

## Neets Control – EcHo

8-Button Keypad control system



Neets Control – EcHo provides uniform AV control interface in all rooms through an 8-Button Keypad with built-in controller.

Reliable and intuitive control system and easy to use. EcHo has 1 NEB port for expansion opportunities. EcHo fits most standard installations and is easy to install, configure and integrate into existing AV-installations.

## Features

### 8-Button AV control system

The world's most compact AV control system – no external processors required

### 8 Freely configurable keypad buttons

Provides uniform AV control interface in all rooms and all 8 buttons can be configured for any function

### 1 Bi-directional RS-232 port

Used for controlling projectors, displays, amplifiers & other AV devices with feedback functionality

### 1 Uni-directional RS-232 or 1 IR port

Used for sending commands to projectors or other AV devices using serial or infrared communication

### 3 General Purpose I/O ports

Used for input/output control of relays, switches and sensors

### 1 NEB port (Neets Expansion Bus)

Add 2 additional devices - choose between Keypad, Level Control or Port Expansion (serial and I/O).

### 1 front USB port

Used for easy system configuration, uploading and downloading project files, service and maintenance

**Included:** Configuration through our free and no-license software: Neets Project Designer

# Neets Control – EcHo

8-Button Keypad control system

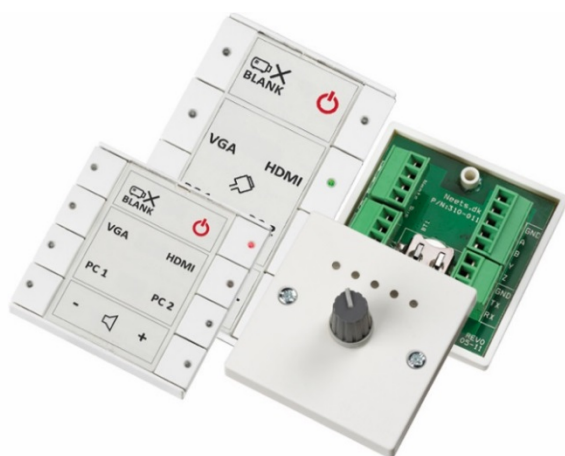
## Neets Expansion Bus (NEB)

With NEB you get additional expansion possibilities to your AV-installation. Add extra functions to control the AV-equipment and increase ease of use.

NEB Keypad,  
Add extra keypads to your installation

NEB Level Control  
Level button with turn function and indication

NEB Port Expansion.  
The NEB Port Expansion adds extra ports



## Backside overview

EU, DK and US versions



## Technical Specifications

Communication ports:  
1 x RS-232 (TX and RX)  
Baud: 1200 – 115200

Data Bit: 7/8  
Parity: None, Even, Odd  
Stop Bit: 1/1.5/2

1 x RS-232 or IR (TX only)  
Baud: 1200 – 115200  
Parity: None, even, odd  
Stop Bit: 1/1.5/2

IR:  
Transmit  
381 Hz – 500 kHz  
Devices: 2

3 x I/Os (GPIO)  
Input:  
Sense Low: <1 VDC  
Sense High: >4 VDC

Output:  
Type: Open drain  
Max Voltage: 24 VDC  
Max Current: 0.5 A

Neets Expansion Bus (NEB)  
12 V (0.3 A) output  
2 devices

Included in box  
12 V PSU (110- 230V AC)

Dimensions  
(without frame) (EU):  
Width: 55 mm  
Height: 55 mm  
Depth: 17 mm

Dimensions  
(without frame) (DK):  
Width: 72 mm  
Height: 45 mm  
Depth: 17 mm

Dimensions  
(without frame) (US):  
Width: 45 mm  
Height: 105 mm  
Depth: 24 mm

Weight (EU,DK,US)  
90 g

Compliance:  
Approval: CE, FCC (part 15, class A)  
IEC/ EN 61000-6-1  
IEC/ EN 61000-6-2

Product item numbers:  
310-0150:  
Neets Control – EcHo Plus,  
EU - Polar white  
310-0151  
Neets Control – EcHo Plus,  
EU - Anthracite  
310-0250:  
Neets Control – EcHo Plus,  
DK - Polar white  
310-0251  
Neets Control – EcHo Plus,  
DK - Anthracite  
310-0450:  
Neets Control – EcHo Plus,  
US - Polar white