

This manual describes the additional functions of the IRTrans LAN Controller / LAN Controller XL compared to the IRTrans Ethernet modules. All further functions are identical with that of the IRTrans Ethernet modules with IRDB.

IRTrans LAN Controller

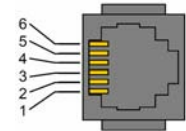


Connectors (from right to left):

1. IRTrans Serial bus
2. Power Supply
5.0/2.1mm DC plug, +pole center
8-16V DC / 500mA – 1.0A
(1.0A if the serial bus is powered)
3. IR LED Output 1
4. IR LED Output 2
5. IR LED Output 3
6. IR LED Output 4
7. Relay Output 1
8. Relay Output 2
9. Relay Output 3
10. Relay Output 4
11. Ethernet Connector (10/100 MBit; 100 MBit default)

Pin-Out Serial Bus:

- | | |
|------|------------------------------|
| 1/2: | 8-16V= /500 mA (Output only) |
| 3/4: | GND |
| 5/6: | Serial Bus IRTrans (Data) |



Pin out of the RJ12 Connector for the Serial Bus. View of the front of the connector.

The integrated IR Database has got a size of 128KB. That is twice the size of the conventional IRTrans Ethernet modules and allows to store around 1.000 – 1.600 IR Commands.

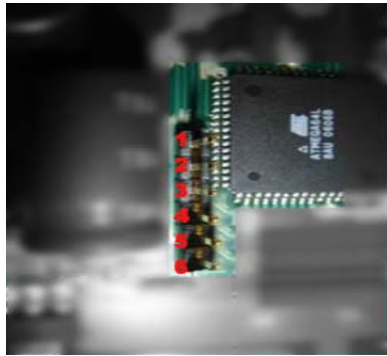
Important: In environments with a lot of IR noise (e.g. Plasma TV) the 455kHz IR Receiver should be switched off via the Device Settings of the GUI Client.



**LAN Controller
LAN Controller XL**

**Supplemental Users
Manual**

Jumper settings



Via this set of jumpers the LAN Controller can be configured:

- **10/100 MBit:** To select 10 MBit a jumper has to be placed on the pins 3-4 of the jumper line. Default (w/o jumper) is 100 MBit.
- **Factory Reset:** The device can be reset to factory settings by placing a jumper on the pins 2-3 and powering up the device. After the red status LED is off, the jumper can be removed.

Relay outputs / Analog inputs

The LAN Controller has got 4 I/O ports. They can either be used as relay outputs (max. 24V / 500mA) or as analog inputs (0-2,5V). The relay outputs can be controlled via IR or via any IRTrans Client (see software section for details). The IR Codes are configured via the IR Database.

When used as analog inputs preprogrammed IR Codes can be sent when certain preprogrammed analog values are reached. These values are also set using the IRTrans GUI client. To check the inputs and sensors the function „Analog Inputs“ of the GUI client can be used.

If a port is to be used as relay output or analog input is selected via jumpers:



Jumper setting for relay output.

(Default)



Jumper setting for analog input.

For each of the 4 I/O ports there are two jumpers.

The LAN Controller automatically detects how the jumpers are set.

When using the analog inputs the positive pole is connected to the tip of the 3,5mm phone plug.

IRTrans LAN Controller XL



Back of the IRTrans LAN Controller XL

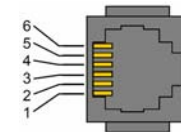
All connectors on the back are clearly marked.

Supply voltage: 5.0/2.1mm DC plug, +pole center; 8-16V DC / 500mA – 1.0A (1.0A if the serial bus is powered)

The integrated IR Database has got a size of 128KB. That is twice the size of the conventional IRTrans Ethernet modules and allows to store around 1.000 – 1.600 IR Commands.

Pin-Out Serial Bus:

- 1/2: 8-16V=500 mA (Output only)
- 3/4: GND
- 5/6: Serial Bus IRTrans (Data)



Pin out of the RJ12 Connector for the Serial Bus. View of the front of the connector.

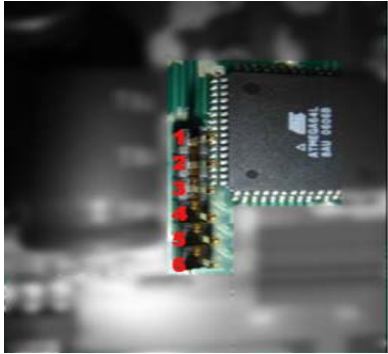
Important: In environments with a lot of IR noise (e.g. Plasma TV) the 455kHz IR Receiver should be switched off via the Device Settings of the GUI Client.



Front view of the IRTrans LAN Controllers XL

At the front of the device an additional RS232 device can be connected. Furthermore it is possible to connect to IR Receiver. If these connectors are used they have to be activated using a jumper inside the case. At the front panel there are also the integrated high power IR transmitters and the status LED of the device.

Jumper settings



Via this set of jumpers the LAN Controller can be configured:

- **10/100 MBit:** To select 10 MBit a jumper has to be placed on the pins 3-4 of the jumper line. Default (w/o jumper) is 100 MBit.
- **Factory Reset:** The device can be reset to factory settings by placing a jumper on the pins 2-3 and powering up the device. After the red status LED is off, the jumper can be removed.

Relay outputs / Analog inputs

The LAN Controller XL has got 4 I/O ports. They can either be used as relay outputs (max. 24V / 500mA) or as analog inputs (0-2,5V). The relay outputs can be controlled via IR or via any IRTrans Client (see software section for details). The IR Codes are configured via the IR Database.

When used as analog inputs preprogrammed IR Codes can be sent when certain preprogrammed analog values are reached. These values are also set using the IRTrans GUI client. To check the inputs and sensors the function „Analog Inputs“ of the GUI client can be used. A 5V DC aux. voltage for sensors can be activated using a jumper.

If a port is to be used as relay output or analog input is selected via jumpers:



Jumper setting for relay output. (default)



Jumper setting for analog input.



Jumper setting for Analog input. 5V aux. Voltage.

For each of the 4 I/O ports there are two jumpers.

The LAN Controller XL automatically detects how the jumpers are set.

When using the analog inputs the positive pole is connected to the tip of the 3,5mm phone plug. If used the 5V auxiliary voltage for sensors is connected to the mid ring of the 3,5mm phone plug.

Software

Control of the additional external LEDs

The additional external LEDs can be controlled as follows:

- Via the device settings (GUI Client and http) the setting *Internal* controls the internal High Power LEDs, *External* controls all external LEDs altogether.
- In the remote.irm configuration file (for the Panels of the GUI Clients) and the APIs (.NET and Active-X) the LEDs can be selected using the parameter ledSelect:
 - 1 Internal LEDs
 - 2 All external LEDs
 - 3 All LEDs (Internal + External)
 - 4-7 Direct control of the external LEDs 1-4 (LAN Controller)
 - 4-11 Direct control of the external LEDs 1-8 (LAN Controller XL)
- For UDP sending the following values are used:
 - LI Internal LEDs
 - LE External LEDs (all)
 - L1 – L4 External LED 1 – 4 (LAN Controller)
 - L1 – L8 External LED 1 – 8 (LAN Controller XL)
- For http Requests the following values are used:
 - led=I Internal LEDs
 - led=E External LEDs (all)
 - led=1 – led=4 External LED 1 – 4 (LAN Controller)
 - led=1 – led=8 External LED 1 – 8 (LAN Controller XL)

Control of the Relays

The control of the relays is possible using two ways:

- Using the Relay options of the IR Database the relays can be controlled via IR Commands. As always this option is configured using the GUI client.
- By “sending” special IR Commands using the IR remote *****relais_x** (x = number of the relay [1-4]) and the commands
 - 0 Relay off
 - 1 Relay on
 - I Relay on for 2 seconds (pulse)
 - T Toggle relay (On-Off-On ...)

the relays can be controlled using any IRTrans client (incl. HTTP and UDP).

EU Declaration of Conformity

For the following products

IRTrans LAN Controller
IRTrans LAN Controller XL



We hereby declare that they conform to the declarations regarding Electromagnetic Compatibility as defined in

DIN EN 55024 : 1998 + A1 : 2001 + A2 : 2003

DIN EN 55022 : 1998 limit class B + A1 : 2000 + A2 : 2003

Declaration of Conformity According to 47CFR, Parts 2 and 15 for Peripherals Power Supplies used with Class B Personal Computers:

We: IRTrans GmbH

Located at: Einsteinstraße 14, 85716 Unterschleißheim, Germany

Declare under sole responsibility that the product identified herein, complies with 47CFR Parts 2 and 15 of the FCC rules as a Class B digital device. Each product marketed, is identical to the representative unit tested and found to be compliant with the standards. Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on a statistical basis as required by 47CFR §2.909. 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. The above named party is responsible for ensuring that the equipment complies with the standards of 47CFR §§15.101 to 15.109.

Trade Name: IRTrans IR Control System

Types or Model Numbers: IRTrans LAN Controller
IRTrans LAN Controller XL

Signature of Party Responsible:



Printed name of Party Responsible: Marcus Müller

Executed on (Date), at (Place): 03-01-06, Unterschleißheim, Germany