



Quick Start Guide

Introduction

BroadSign Xpress Pro is a cost-effective digital signage smart player based on an Intel SoC and the Windows Embedded Industry Pro 8.1 OS. Designed for digital signage by BroadSign, the smart player features must-haves like RS-232, auto power on and a detachable external WiFi antenna. It also offers two times the storage, RAM and cores at half the size of the Android-based BroadSign Xpress!

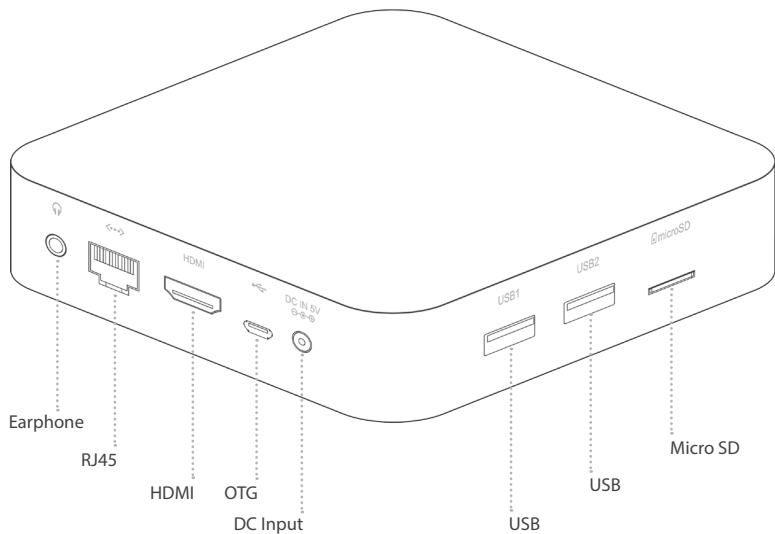
Inside the Box

- BroadSign Xpress Pro player
- 5V, 3A multi-country AC adapter 100-240V, 50/60Hz
- HDMI cable
- Detachable WiFi antenna
- Quick Start Guide
- The device is indoor use only
- 3G dongle is not in the package of Xpress Pro
- Temp Range: 25°C - 40°C
- Frequency Stability: ± 20 ppm

Get Started

1. Ensure your TV or PC monitor has at least one HDMI input.
2. Remove the BroadSign Xpress Pro player from its box.
3. Use the provided HDMI cable to connect your smart player to the screen.
4. If you intend to use a WiFi connection, attach the WiFi antenna to BroadSign Xpress Pro.
5. If you intend to use an ethernet connection, attach your RJ45 ethernet cable to the ethernet port.
6. Connect a mouse and keyboard to the USB ports.
7. Depending on your country, attach the correct plug to the AC adapter (US, UK and EU types included).
8. Plug in the AC adapter to the wall outlet. The BroadSign Xpress Pro player should power on automatically.
9. Turn on your screen and make sure it is set to the correct HDMI input.

BroadSign Xpress Pro: A Quick Look



Technical Specifications

Processor

Intel® Atom™ Processor
Z3735F Quad Core up to 1.83 GHz

GPU

Intel HD Graphics
OpenGL 4.0
DirectX 11.0

OS

Windows Embedded 8.1 Industry Pro

RAM

2GB DDR3

Storage

32GB EMMC

Video Output

Full-size HDMI 1.4

Audio Output

3.5 mm Audio Jack, HDMI 1.4

Connectivity

Dual-Band 2.4 GHz + 5 GHz WiFi a/b/g/n
Bluetooth 4.0
10/100 Mbps Ethernet

Ports

- Micro SD Slot up to 64GB
 - 2x USB 2.0
 - 1x USB OTG
 - 1x RS-232
-

Full 1080p HD Video

Supports compelling full-HD video and content.
Hardware decoding: h.264/MPEG-2
Software decoding: h.264/MPEG-1 & 2/DivX, XviD,
VC-1, WMV, Sorenson 3, FLV

**Chromium-powered
HTML5**

Compatible with the latest HTML5-based
content.

Adobe Flash 18

Commercially licensed, modern Flash runtime
with hardware acceleration.

Multi-frame

Works with your BroadSign designs and templates,
including multiple video frames.

Connectivity

Includes two USB ports for connection to I/O
devices.

Wired and Wireless

Comes with built-in ethernet, WiFi and supports
3G dongles.

Complete QA

Extensively tested and qualified by BroadSign.

One Year Warranty

Login

First Login

BroadSign Xpress Pro comes preconfigured with a hardened Windows Embedded Industry Pro 8.1 OS image and license. When prompted to login, enter the following credentials:

Username: **XpressPro**

Password: **bboxpro**

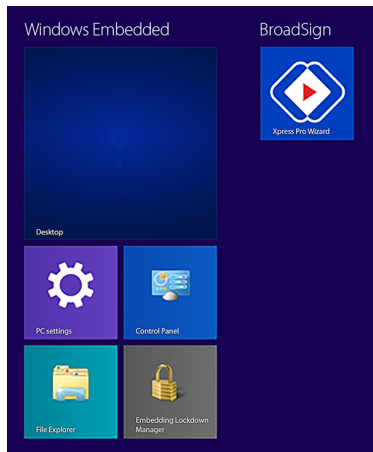
For security reasons, it is highly recommended that you change the default password. To do so, please visit:

PC Settings > Accounts > Sign-in Options > Password > Change

Start Screen

Next Step

To install and configure the BroadSign player, click on the “BroadSign Xpress Pro Wizard” tile. Click “Yes” when prompted by User Account Control.

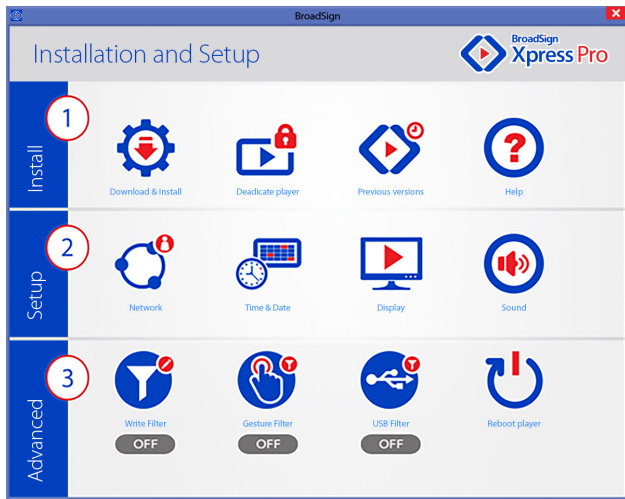


Other Tiles (optional)

1. To access the traditional Windows desktop, click the “Desktop” tile.
2. To access PC settings, click the “PC Settings” tile.
3. To access the control panel, click the “Control Panel” tile.
4. To browse the file system, click the “File Explorer” tile.
5. To configure advanced Windows Embedded features, click the “Embedded Lockdown Manager” tile.
6. To access other apps, click the down arrow at the bottom left hand corner.

BroadSign Xpress Pro Wizard

The BroadSign Xpress Pro Wizard is designed to assist and accelerate the process of installing and configuring the BroadSign Player software.



It provides easy access to the four most common OS configurations required: Network, Time, Display and Sound, and gives a simple on/off toggle of advanced Windows Embedded features explained later in this guide.

1 Install



Download and Install

Click this button to automatically download and install the latest version of the BroadSign Player. Follow the onscreen prompts to complete the installation.



Dedicate Player

Click this button to dedicate the player. This creates a new user with a custom secure shell. When rebooted, the player will automatically start in a secure environment instead of a full desktop.



Previous Versions

Click this button to access the download area to download and install a specific BroadSign Player version other than the latest.



Help

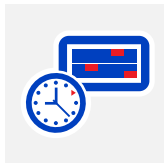
Click this button to access more information and the support page for BroadSign Xpress Pro.

2 Setup



Network

Provides a convenient direct access to Windows network settings. Configure your ethernet and WiFi connection settings.



Time and Date

Convenient direct access to Windows time and date settings.

Please make sure to specify the correct date, time and time zone.



Display

Direct access to display settings. Configure your display properties as desired.



Sound

Direct access to the sound settings. Configure your desired sound properties here.

3 Advanced Windows Embedded Features



Write Filter

Enables the write-protecting of the c:\ drive to prevent OS corruption and guaranteed boot state. Please see the next page for more details.



Gesture Filter

For touchscreens, the gesture filter will disable all edge gestures for the dedicated BSP user account. Please see the next page for more details.



USB Filter

Secure your device by allowing only trusted USB devices to be connected. Please see the next page for more details.



Reboot Player

For your convenience, click this button to reboot the player after making changes.

3 Advanced Windows Embedded Features

Write Filter

The Unified Write Filter intercepts all write attempts to the drive and redirects those write attempts to a virtual overlay. Conceptually, an overlay is similar to a transparency overlay on an overhead projector. Any change that is made to the transparency overlay affects the projected picture as it is seen by the viewer. However, if the transparency overlay is removed, the underlying picture remains unchanged.

This improves the reliability and stability of your device and makes the device impervious to viruses and malware as any changes cannot persist after a reboot.

WARNING:

Enabling the Write Filter can break many third-party applications. BroadSign does not support the configuration of third-party services when the Write Filter is enabled. The Embedded Lockdown Manager can be used to view and modify the overlay exceptions. By default, the overlay has exceptions for the BroadSign Player files and folders, so that content downloaded by the player is persisted on disk.

Gesture Filter

Enable this feature if you intend to use a touchscreen device and want to block unwanted edge and corner gestures.

USB Filter

The USB Filter is a USB port and device base filter that you can use to allow trusted USB devices to connect to a system. The USB Filter intercepts device connect requests and only allows USB devices with matching device product ID, device vendor ID or device class ID set by the administrator to be active and detectable.

When this filter is activated, all currently connected USB devices are scanned and added to a whitelist. All other USB devices will be blocked.

FAQ

How do I get into the BIOS?

As the device boots, repeatedly press the “Esc” key.

How do I obtain maximum video decode performance?

BroadSign recommends that hardware decoding be enabled in the Player’s configuration profile. If software decoding is needed for synchronization, transitions and gapless playback, BroadSign suggests using the OpenGL video output, as it is more efficient than the default Direct3D video output on this device. More information can be found in BroadSign’s online documentation.

Should I use the Write Filter?

Only if you understand what it is, how it works and how it could potentially interfere with third-party programs and cause user confusion as to why settings aren’t saved. In many cases, it is expected that the Write Filter cannot be activated due to other requirements.

When should I enable the Write Filter?

It should be enabled after configuration is complete and you are ready to “seal” the image. If you need to make changes, you can disable it, reboot, make changes and re-enable it to “re-seal” the image.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

