

BIEN-AIR INSTALLATION DIAGRAMS AND BRACKET INFORMATION



IMPORTANT

Bien-Air USA is committed to simplifying operatory workflows for working dental professionals.

The Optima^{INT} and iOptima^{INT} integrated motor control units focus on streamlining dental procedures, and most single motor variations allow for future upgrade, such as adding a second motor, a second and third motor, or a second motor plus piezo scaler.

Single motor configurations do not require installation of an Air Switch to function successfully. To streamline the installation of additional motors to the same system, please keep unused parts, such as the Air Switch, inside the delivery unit and next to the installed circuit board.

Configurations with multiple MX2 PLUS LED micromotors rely on Air Switches for the control unit to determine which motor to activate when pressing the foot pedal. See [page 28](#) for troubleshooting information if a motor/attachment does not function when lifted from its holder.

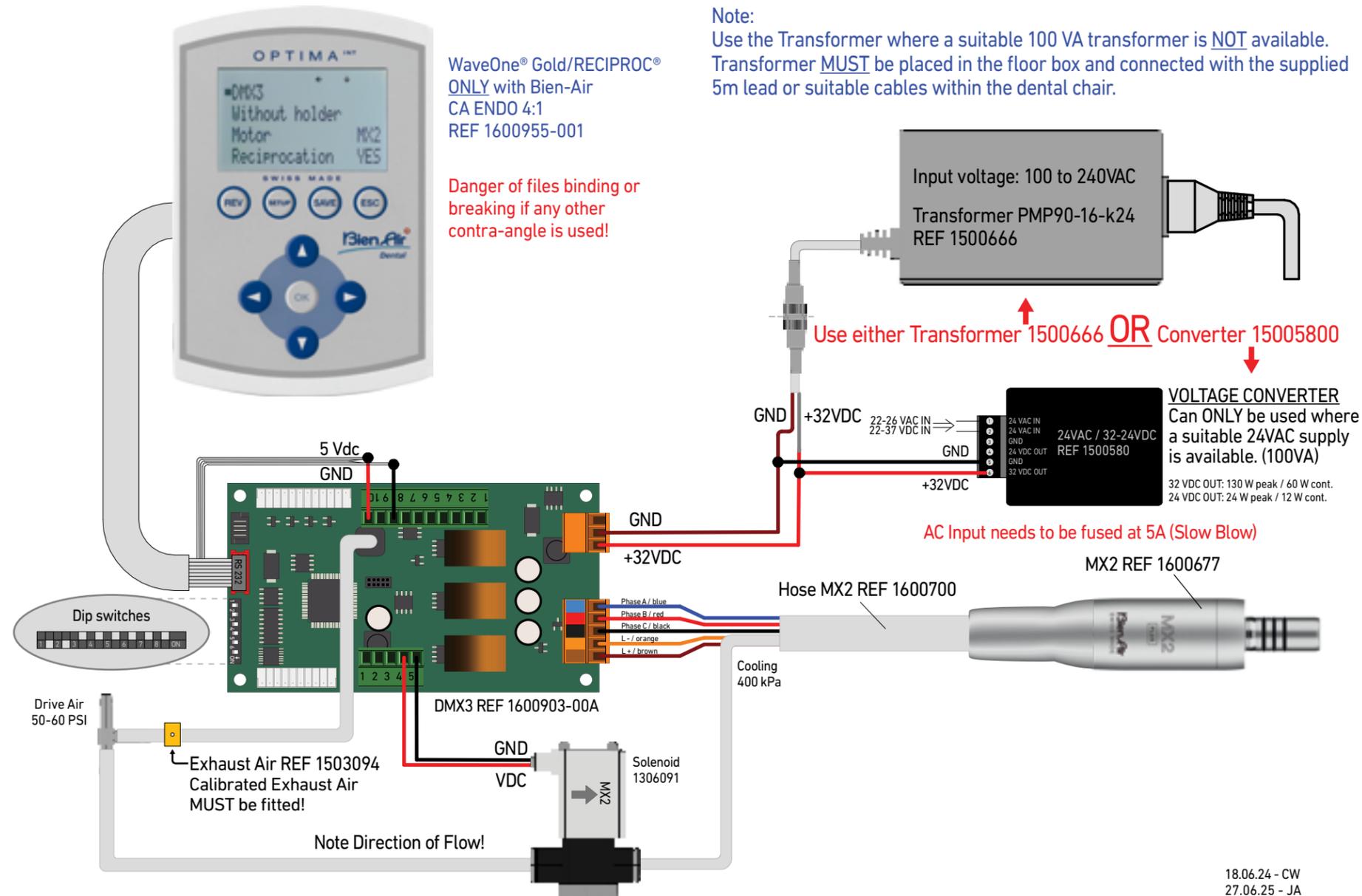
To ensure successful installation, please follow the diagrams and instructions in this manual.

For additional information, please call (800) 433-2436.

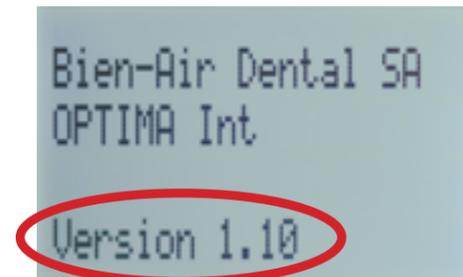
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OPTIMA^{INT} connection with DMX3 (1 motor)

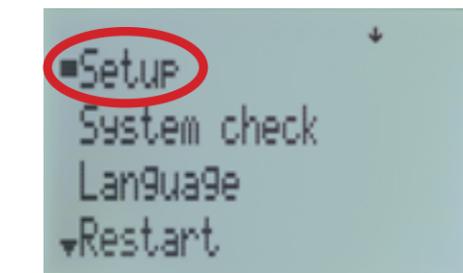


When booting up the system for the first time:

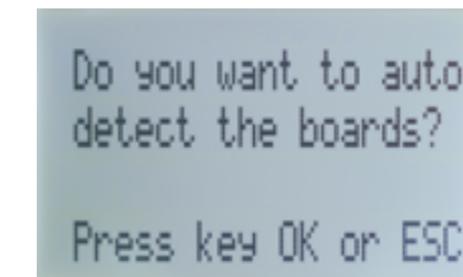


1. Power on system and check for version 1.10 along the bottom of the screen.

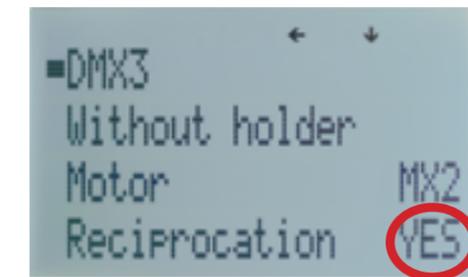
Use the buttons on the touchpad to navigate, change, and confirm selections.



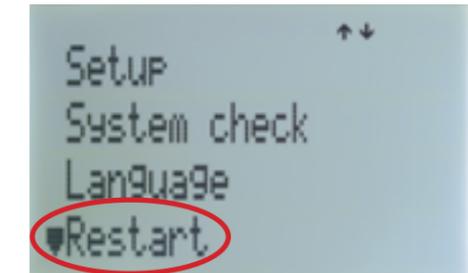
2. Press OK to enter Setup



3. Press OK to auto detect circuit board

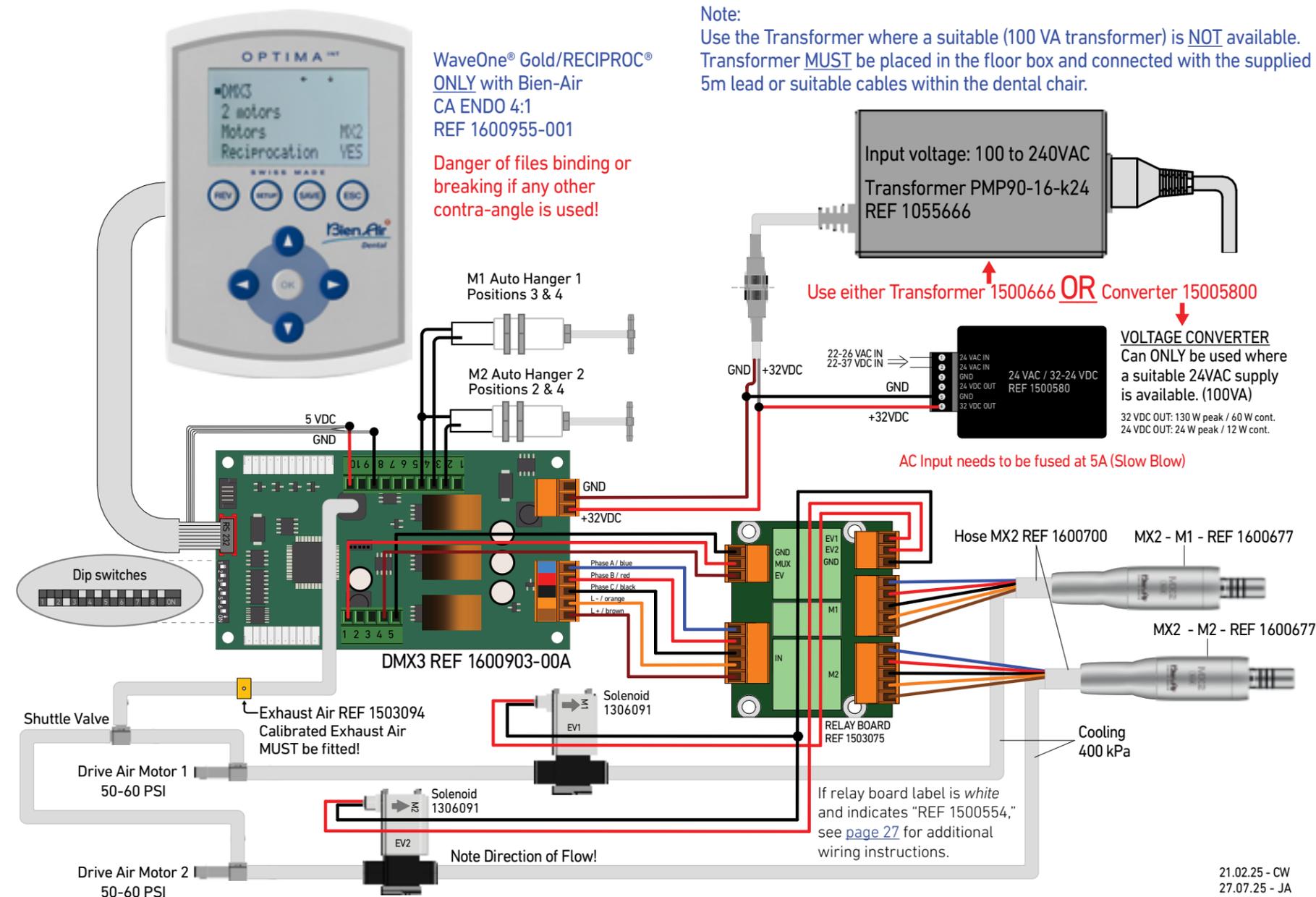


4. Screen will display the above. Ensure that Reciprocation is set to YES, then press SAVE.

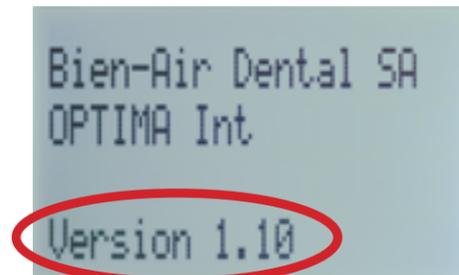


5. Move cursor down to Restart, then press OK. System is now configured and ready for use.

OPTIMA^{INT} connection with DMX3 (2 motors)

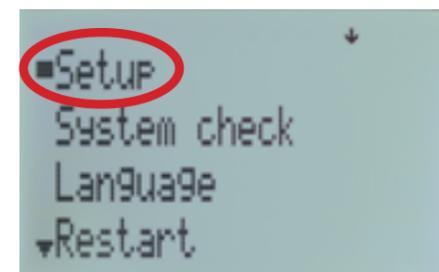


When booting up the system for the first time:

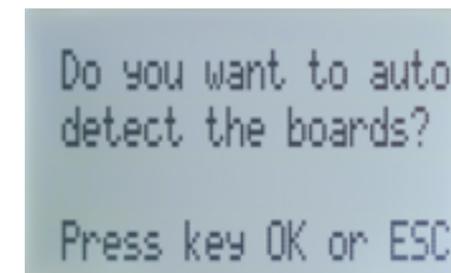


1. Power on system and check for version 1.10 along the bottom of the screen.

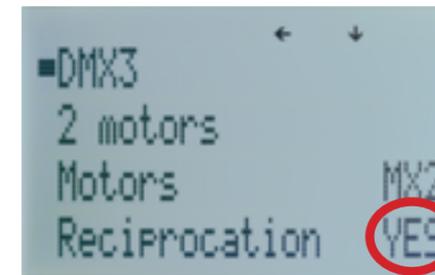
Use the buttons on the touchpad to navigate, change, and confirm selections.



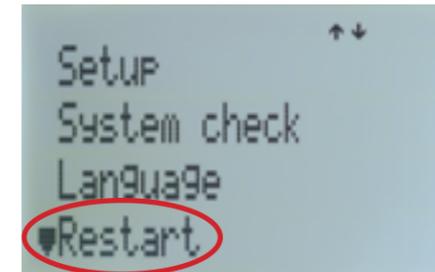
2. Press OK to enter Setup



3. Press OK to auto detect circuit board

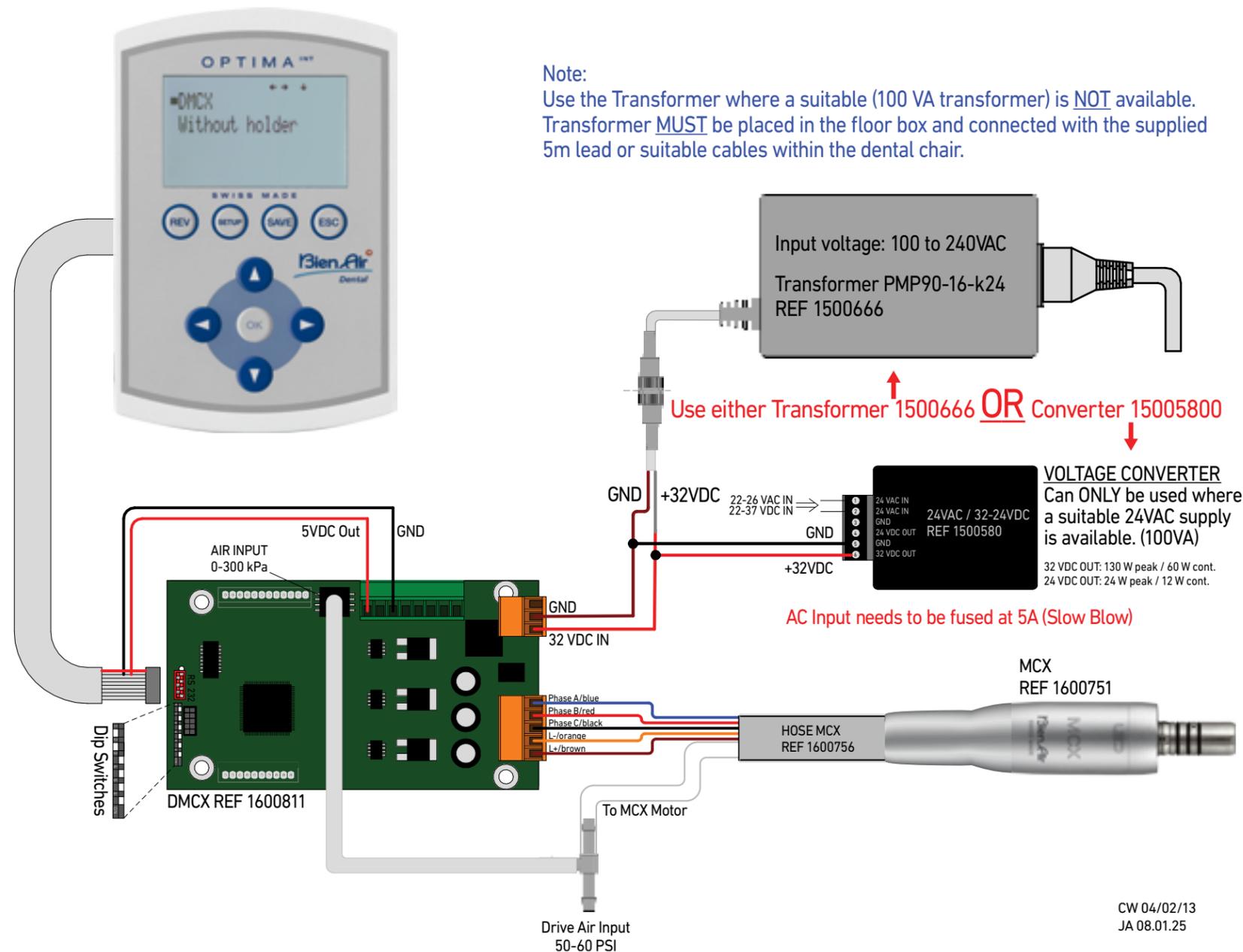


4. Screen will display the above. Ensure that Reciprocation is set to YES, then press SAVE.

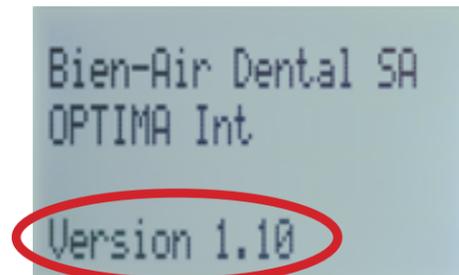


5. Move cursor down to Restart, then press OK. System is now configured and ready for use.

OPTIMA^{INT} connection with DMCX (1 motor without holder)

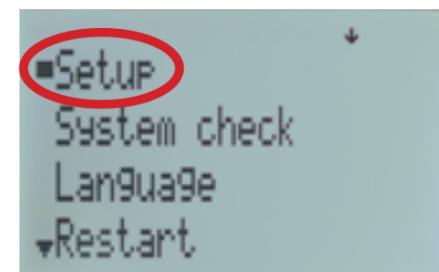


When booting up the system for the first time:

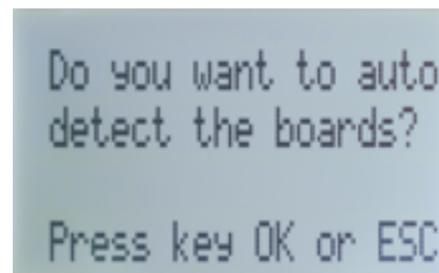


1. Power on system and check for version 1.10 along the bottom of the screen.

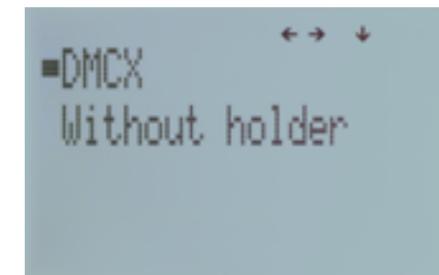
Use the buttons on the touchpad to navigate, change, and confirm selections.



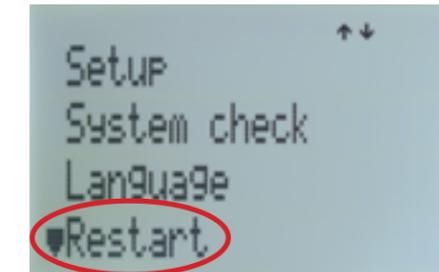
2. Press OK to enter Setup



3. Press OK to auto detect circuit board

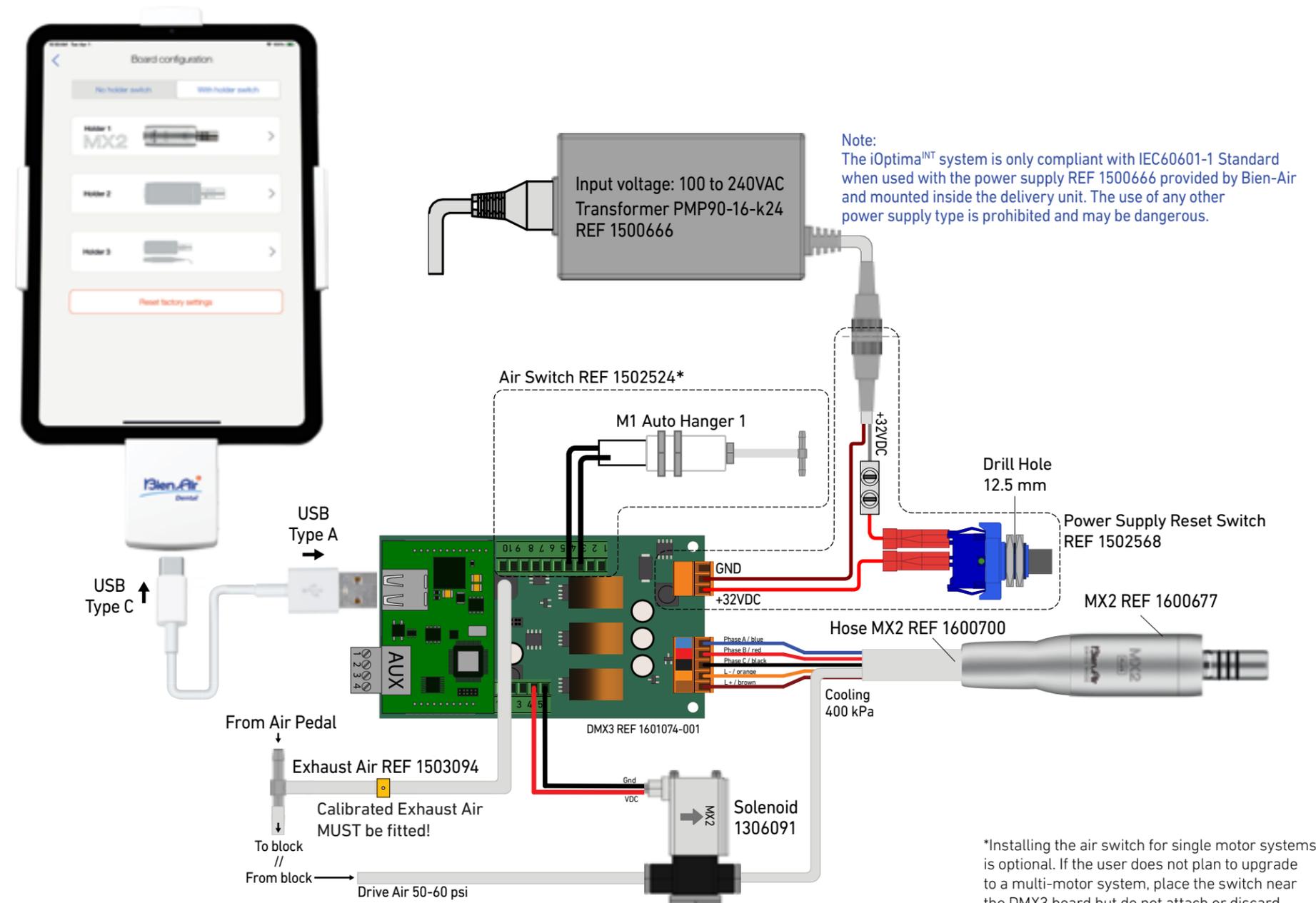


4. Screen will display the above. Press SAVE.



5. Move cursor down to Restart, then press OK. System is now configured and ready for use.

iOPTIMA^{INT} connection with DMX3 (1 motor)

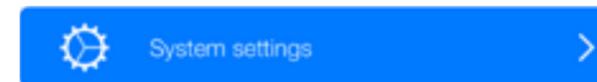


*Installing the air switch for single motor systems is optional. If the user does not plan to upgrade to a multi-motor system, place the switch near the DMX3 board but do not attach or discard.

iOptima^{INT} Application Settings



1. Start the iOptima App. At the main screen, tap the Settings icon (⚙️) in the bottom left.



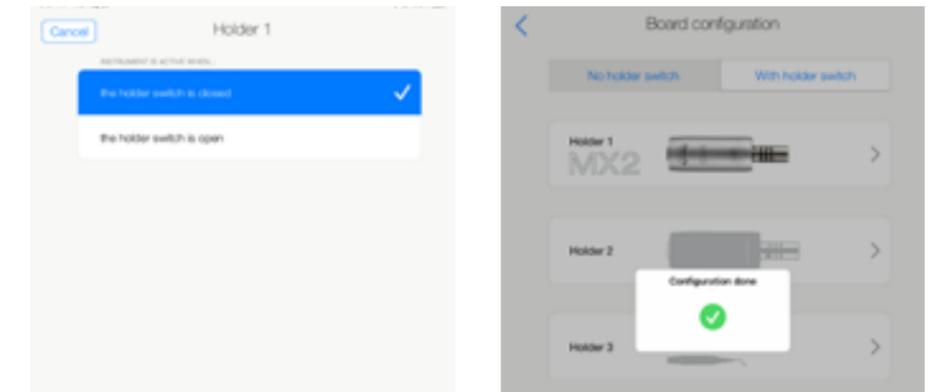
2. Enter the password 1959, then enter the System settings page.



3. Choose Board configuration, and the motor for Holder 1 will automatically choose MX2.

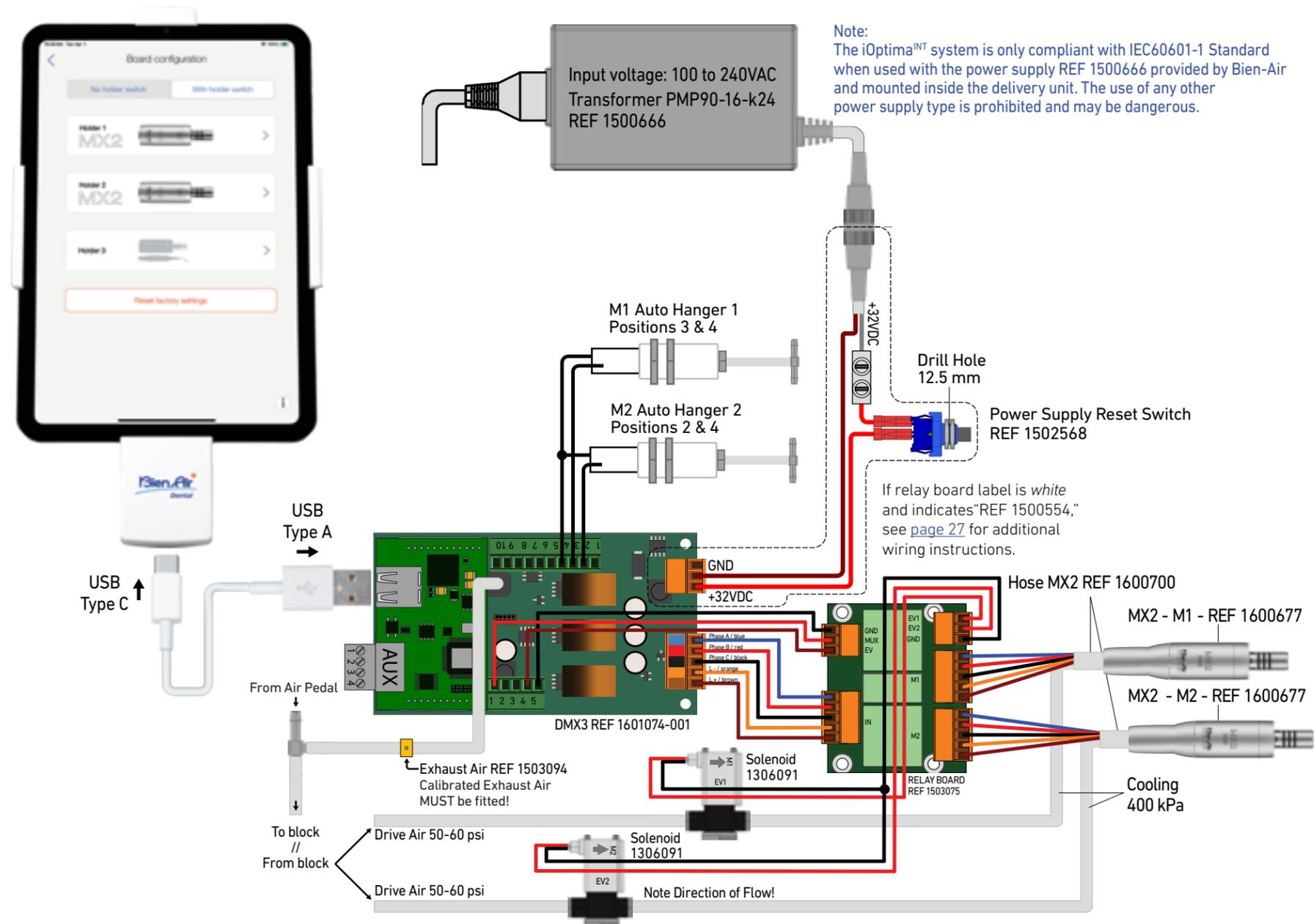


4. If using a holder switch, tap "With Holder Switch" at the top, tap Holder 1, then MX2 at the top of the list. While the hose is firmly placed in delivery holder 1, choose "the holder switch is closed." Lift the motor from its holder. If a green checkmark does not appear next to its icon, see [page 28](#) for troubleshooting.



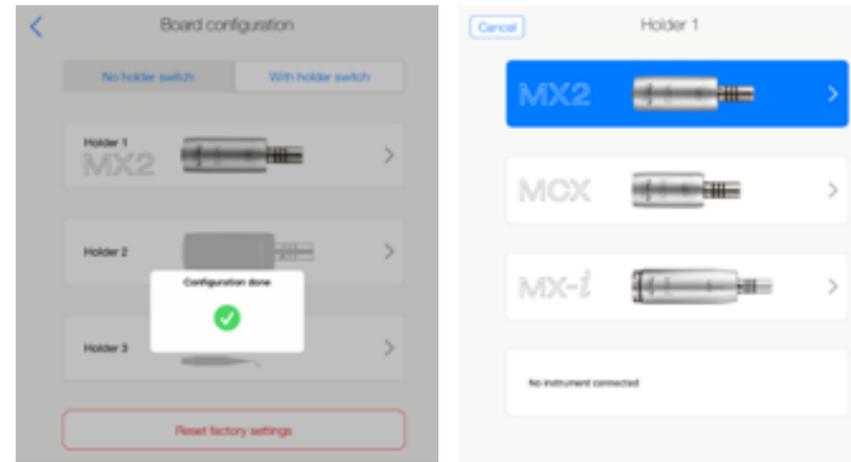
5. System is now configured and ready for use.

iOPTIMA^{INT} connection with DMX3 (2x MX2)

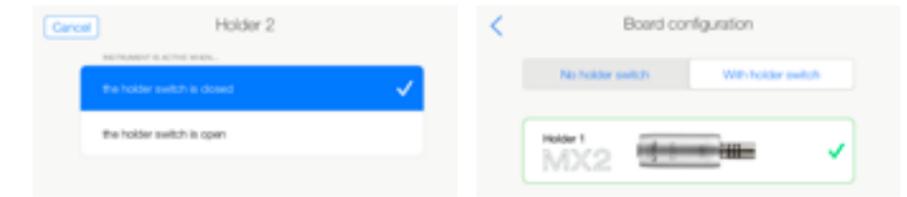


iOptima^{INT} Application Settings

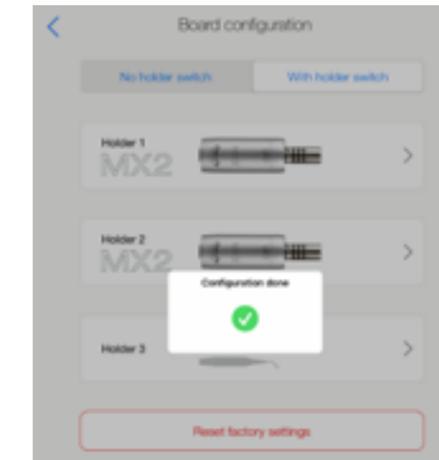
1. Complete steps 1-3 on [page 13](#).



2. For two MX2 motors, tap "With Holder Switch" at the top, tap Holder 1, then MX2 at the top of the list. While the hose is firmly placed in delivery holder 1, choose "the holder switch is closed." Repeat with Holder 2.

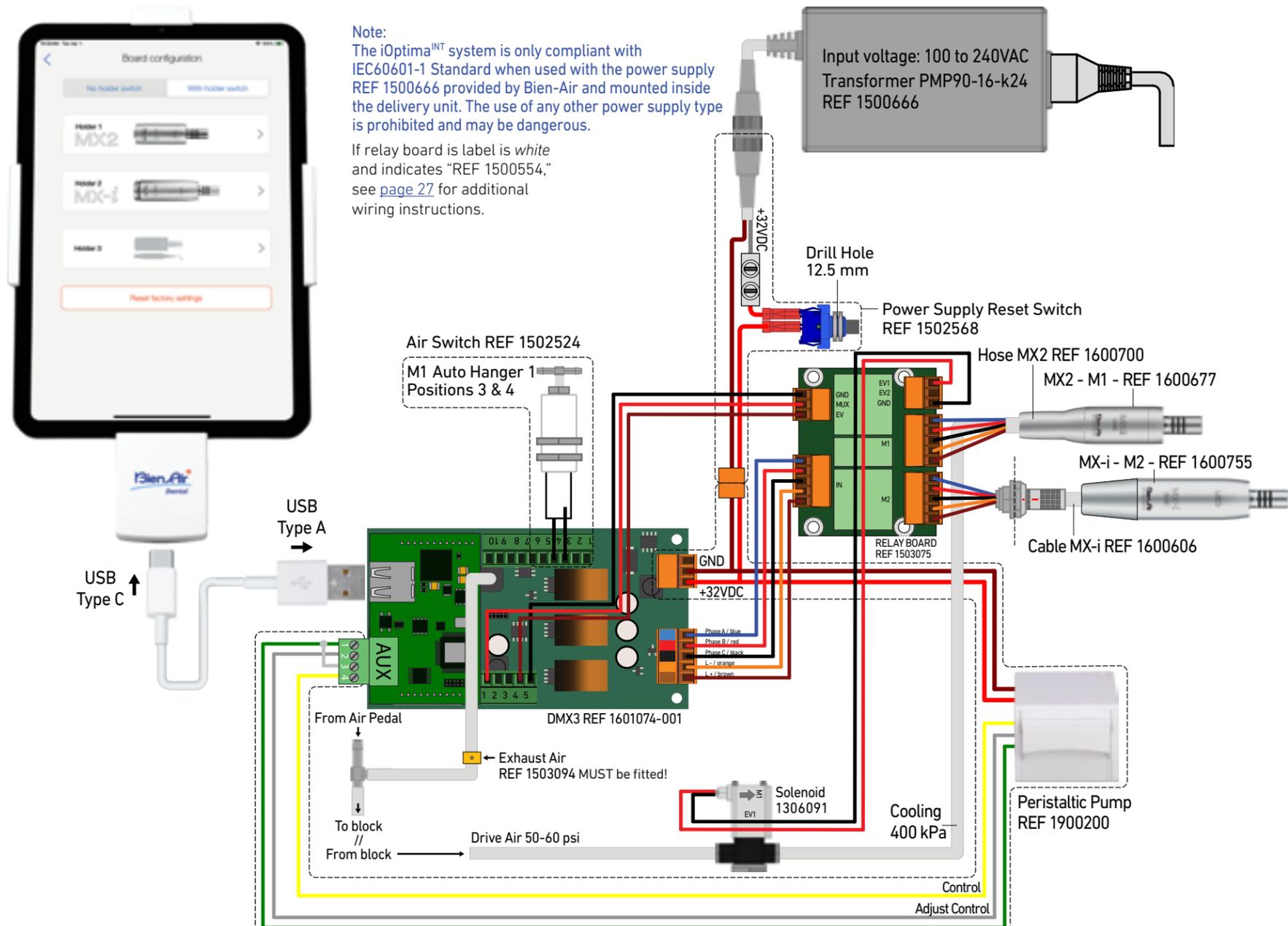


3. If a green checkmark appears by either or both motors while they are seated firmly in the delivery holders, see [page 28](#) for troubleshooting.



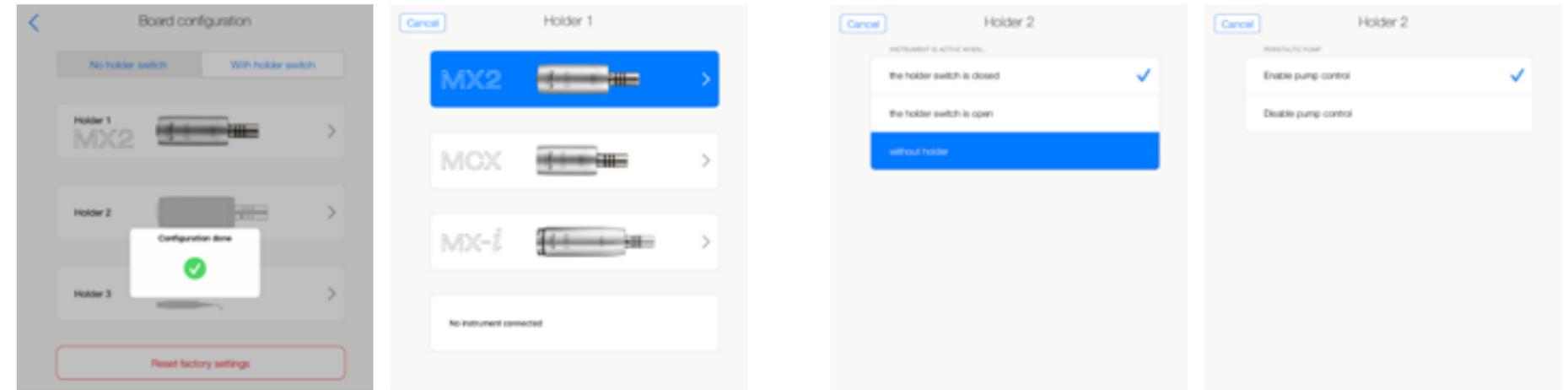
4. System is now configured and ready for use.

iOPTIMA^{INT} connection with DMX3 (1 MX2 PLUS LED, 1 MX-i)



iOptima^{INT} Application Settings

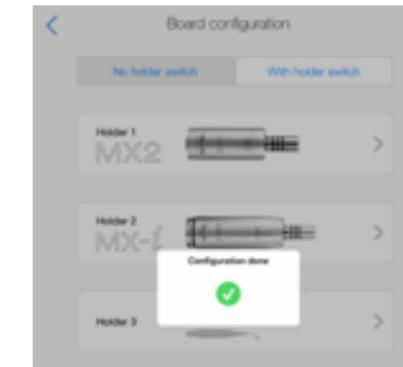
1. Complete steps 1-3 on [page 13](#).



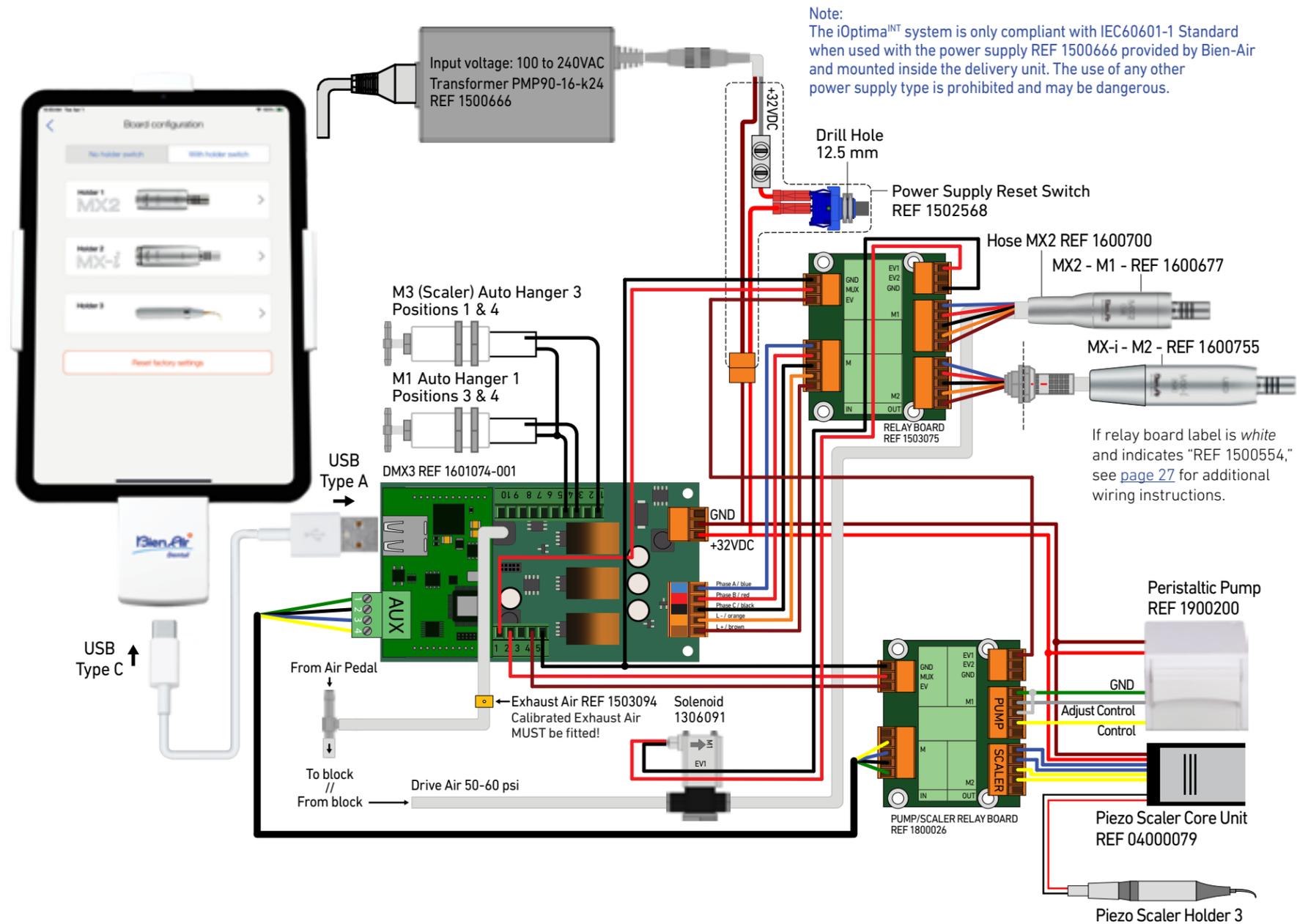
2. To set up multiple motors, tap "With Holder Switch" at the top, tap Holder 1, then MX2 at the top of the list. While the hose is firmly placed in delivery holder 1, choose "the holder switch is closed." If a green checkmark appears by the motor without lifting it from the holder, see [page 28](#) for troubleshooting.



3. For Holder 2, choose MX-i, then "without holder." Enable pump control if Peristaltic Pump (1900200) was installed. Disable if using a separate pump.

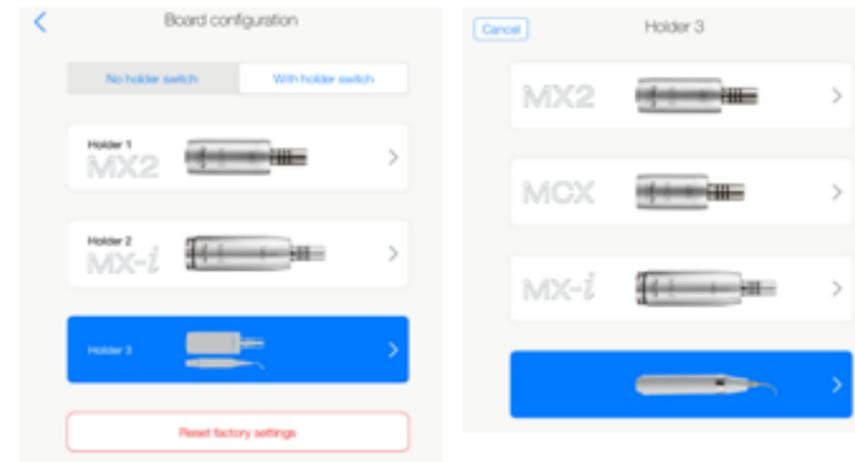


4. System is now configured and ready for use.



iOptima^{INT} Application Settings

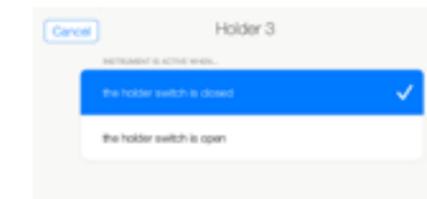
1. Complete steps 1-3 on page 13, then 2-3 on page 17.



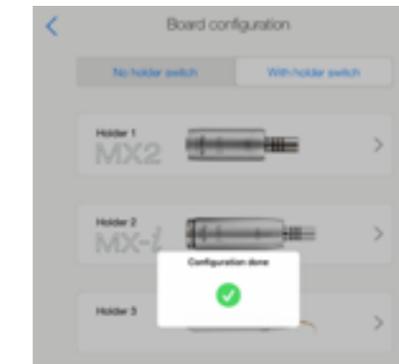
2. Tap Holder 3 to add the Piezo Scaler.



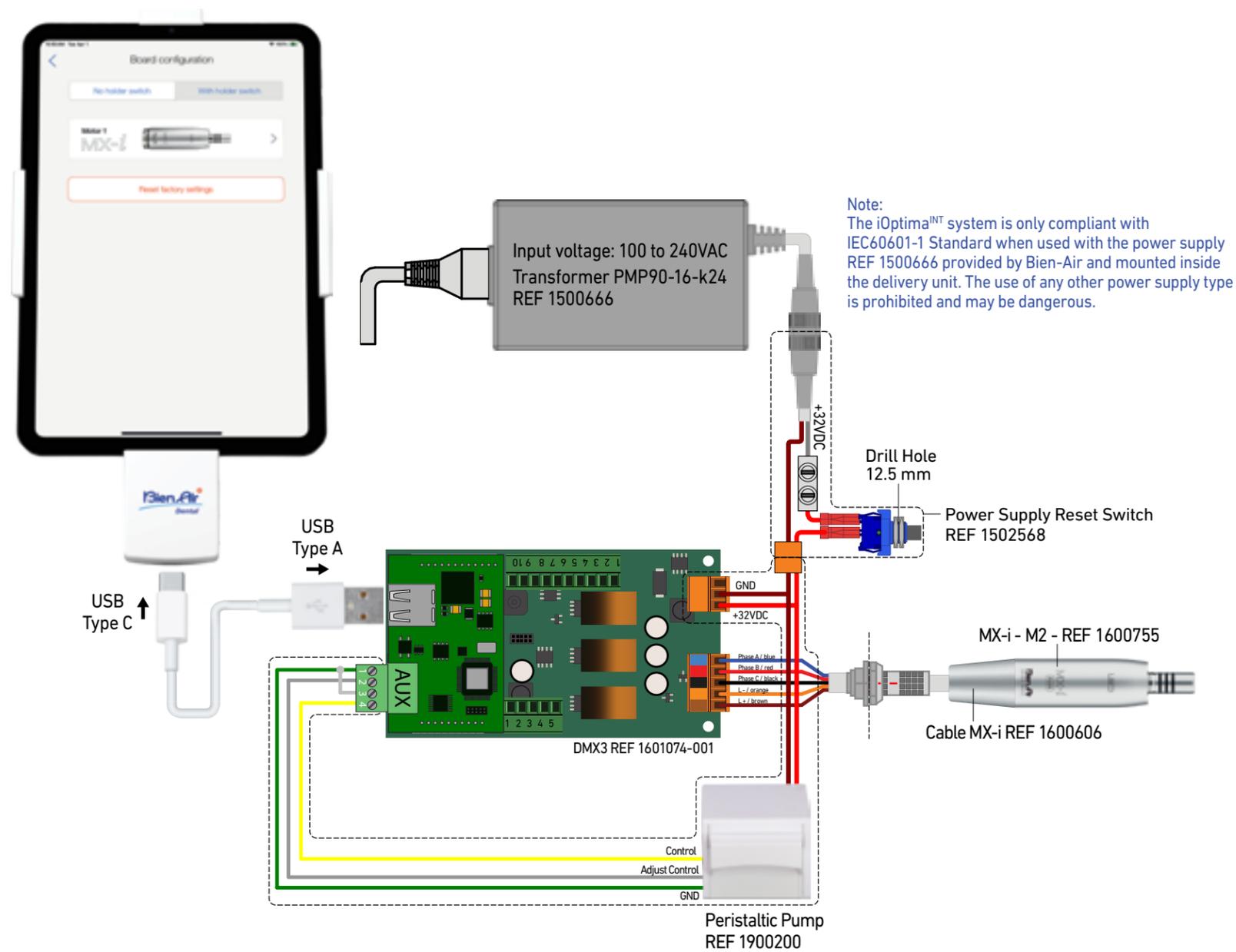
3. Choose "Power regulation 0 to 5V analog voltage," and specify the holder switch value the same as with the MX2 motor. The 2.2KΩ potentiometer option is available to operators who use a potentiometer to adjust power on their scaler instead of using a foot pedal.



4. While the scaler connection is firmly placed in delivery holder 3, choose "the holder switch is closed." If a green checkmark appears by the scaler without lifting it from the holder, see page 28 for troubleshooting.

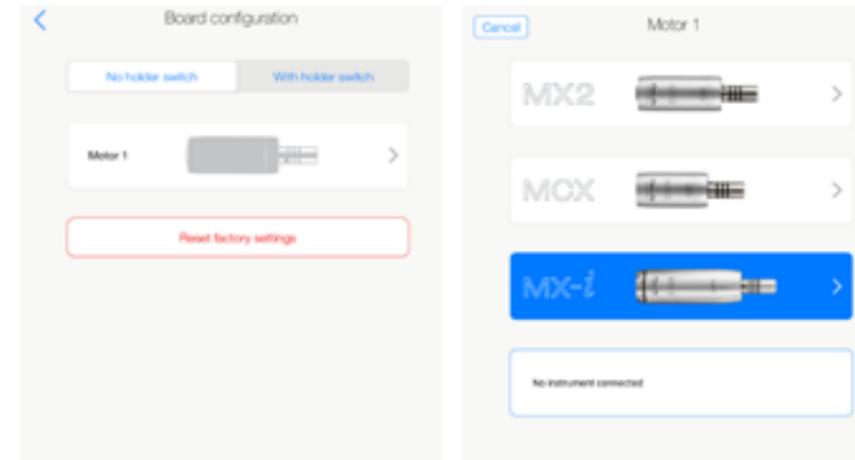


5. System is now configured and ready for use.



iOptima^{INT} Application Settings

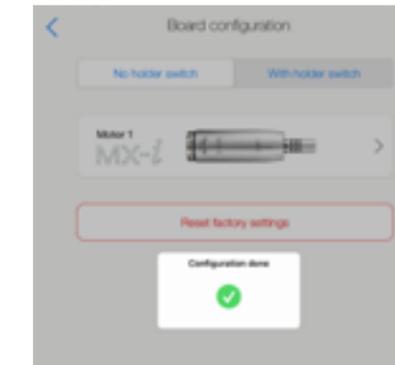
1. Complete steps 1-3 on [page 13](#).



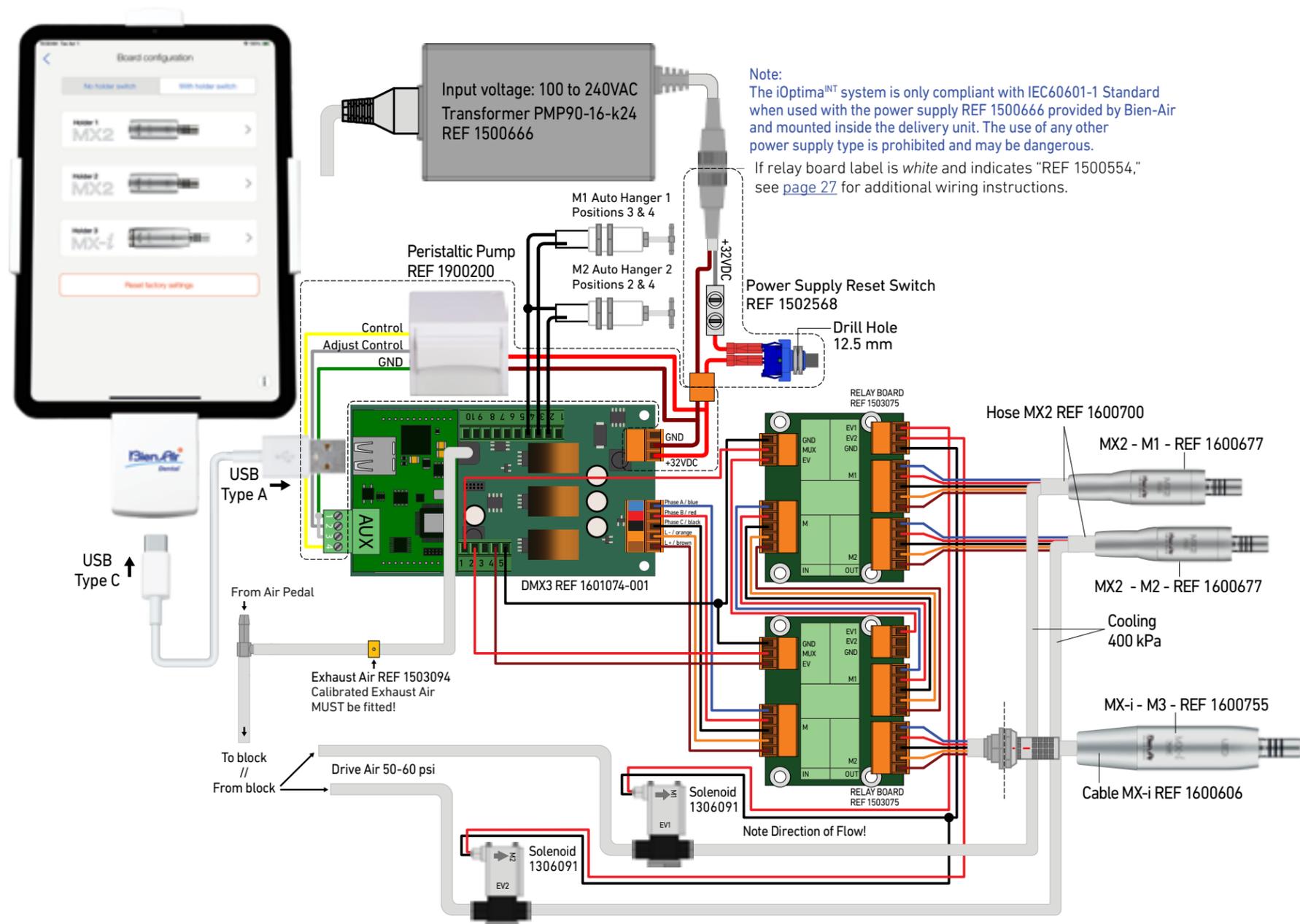
2. Ensure “No holder switch” is selected, then tap Motor 1.
On the next screen, choose MX-i.



3. Enable pump control if Peristaltic Pump (1900200) was installed. Disable if using a separate pump.



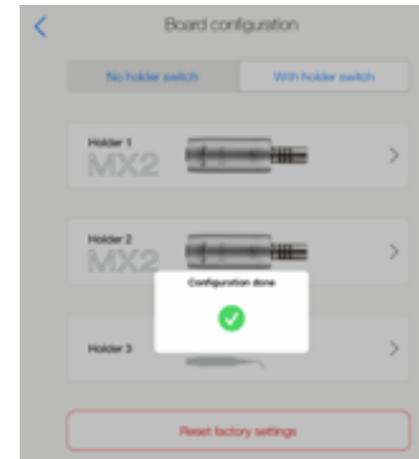
4. System is now configured and ready for use.



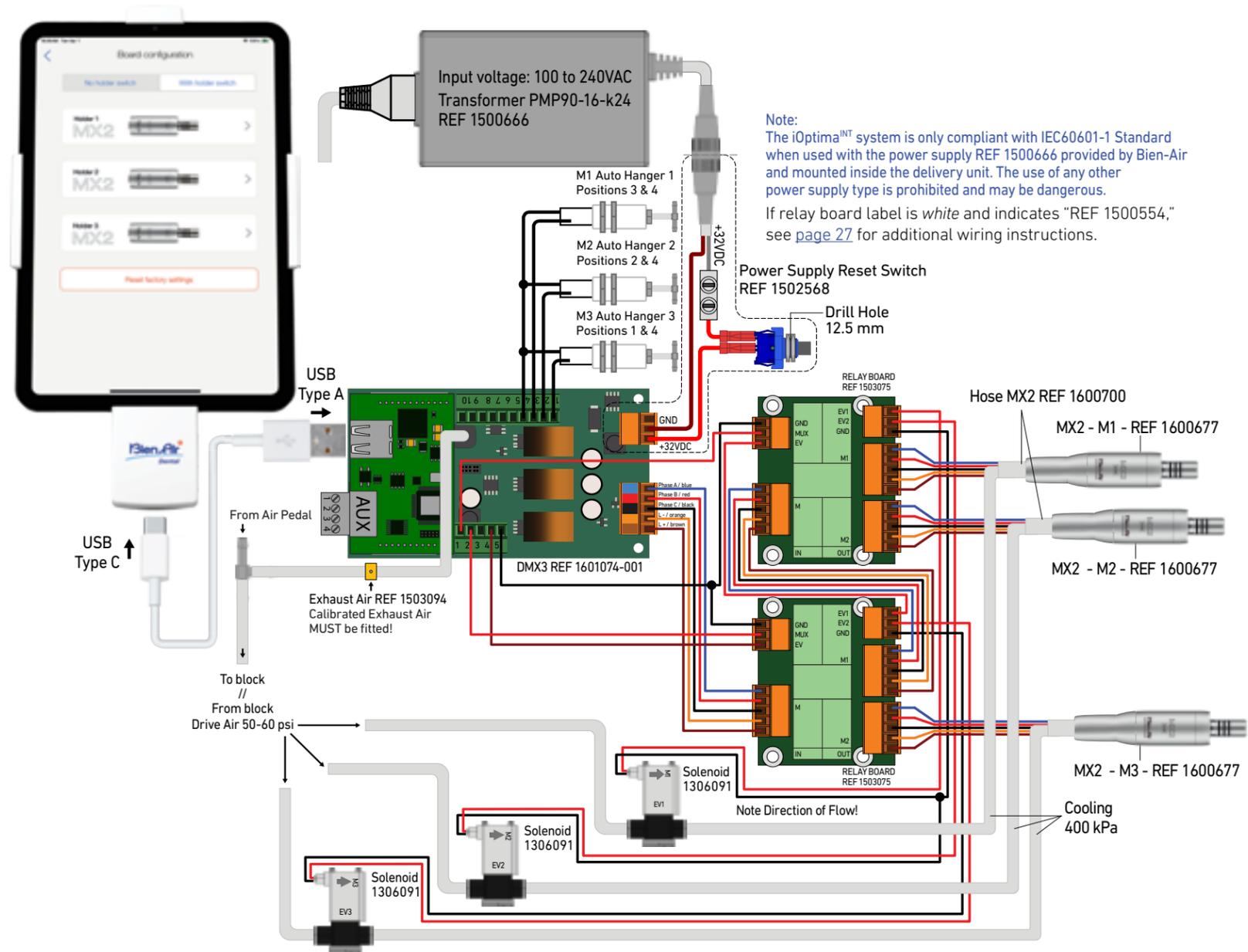
iOptima^{INT} Application Settings

- Complete steps 1-3 on [page 13](#), 2-3 on [page 15](#), then 2-3 on [page 17](#).
Holders 1 & 2 should contain MX2 PLUS LED micromotors, and the MX-i PLUS LED micromotor should remain on an external motor support.

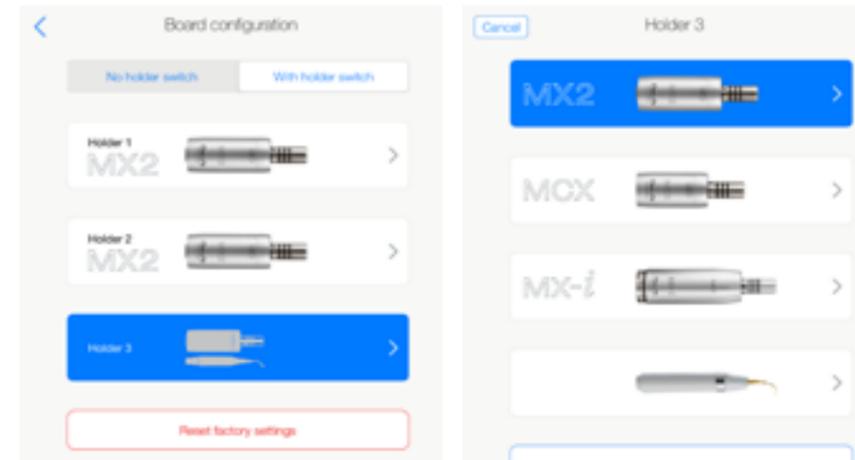
If a green checkmark appears by either or both motors while they are seated firmly in the delivery holders, see [page 28](#) for troubleshooting.



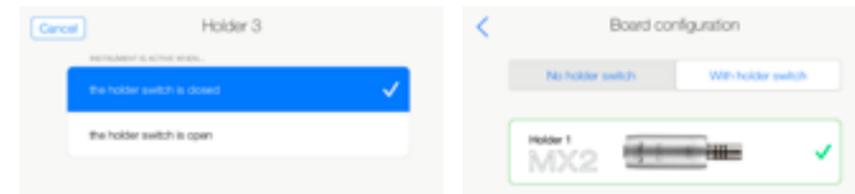
- System is now configured and ready for use.



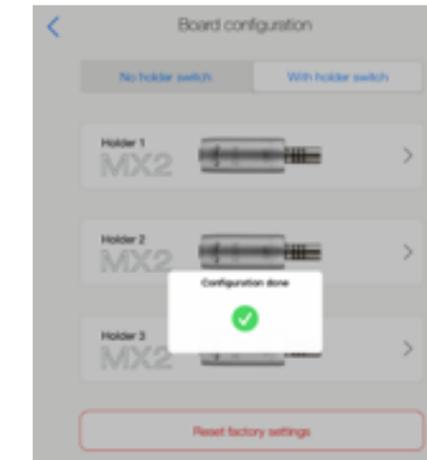
1. Complete steps 1-3 on [page 13](#), then 2-3 on [page 15](#).



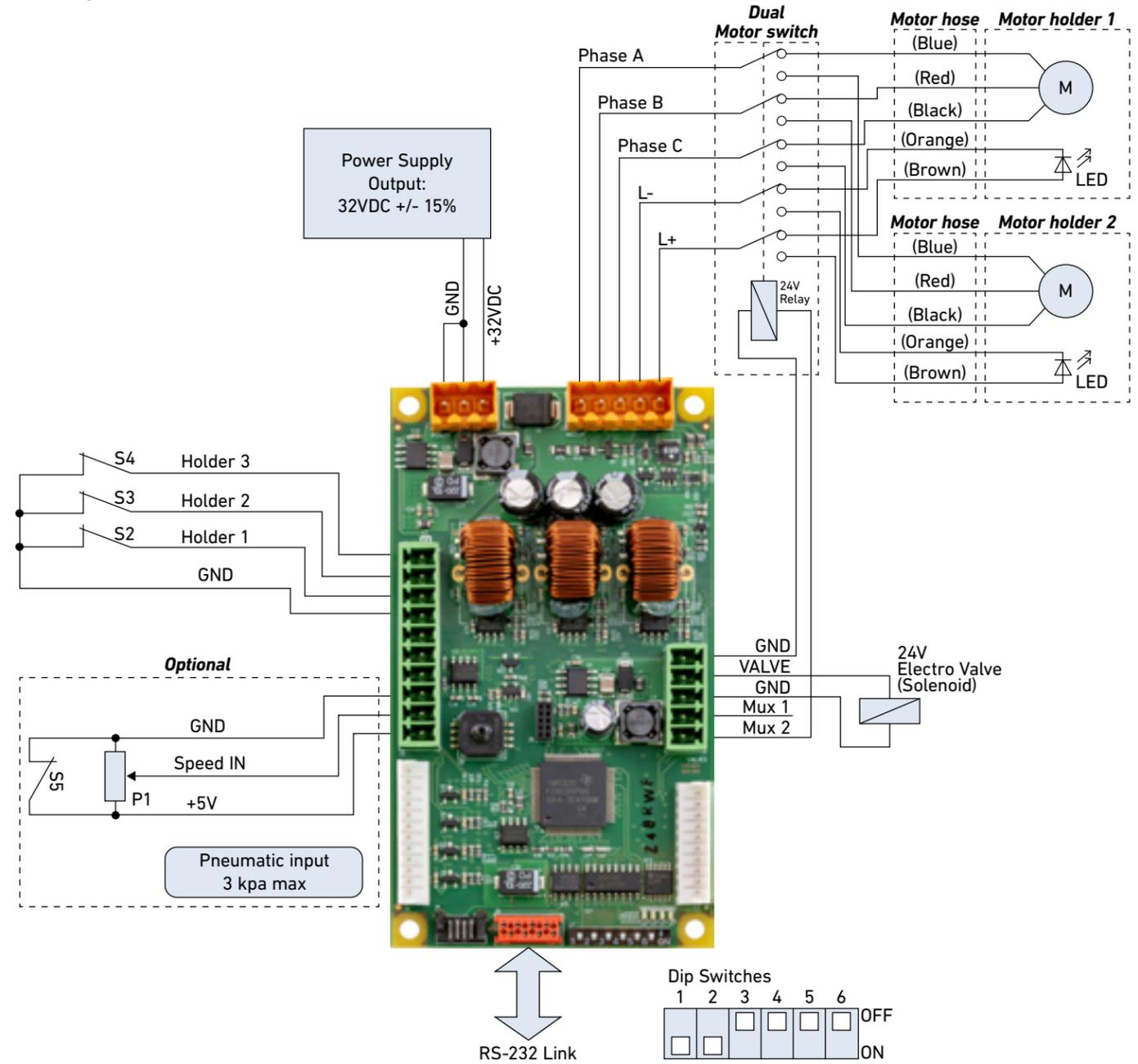
2. For the third MX2 motor, tap Holder 3, repeating the process in the previous steps.



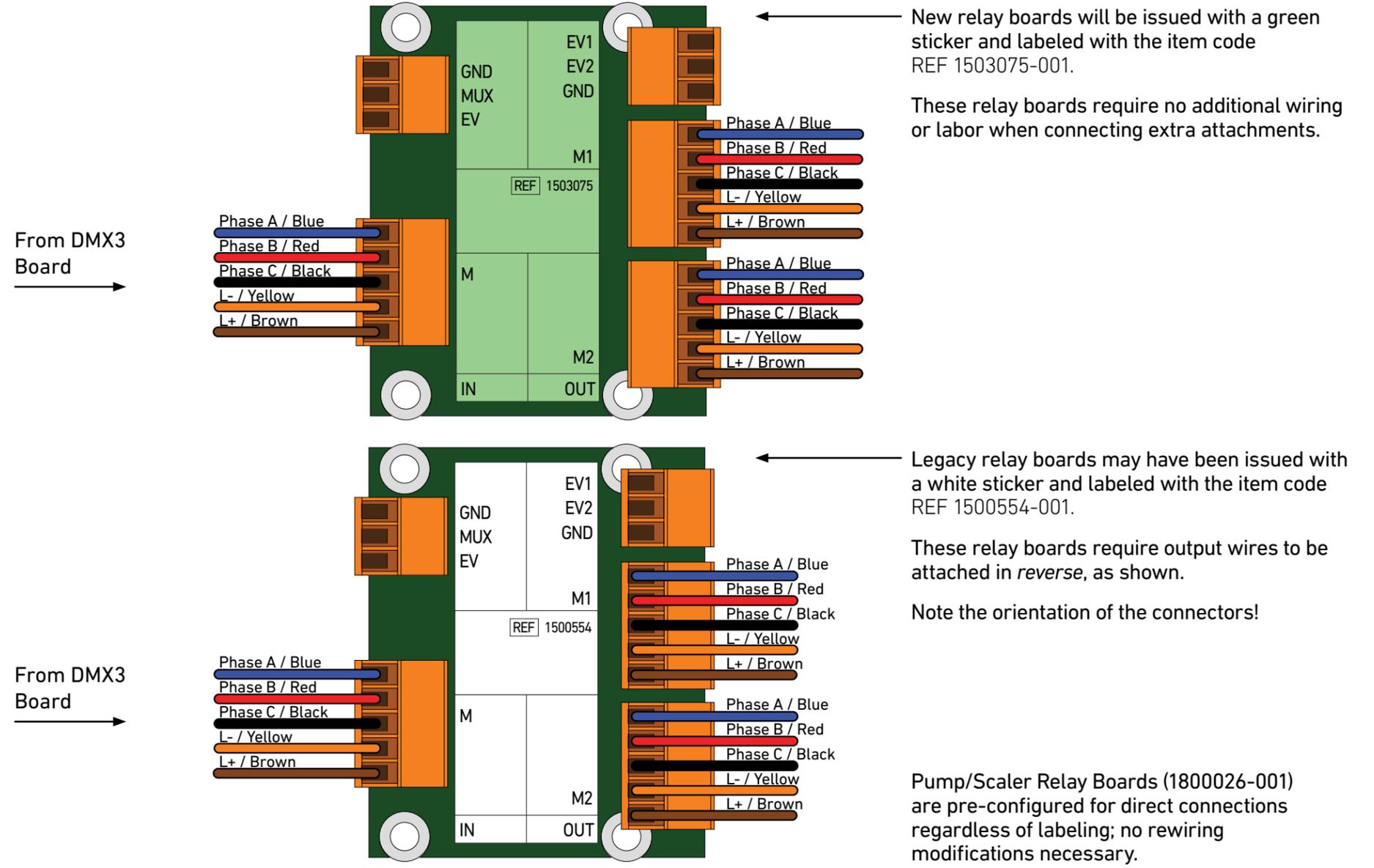
3. If a green checkmark appears by any or all of the motors while they are seated firmly in the delivery holders, see [page 28](#) for troubleshooting.



4. System is now configured and ready for use.



As a general rule: blue wires on top, brown wires on bottom.



When setting up the touchpad for single motor configuration, the operator wants to switch to with/without holder.

Position yourself where you can cycle power to the touchpad while also holding down three of its buttons.

Asking a second person to cut and restore the power may be easier in some cases.

Switch off power to the control unit.

Press and hold down the Left, Right, and Escape buttons, then restore power.

Release the buttons once the system information is displayed, and enter the Setup menu.

Follow the same steps during first time setup, then toggle between "WITHOUT HOLDER" and "1 MOTOR" as desired.

Ensure that RECIPROCATION is still set to YES.

Restart the system.

"Motor Drive Air" message appears on the touchpad screen.

Check the RS-232 connection from the touchpad to the DMX3 board. While it is capable of seating in either direction, ensure that the wires lead into the board as shown on the wiring diagram. The RS-232 connection should lead directly outward from the DMX3 circuit board.

The app appears to open sideways relative to the iPad mini's orientation.

Force close the iOptima app and restart it in the current iPad mini's orientation.

Lifting an attachment from its holder does not show a green checkmark, but placing it in its holder does.

Place the motor/scaler firmly within its holder. Enter the Settings menu (⚙️) on the main screen, enter System Settings, enter 1959 for the configuration passcode, then enter Board Configuration.

If the green checkmark appears at this time, choose the motor holder, tap the relevant attachment, then set the holder switch to "Open" to swap the air/electric switch functionality.

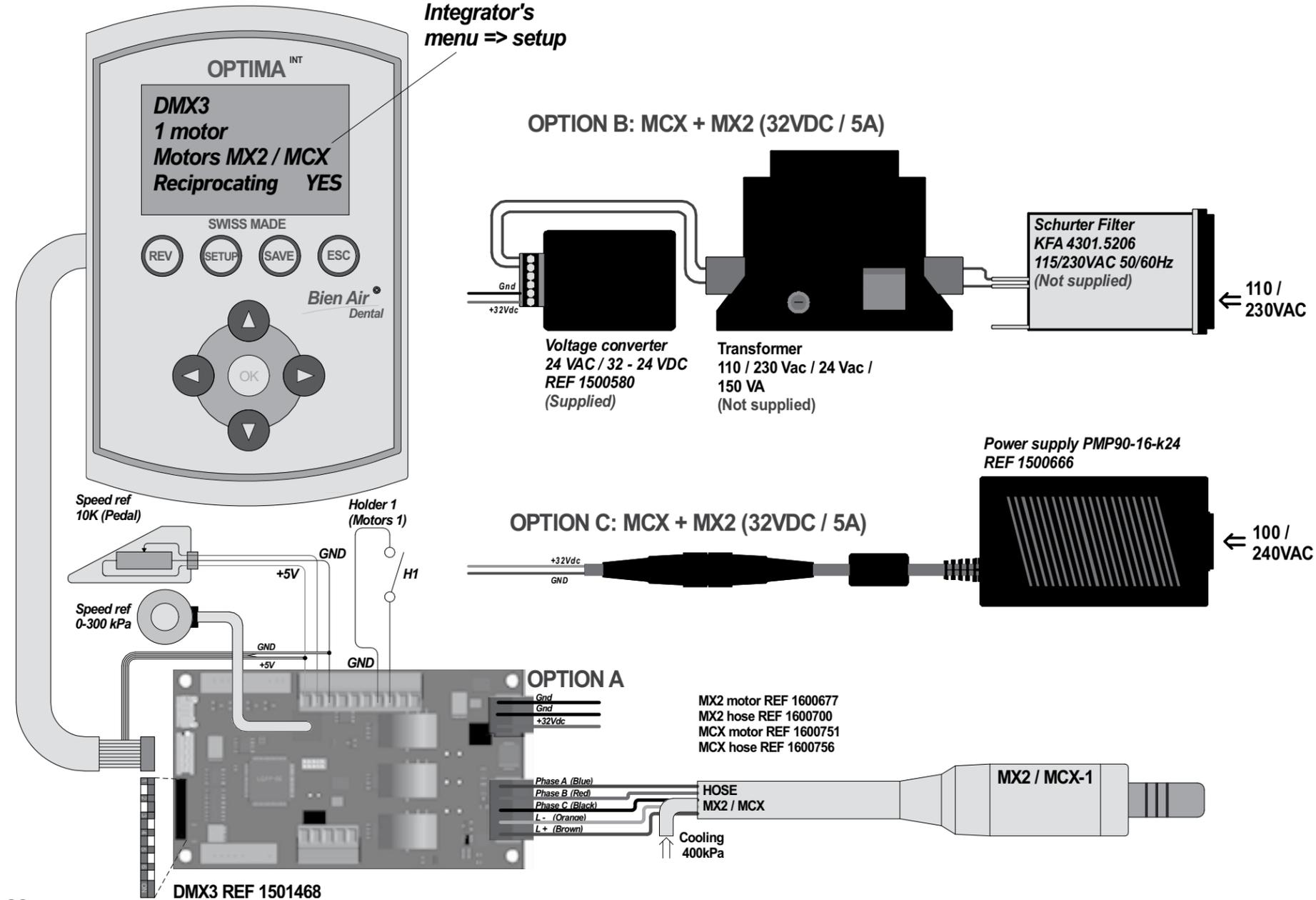
Lift the attachment from its holder to ensure that it displays a green checkmark.

LEGACY UNIT INSTALLATIONS

The following legacy unit installation drawings are provided as-is.

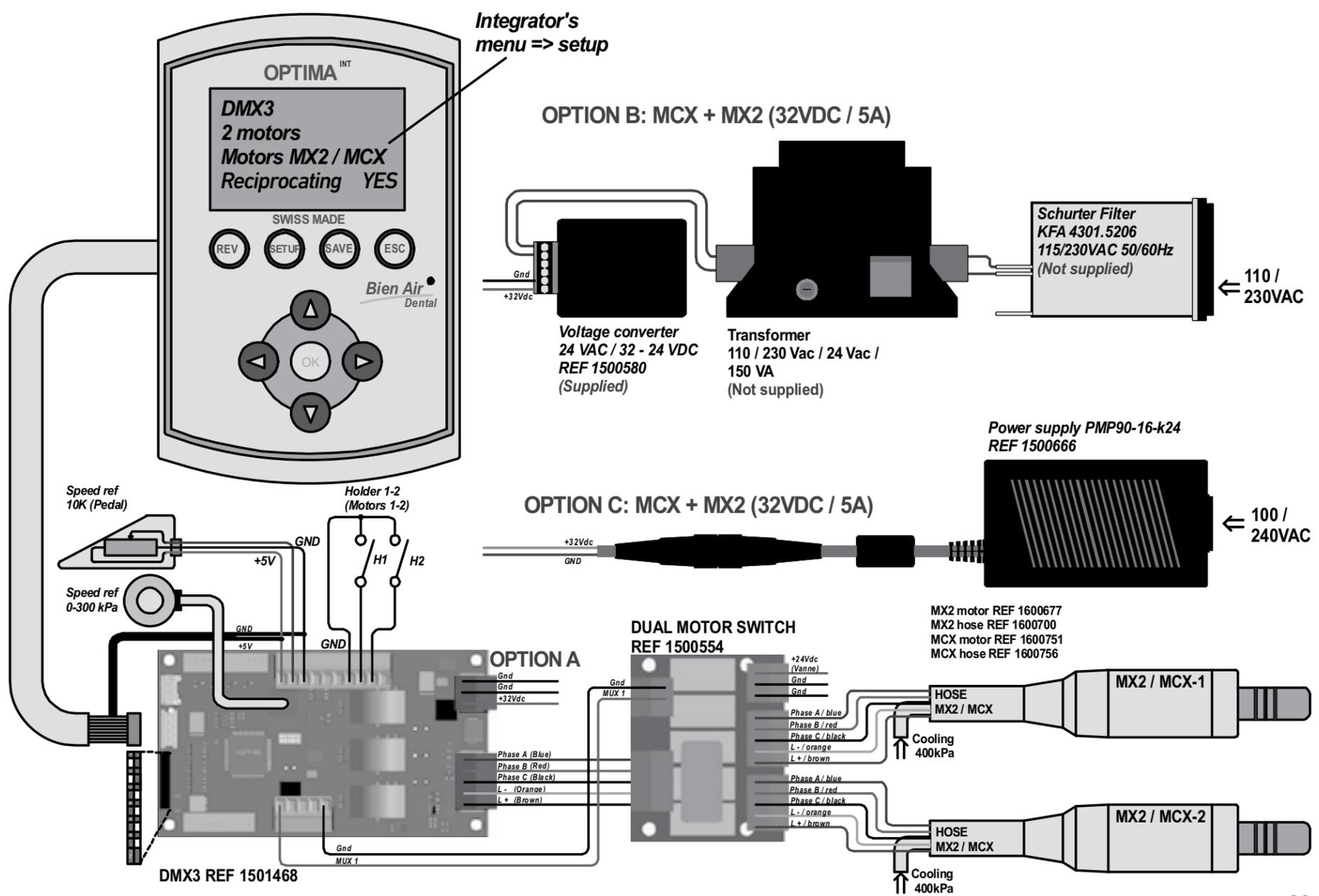
OPTIMA^{INT} SINGLE MOTOR SYSTEM TOUCHPAD CONFIGURATION

OPTIMA^{INT} connection with DMX3 (1 motor)



OPTIMA^{INT} DUAL MOTOR SYSTEM TOUCHPAD CONFIGURATION

OPTIMA^{INT} connection with DMX3 (2 motors)



OPTIMA^{INT} connection with DMX2 (1 motor)

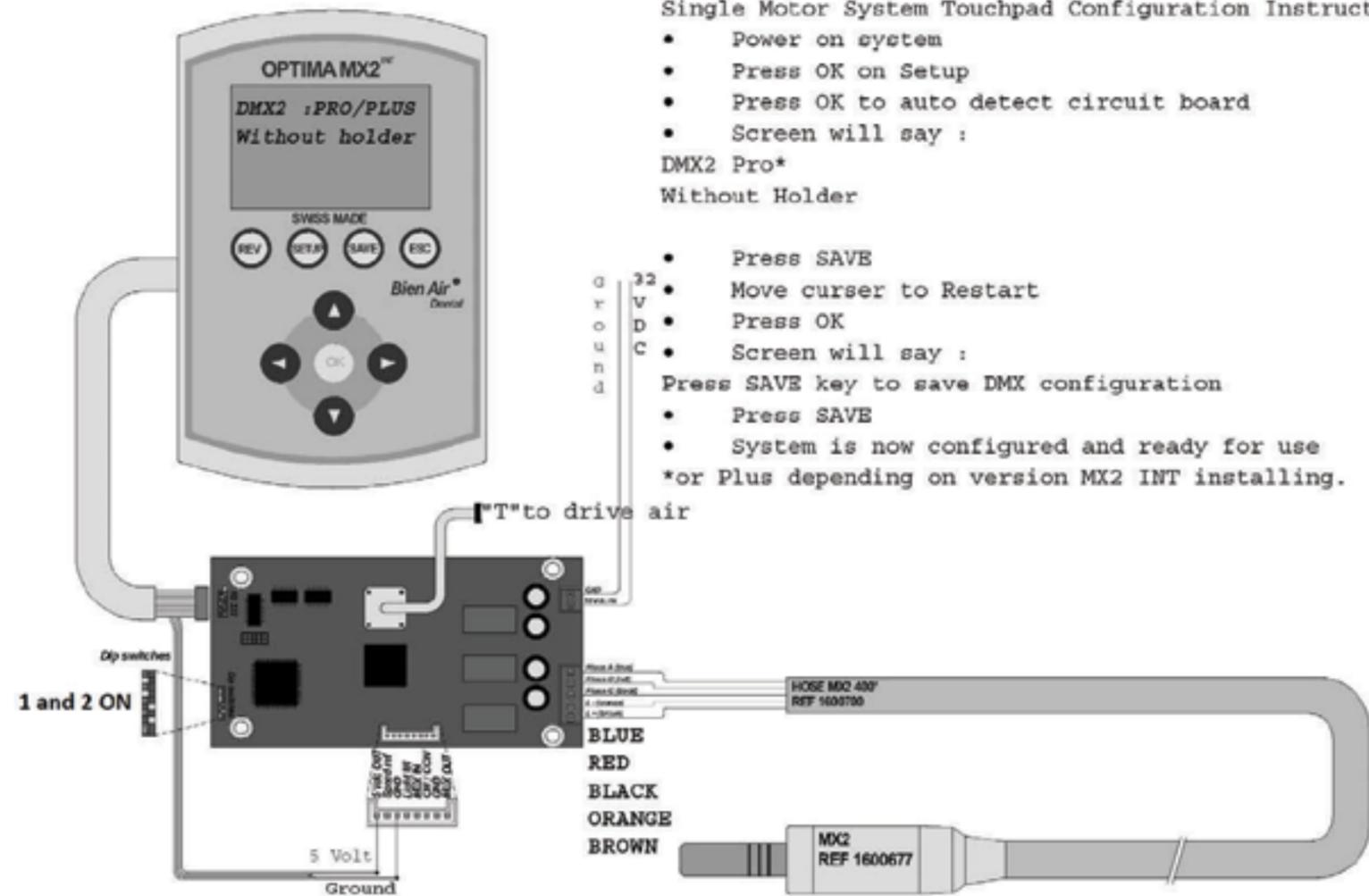
SINGLE MOTOR
OPTIMA MX2 INT PRO or PLUS

PLEASE FOLLOW THESE INSTRUCTIONS WHEN BOOTING UP SYSTEM FOR THE FIRST TIME **

Single Motor System Touchpad Configuration Instructions

- Power on system
- Press OK on Setup
- Press OK to auto detect circuit board
- Screen will say :
DMX2 Pro*
Without Holder

- Press SAVE
 - Move cursor to Restart
 - Press OK
 - Screen will say :
Press SAVE key to save DMX configuration
 - Press SAVE
 - System is now configured and ready for use
- *or Plus depending on version MX2 INT installing.

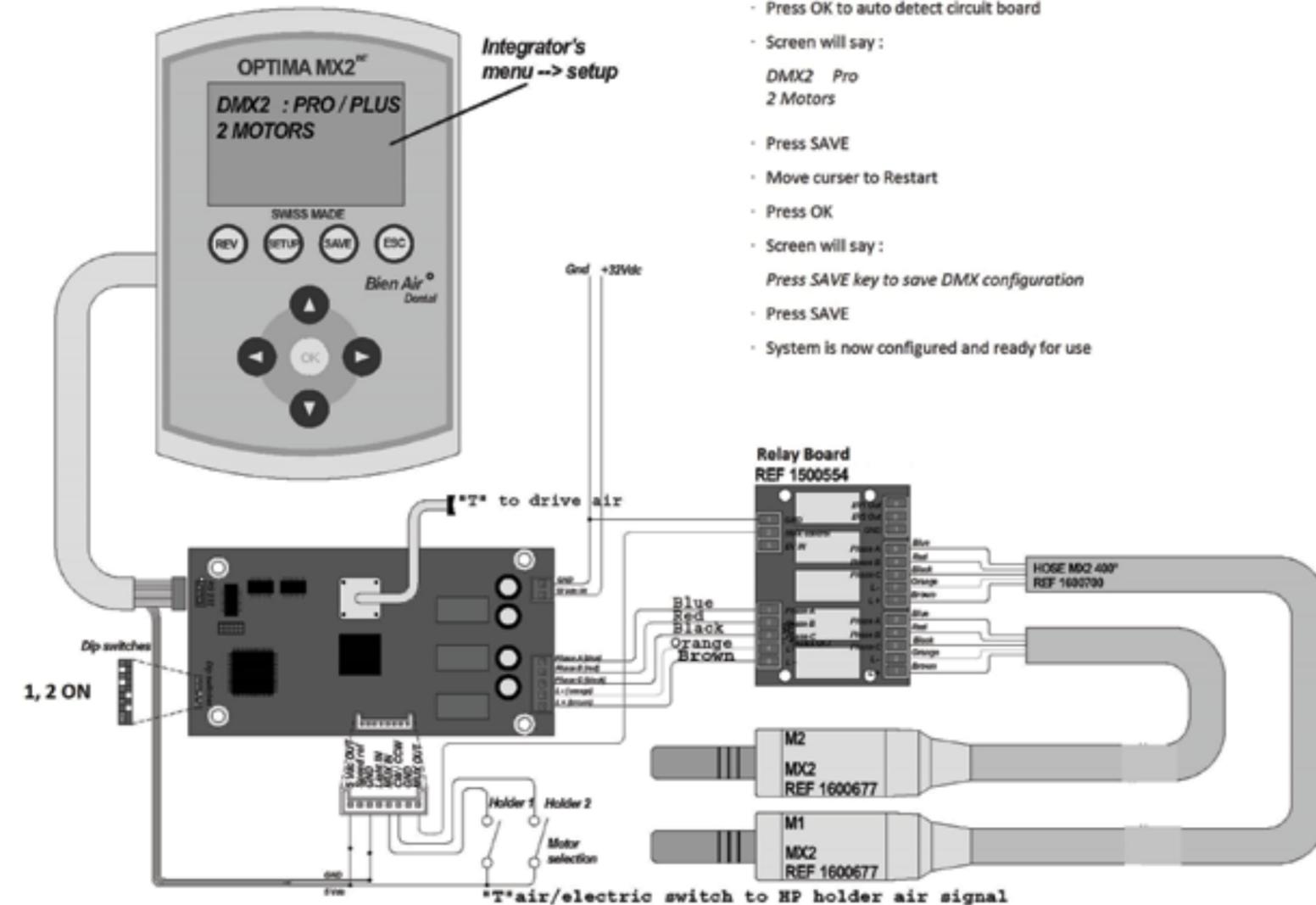


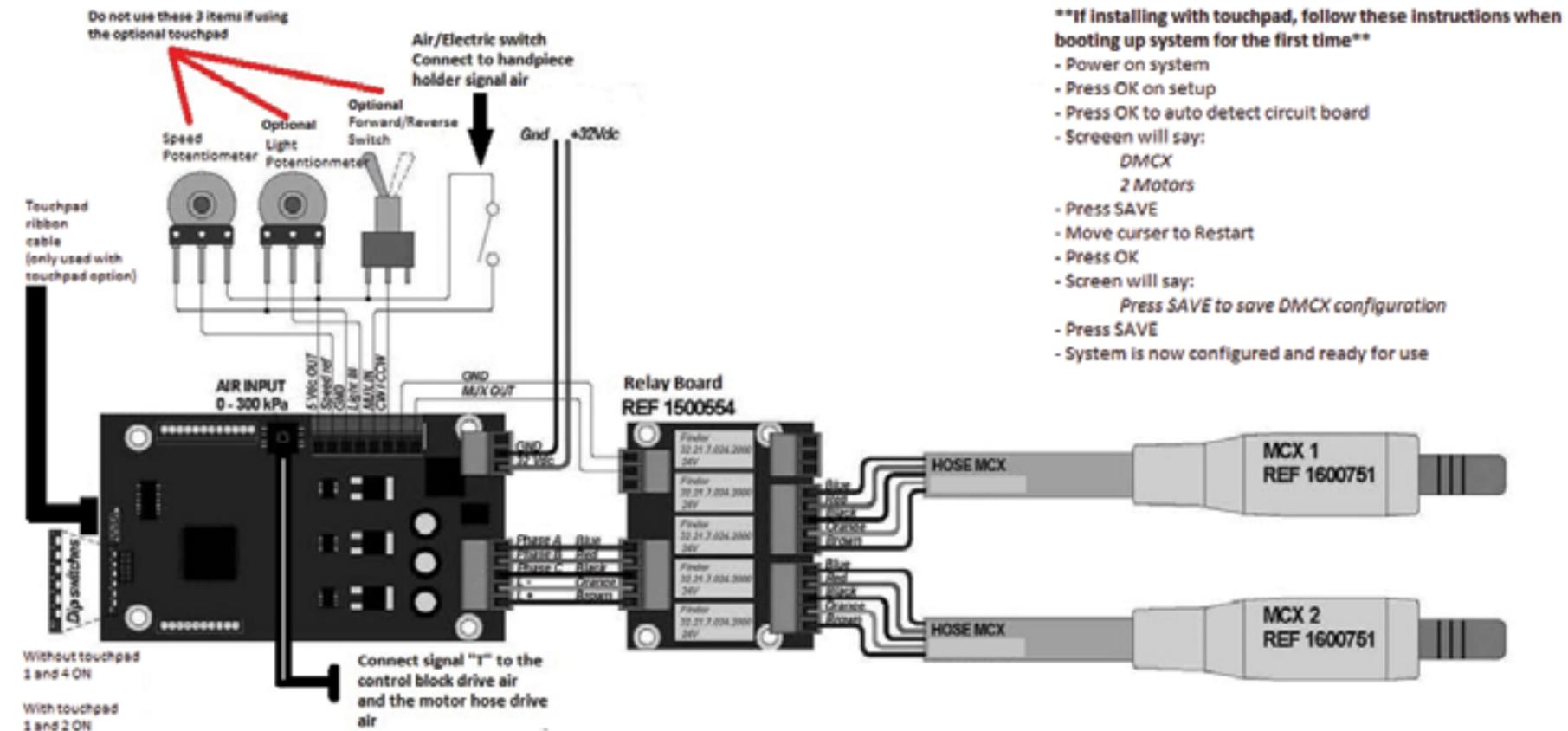
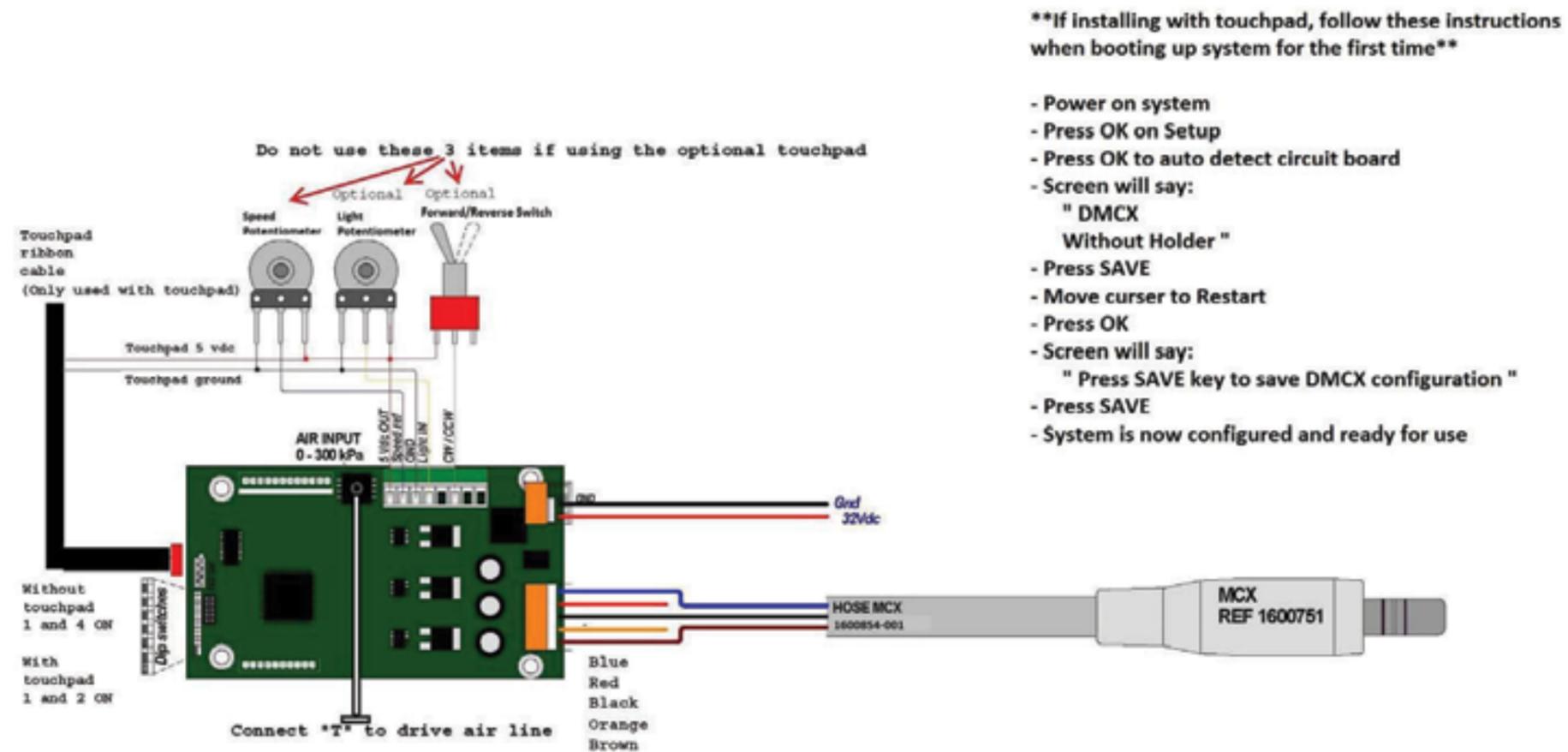
OPTIMA^{INT} connection with DMX2 (2 motors)

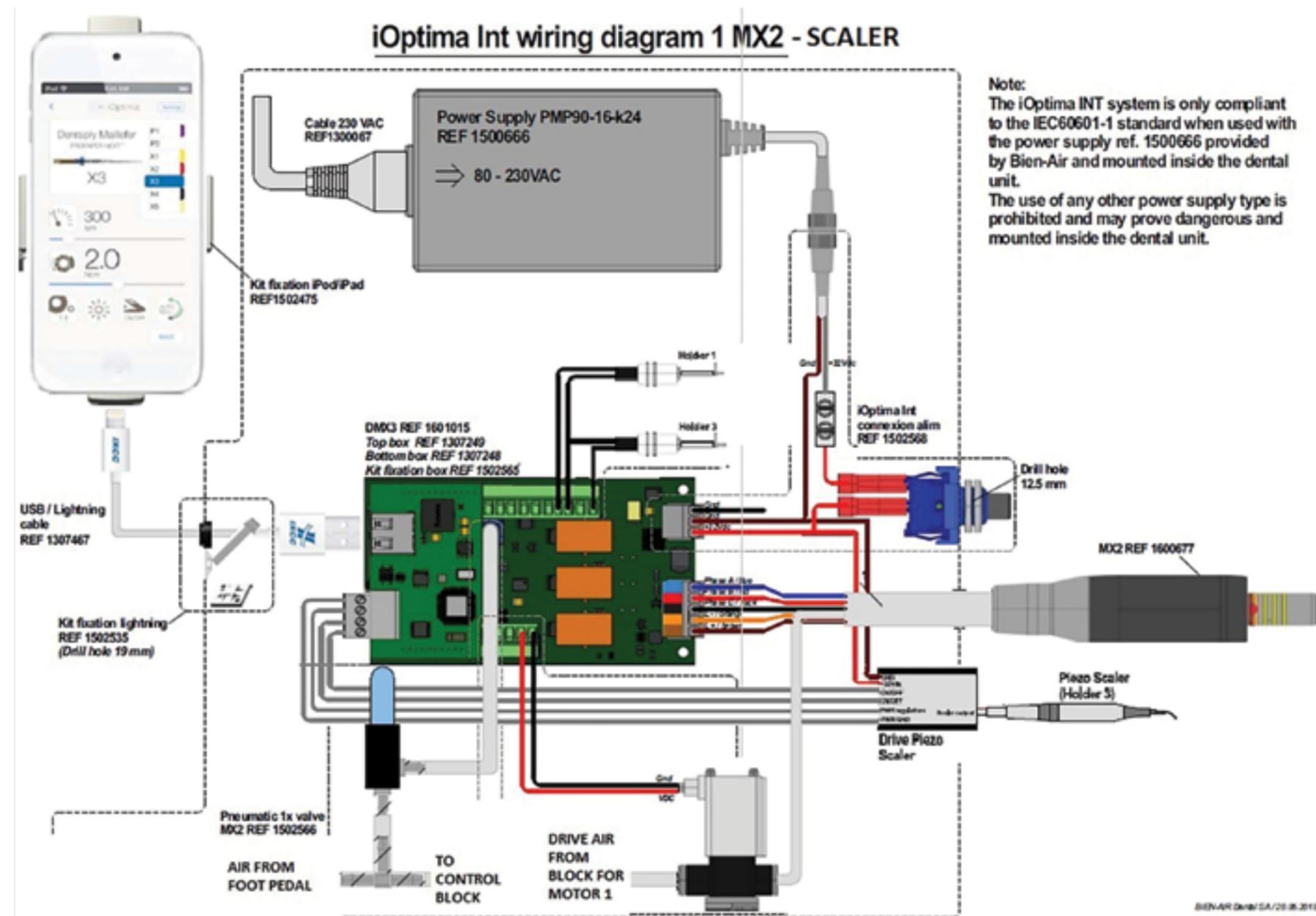
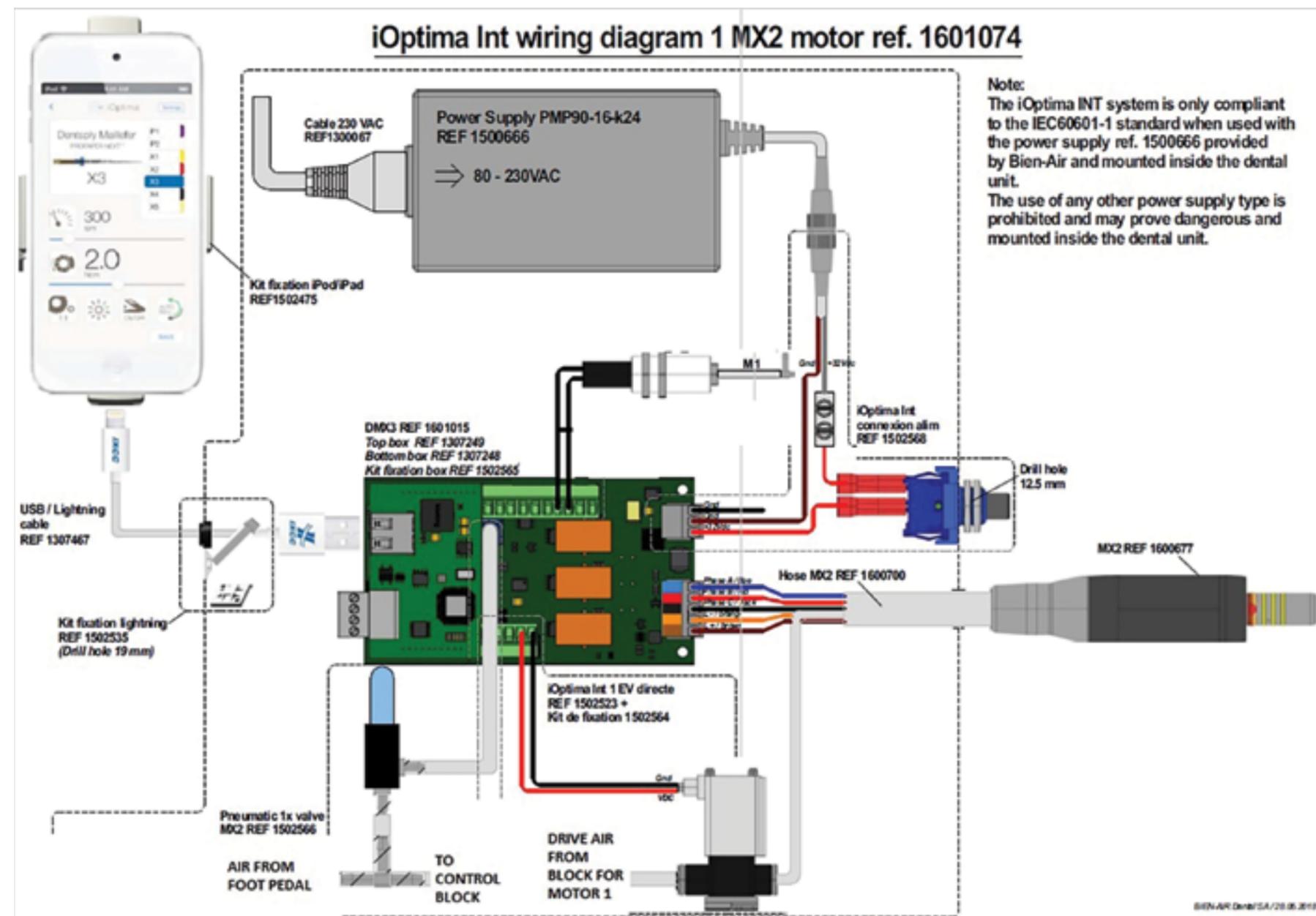
Optima MX2 INT Pro Dual Motor Set

** Please follow these instructions when booting up system for the first time **

- Power on system
- Press OK on Setup
- Press OK to auto detect circuit board
- Screen will say :
DMX2 Pro
2 Motors
- Press SAVE
- Move cursor to Restart
- Press OK
- Screen will say :
Press SAVE key to save DMX configuration
- Press SAVE
- System is now configured and ready for use

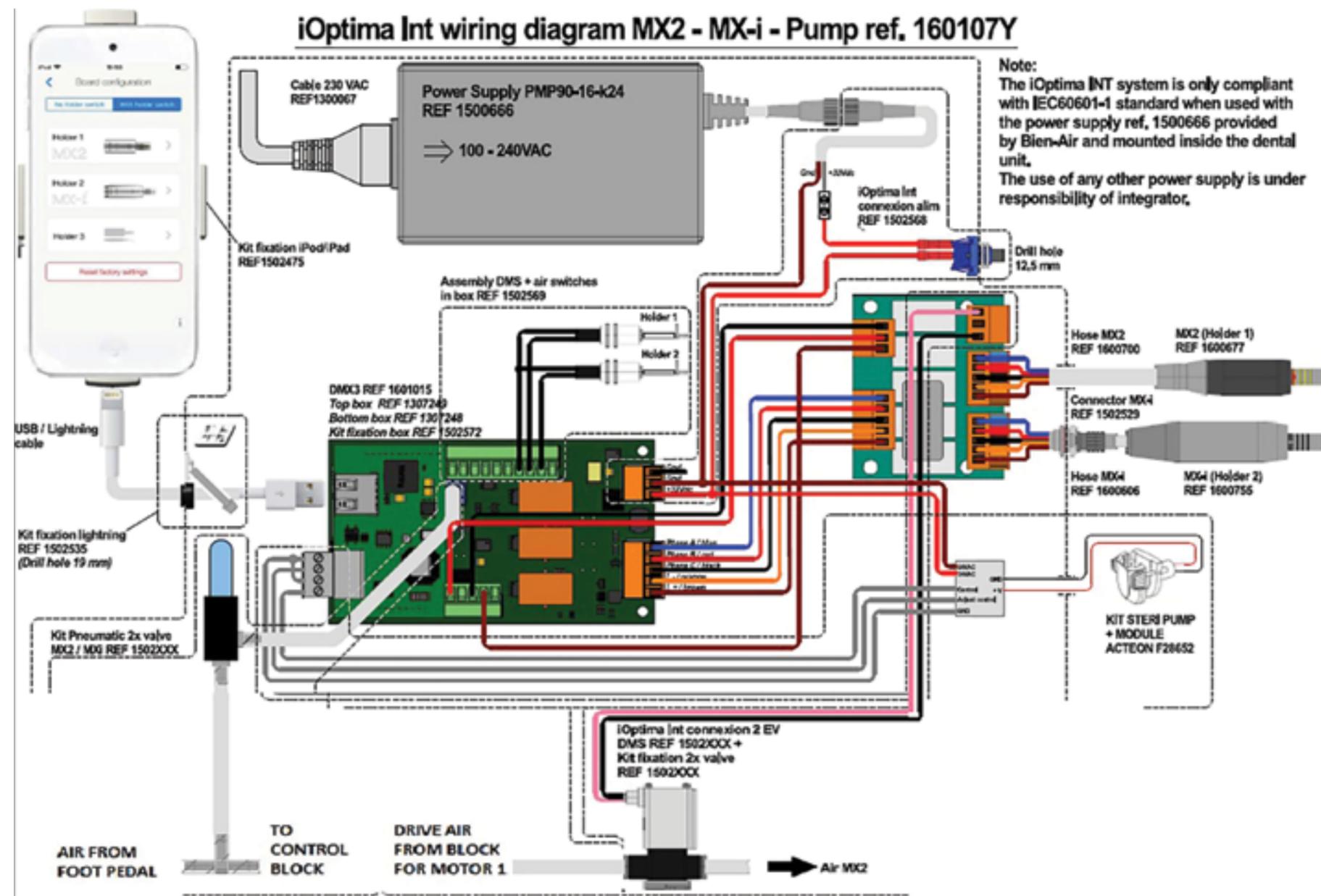






iOPTIMA^{INT} DUAL MOTOR SYSTEM IPOD CONFIGURATION

iOPTIMA^{INT} iPod connection with DMX3 (1 MX2, 1 MX-i, 1 Pump)



iOPTIMA^{INT} ALL-IN-ONE SYSTEM TOUCHPAD CONFIGURATION

iOPTIMA^{INT} iPod connection with DMX3 (1 MX2, 1 MX-i, 1 Scaler)

