

# InTouch Xpress<sup>™</sup> V2 User Manual

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#### **User Profile**

Trained health care professionals are the intended users of the Xpress. Users of this system require clinical judgment and experience to review and interpret the patient data transmitted.

#### Notes, Cautions and Warnings

Pertinent information in **boldfaced type** can be found throughout this owner's manual and should be interpreted in the following context:

**NOTE:** Provides supplementary information for facilitating operation of the system.

**CAUTION:** Presents instructions for avoiding damage to the system.

WARNING: Disregarding this information may prove hazardous to the safety of a person near the Xpress.

#### **Safety Symbols**

Symbols appearing on labels on the Xpress include the following:

	Wireless Transmitter Notification—Non-ionizing electromagnetic radiation. This device communicates over the 802.11a/b/g/n standard for wireless communication.
*	Body Float—Type B. A Type B piece of equipment is one that provides a particular degree of protection against electric shock, particularly regarding allowable leakage current and reliability of the protective earth connection (grounding).
	DC Voltage—This symbol is used to denote the presence of direct current voltage.
	Class 2 Medical Device Equipment—This device has been tested and approved to be Class II per the IEC 60601-1 standard for Medical Electrical Equipment.
	Refer to the instructions manual/booklet—Operating Instructions are contained in a separate instruction manual.



Symbols appearing on labels on the Xpress Mounting Arm include the following:

To avoid injury. You MUST read and operator's manual before using this machine.	Read and follow the instructions for installing the Xpress mounting arm and installing the Xpress. The Xpress mounting arm is adjusted at the factory to securely hold the Xpress steady under a vertical acceleration of 3 gravities with a moment arm of 10 inches (25.4 centimeters).
	The Xpress Mounting Arm has this label on the Lock Release lever to indicate the lock and unlock directions from any orientation.

Symbols appearing on labels on the Xpress Cart Accessory include the following:



#### **Xpress Identification Plate**





#### **Electromagnetic Compatibility**

The Xpress system complies with IEC 60601-1-2, General Requirements for Safety—Collateral standard: Electromagnetic compatibility. Performance of the device is unaffected by exposure to the compliance levels described in Tables 1,2,3 and 4 in the following section.

Special precautions and installation information for the Xpress for electromagnetic compatibility (EMC) are provided below:

- Equipment in hospital environments, including the Xpress and other portable or mobile communications equipment, can produce Electromagnetic Interference (EMI), which may affect the function of these devices. Such effects are prevented by use of equipment with EMI characteristics proven below recognized limits, as identified in the tables below.
- In the event of suspected interference from other equipment, which prevents the proper functioning of the Xpress, contact InTouch Health and/or discontinue use of the system until the problem can be remedied.

The following tables contain the Manufacturer's declaration and additional information required by IEC 60601-1-2.

#### Table 1: Guidance and Manufacturer's Declaration - Electromagnetic Emissions

The Xpress is intended for use in the electromagnetic environment specified below. The customer or the user of the Xpress should assure that it is used in such an environment.

Emissions Test	Compliance	Electromagnetic Environment
RF Emissions CISPR 11	Group 1	The Xpress uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions CISPR 11	Class A	The Ynress is suitable for use in all establishments
Harmonic Emissions IEC 61000-3-2	Class A	other than domestic and those directly connected to the public low-voltage power supply network that
Voltage Fluctuations / Flicker Emissions IEC 61000-3-3	Complies	supplies buildings used for domestic purposes.



#### Table 2: Guidance and Manufacturer's Declaration - Electromagnetic Immunity

The Xpress is intended for use in the electromagnetic environment specified below. The customer or the user of the Xpress should assure that it is used in such an environment.

Immunity Test	EC 60601 Test Level	Compliance Level	Electromagnetic Environment - Guidance
Electrostatic Discharge (ESD) IEC 61000-4-2	±6 kV Contact ±8 kV Air	±6 kV Contact ±8 kV Air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical Fast Transient / Burst IEC 61000-4-4	±2 kV for Power Supply Lines ±1 kV for Input / Output Lines	±2 kV for Power Supply Lines ±1 kV for Input / Output Lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV Line(s) to Line(s) ±2 kV Line(s) to Earth	±1 kV Line(s) to Line(s) ±2 kV Line(s) to Earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage Dips, Short Interruptions, and Voltage Variations on Power Supply Input Lines IEC 61000-4-11	<5% U <sub>T</sub> (>95% dip in U <sub>T</sub> ) for 0.5 cycle 40% U <sub>T</sub> (60% dip in U <sub>T</sub> ) for 5 cycles 70% U <sub>T</sub> (30% dip in U <sub>T</sub> ) for 25 cycles <5% U <sub>T</sub> (>95% dip in U <sub>T</sub> ) for 5 sec	<5% U <sub>T</sub> (>95% dip in U <sub>T</sub> ) for 0.5 cycle 40% U <sub>T</sub> (60% dip in U <sub>T</sub> ) for 5 cycles 70% U <sub>T</sub> (30% dip in U <sub>T</sub> ) for 25 cycles <5% U <sub>T</sub> (>95% dip in U <sub>T</sub> ) for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the RP- Xpress requires continued operation during power mains interruptions, it is recommended that the RP-Xpress be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) Magnetic Field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

NOTE  $U_T$  is the AC mains voltage prior to application of the test level.



#### Table 3: Guidance and Manufacturer's Declaration - Electromagnetic Immunity

The Xpress is intended for use in the electromagnetic environment specified below. The customer or the user of the Xpress should assure that it is used in such an environment.

Immunity Test	EC 60601 Test Level	Compliance Level	Electroma	agnetic Environment - Guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 V	Portable and mobil be used no closer to than the recommer	e RF communications equipment should o any part of the Xpress, including cables, nded separation distance calculated from
Radiated FR IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	the equation applic Recommended sep $d = 1.2 \sqrt{P}$	able to the frequency of the transmitter.
			d = 1.2 √P d = 2.3 √P where P is the maxi transmitter in watts manufacturer and a distance in meters i Field strengths from an electromagnetic compliance level in Interference may o with the following s	80 MHz to 800 MHz 800 MHz to 2.5 GHz imum output power rating of the s (W) according to the transmitter d is the recommended separation (m). In fixed RF transmitters, as determined by r site survey <sup>a</sup> , should be less than the each frequency range <sup>b</sup> . ccur in the vicinity of equipment marked symbol:
				(((•)))

NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

a. Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Xpress is used exceeds the applicable RF compliance level above, the Xpress should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the Xpress.

b. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.



## Table 4: Recommended separation distances between portable and mobile RFcommunications equipment and the Xpress.

The Xpress is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Xpress can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Xpress as recommended below, according to the maximum output power of the communications equipment.

Rated Maximum Output Power of Transmitter (W)	Separation distance according to frequency of transmitter (m)		
	150 kHz to 80 MHz	80 MHz to 800 MHz d = $1.2\sqrt{P}$	<b>800</b> MHz to <b>2.5</b> GHz d = $1.2\sqrt{P}$ d = $2.3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance *d* in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

#### **Xpress Warnings**

- The Xpress is designed to utilize the 802.11 WiFi communication protocol, cellular broadband as well as the public Internet in order to achieve its intended purpose. Failures in any of these supporting systems could cause a complete loss of communication between the Provider Access Software and the Xpress. Consequently, the Xpress should not be utilized in any activities where successful completion of the activity is dependent upon uninterrupted communication between the Xpress and the Provider Access Software.
- A tested backup method of communication should be made available in case network communication is lost.
- To ensure proper operation, users should be thoroughly familiar with the Remote Presence system. Study of this owner's manual is essential to ensure proper operation. In addition, completion of proper training by an InTouch Health Representative is required for safe operation. All questions should be referred to the local InTouch Health Sales Representative or InTouch Health Technical Service.



- The Xpress mounting arm is adjusted at the factory to securely hold the Xpress steady under a vertical acceleration of 3 gravities with a moment arm of 10 inches (25.4 centimeters). To reduce the risk of injury, do not extend the mounting arm further than 10 inches (25.4 centimeters) from the base mounting point.
- To prevent the possibility of injury, do not secure the Xpress Mounting Arm to any support structure within 36 inches (91.4 centimeters) of a patient's head or critical areas.
- Do not attempt to open or remove any parts of the Xpress. To reduce the risk of electric shock, do not remove the cover.
- The Xpress is not MRI (Magnetic Resonance Imaging) safe nor MRI compatible. The Xpress should only be used in locations where the presence of metal is not controlled.
- The Xpress is not suitable for use in the presence of any flammable anesthetic mixture with air, or in the presence of any flammable anesthetic mixture with oxygen or nitrous oxide.
- There are no user-serviceable components inside. Refer servicing and repair to InTouch Health personnel only.
- Plug Xpress into a standard, grounded AC electrical outlet to minimize the risk of electrical shock during the battery charging cycle.
- If the AC/DC power adapter of the Xpress is damaged, the Xpress can be operated using the on-board battery system for about two hours depending on usage. This condition should be reported to Technical Service immediately for repair.
- Provide adequate ventilation. The Xpress may overheat if powered on or plugged in and charging while stored for extended periods of time in an area without adequate ventilation.
- Leakage current from interconnected electrical equipment may exceed safe levels. In order to maintain patient and user safety, it is important to interconnect only with devices in compliance with IEC 60601-1-1 requirements. It is the responsibility of the user to ensure that any interconnected equipment not supplied by InTouch Health maintains compliance with IEC 60601-1-1 requirements.
- The video images transmitted to and displayed on the Xpress and Provider Access Software may not contain all of the information from the original scene. Video information from the camera is captured, compressed, transmitted, and redisplayed remotely at a different resolution. As a result information in the original scene may be lost.
- Color reproduction in the transmitted video is not guaranteed. Color reproduction in a video system is a complicated combination of lighting, cameras, and display technology. It should not be assumed that the colors on the display are an exact replication of the actual colors in the scene.
- Clinical judgment and experience are required to review and interpret images and information transmitted via the Xpress and Provider Access Software.



#### **Xpress Cautions**

- A detachable AC/DC power adapter is provided with the Xpress and should remain available at all times to ensure access to AC power as needed.
- The Xpress is a portable device that may be hand-held during its use making it subject to image instability due to human movement.
- As a portable device, the Xpress is subject to inadvertent mishandling, dropping, etc. Caution should be exercised accordingly.
- Adding third party software or hardware to the Xpress is not supported. All hardware and software must be validated by InTouch Health as part of the Xpress Class II Medical Device clearance. Contact InTouch Health Technical Service prior to installing any third party software or hardware.
- To ensure system readiness, connectivity, and charged batteries, power on the Xpress at least two hours before its intended use. This will allow the Xpress to check for and install any available software updates.
- When cleaning, do not immerse the Xpress as it contains sensitive electronics. Wipe down the surfaces as specified in the <u>Cleaning and Maintenance</u> section of this owner's manual. Do not allow any cleaning solution inside the Xpress. Avoid excess solution which may enter the Xpress through its openings.
- If using Xpress with a stethoscope, do not overextend the cables. Cables may break, especially near the junction points.
- If using Xpress with a stethoscope, a replacement headset must have frequency response level down to 18 Hz for proper sound quality.
- Do not leave video equipment connected to the auxiliary ports. The equipment and/or the Xpress may be damaged if the Xpress is moved with the equipment connected to an auxiliary port.



## **Telehealth System Overview**



The InTouch Health Remote Presence System is a mobile, telehealth platform that enables an individual to "be in two places at once." Remote Presence is the ability to project yourself to a remote location (without leaving your current location) and to see, hear, talk, and in some cases move as though you were actually there. A Remote Presence System is comprised of InTouch Provider Access Software and Patient Access Device. The Provider Access Software and Patient Access Device are linked via the Internet over a secure broadband connection.

The Xpress<sup>™</sup> V2 offers a portable form factor for flexibility, enabling physicians to extend their reach into a broad array of situations ranging from transport, to emergency care, clinic care, and more.

While using the Provider Access Software, an individual can access a Patient Access Device to visit people in a remote location. A physician can communicate with a patient, family members, and other staff. The Patient Access Device's two-way audio and video communications allow a user to be remotely available at the location and time that they are needed.

To ensure proper operation, users should be thoroughly familiar with their InTouch Telehealth System. In addition, completion of proper training from an InTouch Health Representative is required for safe operation. All questions should be referred to the local InTouch Health Representative or to InTouch Health Technical Service. Failure to comply with the instructions in this manual may void the Xpress<sup>™</sup> V2 warranty.



**Xpress Overview** 



Battery Compartment	Used to access the battery. See " <u>Changing the Battery</u> ".
Button Panel	See " <u>Xpress Button Panel</u> ".
Camera	Captures video for viewing at the Provider Access Device.
Connector Panel	.See " <u>Xpress Connector Panel</u> ".
Handle	Used for moving or positioning the Xpress.
Microphone	Captures audio in a focused zone in front of the Xpress for playback on the Provider Access Software.
Quick-Release Mounting Plate	Connects the Xpress to its mounting arm. See "Xpress Mounting Platform Installation".
Speaker	Plays audio from the Provider Access Software.
Touch Screen Display	Shows Provider Access user's face on the Xpress. Used to select a WiFi network.
Viewfinder Display	Displays the video from the Xpress camera. This can be used to aid in positioning the Xpress for the Provider Access user.



**Xpress Button Panel** 



Connect/Disconnect Button	Disconnects all remote users and ends the active session following a disconnect confirmation prompt.
Hold Button	Stops the Provider Access Software from receiving the video feed from the Xpress camera.
Mute Button	Turns off the Xpress microphone so that audio from the Xpress is not heard at the Provider Access Device.
Network button	Displays the WiFi network selector on the Xpress touch screen display.
Power Connector	Used to charge the Xpress battery when plugged into a standard, grounded AC outlet using the provided power adapter. <b>NOTE:</b> Use only InTouch Health provided power adapters.
Power Button	Turns the Xpress On/Off. The Xpress will alert you when shutting down to confirm that you want to turn off the device.
Volume Control	Adjusts the volume of the Xpress speaker and the Bluetooth earpiece.





#### **Auxiliary Ports**

- Audio Line In and Audio Line Out ports.
- Composite Video and S-Video connectors (NTSC Auxiliary Video input ports) which allow the Provider Access user to view auxiliary video through the Provider Access application. These video input ports can be configured to support PAL by InTouch Health Technical Support.
- Ethernet network ports (two).
- The VGA Out allows the video from the Provider Access Software (shown on the RP-Xpress display) to be shown on a different screen or shown by a projector, by InTouch Health Technical Support.

Additional connectors are used by InTouch Health personnel for maintenance, upgrades, and servicing.

**WARNING**: The video images transmitted to and displayed on the Xpress and Provider Access Software may not contain all of the information in the original scene. Video information from the camera is captured, compressed, transmitted, and redisplayed remotely at a different resolution. As a result information in the original scene may be lost.



**WARNING:** Color reproduction in the transmitted video is not guaranteed. Color reproduction in a video system is a complicated combination of lighting, cameras, and display technology. It should not be assumed that the colors on the display are an exact replication of the actual colors in the scene.

**WARNING:** Clinical judgment and experience are required to review and interpret images and information transmitted via the Xpress and Provider Access Software.

**CAUTION:** Adding third party software or hardware to the Xpress is not supported. All hardware and software must be validated by InTouch Health as part of the Xpress Class II Medical Device clearance. Contact InTouch Health Technical Service prior to installing any third party software or hardware.

**CAUTION:** Do not leave video equipment connected to the auxiliary ports. The equipment and/or the Xpress may be damaged if the Xpress is moved with the equipment connected to an auxiliary port.



## **Xpress Basics**

#### **Charging the Xpress**

- 1. Plug in the Xpress AC/DC power adapter into a standard, grounded AC outlet.
- The Xpress must be plugged into a standard, grounded AC outlet to minimize the risk of electrical shock.
- Use only InTouch Health provided power adapters.
- 2. Plug the Xpress AC/DC power adapter plug into the Power Connector port on the Xpress Button panel.
- The system will charge from 20% to 85% in 4¼ hours.
- The system will charge from 20% to 100% in 5 hours.

**NOTE:** The Xpress will not run if the battery charge is less than 20%.

**WARNING:** If the AC/DC Power Adapter is damaged, the Xpress can be operated using the battery system. However this condition should be reported to Technical Service immediately for repair.

#### **Power On Sequence**

- 1. Press the Power button.
- 2. Verify that the Display turns on.

**NOTE:** If the Xpress is not plugged in, power is provided from the battery. The battery can last about 2 hours on a full charge.

Plug in the Xpress as soon as possible.

#### **Power Off Sequence**

- 1. Press the Power button.
- 2. Verify that the Display screen turns off (turns black).

NOTE: It will take approximately 30-45 seconds for the screen to turn off.

#### **Changing the Battery**

- 1. Slide the latch to unlock and open the battery door as shown.
- 2. Pull the tab to remove the battery.
- 3. Install the charged battery with the tab exposed.



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NETWORK

Power -

Power

Connector

### **Xpress Basics**

4. Slide the latch to close the battery door.

**NOTE:** The Xpress battery can be changed while in session if the Xpress is connected to an AC power supply with the InTouch Health provided power adapter.



When the Xpress is not actively connected to Provider Access Software, the screen saver shown to the right will appear. Screensavers chosen by the customer may optionally be shown. Consult your InTouch Health representative Technical Support.

Tap the touch screen display to view status and other useful technical information on the Xpress touch screen display (shown to the right). Tap the screen again to return to the screen saver.

- Serial number
- Battery charge
- Wireless signal strength
- IP addresses
- SIP connectivity
- Xpress status

When a Provider Access user connects to an Xpress, the name of the person logged on to the Xpress will be displayed in a black bar at the bottom of the Xpress Display.







or

ROBOT-1703 Revision: 10.30.41 Battery Charge: Good Connection Type: WiFi WiFi Signal: Good External: 192.168,127,129 Internal: 192.168,127.129 SIP: Registered Status: Ready



## **Connecting to a Wireless Network**

#### Directions:

1. Press the Network button whe button panel. See "<u>Xpress Button Panel</u>".

The available wireless networks will appear on the Xpress touch screen display.

2. Tap directly on the wireless network of interest to select it from the touch screen display.

Refresh		HEALTH HEALTH		x close
My wireless netwo	ork isn't shown			
ITH-Guest			100%	
ITH			100%	
ENG	12-		94%	
RP		1	58%	
	λ			

When selected the password dialog box and the keyboard will appear on the touch screen display as shown below.

Refresh	Close     ITI I     Plasse effet in paborik password.     /////////////////////////////////			
My wireless network isn'	OK cancel			
1 2 3 4	5 6 7 8 9 0 <del>+</del>			
q w e	rtyuiop			
a s d	f g h j k l 🕶			
+ z x	c v b n m +			
	· · · · · ·			

3. Enter your password and tap **OK**.

When connected your network will turn green.



### **Connecting to a Wireless Network**

4. Tap **close** in the upper right-hand corner of the touch screen display to view the blue Xpress status page or press the Network button on the button panel to return to the Xpress screen saver.



**CAUTION:** A tested backup method of communication should be made available in case the network communication is lost. The Xpress is designed to utilize the 802.11 WiFi communication protocol, cellular broadband as well as the public Internet in order to achieve its intended purpose. Failures in any of these supporting systems could cause a complete loss of communication between the Provider Access Software and the Xpress. Consequently, the Xpress should not be utilized in any activities where successful completion of the activity is dependent upon uninterrupted communication between the Xpress and the Provider Access Software.

#### **Integrated Connectivity**

The Xpress can connect to the Internet using 4G cellular broadband through MiFi or other devices capable of creating WiFi hotspots. The cellular service provider may change from area to area. Customers should contact InTouch Health Technical Service for further information.



#### **Xpress Cart Operation**

The Xpress can be mounted on the cart accessory via the Quick Release on the Mounting Plate at the top of the Cart.

#### **Xpress Cart Features**

- 1. The Quick Release Mechanism allows fast and easy attachment and detachment of the Xpress from the Cart.
- 2. The Tilt Joint enables the Xpress to be tilted all the way down past 90degrees. Use the Xpress Handle to overcome the tilt friction.
- 3. The Cart Lift Mechanism enables vertical travel of the Xpress itself, and automatically rises when the height adjustment knob is loosened. Tighten the knob to set the height.
- 4. The Cart has a handle for pushing and positioning, and rotating the view in the care environment.
- 5. The Xpress Power Adapter can be attached to the Cart Power Holster, and secured via Velcro.
- 6. Wheel locks enable the cart to be locked in its current location, and can be engaged by pressing them down, and disengaged by pressing them back up.



#### **CAUTION:**

Be careful not to tip over the Xpress Cart when pushing the cart over thresholds. The tip risk can be reduced by lowering the Xpress Height on the cart, and reducing speed.



#### **Xpress Cart Quick Release**

The Xpress can be detached from the Cart accessory via the Quick Release on the Mounting Plate at the top of the Cart.

CAUTION: Hold the Xpress handle when disengaging the Quick Release or adjusting vertical travel to reduce the likelihood of dropping the Xpress.

#### **Xpress Cart Detach Process**

- 1. Hold the top handle securely to ensure you don't drop the Xpress.
- 2. Press down the Black Lever on the right of the Quick Release adapter, while pulling on the Grey Lever on the Left to loosen the attachment mechanism.
- 3. Lift the Xpress off the adapter plate.







2. Press Black Lever, Pull Grey Lever



3. Lift Xpress



**NOTE:** Press down the Black Lever on the right, and pull the Grey Lever to release the adapter.



#### **Xpress Mounting Plate**

The Xpress can be attached to the Cart accessory via the Quick Release on the Mounting Plate at the top of the Cart.

**NOTE:** First Pull back the Grey Lever until it sticks out and clicks before trying to Attach Xpress to the mounting plate.



#### **Xpress Cart Attach Process:**

- 1. Tilt the Xpress forward so you can see the lip of the attachment plate, as well as the Mounting Socket at the same time..
- 2. Angle the front lip of the attachment plate into the mounting socket.
- 3. Rock the Xpress back until the attachment plate triggers the Grey Lever to lock the Xpress in place. Tug the handle to ensure the Xpress is securely attached.



1. View Plate

2. Align Lip with Mounting Socket

3. Rock back and secure

CAUTION: Ensure Xpress is securely attached to the Mounting Adapter before letting go of the handle.



#### **Xpress Cart Height Adjustment Feature**

The Xpress height can be adjusted by loosening the height adjustment knob, and re-tightening at the desired extension.

### CAUTION: Be Prepared for the Xpress to automatically rise when the height adjustment knob is loosened.



#### **Xpress Cart Tilt Adjustment**

The Xpress Cart Accessory enables the Xpress to be tilted so that the Xpress is facing a desired direction. Use the Xpress Handle to adjust tilt through the friction based tilt joint.





#### **Xpress Cart Handle and Power Holster**

The Xpress Cart Accessory can be positioned and pushed using the handle. The Power Holster below the handle allows for easy storage of the Xpress Power Brick and cable.

#### CAUTION: Be mindful of pushing the Xpress over thresholds to reduce tipping hazards.





#### **Xpress Cart Wheel Locks**

The Xpress Cart Accessory has wheel locks which enable the cart to be locked in its current location.





## **Xpress Mounting Arm**

#### **Xpress Mounting Arm Operation**

The Xpress can be mounted on the arm shown below.

- The lever locks all three pivot points.
- The quick release mounting plate has a secondary lock to disable the quick release function.



#### **Directions:**

- 1. Secure the arm clamp to an appropriate support.
- 2. Hold the platform (or Xpress handle) and unlock the Lock Release lever to set the location of the mounting platform. The mounting platform should be parallel to the ground for best results.

**CAUTION:** When the Lock Release lever is unlocked, all three pivot points are freed to move. Support the Xpress with its handle when repositioning so that it does not fall.

3. Lock the release lever.

WARNING: 10" (25.4 cm) maximum Horizontal extension





### **Xpress Mounting Arm**

**WARNING:** The Xpress mounting arm is adjusted at the factory to securely hold the Xpress steady under a vertical acceleration of 3 gravities with a moment arm of 10 inches (25.4 cm). To reduce the risk of injury, do not extend the mounting arm platform further than 10 inches (25.4 cm) from the base mounting point.

**WARNING:** To prevent the possibility of injury, do not secure the Xpress Mounting Arm to any support structure within 36 inches (91.4 cm) of a patient's head or critical areas.

#### **Xpress Mounting Platform Installation**

- 1. Insert the front edge of the Xpress mounting plate into the platform.
- 2. Lower the rear edge of the Xpress mounting plate on to the latch button. This will release the locking lever.
- 3. Press the locking lever tight.





## Stethoscope (Optional)

#### Littmann Bluetooth Stethoscope Workflow

The Xpress V2 supports Bluetooth Stethoscope technology, sold as an accessory by InTouch Health. Providers will be able to connect remotely to the Stethoscope on an InTouch Xpress V2 endpoint through the Provider Access Software.





A Nurse or Provider monitoring the Patient Access Device will have to turn on the Bluetooth Stethoscope.

- 1. Ask the Provider to press **Start** once the Bluetooth icon on the Stethoscope starts blinking.
- Once the Bluetooth icon is solid, patient auscultation can begin. If the Bluetooth icon does not turn solid once the Provider has pressed Start, reference Troubleshooting.

**NOTE:** The distance between the Stethoscope and the Patient Access Device should be **less than 20 feet** and there should be no obstructions between both devices.



Provider Access Device

The Provider will have control of the Stethoscope on the Provider Access Software.

**NOTE:** The Provider should be wearing a headset and have tested the headset through the Audio and Video wizard prior to a session.

- Press Start once the blinking Bluetooth icon appears on the Patient Access Device (ask Remote Nurse or Provider). This will start the remote Patient auscultation.
- Once connected, adjust the volume and auscultation mode (Bell or Diaphragm) as appropriate. Only the Provider can change these settings.

Possible Issues	Solutions	
Device not connecting	The device may need to be rebooted. Restart the device and try to connect again.	
Battery Low	<ol> <li>To install or change the battery, follow these steps:</li> <li>Twist the battery cap on the head of the Stethoscope counter-clockwise and remove it.</li> <li>Inset the new battery (AA alkaline) with the positive end pointing outward.</li> <li>Twist the battery cap clockwise to close.</li> <li>Make sure the marks align near the opening of the cap.</li> </ol>	

#### Troubleshooting—Littman Bluetooth Stethoscope



### Stethoscope (Optional)

#### **Stethoscope Operation**

The Stethoscope chest piece is applied to a patient by hospital staff following the physician's directions (received through main Xpress V2 audio).

**NOTE:** It is strongly recommended that nurses disinfect the Littman Bluetooth Stethoscope before and after use, per hospital regulations.



#### Technical Service—Stethoscope

To pair your Littman Bluetooth Stethoscope to your Xpress V2, please contact Technical Services.

If a problem should arise in regard to use of the Littman Bluetooth Stethoscope on the Xpress V2, please contact InTouch Health Technical Service so that Technical Service can determine the source of the issue.

Contact your InTouch Health Sales Representative for Littman Bluetooth Stethoscope Replacements.

#### **Best Practices (Strong Recommendations)**

To ensure the best quality auscultation using the Littman Bluetooth Stethoscope, please follow these recommended guidelines:

- Minimize obstruction and electronic interference between the Stethoscope and the Patient Access Device. Other Bluetooth devices should have Bluetooth turned off to reduce interference between devices.
- Place the Stethoscope directly on the Patient's skin for optimal audio quality and minimal artifact.
- Check the battery percentage in accordance with your volume setting and conditions. The Stethoscope turns off when left idle. Therefore you may not need to check it at regular intervals and before each use. You can determine an interval which works for your use. It is recommended to have spare batteries conveniently stored within your care environment.





## **Error Messages**

Xpress Messages: These text messages may appear in the lower right of the Xpress Display.

Message	Explanation	Action
"Internet connection failure." "Internet connection slow."	Very high round-trip latency at Provider Access Software or Xpress. Possible cause: poor internal network conditions, low Quality of Service Internet connection or excessive bandwidth usage.	
"Internet failure: Severe loss."	Packets lost. May see jumpy video with lower frame rates at Provider Access Software or Xpress. Possible cause: poor internal network conditions, low Quality of Service Internet connection or excessive bandwidth usage.	These error messages represent non-optimal Internet connection conditions. They may happen periodically on many networks under
"Internet failure: Severe loss remotely."	Problem was detected on reverse side (i.e., at the Provider Access Software). These messages are shown if problem is only being detected in one direction.	normal conditions. However, if they persist, contact the hospital's IT department.
"Internet failure: Audio lost."	Packets containing audio data lost, therefore user may notice loss of audio at Provider Access Software or Xpress. Possible cause: poor internal network conditions or low Quality of Service Internet connection or excessive bandwidth usage.	
"Internet failure: Audio lost remotely."	Problem was detected on reverse side (i.e., at the Provider Access Software). These messages are shown if problem is only being detected in one direction.	
"No stethoscope audio. Power cycle it next to the device."	Physician cannot auscultate because the stethoscope audio is no longer connected to the Provider Access Software.	Restart Stethoscope and try again.
"Stethoscope disabled due to critically low batter (10%). Please replace battery for normal operation."	Battery needs to be charged or replaced by the nurse on the Patient Access side.	Charge or replace battery.
"Stethoscope battery is critically low (10%). Sound degradation expected. Please replace battery soon."	Battery is critically low. Consider charging or replacing the battery soon.	Charge or replace battery.

**WARNING:** Do not attempt to open or remove any parts of the Xpress. To reduce the risk of electric shock, do not remove the cover. There are no user-serviceable components inside. Refer servicing and repair to qualified personnel only.



## **Cleaning and Maintenance**

#### **Cleaning Procedure**

It is recommended that the outer surfaces of the Xpress be cleaned when visibly soiled and/or after contact with any contaminated surface.

#### Directions:

- 1. Prior to cleaning, make sure the Xpress is unplugged and powered off.
- 2. Soak a clean rag in a hospital grade environmental disinfectant solution (such as a quaternary ammonium) and wring out the rag.
- 3. Wipe surfaces that have become soiled or contaminated. Avoid applying excess solution which may enter the Xpress through its openings.
- 4. Allow to air dry.
- To clean the monitor, use an LCD computer screen cleaner to prevent craze, staining or discoloration.
- To clean the camera lens, use an optical lens cleaner.

**CAUTION:** Do not immerse the Xpress. Do not allow any cleaning solution inside the Xpress. Avoid excess solution which may enter the Xpress through its openings.

**CAUTION:** The Xpress should be kept free from moisture and extreme temperatures.

#### **Maintenance And Inspection**

#### **Xpress and Provider Access Maintenance**

The Xpress and Provider Access Software contain no user serviceable parts and require no maintenance. For further information regarding maintenance or assistance with troubleshooting, customers should contact InTouch Health Technical Service.

#### **Xpress Recycling and Disposal**

InTouch Health leased Xpress units must be returned at the conclusion of their lease contract for equipment recycling or reuse. If the equipment was purchased, it is the responsibility of the customer to make sure any electronic waste or equipment is properly disposed of when necessary. For more information about where you can drop off your waste for recycling, please contact your local authority.



## **Xpress Technical Specifications**

#### **Physical Specifications For Xpress**



Weight: 7 lbs (3.2 kg) with battery installed

Performance		
Main View Camera:	± 80° FOV horizontally ± 60° FOV vertically	6X digital zoom
Audio:	Microphone: mono, directional (hyper-cardioid), 10Hz- 40kHz, Speaker: One 5 W mono	16 kHz sampling rate, 16-bit audio
Video:	Camera: remote digital zoom & focus Video: 30 fps, 640x480 px resolution, 24-bit color	Display: 10.4″ (26.4 cm) LCD Touch Screen, 1024x768 px, 1000 NITS
		Rear Viewfinder Display: 3.5" (8.9 cm) LCD
Cellular Network:	802.11a/b/g/n connections can be made to Cellular Hotspots. InTouch Health recommends that Hotspots provide 4G LTE connections to the Internet, over previous generation 3G or HSPA technology. Contact your InTouch Health representative for information about network requirements.	
WiFi Network:	802.11 a, b, g, or n Wireless Network	
Wired Network:	Gigabit Ethernet	
Battery Life:	2.0 hours (depending on usage)	
Battery Specification	Inspired Energy NI2040HD29, 8.7Ah, 10.8V	
Charging Time:	20% to 85% charge in 4¼ hours 20% to 100% charge in 5 hours	



### **Xpress Technical Specifications**

#### System Power Specifications:

Power Supply Specification	Magic Power MPM-X50-24
Output Voltage:	24 VDC
Output Current:	2.1 Amps
Input Power	100-240 VAC ~ 1.5 A, 50-60 Hz

#### **Classification:**

- Class II, Continuous Operation
- Type B applied parts Stethoscope

#### **General Specifications:**

- UL 60601-1: Issued: 2003-04-25 Standard for Safety Medical Electrical Equipment, Part 1: General Requirements for Safety, Ed.:1 Rev: 2006/04/26
- CAN/CSA C22.2 NO 60601-1 Medical Electrical Equipment Part 1: General Requirements for Basic Safety and Essential Performance (Adopted IEC 60601-1:2005, 3rd edition, 2005-12, including amendment 1:2012 with Canadian deviations).

#### **EMC Classification:**

- EN 60601-1-3:2005, A1:2012 Medical electrical equipment Part 1-2: General requirements for safety Collateral standard: Electromagnetic compatibility Requirements and tests
- IEC 60601-1-3:2005, A1:2012 Medical Electrical Equipment Part 1-2: General Requirements for Safety Collateral Standard: Electromagnetic compatibility Requirements and tests

#### **Environmental Specifications:**

#### **Operating:**

 Designed to operate in an environment suitable for human personnel. (10° to 40° C, 30 to 75% RH, 700 hPa to 1,065 hPa)

#### Non-operating:

- Designed to travel to installations in commercial and cargo airliners and standard ground transportation. (0° to +50° C, 10 to 95% RH, 700 hPa to 1,065 hPa)
- Ruggedized per MIL810F

#### **Ingress Protection (IP) Rating:**

• The InTouch Xpress has been tested and rated to be IP 3X.



## **Contact Information**

24 /7 Live Technical Support

(877) 484-9119

24 /7 Live Remote Technical Support & Live Chat

https://intouchhealth.com/contact-us/

E-mail Support

ITHSupport@intouchhealth.com

Website

www.InTouchHealth.com

InTouch Health User Manuals

https://intouchhealth.com/manuals/

Sales & Product Demos

(805) 562-8686



InTouch Technologies, Inc. 7402 Hollister Avenue, Goleta, CA 93117 Ph: 805.562.8686 • Fax: 805.562.8663 www.intouchhealth.com

