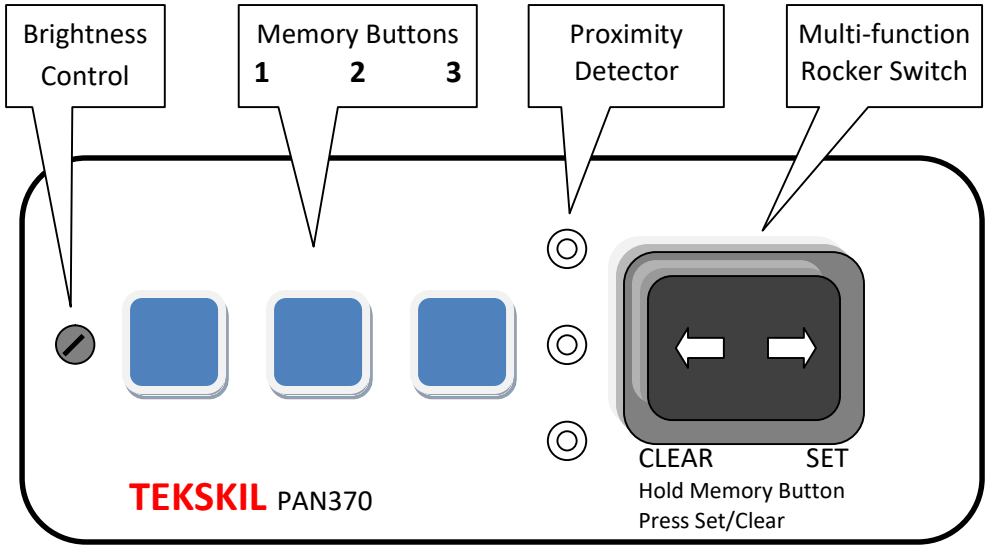
Tekskil PAN370 User Guide

Version 4.2 2020-10-02

Control Panel Layout

The pan table front panel has, from right to left, a brightness control, a proximity detector, 3 illuminated memory buttons, and a directional rocker switch.



Brightness Control – (accessible with a small screwdriver) Adjust the brightness and set dimming operation of the Memory Button Indicators and logo panel.

Memory Buttons – 3 illuminated memory switches allow storage and recall of locally-set memory positions. The buttons may also be used for system reset and error indications. The buttons illuminate to show current or requested memory location, or device status.

Proximity Detector – Detects the presence of user's hand in front of the panel to illuminate the memory buttons if they are dimmed. This is useful to show memory status without pressing a button and invoking a change of pan position.

Rocker Switch – Used to move the pan position, to set and clear memories, set zero reference position, and invoke startup functions.

Control Functions

The pan table has an elegant motion control designed to allow fine (slow) or coarse (fast) movement to target positions. The speed of motion is ramped up or down automatically to reduce vibration of the system during start and stop. The target position may be one of the following:

- Zero Position: The pan table facing straight ahead.

- Limit: The preset limits of the pan table at +/-185° from the zero position.
- Rocker Target: During motion the point at which the user presses any button to cause a stop is recorded as the target position to stop. Similarly, if the rocker switch is pressed in momentary mode the position at the switch release is recorded as the target position. The motion will slow to stop and the pan table will reverse slowly back to that position.
- Memory Target: While approaching a memory position.

Move Right or Left

To pan right or left press the rocker switch right or left.

The rocker switch allows 3 modes of movement depending on duration of press, similar to the action of a vehicle electric window:

- Jog: Pressing the rocker switch for ¼ second or less automatically moves the position slightly in the desired direction. To reduce vibration, the motion first advances a small amount then reverses a smaller amount to the final position.
- Latched Motion: Press the rocker switch for between ¼ and 1 second to latch the motion in the desired direction, with a target of the position limit. The pan motion will speed up to maximum as soon as the rocker is released. Press any switch to stop the motion at your desired target position. This mode is for quick movement to a distant position.
- Momentary Motion: Press the rocker continuously (longer than 1 second) to advance the movement. The pan motion will start slow to allow fine adjustment. If the switch is held more than 3 seconds the motion will speed up to maximum. Release the rocker to stop motion at your desired target position.

Stop Movement

While in motion, with no switches pressed, the unit can be stopped at a desired target position by pressing any memory button or rocker switch. Release the button to invoke another motion or memory control.

Local Memory Buttons

Three local memory positions can be saved and recalled from the device control panel. Three illuminated buttons access the memory functions.

Local Memory Button Indicators

When a memory is stored, the associated button will be lit continuously or flashing:

- Continuous: A position is saved to the memory, but the pan table is not at that position.
- Slow Flash: The pan table is at this memory position as a result of a user's memory recall request.
- Fast Flash: The pan table is moving to this memory position as a result of a user's memory recall request.

Set Memory

Set a local memory position by holding the associated memory switch (1, 2 and 3 from left to right) and, while continuing to press it, press and release the RIGHT rocker switch. The button will begin to flash slowly to indicate the unit is at that saved position.

Clear Memory

Clear a local memory position by holding the associated memory switch (1, 2 and 3 from left to right) and then pressing the rocker switch to the left. The position will be permanently cleared and the button LED will turn off.

Go To Memory Position

Press and release a single illuminated memory button to move the pan table to the stored memory position. The button will flash quickly while the pan table moves to the stored position. Pressing and releasing an unlit button has no action.

Set Zero Position

The Zero Position is generally set to the straight-ahead facing position of the pedestal with the control buttons to the rear. The limits of motion (+/- 185 degrees) are referenced to the zero position (as are positions displayed or requested via web and API interfaces). It is possible to shift the zero position to any other position depending on the user's preference.

To set the zero position press and hold all 3 memory buttons and, while doing so, press the left rocker switch. Setting the zero position clears all stored memories. The saved zero position will be indicated by all 3 memory buttons flashing slow.

Warning: If the turntable of the pan table is removed and replaced, for example to install the prompter hardware, it is possible that the pan turntable can be rotated by a multiple of 60°. This can affect the reading of the zero position by the system. In that case an error will be indicated on power-up and the user will need to reset the zero reference.

Go To Zero Position

To move to the zero position press and hold all 3 memory switches and, while doing so, press the right rocker switch. While moving to the zero position all 3 memory buttons will flash fast. When the pan table stops at the zero position all 3 memory buttons will flash slow.

Brightness Control

The brightness control is accessible through a small hole on the front panel. It affects only the local indicators (not those on a connected remote control).The unit normally ramps up the brightness when there is user activity (button, remote command, or proximity detection), and then dims the indicators after 10 seconds of no activity.

The brightness control has 3 ranges:

> OFF: With the control fully counter-clockwise the indicators are always off. Use this setting if you want no extra light, but the memory indications will not be visible.

AUTO: With the control between the OFF and MAX settings the brightness will ramp up and down automatically between off and the brightness set by the control. When activity is detected (button, remote command, or proximity detection) the brightness will increase. After 10 seconds of inactivity the brightness decreases to minimum.

MAX: With the control fully clockwise the brightness will stay at maximum and will not ramp down after 10 seconds. Decrease the control slightly to enable AUTO mode.

Power-Up Functions

After a normal power up (with no error conditions) the unit will, after 4-seconds, display a sweep across the 3 memory indicators, and then display the status of the programmed memories.

When the unit is powered on the condition of the front panel switches is monitored to detect power-up functions. To invoke one of the functions depress the appropriate switch combination and hold it for 4 seconds or more. The following functions are implemented:

Function	Switch Combination	Description
Demo Mode	Two outside memory switches (1 and 3)	This initiates a demo mode where the unit will sequentially move between the right and left limits and to any saved memory positions on the way. The unit will stop at each position for 15 seconds. To end the demo mode power the unit off.
Factory Reset	All three memory switches plus left rocker	This function resets parameter memory to factory values. Pan zero position is erased, memories are cleared and Ethernet parameters are set for DHCP.

Power-Up Fault Indications

After power up a fault sequence may be displayed on the switch LEDs. The fault sequence is 5 fast flashes of all LEDs which may be followed by a series of binary fault codes. The fault display is repeated until the fault is cleared. If there is no fault, then no fault sequence is displayed.

Code	Fault	Description
1: Off-Off-On	No file system detected	The file system is not found in EEPROM. It is necessary to program the file system into the unit using the Tekskil Device Manager Utility or other means. The file system is required to produce the device Ethernet web pages and API functions.
2: Off-On-Off	Position Detect Failure	The internal position detector is not connected or has failed.

Code	Fault	Description
7: On-On-On	No zero reference	The PAN370 zero reference has not been set, or it has become invalid due to reorientation of the pan table. To clear this fault first move the pan turntable to the desired zero position with the rocker switch. Then set zero using the following button sequence: 1 – Press all three memory switches at once and then, while continuing to hold them 2 –Press and hold the left rocker switch. 3 – Keep holding all three memory switches and the left rocker switch until all 3 memory buttons flash (approximately 4 seconds) 4 – Release all switches. The 3 flashing buttons indicate the unit is at a valid zero reference position.

Operational Fault Indications

The PAN370 can detect a jam condition and indicate this on the Switch LEDs. The jam condition is detected when the turntable is moving in a particular direction and the motion is impeded enough to slow the speed below an internal threshold. This may result if the cables to the unit are entangled or strapped too tightly.

The result of a jam is to:

1. Stop the motion, reverse direction, and move 30 degrees back from the jam point.
2. Repetitively flash the switch LEDs in sequence, alternating right to left, then left to right. The LEDs will return to normal operation after flashing several fault sequences.

Remote Control

The remote control unit replicates the switches and indicators of the pan unit at a remote location. The switches and indicators operate identically and in concert with the local controls.

The brightness control on the remote unit adjusts the brightness of the remote control indicators only.

The remote control connects to a 4-pin connector on the left side of the PAN370 via a Tekskil Cable.

Ethernet Connections

Two Ethernet connections are provided on the left side of the PAN370. These allow for a ‘daisy-chain’ connection of the network between networked devices. Connect one of them via a CAT6 cable upstream to your network router, or to a daisy-chain connector on a Tekskil product (such as a PED319). The remaining connector can provide an Ethernet connection to another downstream device (such as a Tekskil Floor Manager). The PAN370 contains a built-in Ethernet switch to route the data appropriately.

Web User Interface

The PAN370 has a built-in web interface that can be used for remote control and configuration of some operating parameters. To access the web interface enter the URI of the unit in a browser in the format:

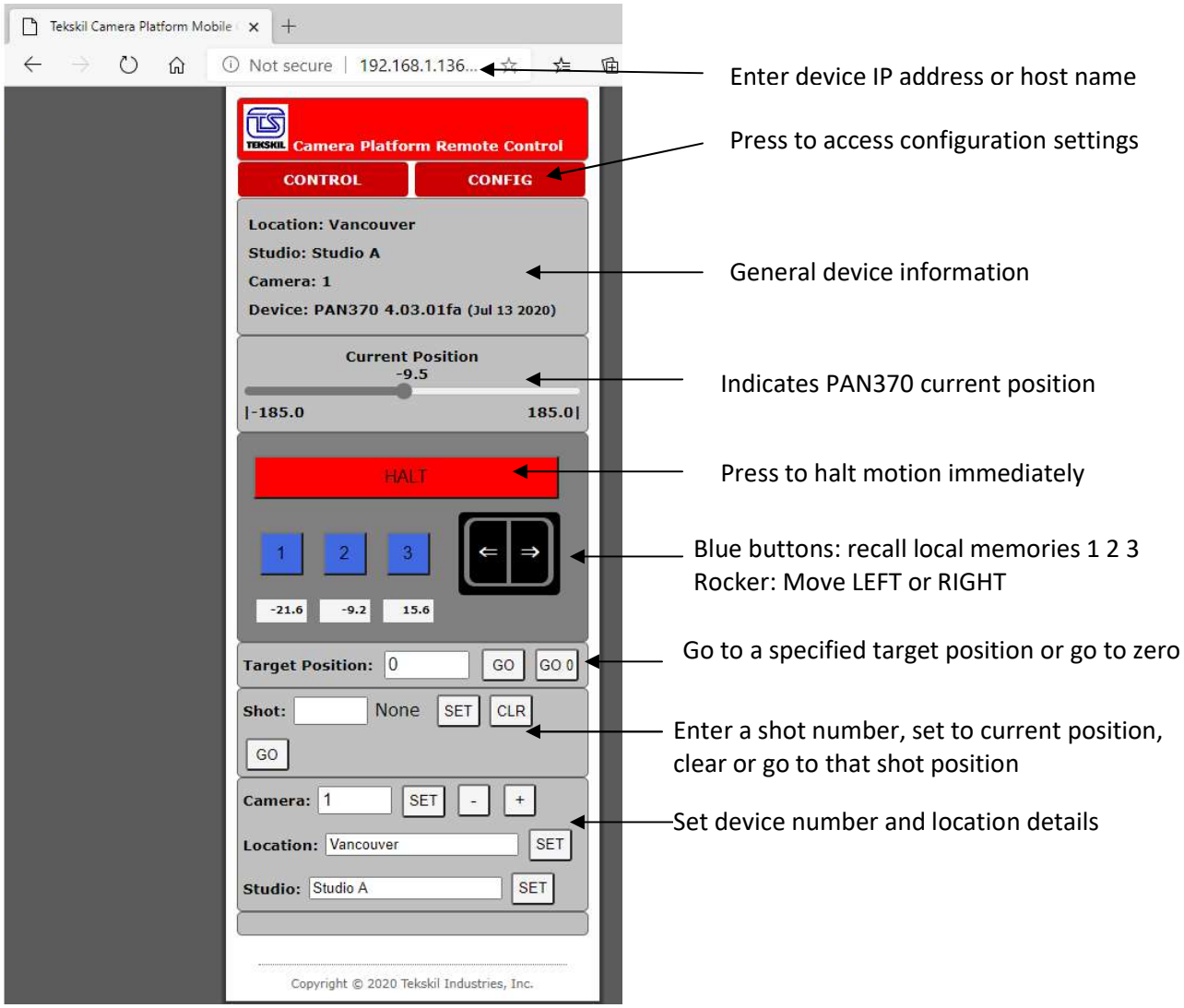
"http://*ip-address*" where ip-address is the device address identified from the system router

Or

"http://*hostname*" where is the host name programmed into the unit from the CONFIG dialog. The default hostname is TEKSKIL-PAN.

CONTROL Menu

The CONTROL page on the web interface allows the user to move the pan table position, recall local memory positions, set, clear or recall shot positions, and go to a specific position.

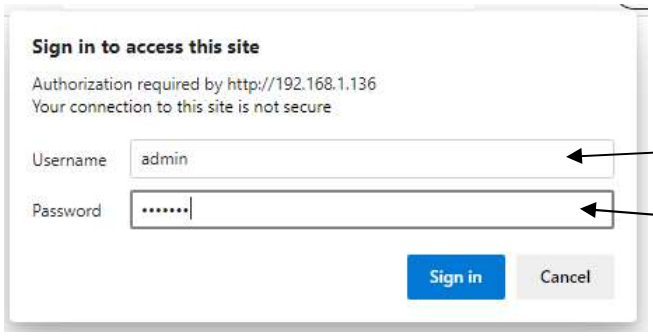


Accessing the CONFIG Menu

While the CONTROL menu is displayed, press CONFIG to access a configuration menu. If you have not accessed the device configuration previously on your computer you will be asked to sign-in.

The CONFIG page requires authentication which is:

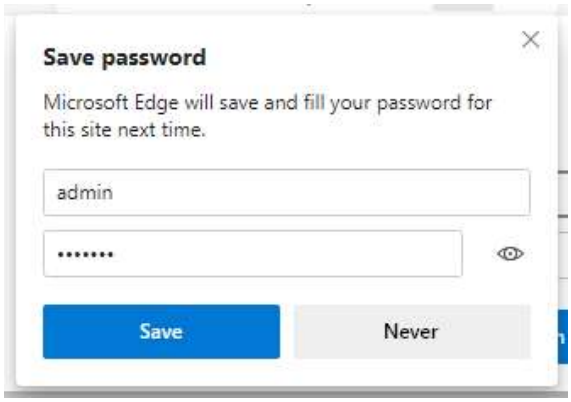
User: admin Password: tekskil



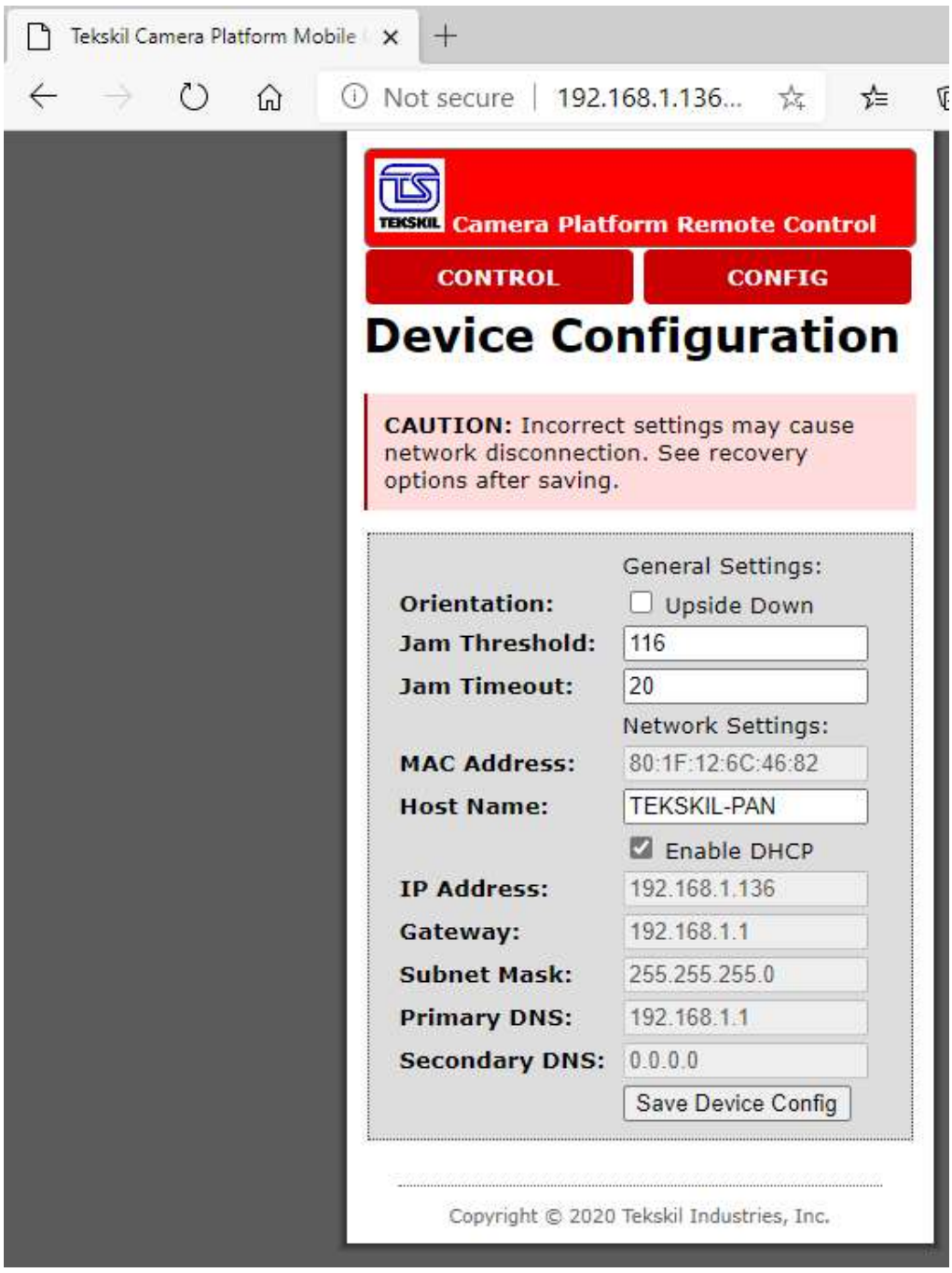
Username is ‘admin’

Password is ‘tekskil'

Optionally, save the password:



CONFIG Menu


Tekskil Camera Platform Mobile
Not secure | 192.168.1.136...
TEKSKIL
Camera Platform Remote Control
CONTROL
CONFIG
Device Configuration
CAUTION: Incorrect settings may cause network disconnection. See recovery options after saving.
General Settings:
Orientation:
Upside Down
Jam Threshold:
116
Jam Timeout:
20
Network Settings:
MAC Address:
80:1F:12:6C:46:82
Host Name:
TEKSKIL-PAN
Enable DHCP
IP Address:
192.168.1.136
Gateway:
192.168.1.1
Subnet Mask:
255.255.255.0
Primary DNS:
192.168.1.1
Secondary DNS:
0.0.0.0
Save Device Config
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Description of CONFIG Settings

Parameter	Description
Orientation	Checkbox – check if the device is mounted up-side-down. This adjusts the direction of movement appropriately.
Jam Threshold	Value (50 – 255, default 116) - Used in the PAN370 to set a threshold above which a jam is detected. It is based on a measurement of motor current. If the value is exceeded for longer than the 'Jam Timeout' then a jam sequence is initiated.
Jam Timeout	Value (5 – 255, default 20) – Used in the PAN370 to set the timeout for a jam detect. Each step represents 10mSec. If the motor current exceeds the 'Jam Threshold' value for longer than this time, then a jam sequence is initiated.
MAC Address	This is the pre-programmed MAC address contained in the device memory. It is not user-programmable.
Host Name	Text (15 char max) – this can be used to set a unique host name for the device. A hostname is useful to access the device on the network using a name rather than an IP address. It should be set accordingly by the user. (ie. CAM1-PAN)
Enable DHCP	Checkbox (default checked) – Check this box to enable DHCP, and the network will automatically assign an IP address to the unit. Uncheck the box to set a static IP address (preferred). When DHCP is used the subsequent fields show the assigned IP address, which are not editable. When DHCP is not used, the following fields can be user-adjusted to set a static IP address.
IP Address	DHCP – shows the current IP address of the unit (set by network or auto-config) Static – user-settable static IP address
Gateway	DHCP – shows the gateway IP address Static – user-settable gateway IP address
Subnet Mask	DHCP – shows the subnet mask Static – user-settable subnet mask
Primary DNS	DHCP – shows the primary DNS IP address Static – user-settable primary DNS IP address
Secondary DNS	DHCP – shows the secondary DNS IP address Static – user-settable secondary DNS IP address