs.
- **VCR Code**
Select from the IR control library the VCR and remote control code. For example for the Emerson VCR model EW401B select *VCR | Emerson | 0000*.
- **VCR #**
Select the VCR # or IR Cable # this VCR is attached to. The numbering has been broken up in to 2 parts A and B, 1 through 8.

To edit a device click on **EDIT**

- **Description**
Enter in the name of media. Such as Movie Title or TV Channel.
- **Always On?**
If this is checked it will always show in the library list. Date controls (Start/End) are overridden.
- **State Date & Time**
Enter in the date & time this is available or when it will automatically start.
Enter with the date and time format *1/6/2003 2:00:00 PM* or *1/6/2003 14:00:00*
- **End Date & Time**
Enter in the date & time this is ends or when it will automatically stops.
Enter with the date and time format *1/6/2003 2:00:00 PM* or *1/6/2003 14:00:00*
- **Auto Sets**
Check if you want to automatically PLAY at start time, automatically STOP at end time and automatically REWIND after STOP at end time.

The fields below here are not available to someone with **Librarian** rights.

- **VCR Code**
Select from the IR control library the VCR and remote control code. For example for the Emerson VCR model EW401B select *VCR | Emerson | 0000*.
- **Active**
Uncheck this if you need to reset it off after an auto start.

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- **VCR #**
Select the VCR # or IR Cable # this device is attached to. The numbering has been broken up in to 2 parts A and B, 1 through 8.

To select who can view and control this VCR click on **RIGHTS**

- **User Groups**
This shows a list of who can view this VCR. To remove a group or individual click the **checkbox** next to the name and click the **Delete** button.
- **Add Group**
Select which group you want to be able to view this VCR; then click the **ADD** button. Selecting the group **Public** will let everyone view it. Groups cannot control the VCR, only view. Anyone with Librarian, Head Librarian, or Supervisor or better rights will automatically be able to view and control the VCR.
- **Add User**
Select the name of the individual you want to view and control the VCR, then click the **ADD** button.

To show that this VCR is free click on **CLEAR**

To quickly control the VCR you can use the **Universal Remote** control panel.

- First click on **VIEW** to send the VCRs output to your monitor.
- You can quickly **REWIND, PLAY, STOP, PAUSE** and **FAST FORWARD** the VCR by clicking on the small VCR controls. For more control beyond these, select from the drop down box and click the **GO** button.



Remember: you **don't** need to click the **GO** button if you use the small VCR buttons.

To remove a VCR click **DEL**.

This option is not available someone with Librarian rights.