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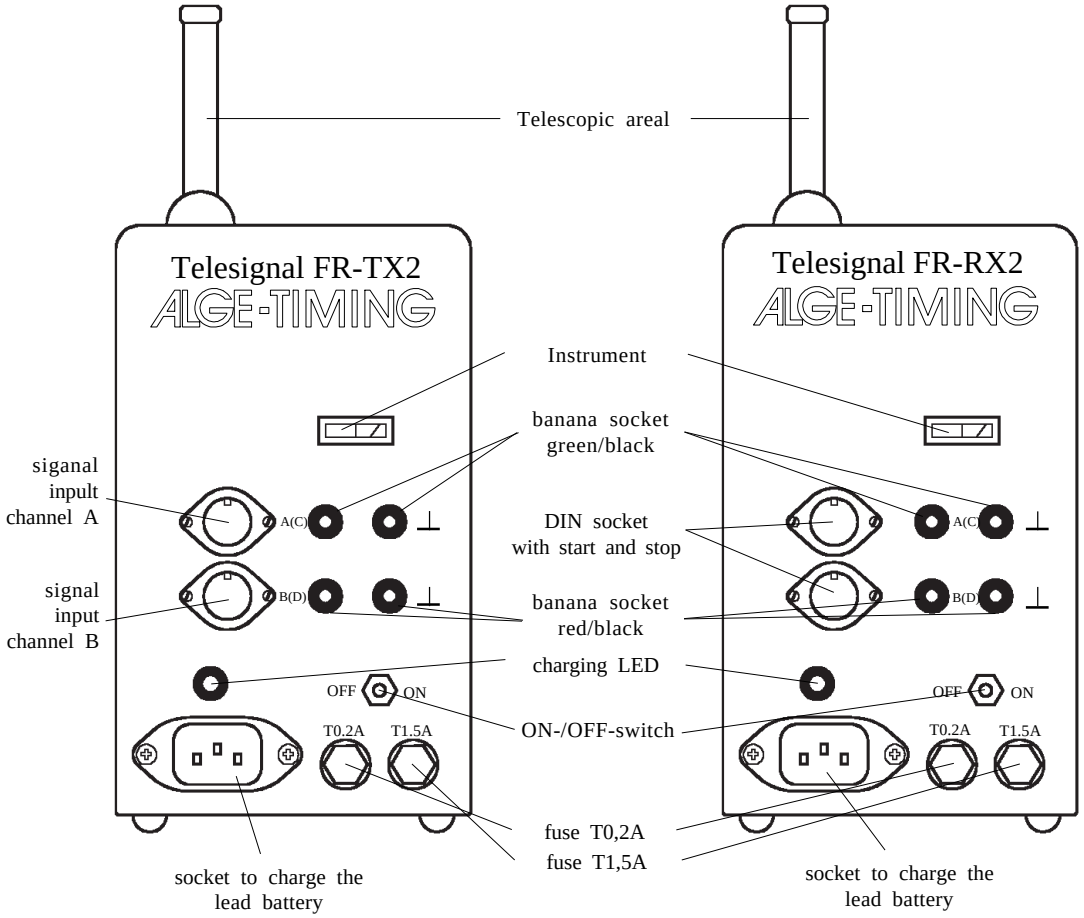
Telesignal TX / RX:



Telesignal TX (Transmitter) **Telesignal RX (receiver)**

1. COMMON:

ALGE remote triggering system consists of Transmitter Telesignal TX and Receiver Telesignal RX and is used for cordless transmission of impulses e.g. for electronic timing.

Frequency modulated Radio-transmission with Plus-Code-Modulation in 40 MHz Band with two channels, built-in rechargeable battery, charging-unit, and telecopic-aerial.

2. POWER SUPPLY:

Built-in maintenance-free link lead rechargeable battery with 12 V / 1.2 Ah.

Condition of battery will be shown by the instrument:
- Pointer between green and red field: battery is nearby empty (approx. 11V)
- Pointer approx. 3 mm in green field: battery is fully charged

Attention: Do never deposit units with empty batteries!

Charging: turn off the unit, connect the unit with the delivered cord on an AC outlet (110V / 220V), red LED will shine, batteries will be charged.

Term of charging: approx. 10 hours for a fully charging
"over-charging" of batteries will decrease lifetime

Running after fully charging: With connected ALGE photocell RLS1c approx.. 20 hours

3. Transmitter TX and Receiver RX:

3.1. High-frequency module:

High-frequency modulated "small-band-transmission" in 40 MHz Band with Plus-Code-Modulation.

HF-Channels:
- K50: 40.665 MHz
- K51: 40.675 MHz
- **K52: 40.685 MHz**
- K53: 40.695 MHz

Standard channel is K52 with 40.685 MHz. Other channels on inquiry.

3.2. Reach:

Reach will be sight-contact and draw out telescopic aerial approximate 800 meters. It depends on different factors and should be tested by trails.

Transmitter and Receiver should be installed in the height.

It would be good to try before competition, if the transmission with only 3/4 drawn out transmitter-aerial (receiver-aerial fully drawn out) is o.k. Only then draw out the telescopic aerial fully.

For utilization of the whole receiver-sensibility there has to be connected a HF-blockade on the timing unit (adapter 058--2). For connection form the HF-blockade to the Telesignal RX you have a cord 004.

3.3. Precision:

If the start- and stop impulse is transmitted by the Telesignal, the mistake is less than a 1/1000 sec. Through coding the impulse it is caused a delay of 0.17 sec.

- *Start- and finish impulse will be transmitted by Telesignal:*
  No mistake in the absolute time measurement, because start- and finish time will be delayed 0.17 sec.

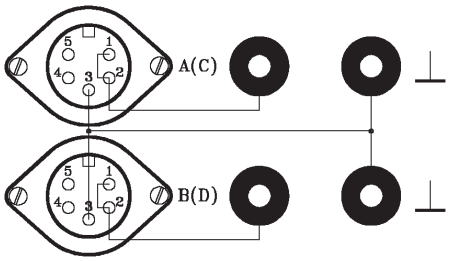
- *Only start impulse will be transmitted by Telesignal:*
  Precise absolute time by addition of 0.17 sec.

- *Only finish impulse will be transmitted by Telesignal:*
  Precise absolute time by counting down 0.17 sec.

After every impulse the Transmitter and Receiver will have a "blockade-time" of 0.5 sec.

3.4. Transmitter TX:

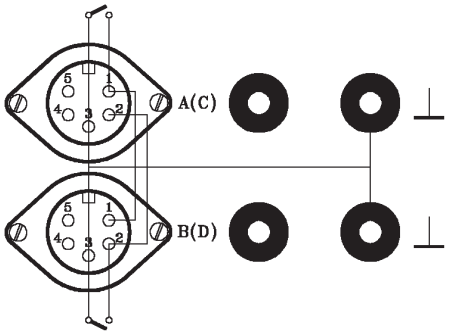
- every transmitter is able to transfer two commands
- channel A and B are in accordance with the socket
- all inputs and outputs have common ground
- negative "page" of the start impulse or stop impulse release "radio-commands" (is like closing contact)



1/2	signal input
3	ground
4	input +12V external (e.g. NLG4)
5	output +5V stabilized (ext. power supply for photocell)

3.5. Receiver RX:

- every receiver is able to transfer two commands.
- channel A and B are in accordance with the socket
- all inputs outputs have common ground
- closing time of the working contact is 0.23 sec.



1	signal output A (C)
2	signal output B (D)
3	ground
4	input +12V external (e.g. NLG4)
5	not used

4. SET UP OF THE TELESIGNAL:

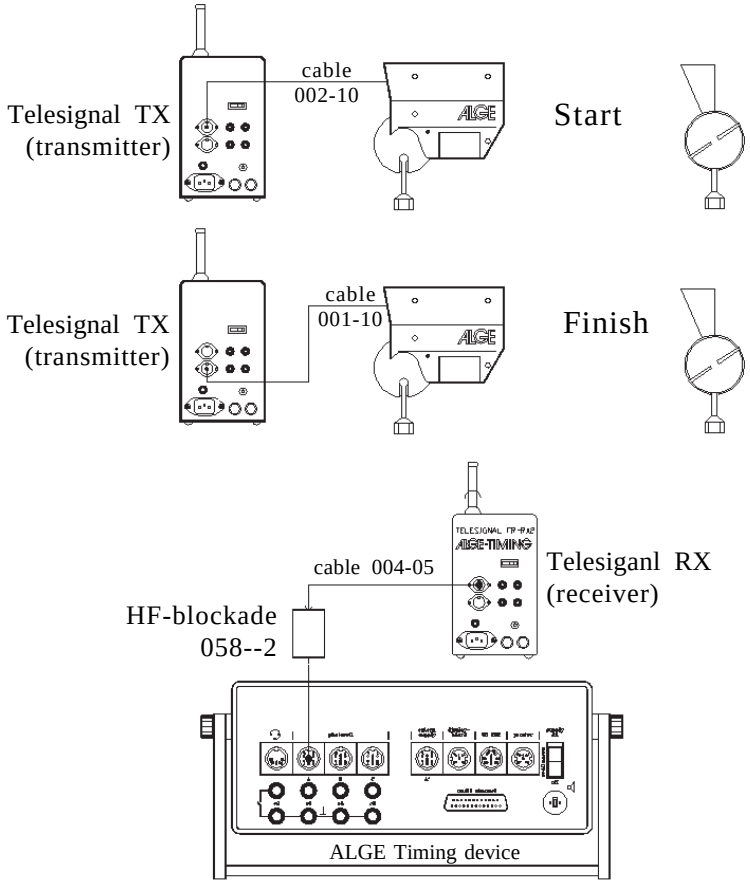
Reach of the Telesignal is wider as higher the transmitter and receiver will be installed.

For fastening on a post or an other possibility we are sending you a chain-fastening.

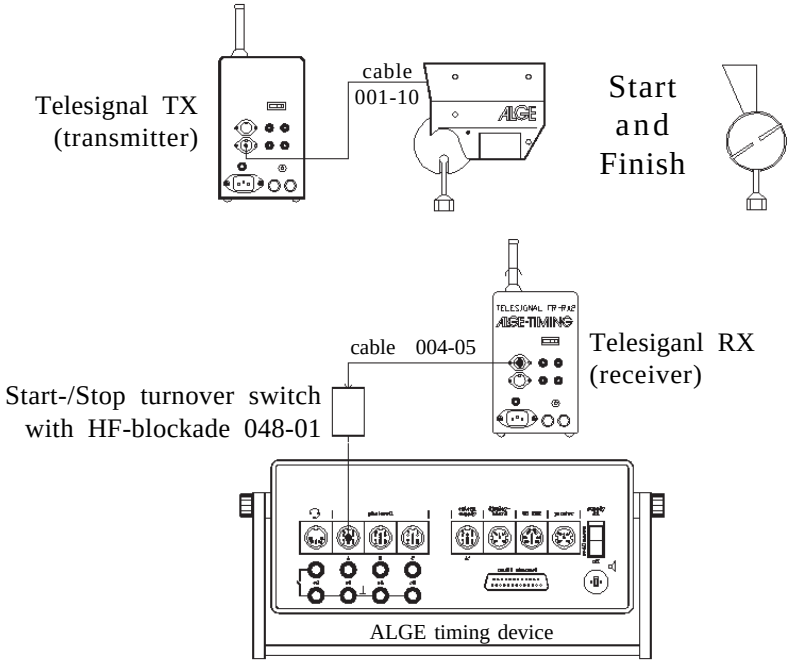
The aerial should be if possible far away form "leading" materials (metals, wet posts, etc.)

5. INSTALLATION EXAMPLES:

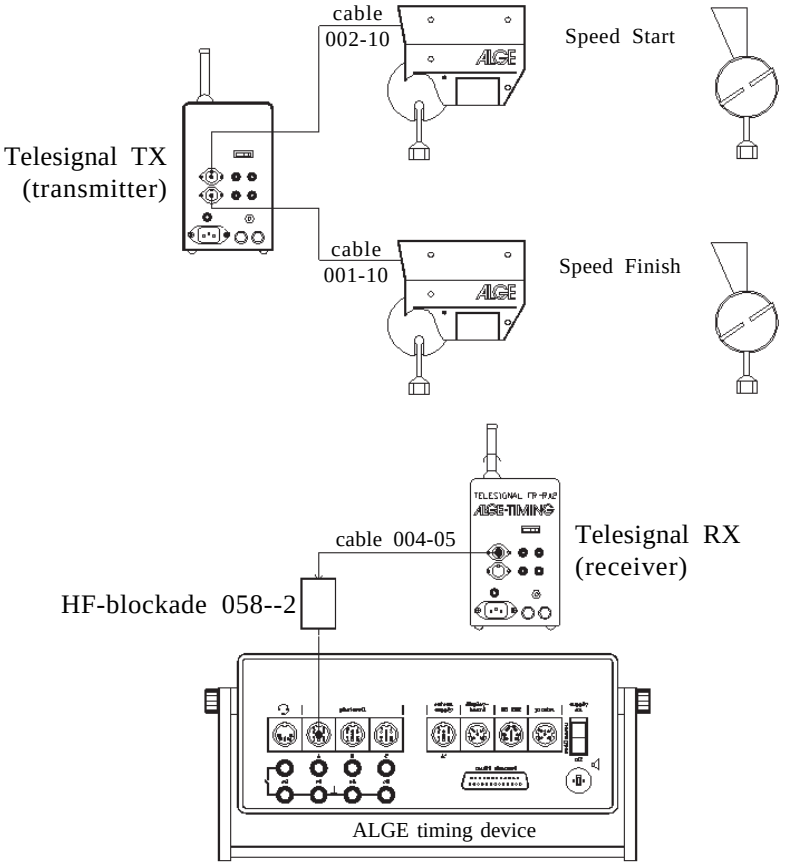
o Telesignal and Photocell for Start and Finish:



o Telesignal and Photocell makes imples for Start and Finish (Start- /Stop turn over switch with off position and HF-blockade 048-01):



o Telesignal for Speed Measurement:



o Timer S4 with Telesignal and Photocell for Show Jumping used for:
Two Stage Show Jumping or
Standard Show Jumping with American Stage:

You need tree Telesignal TX (transmitter) and one Telesiganl RX (receiver). Plug at each transmitter a photocell. At the finish you have to activate the each used photocell manually with the adapter 087-01 (start - stop turn over switch with HF-blockade). The 087-01 is used to switch the photocell off, when a rider passes the photocell during the parcours.