

XY I/O 1U

Link Connector Access Jacks



TABLE OF CONTENTS

COMPLIANCE	2
INSTALLATION	3
OVERVIEW	4
FRONT & BACK PANELS	4
OTHER USES	6
TECHNICAL SPECIFICATIONS	6



COMPLIANCE



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 Intellijel Designs, Inc. could void the user's authority to operate the equipment.

Any digital equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.



This device meets the requirements of the following standards and directives:

EMC: 2014/30/EU
EN55032:2015 ; EN55103-2:2009 (EN55024) ; EN61000-3-2 ; EN61000-3-3

Low Voltage: 2014/35/EU
EN 60065:2002+A1:2006+A11:2008+A2:2010+A12:2011

RoHS2: 2011/65/EU

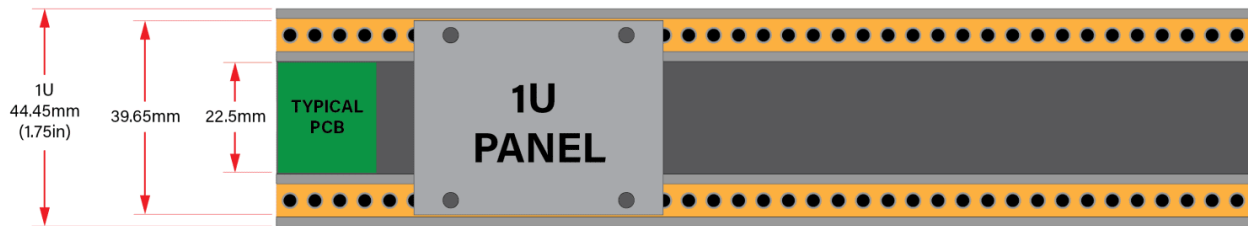
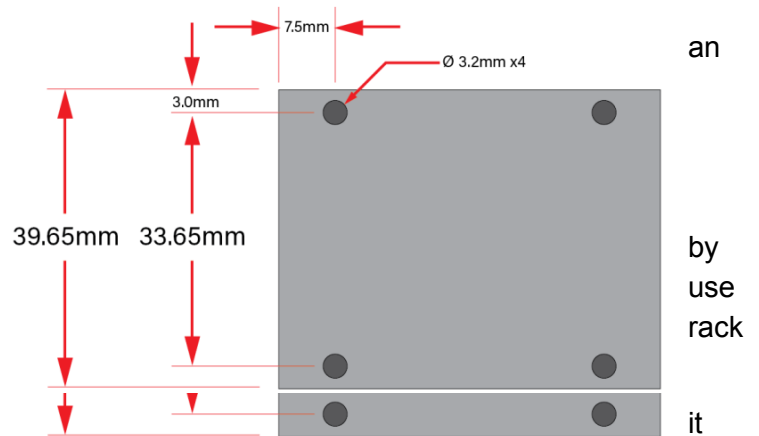
WEEE: 2012/19/EU



INSTALLATION

This module is designed for use within Intellijel-standard 1U row, such as contained within the Intellijel 4U and 7U Eurorack cases. Intellijel's 1U specification is derived from the Eurorack mechanical specification set Doepfer that is designed to support the use of lipped rails within industry standard heights.

Because XY IO 1U is a passive module, it requires no power to operate.



OVERVIEW

Use this module to tap into the 3-pin LINK connector used in several Intellijel products, including **Mixup**, **Switched Mult 1U**, **Pedal I/O** and the various **Palette** and **7U** cases (NOTE: 7U cases requires a 2nd Generation Audio Jacks Board).

It uses two 3.5mm TRS jacks, which accept insert cables to provide send/return capability to a pair of Pedal I/O's, or additional stereo inputs (or outputs) to a pair of Mixups, or one of each.

A third 3-pin Link connector on the back panel allows the **X** and **Y** jacks to sum with the **X** and **Y** busses on a Switched Mult 1U, or to access the L/R (or Send/Return) jacks on a single connected module or case without needing a stereo cable.

FRONT & BACK PANELS

[X] X - This stereo 3.5mm (tip/ring/sleeve) jack connects to **JP1 [1]** and **JP2 [2]** on the back panel as follows:

TIP: connects to both JP1 PIN 1 and JP2 PIN 1

RING: connects to JP1 PIN 3

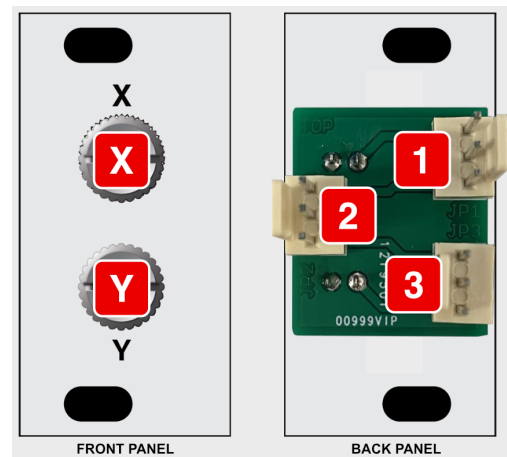
SLEEVE: Ground

[Y] Y - This stereo 3.5mm (tip/ring/sleeve) jack, connects to **JP2 [2]** and **JP3 [3]** on the back panel as follows:

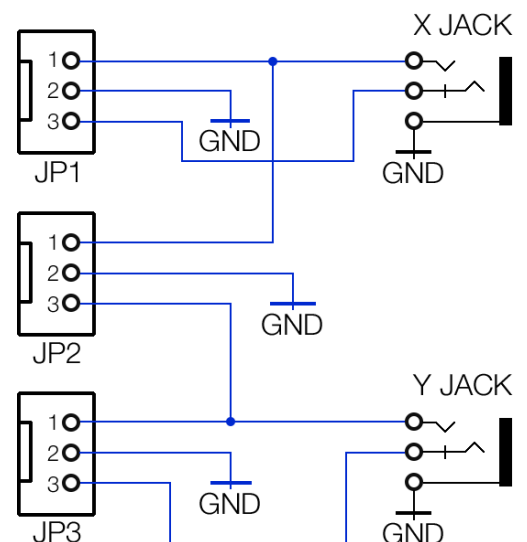
TIP: connects to both JP3 PIN 1 and JP2 PIN 3

RING: connects to JP3 PIN 3

SLEEVE: Ground



The illustration on the right shows how the **X** and **Y** jacks are wired to the **JP1**, **JP2** and **JP3** jacks on the back panel.



[1] JP1 - This 3-pin LINK connector is internally wired to the **X [X]** TRS jack on the front panel as follows:

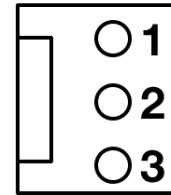
- PIN 1:** connects to **X TIP**
- PIN 2:** connects to ground
- PIN 3:** connects to **X RING**

Connect this to another module's 3-pin Link Connector.

Example 1: Mixup - Connecting JP1 to the CHAIN IN on an Intellijel Mixup gives you an extra stereo input through the front panel **X** jack, where **X TIP = LEFT CH** of Mixup, and **X RING = RIGHT CH** of Mixup.

Example 2: Pedal I/O - Connecting JP1 to a Pedal I/O provides you with send and return on a single 3.5mm TRS insert cable, where **X TIP = SEND** and **X RING = RETURN**.

3-PIN LINK CONNECTOR (JP1 - JP3)



[2] JP2 - This 3-pin LINK connector is wired to both the **X [X]** and **Y [Y]** TRS jacks on the front panel. Specifically:

- PIN 1:** connects to **X TIP**
- PIN 2:** connects to ground
- PIN 3:** connects to **Y TIP**

This has numerous uses, including:

- Connecting a Switched Mult 1U, such that an extra jack is added to both the Switched Mult's **X** and **Y** busses.
- Connecting a Pedal I/O without using a TRS insert cable. Specifically:
 - X** jack (TIP) = **SEND** to Pedal
 - Y** jack (TIP) = **RETURN** from Pedal.
- Feeding the Left and Right CHAIN IN connector on a Mixup using regular mono eurorack cables. Specifically:
 - X** jack (TIP) = **LEFT** input to Mixup
 - Y** jack (TIP) = **RIGHT** input to Mixup.

[3] JP3 - This 3-pin LINK connector is internally wired to the **Y [Y]** TRS jack on the front panel as follows:

- PIN 1:** connects to **Y TIP**
- PIN 2:** connects to ground
- PIN 3:** connects to **Y RING**

This works as described for **JP1**, and provides the same connection options to external modules, except that the **Y** jack (and not the **X**) is connected to **JP3**.

OTHER USES

Other usages are possible given a bit of ingenuity. These include:

- Make a Midi TRS Type-A to Type-B converter by cross patching the pins on the back with a jumper cable
- Make an 1/8" Floating Ring converter by linking the two together with only 2 of the pins
- Simple 1/4" to 1/8" converter with the Case Jacks
- Add an additional set of 1/8" inputs to Mixup (via Mixup's CHAIN IN) — handy for patching in small external synths (like Korg's Volca series), which have 1/8" outputs.
- Add additional jacks to the X and Y busses on a Switched Mult 1U.
- Use the Jacks as an I2C^(NOTE) header to link I2C modules across cases
- I2C^(NOTE) from something like the ER-301 (3Pin) to the 16-N Faderbank (TRS)

NOTE: Mileage may vary with I2C, depending on the hardware involved.

TECHNICAL SPECIFICATIONS

Width	4 hp
Maximum Depth	24 mm
Current Draw	No current draw - module is passive

