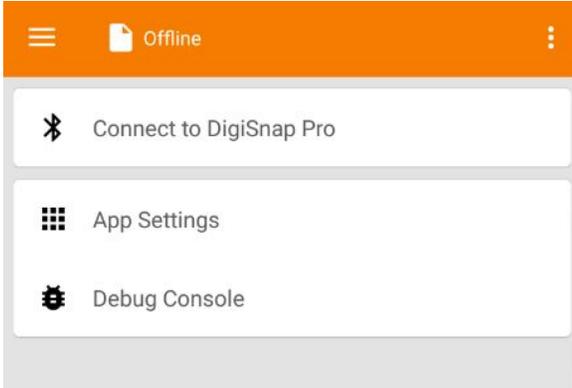


DigiSnap Pro Version v1.1.195 (195)

Default Settings and Behavior



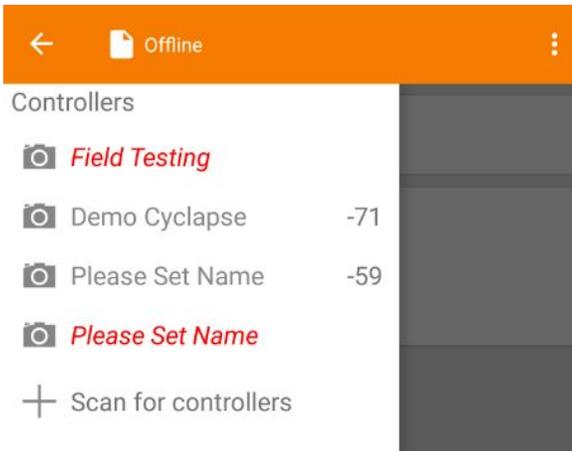
Offline

When you first open the app, you will be presented with the Offline screen.

Connect to DigiSnap Pro will prompt you to scan for and associate with nearby Bluetooth enabled DSP controllers. This will be the first step in making a connection over Bluetooth

App Settings is where you can define the behavior of the Android app itself.

Debug Console contains a list of messages that are logged in the DSP system to assist with troubleshooting.



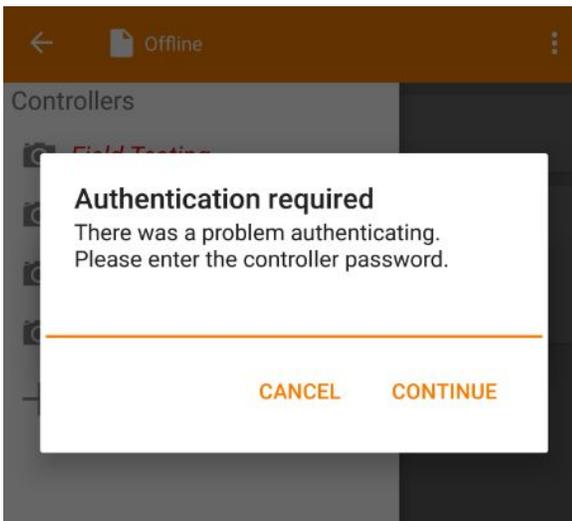
Scan for Controllers to discover nearby DSP's.

Their Bluetooth signal strength, represented in dB, is shown to the right of the system name.

From the factory, the system will show as "Please Set Name".

Entries in red are previously associated controllers that were not seen in the last scan.

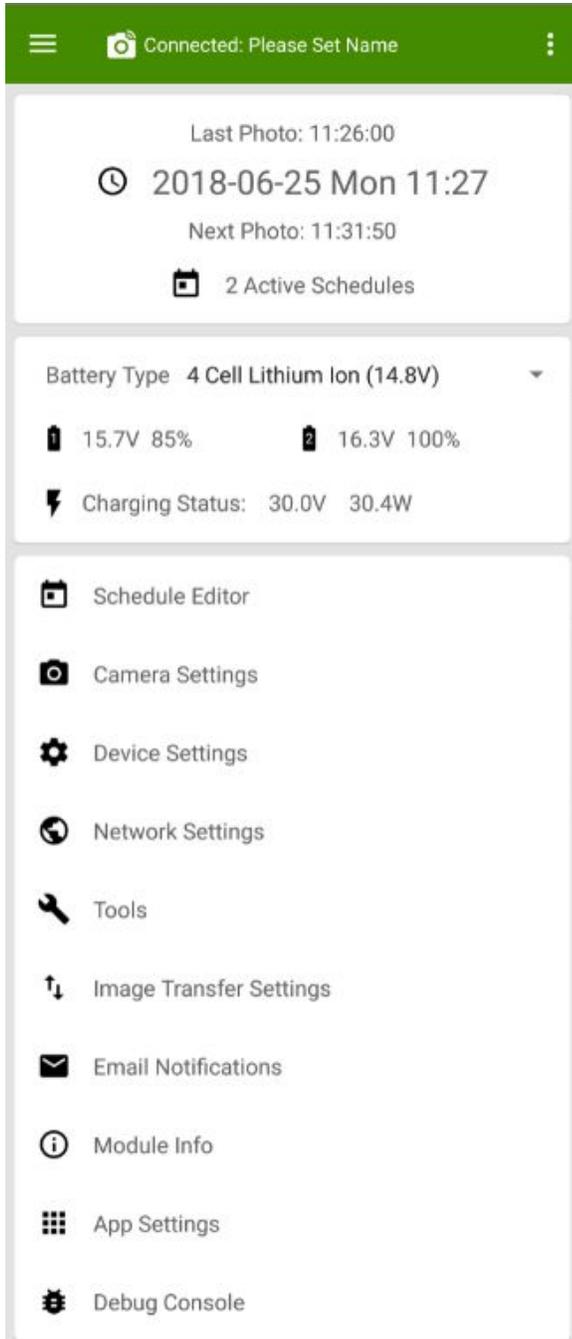
If you know your controller is within range and shows as red, tap it to connect anyway, there's a good chance it will succeed without the extra step of scanning.



Bluetooth can be fickle. You may need to scan for and attempt to connect to the controller more than once. If you are having issues connecting try rebooting your Android device or using a different Android device.

Authentication Required will be displayed with a prompt to enter the controller password when connecting to a controller for the first time. After a connection is successfully established the password will be remembered by the app.

*The password is **aaa***



Main Screen

This is the main screen of the Android app. At the top is the connection state and the name of the controller connected.

The 3-bar menu at the upper left can be used to scan for and connect to other controllers.

The 3-dot menu at the upper right can be used to rename the DSP, refresh the app, registry, and connected modules. Disconnect will terminate the current Bluetooth connection to the DSP system.

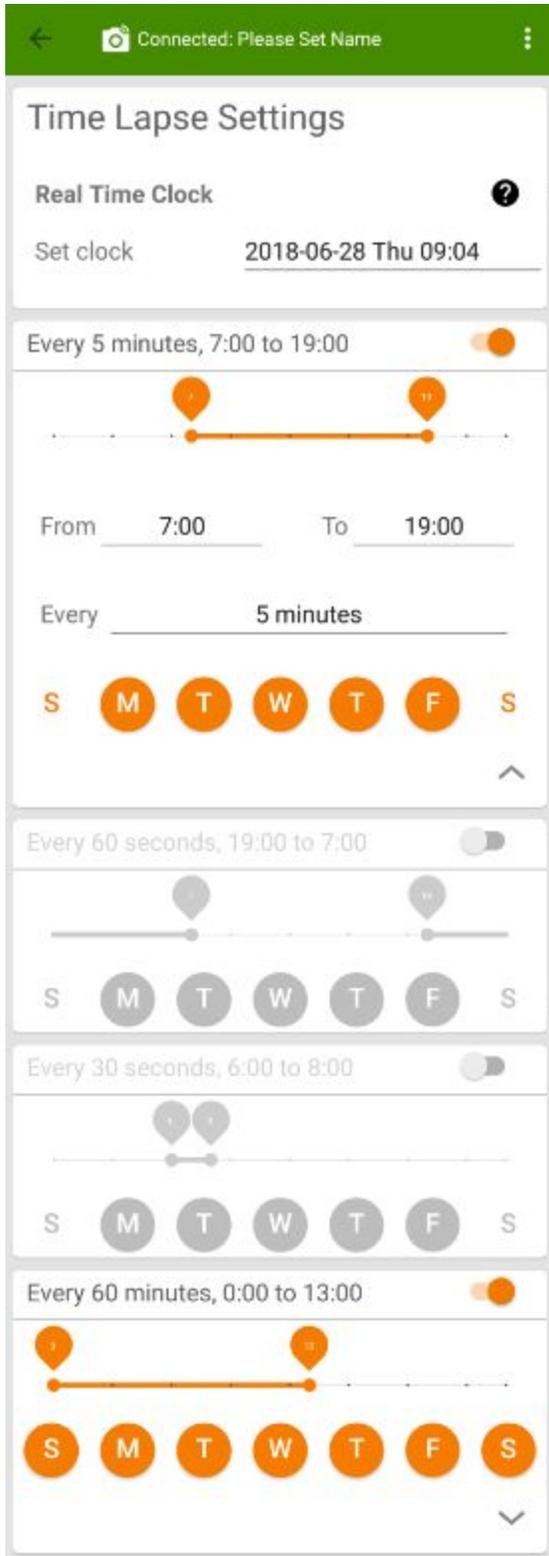
Next you will find the intervalometer status, with a summary of the time and photo schedules.

Below this is battery and charging information for the DSP system.

Battery Type allows the correct charging algorithm for different battery chemistries to be selected.

Finally, you will find the **Schedule Editor, Camera Settings, Device Settings, Network Settings, Tools, Image Transfer Settings, Email Notifications, Module Info, App Settings, and Debug Console.**

Let's dive in!



Schedule Editor

This is where all intervalometer settings are configured.

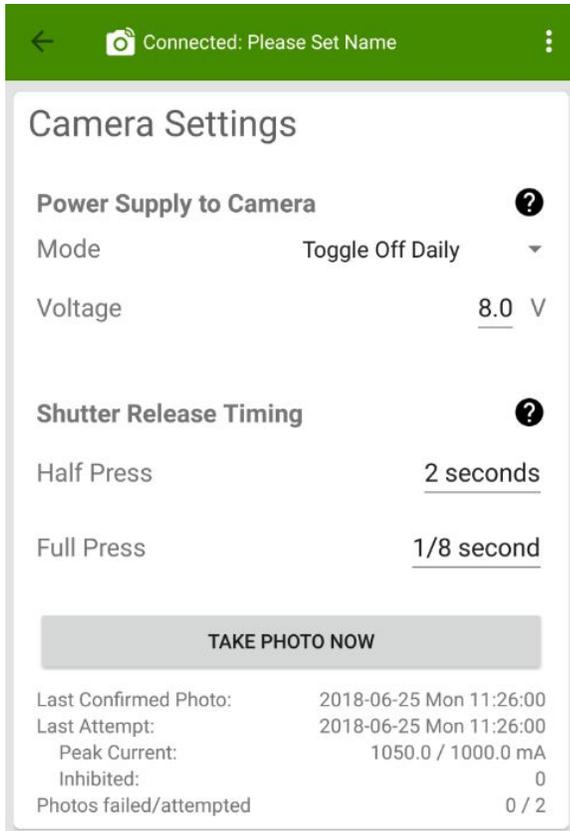
First is the RTC. Tapping on this gives you the option to input the time manually, or setting it automatically from your Android device.

Next you will find the four intervalometer schedules. These can all be set independently. Overlapping schedules will not interfere with each other.

The arrow in the lower right corner allows configuration of the settings.

The interval, start/stop time, as well as the days of the week can be set here. Setting the start/stop to the same time of day will result in a continuous capture for the days selected.

Once set the schedules can be toggled on and off with the switches in their upper right corner.



Camera Settings

Here are the settings for the camera that is connected to the DSP system.

Power Supply to Camera Mode allows you to select how the camera power is managed.

Toggle Off Daily is *generally the best setting*. This will reboot the camera once per day to eliminate any potential errors in the camera itself, and allow it to enter a “sleep” state when not actively in use.

Always On will leave the camera powered whenever the DSP is powered.

Always Off will leave the camera un-powered unless actively taking a photo. This causes local and remote image transfers to fail.

On Before/Off After allows the camera to be powered on before taking a picture and for a period after the picture is taken.

Voltage sets the voltage that is output to your camera. It is extremely important that this setting is correct. Most cameras use 8.0v, but please double check before connecting your camera.

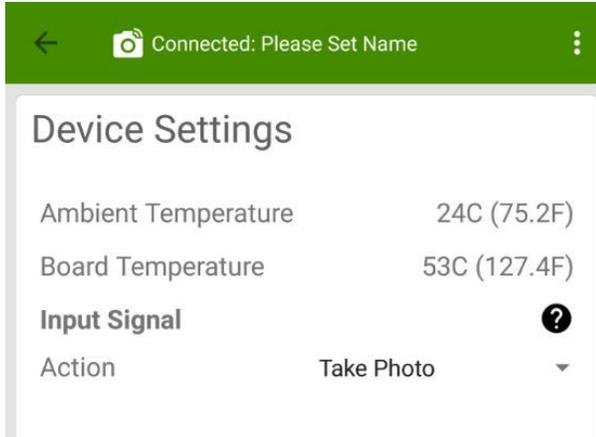
Shutter Release Timing changes the behavior of the shutter input to the camera.

Half Press is the same thing as holding the shutter button down halfway. This wakes the camera up and prepares it to take a photo.

Full Press is the full shutter release, which initiates the image capture by the camera.

Both of these settings can be adjusted to accommodate different cameras and shooting situations

The **Take Photo Now** button will cause the DSP to initiate a photo capture. There may be a delay due to processing of the command.



Device Settings

There are two thermal sensors inside the DSP.

Ambient Temperature is measured by a combination temperature/humidity sensor that is raised off of the board.

Board Temperature is measured by a sensor directly on the board.

Input Signal Action defines what occurs when the DSP receives a signal on the input pins of the 6-pin I/O connector.

Do Nothing performs no action.

Take Photo takes one photo.

Burst Photo initiates a pre defined burst sequence.

Enable all Time-Lapses will turn on all intervalometer schedules.

Gated Burst will initiate a burst for as long as the signal is active.

Shutter Sense can be used in conjunction with a hot-shoe connection to the camera to activate an accessory (LED lighting driver, etc) only when the shutter is open.

Output Signals		?
Signal	Do Nothing	▼
Switched Battery	Do Nothing	▼
Switched 5V	Do Nothing	▼
Burst Time-Lapse Settings		?
Photos		<u>10</u>
Interval	<u>00</u> m <u>10</u> s	
Initial Delay		<u>00</u> s

Output Signals define what occurs on the output pins of the 6-pin I/O connector.

Signal will activate the signal output pins to perform the following functions:

Do Nothing No action performed.

Active Before will activate prior to image capture.

Active After will activate after image capture.

Before & After will activate before/after image capture.

Always will always be active.

Heater Control can power a small heater.

Network Board Powered On will activate when the networking hardware is on.

RCServo can control an RC Servo.

Cover Control can open/close a cover.

Switched Battery will activate the battery output pins to perform the following functions:

Do Nothing No action performed.

Active Before will activate prior to image capture.

Active After will activate after image capture.

Before & After will activate before/after image capture.

Always will always be active.

Heater Control can power a small heater.

Network Board Powered On will activate when the networking hardware is on.

Lamp Control can control an auxiliary lamp.

Switched 5V will activate the 5V output pins to perform the following functions:

Do Nothing No action performed.

Active Before will activate prior to image capture.

Active After will activate after image capture.

Before & After will activate before/after image capture.

Always will always be active.

Heater Control can power a small heater.

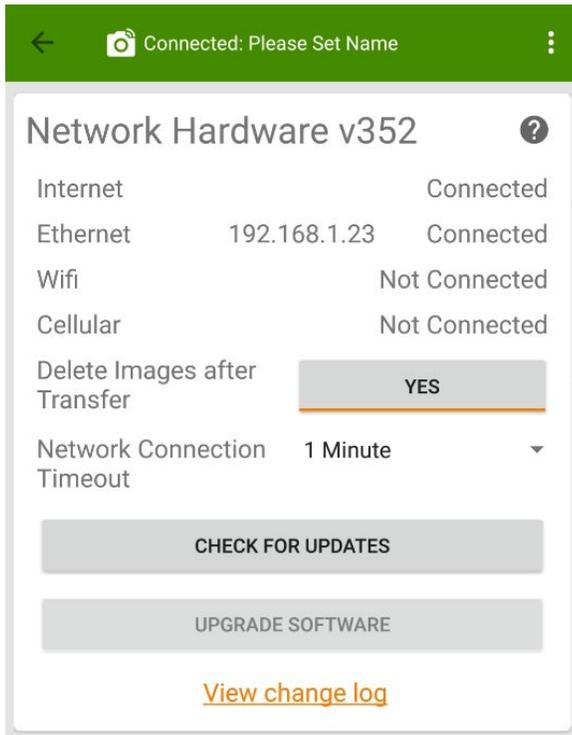
Network Board Powered On will activate when the networking hardware is on.

RCServo can control an RC Servo.

Cover Control can open/close a cover.

Burst Time-Lapse Settings define the number of photos taken, the interval, and the delay after the

trigger signal is received on the I/O port before a burst sequence is captured.



Network Settings

This page shows the status of the DSP's internet connection.

Internet will show as "Connected" when a connection to the internet is verified by the DSP.

Ethernet will show an IP address as well as "Connected" if connected and an IP is assigned by your network.

WiFi will show an IP address as well as "Connected" if connected and an IP is assigned by your wireless network.

Cellular will show an IP address as well as "Connected" if connected to a cellular network using a USB cellular modem.

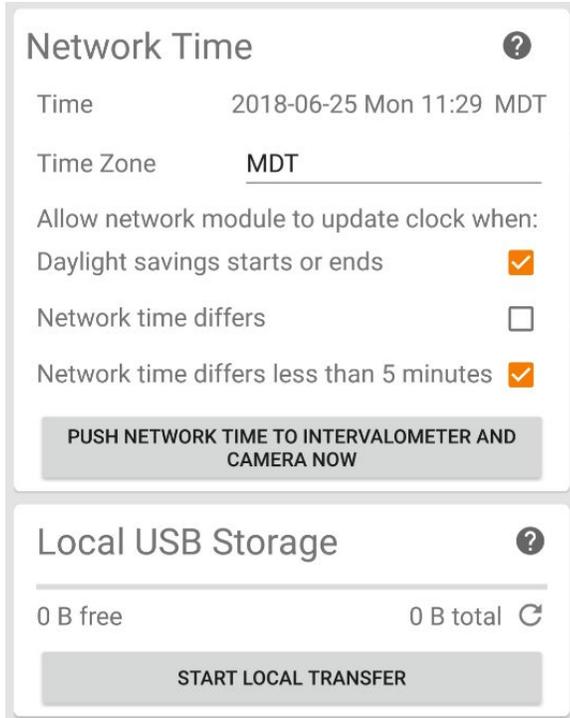
Delete Images After Transfer will delete the images from the camera's SD card after verifying a successful transfer to remote storage, local storage, or both, depending on your configurations.

Network Connection Timeout determines how long the networking hardware will remain powered on after it is initiated. This needs to be increased when using slow network connections.

Check For Updates will check our update server (if the DSP is connected to the internet) for new NCM firmware for the networking hardware.

Upgrade Software will download the newest NCM and update the networking firmware

View Change Log will take you to our website to view the list of changes in the new firmware.



Network Time displays the network hardware clock settings.

Time Zone allows you to set the network hardware to your local time zone.

Allow Network Module to Update Clock will update the DSPC clock based on the following conditions. The network hardware will acquire time from a Network Time Protocol server when online to ensure accuracy.

Daylight Savings Starts or Ends will update the system clocks based on DST information for your set time zone.

Network Time Differs will update the clock whenever there is a difference.

Network Time Differs Less than 5 Minutes will update the clock but only if the difference is under 5 minutes.

Push Time to Intervalometer and Camera Now will update the DSPC clock (Intervalometer) and Camera clock (if connected via USB) using the network controller time, and NTP if available.

Local USB Storage will display the status of your local storage device. The **circular arrow** to the right will refresh the status of the installed USB storage device.

Start Local Transfer will initiate a transfer of all images from the cameras SD card to USB storage.

Remote Storage ?

Host Name

Login

Password

START REMOTE TRANSFER

Email Settings ?

Email Address

Advanced Email Settings ▼

SEND STATUS EMAIL

SEND TEST EMAIL

Remote Storage allows you to define the FTP location to transfer images to.

Host Name is the address of your FTP server, and the path to the directory to use for image uploads.

Login is the username that will authenticate to the FTP server.

Password is the password that will authenticate to the FTP server.

Start Remote Transfer will initiate a transfer of all specified images from the camera's SD card to your FTP server.

Email Settings contain the necessary configurations for the DSP system to send out email notifications.

Email Address is the address you would like to receive the email notifications. If desired more than one address can be entered. Just separate them with a space and a comma.

Advanced Email Settings are where you can override the default SMTP settings and define your own. This is useful if you need to define the account that the DSP uses to send email. This is typically not necessary.

Send Status Email will prompt the system to prepare and send a status email to the defined email address. This can take up to 20 minutes depending on system load.

Send Test Email will prompt the system to prepare and send a test email to the defined email address. This is very quick, and the best way to test email function.

Cellular Modem ?

IP Address Not Connected

Multitech MTD-H5 Settings:

APN Request APN from carrier

SIM PIN Edit PIN

Wifi ?

IP Address Not Connected

SCAN FOR WIFI NETWORKS

SSID Set new SSID

Key Set new key & save

Cellular Modem will show an IP address if connected via a USB cellular modem.

Multitech MTD-H5 Settings pertain only to the Multitech MTD-H5 modem that we offer.

APN should be set according to your mobile network requirements.

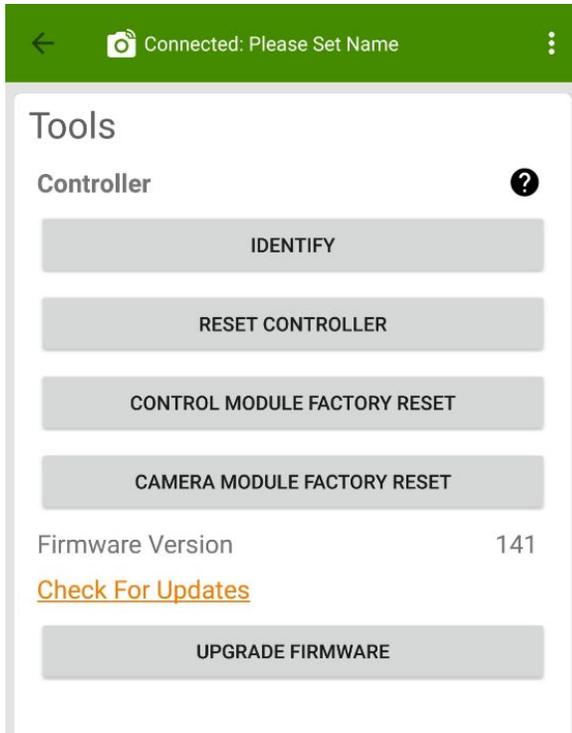
SIM PIN allows you to enter the PIN number associated with a PIN locked SIM card if required. It's generally best to remove the PIN from the SIM card for simplicity.

WiFi will display an IP address if connected to WiFi.

Scan for WiFi Networks will prompt the system to search for available WiFi. Sometimes this needs to be performed more than once. If your network isn't shown, you can enter the SSID and password manually.

SSID is the name of the network.

Key is the password.



Tools

Identify will blink the DSP LED amber to help identify which controller is connected if you have multiple units.

Reset Controller will reboot (reset) the system. This will not erase any configurations.

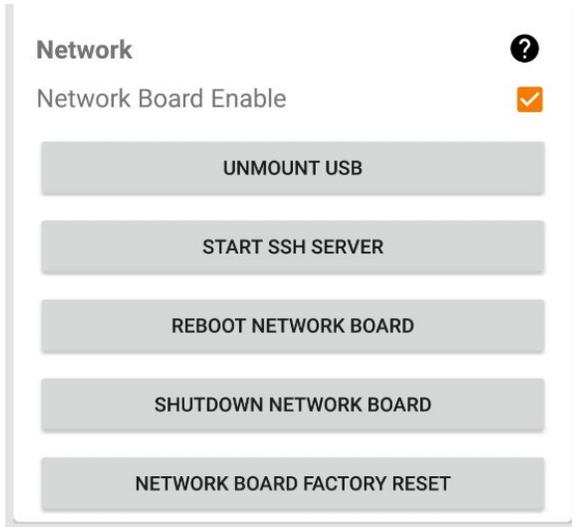
Control Module Factory Reset will clear any changes you have made to the DSPC controller configurations and reset them to factory defaults.

Camera Module Factory Reset initiates a factory reset of the camera control module which will clear out any intervalometer settings

The current DSPC firmware version is displayed. Here you see the version at the time this document was written is “141”.

Check For Updates brings your web browser to <https://cyclapse.com/support/digisnap-pro/software-upgrades/> where you can download the latest versions of the NCM and DSPC firmware

Upgrade Firmware will prompt you for a downloaded DSPC firmware image, which can then be flashed to the controller.



Network Board Enable should be checked whenever you are connected via the app since the DSP initiates a network board power-on whenever the app is connected. If you find this is not the case or are having issues accessing the network settings “check” this box and wait approximately 60 seconds for the networking hardware to boot up.

Unmount USB will prepare the USB storage media for removal from the system.

Start SSH Server will enable the ability to SSH into the system from your local network.

Reboot Network Board will reboot (reset) the network board. This will not erase any configurations.

Shutdown Network Board will power down the networking hardware.

Network Board Factory Reset will clear any changes you have made to the network configurations and reset them to factory defaults.

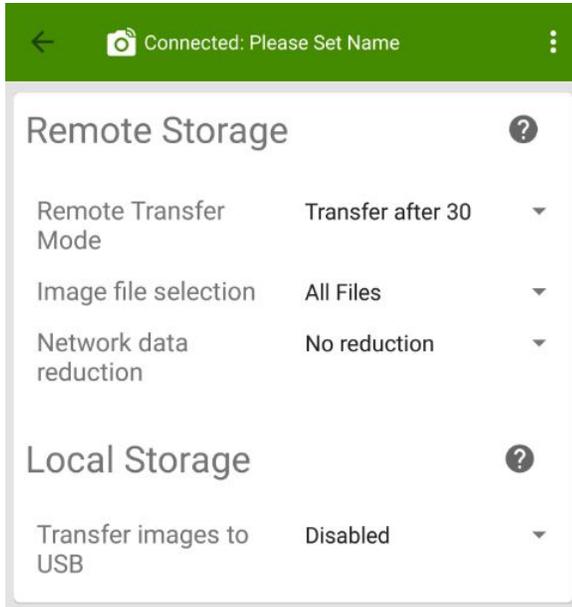


Image Transfer Settings

Remote Transfer Mode determines how many photos are taken before a transfer to FTP is initiated.

Image File Selection allows you to select which types of files are transferred to remote storage. This also depends on how you have your camera set.

Network Data Reduction gives you the option of sending one photo out of every “n” taken to FTP. This is useful if you don’t need every image captured transferred to remote storage.

Transfer Images to USB can be enabled to set the system to copy your photos from the SD card to a USB drive.



Debug Console

Here you will find a list of messages that are logged in the DSP system to assist with troubleshooting.

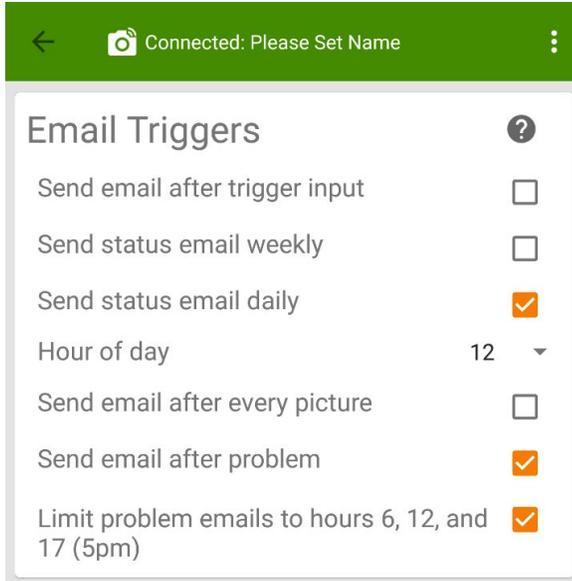
These are the same messages that flash across the bottom of the app screen during operation.

Clear Console will clear out the messages.

The small **“Envelope”** in the lower right corner will download the log files to your android device and prompt you to email them.

This can be extremely useful if you are having issues and contact our support team.

The first step in getting assistance is to send us your log files, along with a description of your issue. We use these for rapid in-depth analysis of each system.



Email Notifications

Send Email After Trigger Input will send an email after an input signal is received on the 6-pin I/O connector.

Send Status Email Weekly will cause a status email to be sent every week.

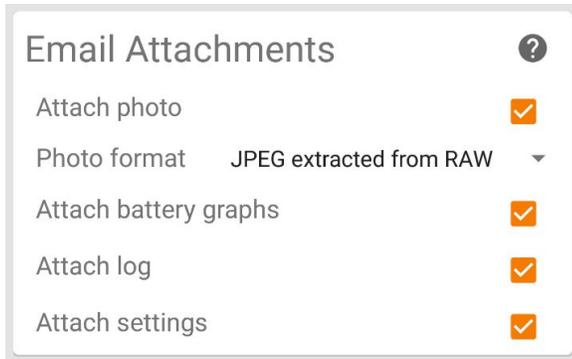
Send Status Email Daily will cause a status email to be sent every day.

Hour of Day defines what time of day to send the status email.

Send Email After Every Picture will cause a status email to be sent after every captured image. This can be very network and power intensive.

Send Email After Problem will cause a status email to be sent when one of the DSPC's internal checks reports an error.

Limit Problem Emails to Hours 6, 12, and 17 (5pm) this setting will limit the time of day that problem emails are sent out. It will keep the system from sending you emails at all hours of the day.



Attach Photo will attach the most recent photo to the status email.

Photo Format defines what type and size of photo is attached to the email

All Files will attach all captured image types.

JPEG only will only send a JPEG

JPEG extracted from RAW will attach the embedded JPEG from captured RAW files if the camera is set to capture RAW

Tiny Thumbnail will send a 160x120 pixel thumbnail image. This is a useful function check if you don't have enough connectivity or data available to send full size images

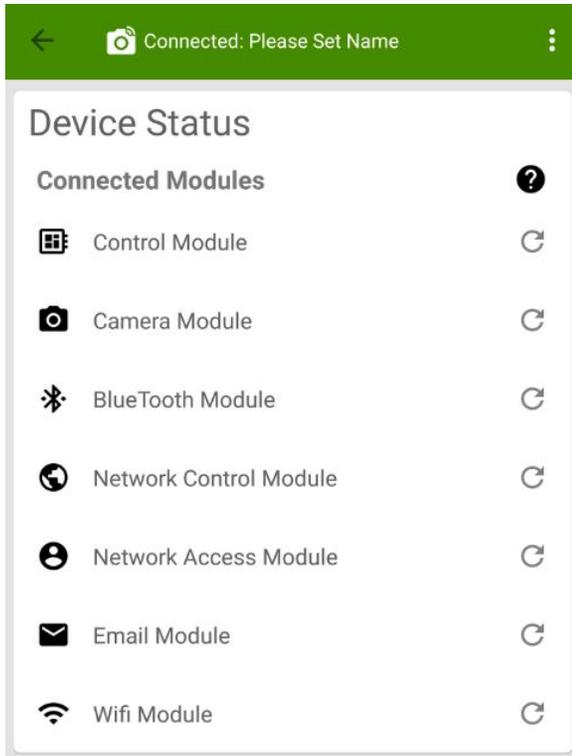
Attach Battery Graphs will attach graphs of battery charge status to the status email.

Attach Log will set the system to attach logged debugging information to the status emails.

Attach Settings to have the internal configurations of the DSP attached to status emails as JSON files.

Most of the email attachments are extremely useful for our troubleshooting team. We use these to rapidly analyze customer systems for issues.

Simply forward the status email to support@harbortronics.com if you have any concerns.

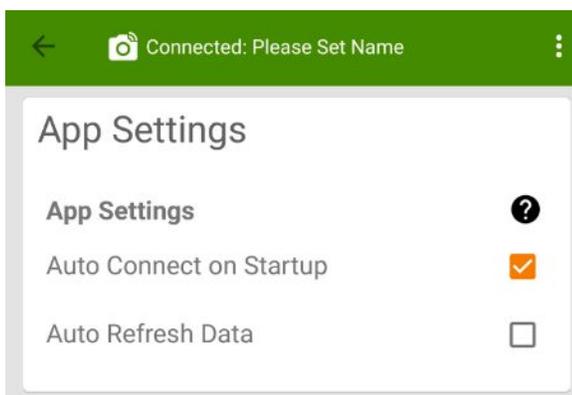


Module Info

This page shows the connected modules that are currently powered on.

If the Network board is powered down due to inactivity at the time this page is accessed it will not display **Network Control Module, Email Module, or Wifi Module**. This is normal

You can tap on any of the active modules to access detailed information about them.



App Settings

Here you can define the behavior of the Android app itself.

Auto Connect on Startup will set the app to automatically reconnect to the last associated system upon startup of the app.

Auto Refresh Data will set the app to automatically refresh the configuration data of the DSP system over Bluetooth when connected.