



Joystick Control Operation Manual



Joystick Control – Operation Manual

Overview

The Camera Corps PTZF panel has many advanced features which allow it to control any of the pan & tilt heads which work using the Camera Corps data control system.

The panel is future proof as re-programming is easily possible. The LCD display and menu selection system allow the addition of many new features as may be required by some customers.

The ergonomic design has been proven by previous models to be favoured by most experienced remote camera operators.



General Operation

The eight illuminated buttons at the top left of the panel are used for selection of up to eight different pan and tilt heads. These may be of different types and all the settings available for each type of head are stored independently for each channel. The channel ID associated with each button may be assigned to any of eight 'standard' ID's or up to ninety six 'multi-camera' ID's. The button of the selected channel will normally be illuminated green. If there is an incoming cue/tally light for any of the eight channels then the button colour will change to red (whether that particular channel is selected or not). The cue/tally information is supplied on the panel data input socket and will normally come from a Camera Corps Universal RCP.

The menu selection system works in a similar manner to the Camera Corps RCP panel. The two 'menu select' buttons above the LCD display allow movement through multiple menus to set up different operational parameters for each head that is being controlled.

Holding down the left hand button always returns immediately to the top level menu. The four function buttons allow changing of the parameters for a particular menu selection. Any of the buttons which are illuminated will perform some function. If the button is not illuminated then that particular function will not be available. (Different head types may allow different functions to be available).

The eight buttons at the top right of the panel perform a number of different operations. The 'standby' button allows a particular channel to be put in standby mode where none of the controls will be operational. This button will also flash Red/Green while data is being sent from the joystick or zoom controls. If the Standby button is flashing when no controls are being moved, then press this button to reset the control centre positions.

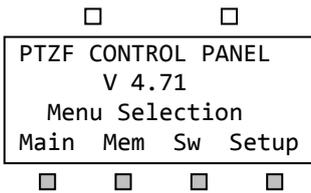
The 'Mem Bank' button below Standby selects one of three groups of 6 preset positions giving 18 possible presets in total. These are selected using the buttons labelled 1-6 to the right of this group of buttons. If the 'Mem' button is unlit then presets 1-6 are available. If the 'Mem' button is illuminated green then presets 7-12 are available and if illuminated red then presets 13-18 can be selected.

Memory presets are only available for certain types of head and the buttons will remain unlit if the head type does not support preset positions.

See later in this manual for a full description of the preset position feature.

Initial Setting Up

The basic concept of the panel operation is that each channel button can be preset to a particular type of pan and tilt head. The selection of a particular head type will provide default values (which can be changed later if required), and set those functions which can be used with different head types. (E.g. not all head types support setting endstops).



This is the top menu and allows moving into any one of four basic menu groups.

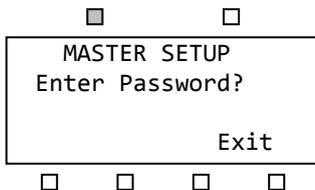
The 'Main' menus are available to operators to allow setting of variable parameters such as pan and tilt speed, damping etc.

The 'Mem' (memory) menus allow settings of various pre-set positions and operator memory functions.

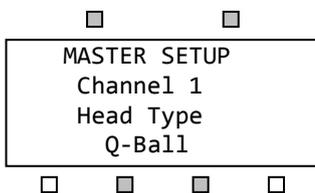
The 'Sw' (switch) menus allow such things as reversing control directions, operation of wipers, washers and blowers and sending of 'test cue/tallys' to check the operation and ID allocation of remote cameras and heads.

The 'Setup' menus are password protected and contain settings which would not generally be available to an 'operator'. Things such as channel ID allocation and head type settings are made here.

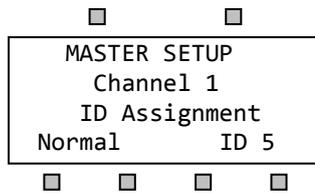
Set-Up Menus



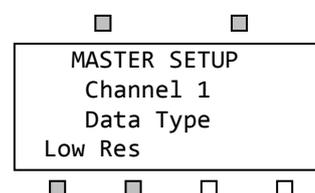
Pressing the 'Setup' function button from the top menu takes you to the password entry menu. A sequence of channel button presses is used to enter the password. A correct password entry will move on to the 'Head Type' setting menu.



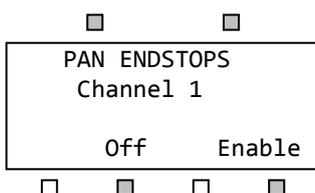
Pre-selecting a head type sets up certain parameters to default values suitable for each head type. Some of these may be changed later by an operator from the main menu if required. It also sets which features are available with any given head type. Such things as endstop settings, programmable moves, high or low resolution data control etc. will be enabled or disabled depending on the head type chosen.



Moving to the next set-up menu (press the right menu button) allows allocation of ID numbers to a particular channel button. The 'normal' ID setting allows 1-7 to be set as the ID. Other channel ID's may be set simply by pressing the required channel button and setting that to the required ID. The ID type may be changed from 'normal' to 'multi'. This enables up to 48 ID's to be set for any given channel allowing more flexibility with interface box allocations.



The next menu allows selection of 'High Res' or 'Low Res' data. A new data code system has now been developed which allows much finer control of PTZF functions. Older equipment will only respond to 'Low Res' data whereas newer equipment will respond to both types of data.



The next two menus allow setting of pan and tilt endstops (if allowed by the head type selected). If not available then the Clear and Enable buttons will not be lit. To set the Pan endstops press the Enable button. This will bring up a screen asking you to move the head to the first pan endstop. Do this and press Set. Then you will be asked to move the head to the second endstop position. Do this and then press set again. This completes the endstop setting process.

Check that the endstops are truly set in the correct positions. (If not then simply repeat the process).

Setting the Tilt endstops is done in exactly the same way. Pressing the 'Clear' button will reset the endstops to their maximum limit positions.

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CONTROL DEADBAND
Channel 1
PTJoystick Zoom
12 4



The control deadband is adjusted to prevent any delay in the head or zoom movement as the control is first moved. E.g. with some head types it may be necessary to move the joystick quite a long way before there is any movement of the head. The control deadband setting is adjusted to remove this unwanted delay and allow the head to move as soon as the joystick is moved. If the setting is too high then slow movements of the head will be lost. See addendum for more info.

ZOOM DRIFT ADJUST
Channel 1
Adjust
Reset Inc Dec



The zoom drift adjust enables correction of any continuous zoom drift which may be caused by a faulty lens or an earth potential problem within a venue. The drift values are stored in the interface box which must have compatible software installed for this feature to work. Only high res. data systems allow this feature. Pressing RESET will clear any drift values stored in the interface box.

To correct a drift press inc or dec repeatedly until the zoom drift slows down and eventually stops. It may take up to 50 or more presses of the buttons before anything visible occurs! Use the inc and dec buttons to find the mid-point of the correction point.

FOCUS OFFSET ADJUST
Channel 1
Adjust
Reset Inc Dec



This works in a similar way to the zoom drift described above. The correction can be used to set the infinity focus point of a lens to the correct position. This may be caused by an incorrectly adjusted lens or an earthing problem between the venue and operating position.

MASTER SETUP
Channel 1
Focus Mode TX Baud
Positional 2400



This next set-up menu allows setting of the focus mode and data output baud rate. The focus mode can be set to either positional or rate depending on the lens type. The Tx Baud setting defaults to 2400 baud, but may be set to 4800 baud for slightly improved responsiveness of the head, or to 1200 baud if the bandwidth of the data line is limited. (Such as a telephone line).

MASTER SETUP
All Channels
Data O/P Level
4 4



This final menu allows setting of the data output levels for the two output sockets. The default value is 4 which is normal for a single interface box connected over an average distance. If 4 or 5 interface boxes are connected or the distance is large then it may be necessary to increase the data output level to achieve reliable control. If there is one interface box which is close to the panel and others which are on a long cable then the two separate outputs can be set to different levels to cater for both requirements.

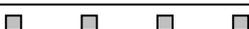
Main Menus

PAN & TILT SPEED
Channel 1
Pan Tilt
6 10



The first main menu allows independent adjustment of pan & tilt speed for each channel. The range is from 'Off' to a maximum of 15. Default values will be set depending on the head type selected, but the full range is available for all head types. Holding down the buttons will allow rapid changes.

LENS SPEED
Channel 1
Zoom Focus
3 2

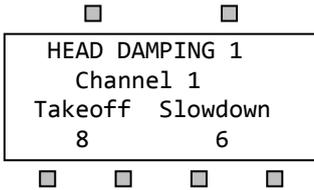


The next main menu allows adjustment of zoom speed and focus sensitivity. Zoom speed can be adjusted over the range from 'Off' to 15 as with the pan and tilt. Focus can be set between 1 and 4. 1 requires four full turns of the focus wheel for full range lens movement, 2 requires 2 turns, 3 requires 1 turn and 4 requires ½ turn. For head type 'HD MiniZoom' an 'Auto' setting is also allowed. Note that after switching on the camera this control must be adjusted

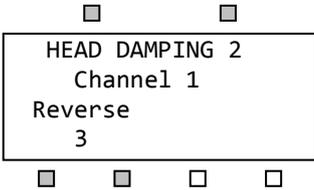


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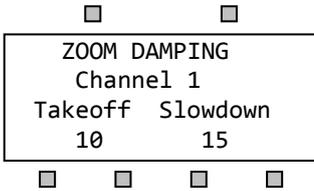
between a manual and auto setting to set the correct camera focus operation.



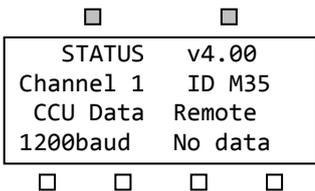
This menu allows setting of the head ‘takeoff’ and ‘slowdown’ damping. A value of 0 will remove all damping effects. As the value is increased the damping will increase. The effect of the takeoff damping is to limit the maximum acceleration of the head as the joystick is moved away from its centre position. The effect of the slowdown damping is to limit the deceleration of the head as the joystick is returned to its centre position. Note that the slowdown damping is only implemented if the joystick is returned to the centre position. If the joystick is moved past the centre position to reverse the direction of the head then the ‘reverse’ damping value is used instead.



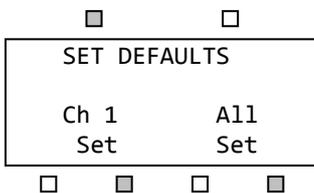
The reverse damping setting is used to help reduce the ‘jerkiness’ of some heads if the direction of movement is suddenly reversed. Increasing the setting will increase the time taken by the head to slow down and then speed up again as the joystick is moved from one direction to the other. Note that with all the damping settings the damping effect will only be noticed if the joystick is moved faster than the damping value. If the joystick is moved slowly and the damping is set to a low level then the damping will have no effect at all. In this condition the head speed is directly controlled by the speed of joystick movement. See addendum for further explanation.



The zoom damping works in the same way as the head damping described above. Only takeoff and slowdown damping settings are available for the zoom control.

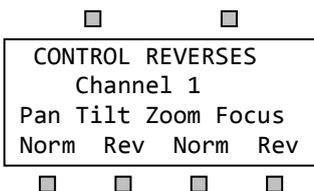


The next screen has no adjustments but displays various information which may be useful. In the top line the software version no. is shown. The second line shows the currently selected channel together with its ID no. (M shows the ID is a ‘multi camera’ ID.) The bottom line shows the baud rate of any incoming CCU data. If there is no data detected on the input socket then the display shows ‘No Data’. The bottom line also shows the state of any data on the remote 9 way ‘D’ socket. See addendum for more info.

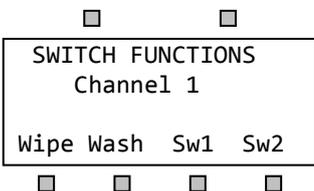


The final screen of the Main menu displays allows setting a given channel or all 8 channels to their default values. Only values which can be set by the operator in the Main or Switch menus are reset to their default values. Items set using the Set-up menus are not affected.

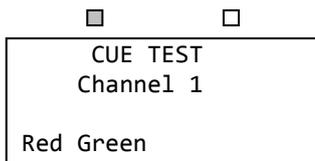
Switch Menus



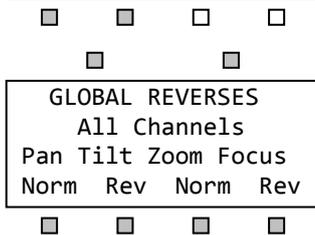
The first ‘Switch’ menu is used to set the direction of movement of the Pan, Tilt, Zoom and Focus controls. These can be set independently for each channel.



The next switch menu provides operation of the Wipe, Wash and auxiliary switch functions depending on the type of interface box being controlled.

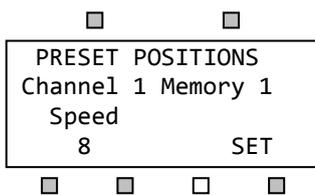


This switch menu can be used to send a 'test' cue/tally light to a remote interface box to check the data is connected and the ID is set correctly. The channel select button will turn red when either a red or green cue/tally is sent.



This menu provides a quick method of changing the direction of control operation for all channels rather than just a single channel. Useful if a particular operator has different preferences to another.

Memory Menus



Up to 18 preset memory positions may be saved and recalled for each channel using the group of 8 buttons on the upper right hand side of the control panel. The 'Mem Bank' button cycles through Off, Green and Red colours. These set the 6 numbered buttons on the right to memories 1-6, 7-12, and 13-18. The 'Standby' button will show continuous Red when pan, tilt, zoom and focus controls are disabled.

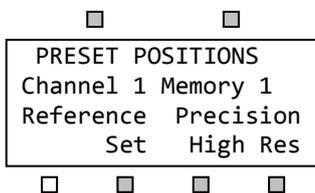
The first memory menu is used to save the preset positions for a given head. (See addendum showing which heads have preset function). The speed of movement to the preset position is set by the two left hand function buttons. Select the memory no. to be preset, and move the head to the required pan, tilt, zoom and focus positions. Then press the 'Set' button to store this position and speed of movement.

Further presets may be saved while in this menu by simply selecting a different memory no., moving to a new position and pressing 'Set' again.

To activate a preset position you must leave the Preset Position Menu. Then just press the memory button which has been set to a particular position and the head will move to that saved position.

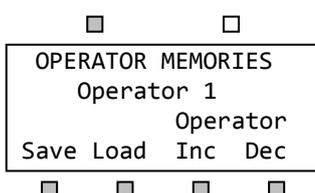
Note that on completion of a given move the channel will be set to 'Standby'. To restore manual control of this channel the Standby button must be pressed to return it to a 'green' active state. Note that pressing 'Standby' during a move will instantly stop the move and restore manual control. Pressing a different memory button during a move will immediately start a move to the new position.

See the Addendum at the end of this manual for a step by step guide to setting and recalling memories.



The second preset memory menu is used to set a reference 'home' position for the head. Before setting any preset positions, point the camera at a particular repeatable shot and press the 'set' button. If ever the head loses its preset memories (such as if power is lost while the head is moving), then pointing the head to the original shot and pressing 'set' again should restore all the lost memories!

The 'Precision' setting allows 'Low Res' or 'High Res' settings. In the Low Res setting the head will move directly to the preset position and stop as close as possible. Because of mechanical tolerances, a more accurate final position can be achieved by making the head move in the same direction at the end, as when the preset position was originally set. This can be achieved using the High Res setting. This setting is only used when recalling preset positions, and is not used while setting memory presets.



The next memory menu is used to store operator memories. The operator memories are used to store all of a particular operators settings to allow a speedy change of operators who may have different setting choices. The settings for all 8 channels will be stored for up to 3 operators. The 'Save' button is used to store the settings, and the 'Load' button is used to restore them. A warning display will be activated to make the operator think before he presses

the wrong button and deletes someone else's saved memory!

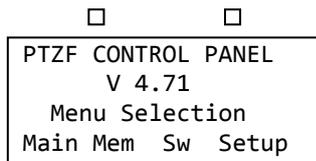


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Note that when the control panel is first turned on, the settings will be exactly the same as when it was last turned off.

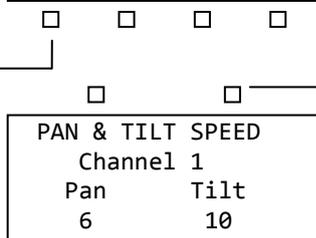
None of the operator memories are loaded by default.

PTZF Panel – Main Menu Selection

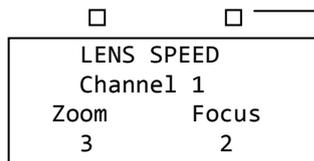


This main menu select screen can be reached at any time by repeated presses (or holding down) of the top left menu button.

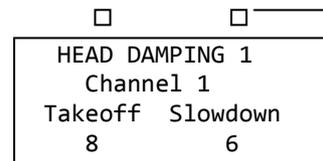
Note that if a 'menu' or 'function' button is illuminated it will perform some action. If unlit it will have no effect.



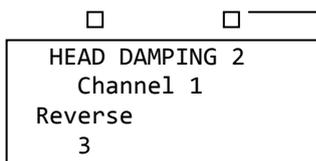
Values can be set in the range 0-15 and set the maximum speed which can be achieved with the joystick at full deflection. 0 turns off pan/tilt



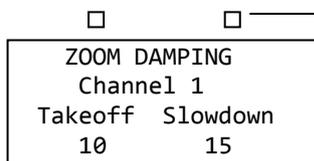
Zoom setting is the same as for pan & tilt. Focus can be set over the range 1-4. For full focus range 1=4 turns, 2 = 2 turns, 3 = 1 turn and 4 = ½ turn of the focus wheel



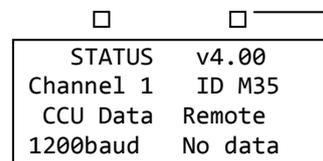
The 'Takeoff' setting sets the speed of acceleration of the head for a rapid PT control movement. 'Slowdown' sets the deceleration speed when the PT control is centred. The range is 0-15 with 15 giving maximum damping.



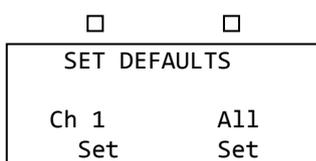
The 'Reverse' setting sets the amount of damping during a rapid change of PT direction. The range is 0-15 with 15 giving maximum damping.



The 'Takeoff' setting sets the speed of acceleration of the zoom for a rapid zoom control movement. 'Slowdown' sets the deceleration speed when the zoom control is centred. The range is 0-15 with 15 giving maximum damping.



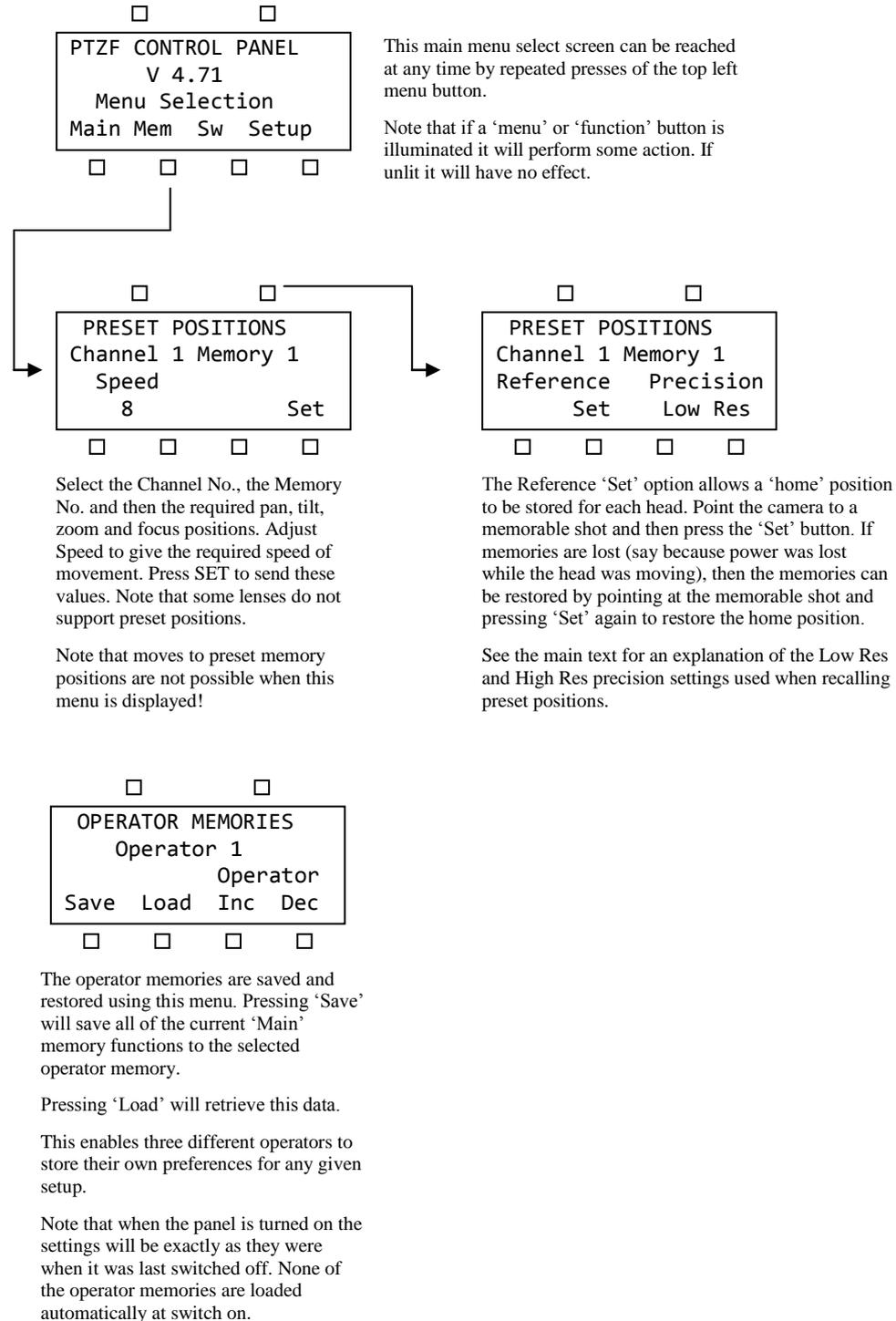
This screen simply displays various details of the current system. The top line shows the current software version. The second line shows the currently selected channel together with the assigned ID setting. The 'M' shows it is a 'multi-camera' style ID. The bottom line shows if there is any incoming CCU data and its baud rate. Also whether there is any data on the 'Remote' input.



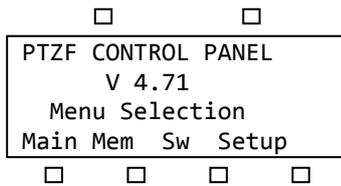
This screen allows the setting of default values for either the currently selected channel, or for all eight channels. The default values will depend on the selected head types. (Head types can only be changed in the 'Set-up' menus).

Only settings for each selected head type will be changed. ID's and all other channel settings remain unchanged.

PTZF Panel - Memory Menu Selection

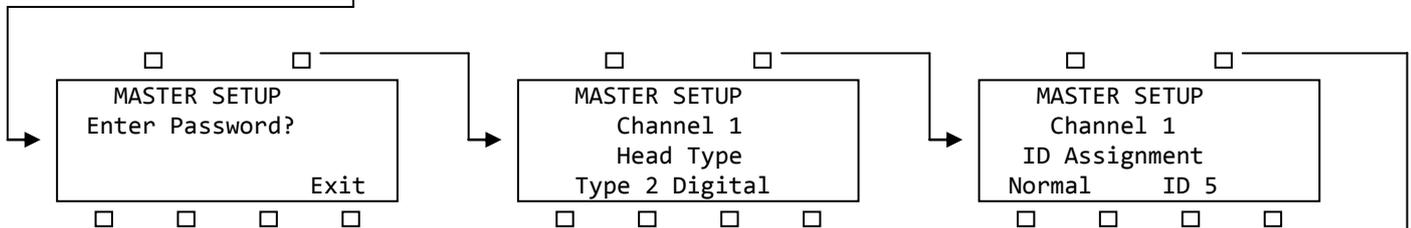


PTZF Panel - Master Set-up Menus



This main menu select screen can be reached at any time by repeated presses of the top left menu button.

Note that if a 'menu' or 'function' button is illuminated it will perform some action. If unlit it will have no effect.

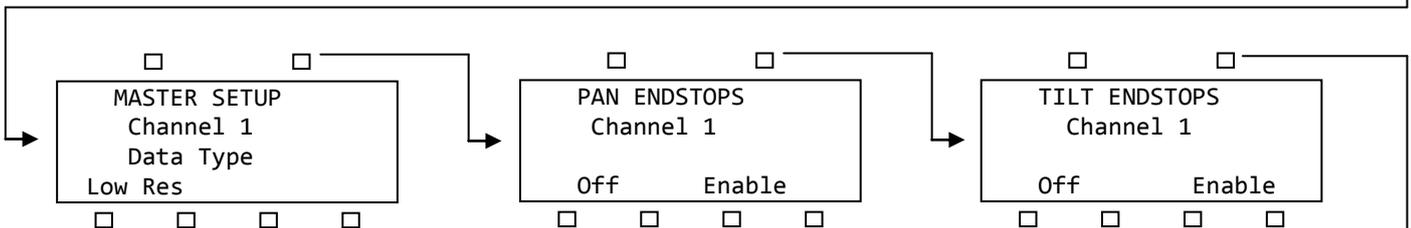


Before proceeding with the set-up menus a password must be entered. This is because any incorrect settings here may cause complete loss of control of a particular head or lens. These settings should only be made by somebody who understands the system!

The password is entered by pressing the channel buttons in the correct sequence.

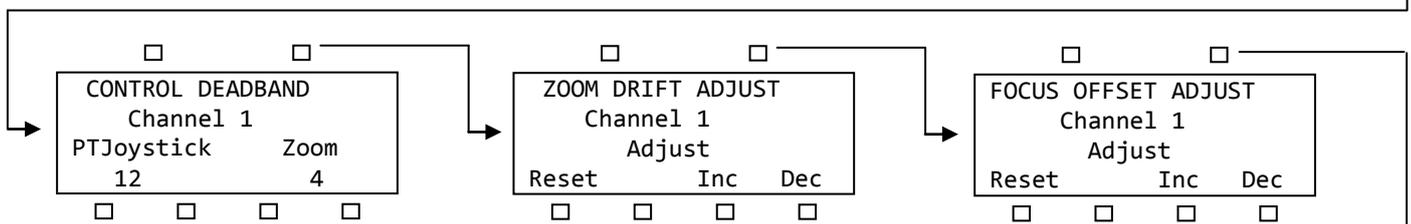
First select the channel to be set. Now using the left hand two function buttons scroll through the list of available head types and select the one required.

This screen allows the head ID to be assigned to the selected channel no. The left hand buttons select between 'Normal' or 'Multi-Camera' style ID's. 'Normal' ID's can be in the range 1-8 and 'Multi-Camera' ID's in the ranges 1-8, 11-18, 21-28, - up to 111-118. 'Normal' and 'Multi-Camera' ID's can be mixed for different channels if required.



The 'Data Type' can only be changed for certain head types. This setting will normally be made automatically when the 'Head Type' is chosen. Newer heads will default to 'High Res', but will also work on 'Low Res' if any problems are experienced with the 'High Res' setting.

The Pan and Tilt endstops can only be set for certain types of head. If the head type does not allow endstops then the Off and Enable buttons will not be lit. The 'Off' button may either clear just the pan or tilt endstops, clear both pan and tilt endstops, or remove the endstops completely depending on the type of head. To set the endstops press 'Enable' and then follow the instructions setting first one endstop and then the other.



The 'Control Deadband' setting removes any delay in response to small control movements. The best setting will depend on head and lens type. Beware that if the setting is too high then slow movements will be lost.

This screen allows zoom drift to be corrected if there is a small drift that cannot be corrected any other way. Always do a reset before adjusting.

This screen allows focus offset if problems are experienced reaching infinity focus. Always do a reset before adjusting.



Focus mode should be set to 'Positional' for virtually all lens types. 'Rate' mode is only required for very specific lens types such as the Canon VCL-719BXS.

The TX Baud rate can be set here and applies to all channels, not just the selected one.

This screen allows setting of the data level for each of the two outputs. This means that for heads which are on long cables O/P1 say could be set higher for those heads, and closer heads could use O/P2 set at a lower setting. Range 0-15. Default 4 for 1v pk to pk output.



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Addendum

Head Types available:-

1. **Q-Ball** – Camera Corps Q-Ball combined head and MiniZoom camera. (Preset option must be specified when purchasing).
2. **VHR Head**- This is for the Camera Corps VHR Pan & Tilt head. Presets and endstops possible.
3. **XHR Head**- This is for the Camera Corps XHR Pan & Tilt head. Presets and endstops possible.
4. **Hotshot-Auto I/Face** – Egripment Hotshot or Scanner head using the new mini automatic interface box. (The lens type detection is automatic). Presets not possible. Tilt endstop only.
5. **Minishot** – Egripment Minishot or Microshot with the 'Old Style' Black Interface Box. Presets not possible. Endstops not possible.
6. **Underwater Head** – This is for The Camera Corps Underwater P&T head. Presets not possible. Endstops possible.
7. **Type2B W/Proof** – This is for the new Camera Corps weatherproof system with built-in SMPTE cable adapter. Presets and endstops possible
8. **W/Proof White P&T**- This is for a Camera Corps weatherproof system using an old style 'white' P&T unit. Presets and endstops possible.
9. **Panasonic HE Series** – This is for Panasonic HE Series robotic heads which must use the special Camera Corps Interface box designed for these heads. Presets possible.

Control Deadband setting:-

The control deadband needs some more explanation!

Basically, not all heads and lenses have the same amount of sensitivity. This means that some heads and lenses require a larger voltage to start them moving from rest than others. (The Egripment Minishot and Microshot are particular examples of heads that require a high voltage to start them moving).

With a normal controller this would mean that the joystick has to be moved quite a long distance from its resting position before the head started moving, causing the operator a problem with knowing when the head would move. This might not be a problem if only one type of head was being used, but with different types of head being controlled from the same controller it could cause a problem.

The deadband setting solves this problem by adding a fixed voltage to the pan, tilt and zoom signals before sending the data. The thing to be aware of though is that if too high a voltage is added then the slowest speed of head movement will be lost, and the head will always start moving at a faster speed than is possible.

The deadband setting is the same for both pan and tilt (zoom has separate setting menu), so first decide whether to use the pan or tilt movement to make the setting. (It may be that a head will have little tilt movement in operation, so use the pan, or vice versa.) Assuming the pan will be used, first set the pan speed to 1 and turn off the tilt.

Now select the control deadband menu. (The setting may already have a default value associated with the particular head type chosen so may only need checking anyway).

Move the pan joystick to the point where the head just starts moving and then back it off again to the point where it just stops. Now increase the deadband setting (while holding the joystick stationary), until the head just starts moving.



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Now that the approximate value has been found you can check that it is correct by moving the joystick slowly from its resting position and checking that the head starts moving almost as soon as the joystick is moved. Note that there will always be a small 'window' before any movement is apparent which is unavoidable due to mechanical tolerances etc.

Also check that when the head starts moving it is at the slowest speed possible with that particular head type. (You can check this speed by seeing how slowly you can move the head with the deadband set to zero).

If you cannot achieve such a slow speed with the deadband set, then reduce the deadband one step at a time until the slowest speed can be achieved.

The deadband setting for zoom is carried out in a similar way.

Damping Operation:-

The damping control settings provide a very powerful way of making control operation smoother for inexperienced operators, or less capable pan and tilt heads. However, the concept of how the damping works needs to be fully understood to get the best results.

Basically, it works by limiting the acceleration and deceleration of the head regardless of how rapidly the joystick is moved.

The data adjustments are made in the PTZF panel rather than the head, so all types of head can have damping settings allocated.

The best way to explain the operation is by experimenting with a head. Set the head speed to maximum and then move to the 'Head Damping 1' menu which allows setting of takeoff and slowdown damping.

Adjust the takeoff damping to 12 and then move the joystick rapidly from the center to fully in one direction. The head will be seen to slowly accelerate up to its maximum speed. The higher the damping setting, the slower the head will accelerate. Moving the joystick slowly will not affect the performance at all. This is a fundamental advantage of this system compared to other methods. The basic concept is that the acceleration of the head is only affected if the damping value is higher than a given speed of joystick movement.

Now set the takeoff damping back to 0 and set the slowdown damping to 12. Move the joystick rapidly to full movement in one direction and then allow it move rapidly back to its center position. (Don't allow it to move past the center or the effect will not be seen).

Now the head will accelerate rapidly to its maximum speed, but then slow down gradually after the joystick has returned to the center position. This works in exactly the same way as before except this time the head's deceleration is limited to the value set by the slowdown damping. As before, slow movements of the joystick will not be affected.

Moving on to the next menu (Head Damping 2), allows the setting of 'Reverse' damping. This controls the way the head responds if the joystick is moved rapidly from one direction to the other. I.e. moving it first one way and then the other way. (Passing the center zero point).

The reverse damping sets how slowly the head decelerates and then accelerates again after changing direction. Experiment by using a high value of reverse damping to see the effect.

The reverse damping is particularly useful for heads where the pan axis is offset from the center of mass, and pan reverses can cause a 'jerky' movement when reversing direction at high speed.

Data transmission:-

The PTZF panel has two separate data outputs and the data level can be set independently on each output. The default value of 4 is normally correct for most systems, but if the heads are on long cables or there are more than 2 heads on a particular output, then the level may need to be increased. In general the level can be set by seeing what is the lowest and highest level on which all the heads work, and then setting the output to halfway in between!



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The transmission baud rate can be set to either 1200, 2400 or 4800 baud. This will be the same for both data outputs.

Always use the highest transmission baud rate possible. The response of the heads will be slightly faster if you can use 4800 baud. (1200 baud should only be necessary if the data has to use a telephone line or RF transmission system). 4800 baud won't work over such long cable lengths as 2400 baud but the extra speed is worthwhile if it can be used.

Make sure that all heads are checked though at the high baud rate. However, if there are problems controlling one particular head then try putting that on its own data output, and varying the data level of that output to see if it improves things.

Remote RCP Data:-

When the camera on a particular head is one being controlled by a Camera Corps RCP panel, the data from the RCP panel is fed into the PTZF unit where it is mixed with the PTZF data before being sent to the head and camera.

The status display on the PTZF panel shows whether this data is present and what baud rate is being received. When the system is first switched on it is possible to get a misleading reading of the current baud rate if the RCP data has not 'locked up' inside the PTZF panel.

It may take quite a few bytes of data from the RCP panel before 'locking' is achieved and the CCU operator may think he has lost control while the PTZF panel is in its 'locking up' state.

Note that the RCP baud rate must be equal to or less than the Joystick Panel output baud rate.

The best way to achieve lock quickly is to send an update camera command from the RCP panel to the PTZF panel after everything has been switched on, as this sends a lot of consecutive data. While the PTZF panel is locking to the incoming data the display will be flashing to show lock is happening.

Presetting Memory Positions:-

See Addendum on Page 11 - The Preset Positions option provides a powerful method of returning heads to a specific position of Pan, Tilt, Zoom and Focus. Although moving to a preset position is done in a smooth manner with a smooth start and stop, it is not intended that the movement is for 'on-air' use.

Up to eighteen presets may be stored for each head being controlled. Six buttons on the group at the top right of the joystick panel are used in three groups of six giving eighteen in total. The 'Mem Bank' button selects presets 1-6 when unlit, presets 7-12 when green, and presets 13-18 when red.

Before setting any preset positions it is worthwhile setting a 'home' position for the head. Some heads which don't have endstop positions (such as the Preset Q-Ball) have no reference unless the 'home' position is set. Normally, this is not a problem as the head will always remember its last position even when switched off. However, if the head loses power while it is moving then it will lose its reference position. By setting a 'home' position the reference can be restored and all the presets will then also be restored.

To set the home position, first move the head to a shot which can easily be repeated. Move to the second Memory Menu and press the 'Reference Set' button. This sets the 'home' position. If the memories are lost due to a power loss while the head is moving, then repeating the process of setting the 'home' position should restore all preset memory positions.

To set a memory position proceed as follows. Select the 'Mem' option from the main menu. The shot will zoom to fully wide. Now move the pan, tilt, zoom and focus controls to the required shot. Note that the zoom will work in a 'stepping' mode in the case of the Q-Ball as it is now working in positional rather than rate mode. When the shot has been finalized, select the memory to be used using the 'Mem Bank' and Memory number buttons. Then simply press 'Set' to store the position. The speed at which the head will move to the new position can be set using the 'Speed' value in this menu.

To set further positions stay in this menu, change to the required shot, memory no. and speed, and press 'Set' to store the new position(s).



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To recall any preset memory positions you must leave the memory setting menu first. Then simply pressing the required memory button will move the head from its current position to the stored position at a speed which is set during the storing process.

When recalling a memory position it is possible to use either the 'Low Res' or High Res' setting available in the second of the memory menus. In 'Low Res' mode the head will move directly to the new position and stop when it gets as close as possible.

In 'High Res' mode the final position can be achieved slightly more accurately by possibly overshooting the final position and then moving back in the same direction as the head was moving when setting the position originally. This is because any mechanical tolerances are reduced by the final movements being in the same direction when restoring the position as they were when set originally.

Operational Notes:-

1. A menu/function button will only have an effect if it is illuminated
2. Most increase/decrease buttons can be held down for rapid movement
3. The currently selected menu screen for a given channel no. is remembered and returned to whenever that channel is selected. (This does not apply to 'Setup' menus where it is likely the channel needs to be changed without changing the menu display)
4. Always set the control speeds to slowest necessary to achieve the required maximum speed. This will give much finer control at slow speeds than is possible with the speed set at maximum.
5. If there are less than 8 heads being controlled, it can be quite useful to set up more than one channel button to the same ID. This allows an operator to have two completely different sets of parameters for any given head, which can then be changed very quickly by simply changing channel buttons.
6. When the PTZF panel is powered down it is possible that some random data may be sent to the currently selected head. To prevent this causing unwanted head movement, either select an unused channel, or set the current channel to standby before switching the PTZF unit off.
7. From Software Version 3.6 onwards there is a method to completely reset all the internal memory used to store configurations and operator memories. This may be necessary if the memory has become corrupted and prevents the need to completely re-program the unit. To do this hold down both Menu Select buttons while switching on the power. Release the buttons when instructed on the LCD display.
8. From Software Version 3.8 onwards the input data from the RCP panel must be set to 2400 baud when using the Multicam Keypad to control channel selection.
9. From Software Version 4.0 onwards the layout and numbering of the Memory buttons has changed. There is now a 'Mem Bank' button and six memory buttons. The Mem Bank button can be cycled through three positions (Off, Green and Red). Each position accesses 6 different memories. The Operator memories are now only accessed from the Memory Menus.
10. From Software Version 4.0 onwards the Standby button shows when pan, tilt, or zoom data is being transmitted from the control panel by flashing Red/Green. If this button is flashing without any control movement then the zero position of the joystick or zoom control may have drifted. To reset the zero position of these controls simply press the Standby button.
11. From software version 4.5 onwards the headtypes have been re-named and the 'Fast' Q-Ball head type added. Note that the 'Fast' Q-Ball has a different ratio gearbox to give the increased speed and this does reduce the smoothness of slow speed movements slightly.
12. From software version 4.71 onwards the 'Fast' Q-Ball head has been removed and the Panasonic HE Series heads added.

Always ensure that when pressing the Standby button the Joystick and Zoom controls are in their centre positions otherwise they will be reset to the wrong position!



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PTZF Panel - Specifications

Data System

Standard Camera Corps serial data system switchable to 1200, 2400 & 4800baud.
Audio sine wave tone system nominal 1v pk to pk. ± 6 db minimum tolerance.
2 outputs provided on male XLR3 connectors with separately adjustable output level.
1 input provided for data from a Camera Corps RCP panel.
1 remote 9 way 'D' socket for future expansion of in/out data.
1 programming 9 way 'D' socket for updating panel software.

Resolution

Low res. data system:- 9 bit for pan, tilt, zoom & focus = 256 speeds each direction.
High res. Data system:- 11 bit for pan, tilt, zoom & focus = 1024 speeds each direction.

Channels

Up to eight separate heads of any type may be controlled at any one time.
Standard or Multi-camera ID's may be assigned to any channel button.

Memories

Up to eighteen preset position memories maybe set for each of the eight channels. (Depending on head type).
Up to three operator memories may be set to store operator data.

Dimensions

Width 411mm, Depth 325mm, Height 75mm

Weight

5.0 kg

Power Input and Consumption

Input:- 100 – 240 volts AC 50/60hz Power consumption:- 12 watts