

BEALE

Xpress

D2.1

Digital 2.1 Channel Amplifier

User Guide



XPECT MORE

Important Safety Instructions



CAUTION: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.

▪ Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR USAGE

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE PLUG TO WIDE SLOT, INSERT FULLY.

ATTENTION: POUR EVITER LES CHOCs ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

PORTABLE CART WARNING



13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
16. **CAUTION:** Servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
17. **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
18. Where an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
19. **CAUTION:** Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

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Introduction

Congratulations and thank you for purchasing the Xpress D2.1, Digital 2.1 channel audio amplifier!

The compact size and advanced design of the D2.1 deliver a whole lot more than just great, powerful, clear audio in a small package. The D2.1 delivers a true 50 Watts at 8 Ohms, making it the perfect companion for all Xpress in ceiling and in wall speakers. Though we'd rather that you used our speakers, the D2.1 will also team up nicely with other branded speakers...when those situations are just unavoidable.

Are you a bass freak? If so, the D2.1 has a line level subwoofer output that can be used to drive an Xpress subwoofer amplifier and subwoofer for additional bass extension and presence. (Of course, if you have to, you can use other branded amps and subs, but c'mon...Get Beale!)

Beyond all of the great audio amplification and subwoofer flexibility, are the other great features that make the D2.1 so powerful. Let's start with three audio inputs, including stereo line level, Digital Optical and a special Bluetooth streaming input. All three inputs are auto-sensing so when the music plays on any source, the D2.1 will automatically turn ON making system control as easy as pressing the play button or turning on the TV.

The D2.1 also features IR control from the D2.1 IR Remote for source selection, volume, mute, EQ. The IR Remote also features commands for Bluetooth device control for most current Bluetooth devices. (Even though the D2.1 is auto-sensing we have also provided IR control of power ON/OFF, for applications where manual power is preferable.) The built-in IR eye, increases installation location options in that by using an IR control system, and yes we make those too, the D2.1 can be hidden away in a cabinet or closet and still be controlled via remote control.

Got Bluetooth? Good...so do we! The Xpress Bluetooth Module will interface with most current Bluetooth devices for streaming audio from smartphones, tablets and other Bluetooth devices. The D2.1 features a special port for the Bluetooth Module that not only acts as an audio input, but also outputs play commands to the Bluetooth device, when triggered by the D2.1 IR Remote!

So let's see...compact size, big power, sub out, three audio inputs, auto-sensing, IR control of the amp and a Bluetooth device, wow, that's a whole lot of stuff right?

Well there's more...like the D2.1 Setup App.

The Setup App communicates with the D2.1 via the Bluetooth Module. The App allows access to and control of typical functions like volume, balance, sub level and source select but there's more to it than that. Like the ability to create, store and recall different amp setup configurations. Max output limiting. Select and set custom EQ settings that can then be selected with the IR Remote. Auto-sense ON/OFF with source priority that determines which source plays if more than one source is playing at the same time and variable auto-OFF delay. The App also includes configurable sub/LFE selection, variable crossover, slope and phase with a variable high-pass setting for main speaker low frequency cutoff for fine tuning the amp and speakers to the given room environment.

So yes, the best things do come in small packages.

Please read and follow the instructions in this User Guide to assure you are getting the most from your new Xpress D2.1 Digital 2.1 Channel Amplifier.

Features

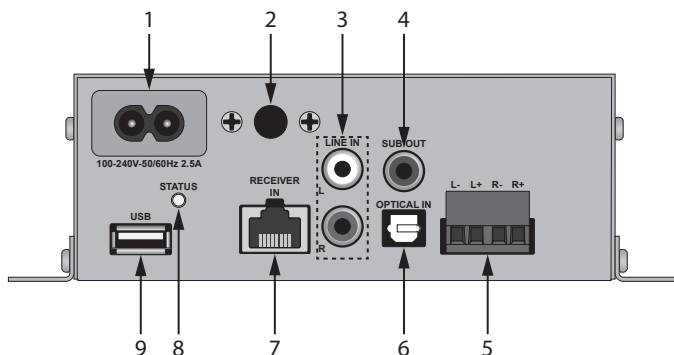
- Compact size...fits almost anywhere
- Cool, efficient digital design
- Stereo Audio Line level Input (RCA)
- Digital Optical Audio Input
- Bluetooth Compatible (audio and control)
- Line Level Subwoofer Output (RCA)
- 5VDC power supply output for Xpress Accessories
- 10 Band Graphic EQ
- Adjustable High-Pass or full range speaker settings
- Adjustable Subwoofer crossover frequency, slope and phase settings
- Anti-clipping Output Limiter
- Bluetooth playback control via IR Remote Control

What's Included

- 1 - D2.1 Amplifier
- 1 - AC Power Cord
- 1 - Owner's Manual

D2.1 Inputs & Outputs

These connectors connect things to the D2.1...some actually do some other stuff too...



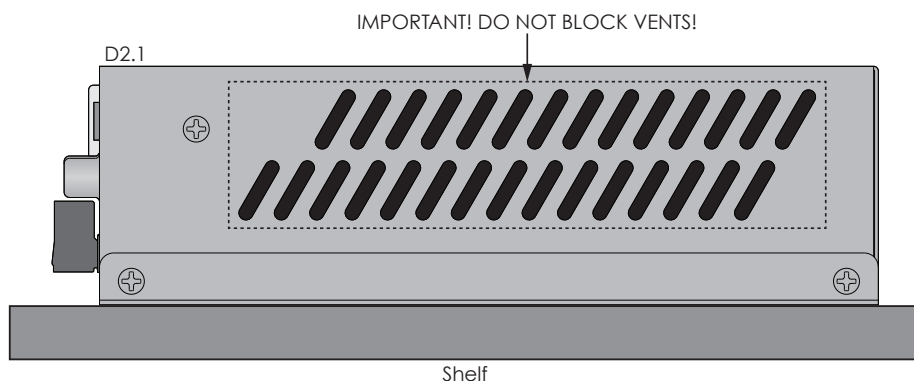
- 1. AC POWER TERMINAL (100-240V-50/60Hz 2.5A)** - Universal power connector. Automatically selects AC power mode (110VAC/220VAC) when connected to AC power. After all connections have been made, connect the supplied AC Power Cord to an unswitched AC power outlet.
- 2. IR SENSOR** - IR sensor 'sees' the IR commands from the D2.1 IR Remote, or other properly configured programmable remote to control D2.1 Power, Volume, EQ Input, etc.
- 3. LINE IN (L&R)** - Two RCA jacks. Analog audio sensing input. When an audio signal is present on these jacks the amplifier will turn ON. The amp will enter sleep mode when no audio input has been sensed for a configurable delay to save energy. Using a stereo RCA cable with gold ends, connect to the L&R line level audio output on a source to be played through the D2.1. If the source has variable output be sure to lower the volume on the source prior to turning the source and amp on to avoid unintentional damage to the D2.1 and/or speakers. Set source to an appropriate output level during audio level setup.
- 4. SUB OUT** - One RCA jack. Outputs line level low frequency content to a powered subwoofer. Using a mono RCA cable, connect to the Sub IN or LFE jack on a powered subwoofer.
- 5. SPEAKER TERMINALS** - Four-position plug-in screw terminal. Outputs speaker level audio to left, right channel speakers or a sound bar. Using 16AWG (min) speaker wire, connect to the appropriate speaker terminals on a sound bar or left and right speakers. Before connecting the speaker wire to the amp, twist the ends of the speaker wire so there are no strays that can cause shorts.
- 6. OPTICAL IN** - S/PDIF Optical Terminal. Digital audio sensing input. When an audio signal is present on this terminal, the amplifier will turn ON. The amp will enter sleep mode when no audio input has been sensed for a configurable delay to save energy. Using an optical audio cable, connect to the Optical output of a TV or other device to be played through the D2.1.

- 7. RECEIVER IN** - RJ45 Connector. Allows connection of the Xpress Bluetooth Streaming Audio/Setup Module. Allows setup of the D2.1 via D2.1 Setup App and Bluetooth Module. Also allows IR control of a connected Bluetooth streaming device via the Xpress Bluetooth Module, using the D2.1 IR Remote or other properly programmed IR System Remote. Using Cat5/5e/6 cable, connect to the RJ45 jack on the Xpress Bluetooth Setup/Streaming Module.
- 8. STATUS** - LED flashes or illuminates solid to indicate various setup modes.
Solid ON - Power ON
OFF - Power OFF or Standby depending upon setup
See IR Learning Section for other Status LED modes.
- 9. USB** - Provides 5VDC to Xpress Accessories.

D2.1 Side Vents

Even though the D2.1 will typically run cool, the side vents allow air to circulate through the chassis allowing optimum performance, and besides...they just look cool...get it...air vents... look *cool*...never mind...

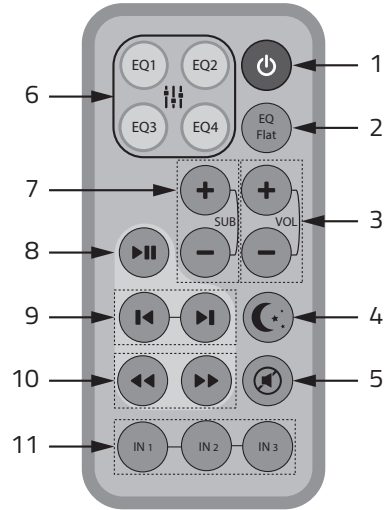
One serious item...please be sure to not block the vents with wires or other objects that will block the free flow of air through the amp.



D2.1 IR Remote

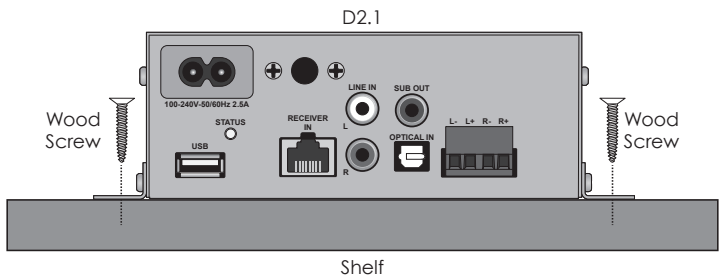
Push the buttons...stuff happens...

1. **POWER** - Toggle power button. Press once to turn the D2.1 ON. Press again to turn the D2.1 OFF.
2. **EQ FLAT** - Press to cancel active EQ and return all EQ settings to neutral (flat).
3. **VOLUME UP/DOWN**- Press '+' to increase volume. (Turn it up.) Press '-' to decrease volume. (Turn it down.)
4. **NIGHT MODE**- Press once to turn Night Mode ON (Night Mode maintains relative dynamics of audio content at low listening levels.) Press again to turn Night Mode OFF.
5. **MUTE** - Toggle mute. Press once to mute speakers. Press again to un-mute speakers.
6. **EQUALIZER 1-4** - Select EQ 1-4. These settings are identical to the EQ1-4 settings in the D2.1 Setup App.
7. **SUB UP/DOWN** - Press '+' to increase D2.1 Sub Out level. Press '-' to decrease D2.1 Sub Out level.
8. **BLUETOOTH PLAY/PAUSE** - Toggle Play/Pause when controlling a Bluetooth device paired to an Xpress Bluetooth Module connected to the D2.1 RJ45 Receiver IN jack. Press once to Pause. Press again to Play.
9. **BLUETOOTH SKIP FORWARD/BACK**- Press ◀ to skip to the previous track when controlling a Bluetooth device paired to an Xpress Bluetooth Module connected to the D2.1 RJ45 Receiver IN jack. Press ▶ to skip to the next track.
10. **BLUETOOTH SCAN FORWARD/REVERSE** - Press ◀◀ to reverse scan to the current track when controlling a Bluetooth device paired to an Xpress Bluetooth Module connected to the D2.1 RJ45 Receiver IN jack. Press ▶▶ to forward scan the current track.
11. **INPUT SELECT** - **IN 1** - Press to select the source connected to the D2.1 L&R Line Level IN.
IN 2 - Press to select the source connected to the D2.1 Optical IN.
IN 3 - Press to select the source connected to the D2.1 Xpress Bluetooth Module connected to the Receiver IN.



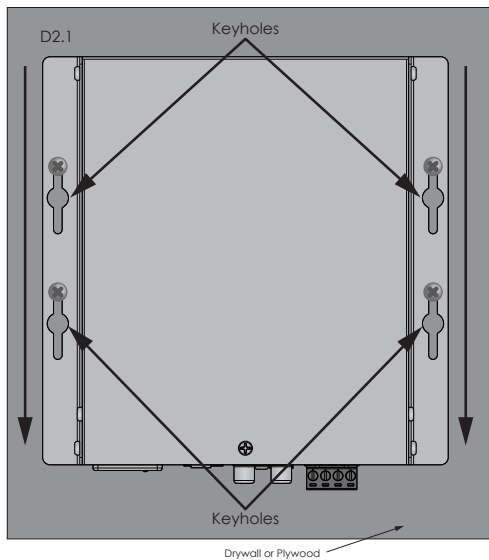
Installation

Here's where you can stick it...and how...



SHELF MOUNT

The D2.1 can be conveniently mounted on a shelf top as shown. Use wood screws to secure the amp to the shelf to avoid having the amp slide off the shelf and possibly damage the amp, connected cables or other equipment. Leave room for wires. Allow adequate space for airflow. Do not set objects on top of the amp.



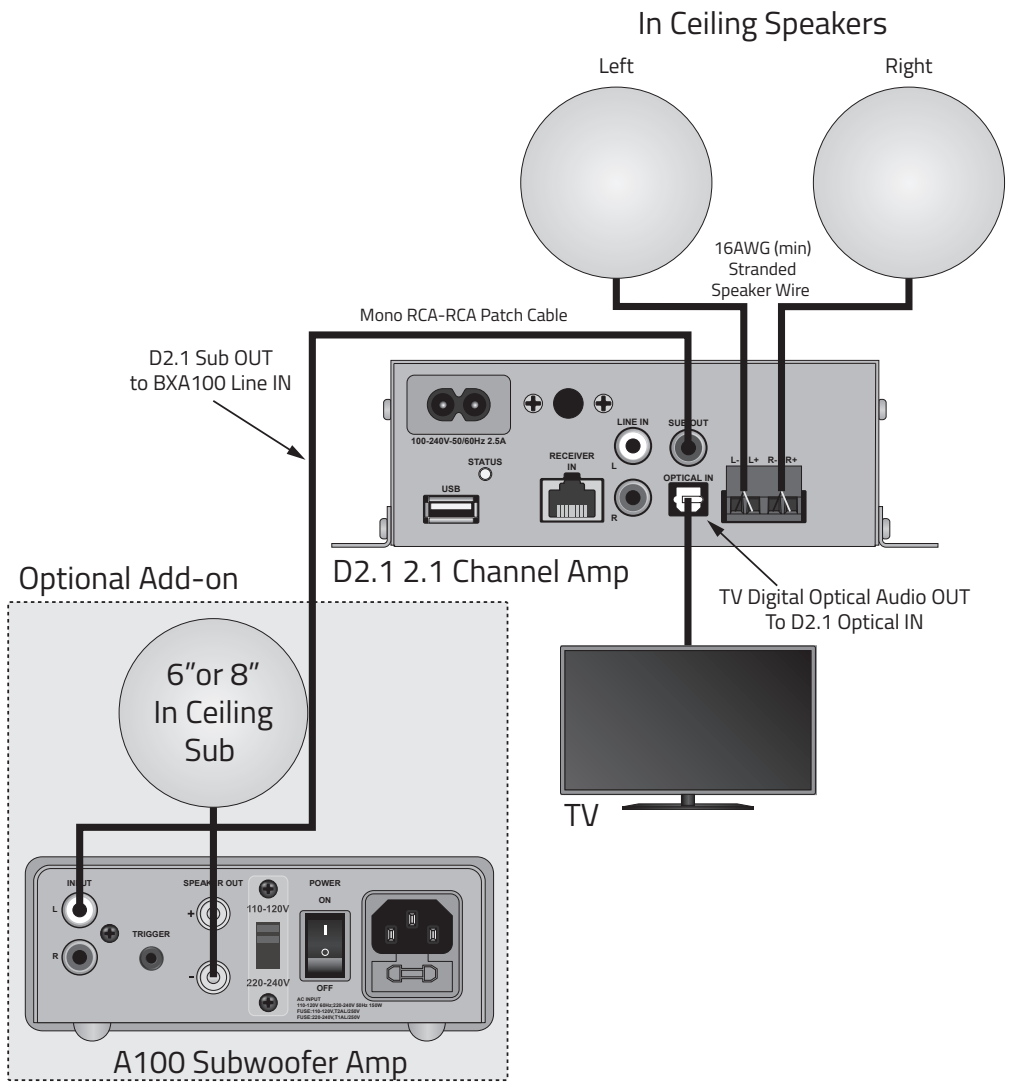
WALL MOUNT

The D2.1 can be wall mounted to the inside of an equipment cabinet or regular wall surface. A sheet of plywood or particle board attached to wall studs makes a good mounting surface, otherwise use proper drywall anchors to assure a secure mount. Install wood screws at the spacing of the mounting bracket keyholes. Slip the amp (connector plate end down) over the screw heads and then slide the amp down to lock the amp in place. Tighten the screws to secure the amp to the wall. Leave room for wires. Allow adequate space for airflow. Do not set objects on top of the amp.

Connections

All connections are conveniently placed on the side panel for sane wire management, convenient connections and simple service.

The illustration shows the D2.1 in a typical home entertainment system for TV audio with stereo in ceiling speakers with a subwoofer amp and subwoofer.



Connections

NOTE: Do not connect the AC power cord or turn the amp on until all connections have been made and confirmed. Making connections with the power on can result in...well...undesirable circumstances...that may not be covered under the factory warranty.

OPTICAL IN (TV AUDIO CONNECTION)

1. Using a Digital Optical Audio cable, connect the Digital Optical Audio OUT on the TV (or other source) to the Optical IN on the D2.1. To select this input, press IN 2 on the D2.1 IR Remote.

SUB OUT (BXA100 SUBWOOFER AMP CONNECTION)

1. Using a mono RCA-RCA cable with gold ends, connect the Sub OUT on the D2.1 to the Sub IN on the BXA100 subwoofer amp , a powered sub or other subwoofer amplifier.

L- L+ R- R+ (SPEAKER CONNECTIONS)

1. Use 16AWG (min) 2-conductor stranded speaker wire for speaker connection
2. Strip approximately 1/2 to 3/4 of an inch off the ends and twist the strands together so there are no loose ends that can cause shorts.
3. While observing proper wire polarity, insert the stripped and twisted ends of the speaker wire into the appropriate + and - terminals for the left and right speakers.
4. Tighten the terminal screws.
5. Confirm connection and polarity.
6. Connect the speaker wires to the appropriate + and - terminals on the left and right speakers.
7. Confirm connection and polarity.

LINE IN (AUXILIARY AUDIO SOURCE)

1. Using a stereo RCA-RCA patch cable connect the L&R line level audio OUTs on a Bluetooth audio receiver or other source to the L&R Line IN on the D2.1. To select this input, press IN 1 on the D2.1 IR Remote.

RECEIVER IN (BLUETOOTH AUDIO STREAMING & AMPLIFIER SETUP)

1. Using a Cat5 patch cable with RJ45 connectors, connect the output of the Xpress Bluetooth Module to the Receiver IN port on the D2.1. For streaming audio, see section 'Operation' for information on pairing a Bluetooth device. For information regarding the setup App, please visit www.bealexpress.com for additional information.

AC POWER TERMINAL (100-240V-50/60Hz 2.5A)

1. After all connections have been made connect the supplied AC Power Cord to an un-switched AC power outlet. Automatically selects AC power mode (110VAC/220VAC) when connected to AC power.

NOTE: Do not connect the AC power cord or turn the amp on until all connections have been made and confirmed. Making connections with the power on can result in...well...undesirable circumstances...that may not be covered under the factory warranty.

Operation

You don't need to be a brain surgeon to perform these operations...

ON/OFF

The D2.1 is auto-sensing, so typically once the system is installed and setup, the power will automatically turn ON with the presence of an audio signal on either the Digital Optical IN, Line IN or Receiver IN. The amp will automatically turn OFF when no audio signal has been detected for the delay set using the Setup App.

POWER - If however you are a major control freak and just have to have the ability to turn the amp ON/OFF, press the Power button once to turn the amp ON, and press it again to turn the amp OFF.

VOLUME

VOLUME UP (+) - Press to increase volume. Turn it up! YAY!!!

VOLUME DOWN (-) - Press to decrease volume. Turn it down! BOO!!!

MUTE

(SPEAKER WITH A SLASH THROUGH IT SYMBOL) - Press once to mute the speakers while a source is playing. Press again to un-mute the speakers while a source is playing.

EQ

EQ FLAT - Press to cancel active EQ and return all EQ settings to neutral (flat).

EQ 1-4 - Press to adjust the tonal balance of the audio output to suit different audio content...whatever sounds good to you is the right setting!!!

NIGHT MODE- Press once to turn Night Mode ON (Night Mode maintains relative dynamics of audio content at low listening levels.) Press again to turn Night Mode OFF.

SOURCE SELECT

IN 1 - Press to select the source connected to the Line L&R jacks on the D2.1.

IN 2 - Press to select the source connected to the Digital Optical jack on the D2.1.

IN 3 - Press this button to select the Xpress Bluetooth Module connected to the Receiver In Port on the D2.1.

Operation

XPRESS BLUETOOTH MODULE

OK...so you're one of the really smart people who also purchased the Xpress Bluetooth Module. This device will not only allow you to stream your favorite audio content via Bluetooth from almost any current Bluetooth device to the D2.1, but it will also allow IR control of D2.1 functions, (source select, volume, mute, EQ etc) but also allow IR control of most current Bluetooth devices using either the D2.1 IR Remote or other properly programmed IR remote control.

PAIRING A BLUETOOTH DEVICE

With the Bluetooth Module connected to the D2.1, open the Bluetooth Menu on the device to be paired. Select Xpress Bluetooth Module from the list. Done...Really...That's it...Go ahead...play something...pretty cool huh?

BLUETOOTH TRANSPORT FUNCTIONS

BLUETOOTH PLAY/PAUSE - Toggle Play/Pause when controlling a Bluetooth device paired to an Xpress Bluetooth Module connected to the D2.1 RJ45 Receiver IN jack. Press once to Pause. Press again to Play.

BLUETOOTH SKIP FORWARD/BACK- Press |◀ to skip to the previous track when controlling a Bluetooth device paired to an Xpress Bluetooth Module connected to the D2.1 RJ45 Receiver IN jack. Press ▶| to skip to the next track.

BLUETOOTH SCAN FORWARD/REVERSE - Press ◀◀ to reverse scan to the current track when controlling a Bluetooth device paired to an Xpress Bluetooth Module connected to the D2.1 RJ45 Receiver IN jack. Press ▶▶ to forward scan the current track.

IR Learning

What...you don't want to have to use more than one remote to control your system??? WOW... some people!!! Well...if you insist...here's what you can do to use a TV or other pre-programmed remote to control the D2.1. (You can also teach the IR commands from the D2.1 IR Remote to a programmable IR system remote if you prefer.)

The D2.1 can learn IR commands for ON/OFF, Volume UP/DOWN, Mute and IN 3.

Please carefully follow the steps below to teach the D2.1 the IR commands to be used from the remote to be used for system control.

TO ENTER LEARNING MODE

1. Press the Power button on the D2.1 IR Remote to turn D2.1 power OFF.
2. Sequentially press the Mute, IN 3 and Volume Down (-) buttons to enter the learning mode.
3. Status LED will turn ON.

POWER

1. Press the Power button on the D2.1 IR Remote. The Status LED will flash once and turn OFF.
2. Press the button on the system remote to be used for turning the D2.1 ON/OFF.
3. The Status LED should flash twice and turn OFF.
4. Press the button on the system remote again. The Status LED will flash once and turn ON to confirm the learned code.
5. To exit Learning Mode, press IN 1, otherwise press the next button to be learned.

VOLUME UP

1. Press the Volume UP button on the D2.1 IR Remote. The Status LED will flash once and turn OFF.
2. Press the button on the system remote to be used for Volume UP.
3. The Status LED should flash twice and turn OFF.
4. Press the button on the system remote again. The Status LED will flash once and turn ON to confirm the learned code.
5. To exit Learning Mode, press IN 1, otherwise press the next button to be learned.

VOLUME DOWN

1. Press the Volume DOWN button on the D2.1 IR Remote. The Status LED will flash once and turn OFF.
2. Press the button on the system remote to be used for Volume DOWN.
3. The Status LED should flash twice and turn OFF.
4. Press the button on the system remote again. The Status LED will flash once and turn ON to confirm the learned code.
5. To exit Learning Mode, press IN 1, otherwise press the next button to be learned.

IR Learning

MUTE

1. Press the Mute button on the D2.1 IR Remote. The Status LED will flash once and turn OFF.
2. Press the button on the system remote to be used for Mute.
3. The Status LED should flash twice and turn OFF.
4. Press the button on the system remote again. The Status LED will flash once and turn ON to confirm the learned code.
5. To exit Learning Mode, press IN 1, otherwise press the next button to be learned.

INPUT 3 SELECT

1. Press the IN 3 button on the D2.1 IR Remote. The Status LED will flash once and turn OFF.
2. Press the button on the system remote to be used for IN 3.
3. The Status LED should flash twice and turn OFF.
4. Press the button on the system remote again. The Status LED will flash once and turn ON to confirm the learned code.
5. To exit Learning Mode, press IN 1, otherwise press the next button to be learned.

TO EXIT LEARNING MODE

1. Press the IN 1 button on the D2.1 IR Remote to exit learning mode. The Status LED will turn OFF.

TO CLEAR ALL LEARNED COMMANDS

First Enter Learn Mode:

1. Press the Power button on the D2.1 IR Remote to turn D2.1 power OFF.
2. Sequentially press the Mute, IN 3 and Volume Down (-) buttons to enter the learning mode.
3. Status LED will turn ON.

In Learn Mode:




4. Press the IN 2 button on the D2.1 IR Remote to clear all learned commands. The Status LED will flash once.

To Exit Learn Mode:

5. Press the IN 1 button on the D2.1 IR Remote to exit learning mode. The Status LED will turn OFF.

Factory Reset

RESET TO FACTORY DEFAULT SETTINGS

1. Sequentially press the    buttons to restore the D2.1 to factory default settings. The Status LED will turn ON then OFF.

NOTE: It is not necessary to be in Learn Mode to reset factory default settings.

Specifications

AUDIO

Maximum Output Power per Channel.....	50W
THD+N	<0.5%
Signal to Noise (RCA/Bluetooth).....	78dB
Signal to Noise (Optical).....	90dB
Input Sensitivity	500mV

GENERAL

DC Power Supply Output.....	+5VDC/0.5A
Line Voltage Range	100~240 VAC
Standby Power	1W
Dimensions.....	5.3"W x 6.9"H x 2" D (135mm W x 175mm H x 51mm D)
Weight.....	2.3lbs (1kg)

Limited Warranty

All in-wall, in-ceiling, outdoor speakers, volume controls, and freestanding loudspeakers have a Lifetime Limited Warranty. This warranty includes lifetime parts and repair on components. Powered subwoofers and Xpress amplifiers have a two (2) year limited warranty. This warranty includes two (2) year parts and repair labor on components. Xpress obligation under this warranty is limited to repairing or replacing any component found defective in material or workmanship under normal conditions of use. This warranty shall not apply to products which have been abused, modified, disassembled, or repaired by anyone other than Xpress or one of its appointed service centers. Products to be repaired under this warranty must be returned to the factory or designated service center with all transportation and insurance charges pre-paid.

IMPORTANT: This warranty is ONLY valid if the product is purchased through a Certified Xpress Dealer. Proof of purchase may be required.

Note: It is the policy of Xpress to continuously incorporate improvements into our products. All specifications, warranty terms, and prices are subject to change without notice.

Notes

Notes



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