



Wiring Instructions and Operating Manual

ULTRABEAM REMOTE SYSTEM

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Safety Precautions

These instructions MUST be read carefully before installation and by every operator in order to maintain working condition and minimise risk of misuse. These precautions are in addition to any existing regulations.

What you must do

- Strictly adhere to all instructions as outlined in this manual
- Ensure installation is carried out by professional and competent personnel
- Ensure all applicable site safety regulations are fully respected
- Make this manual permanently available to operators and maintenance personnel
- Keep the transmitter in a secure place when not in use
- Ensure that you have a clear view of any machinery to be operated and the surrounding area before beginning operation
- Keep a record of all remotes used on site and mark transmitters clearly for use with different equipment
- Service the equipment periodically (see preventive maintenance)

What you must not do

- Never modify any part of the equipment unless Hycontrol has approved these modifications.
- Never apply any voltage exceeding the maximum supply voltage
- Never exceed current rating of the relays
- Never allow unauthorised personnel to operate the equipment
- Avoid knocking or dropping the receiver
- Do not attempt to inspect or repair the unit unless you are suitably qualified
- Do not use this equipment for lifting of persons, as part of a life support machine or in a potentially explosive atmosphere
- Do not use the equipment if any failure is suspected
- Never regard any remote control function as an emergency stop.

Ultrabeam Radio Transmitter Technical Data



Supply Voltage

100VAC – 240V AC

Range

Dependant on conditions
Typical 250m

Transmission Type

434MHz
Momentary operation

Operating Temperature

-20c to 60c

Input

Hycontrol level gauges
4-20mA

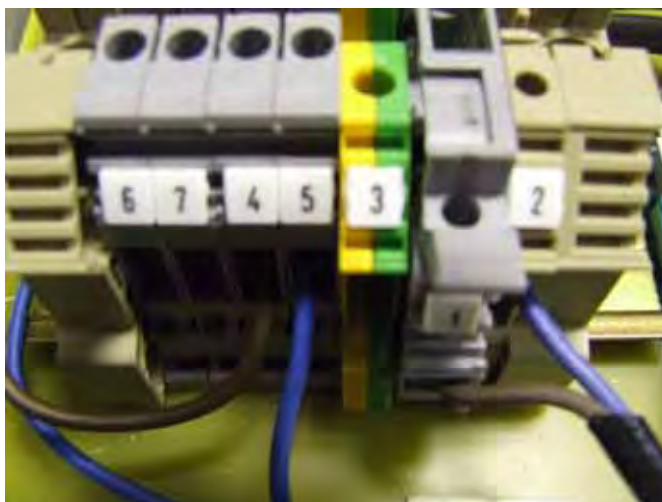
Housing

IP65 Sealed

Software

“Level Tx”

Transmitter Wiring Instructions



1. Live from supply
2. Neutral from supply
3. Earth from supply
4. Not Used
5. Not Used
6. +24V DC supply for Level Sensor (+ on Sensor)
7. 0V DC Supply for Level Sensor (-on Sensor)

Ultrabeam Radio Receiver Technical Data

This information relates to the unit, with which it was supplied, specifications for other units may vary.



Serial No.	R8061
Matching Transmitters	T7152, T7153 & T7154
Working Frequency	434MHz
Range	Typical 250m
Charging Voltage	12 – 24V DC
Battery Type	8.4V NiMh Rechargeable PP3
Operating temperature	-10 to 60 degrees Celsius
Storage temperature	-20 to 60 degrees Celsius
Aerial	Whip Antenna supplied with 90° Socket
Software Version	“Flood_LV”

Operation of Receiver



This Shows the Receiver Scanning for the Transmitters.



This Shows the Receiver Scanning for the Transmitters in All bins Mode. This will constantly cycle through all bins displaying the level in each.



This Shows the Receiver receiving data from the transmitter on Bin 1. It shows the level of the bin being empty.



This Shows the Receiver receiving data from the transmitter on Bin 1. It shows the level of the bin being half full.



This Shows the Receiver receiving data from the transmitter on Bin 1. It shows the level of the bin being full.

Use of Ultrabeam Radio Equipment UBSY Range

Before using any of the equipment read the safety instructions at the start of this manual. Ensure stop functions are working before carrying out any operations.

- Ensure you are familiar with the operation of the equipment, do the functions latch or time? etc. If in doubt check.
- Ensure that the operating position is in line of site of the aerial of the receiver and you are within range.
- Ensure that the area surrounding the machinery concerned is clear
- Hold the transmitter vertically and press the relevant button, the red LED indicator should light. When appropriate release the button, the red LED should remain on for 0.5 to 1sec.

Preventative Maintenance

Carry out the following routines regularly to ensure prolonged and reliable operation

- Clean the transmitter and receiver with only a damp cloth
- Store receiver in a dry place when not in use
- Avoid knocking or dropping receiver
- Ensure that all screws on receiver and transmitter are secure
- Ensure that all wiring to the PCB connector on the receiver are secure
- Check the aerial connections on the receiver
- Check mounting screws on receiver

Troubleshooting

Before inspecting any of the equipment read the safety instructions at the start of this manual. Qualified personnel should only carry out inspection.

If the unit does not work correctly carryout the following checks

- If the red LED on the transmitter is not lighting then the problem is most likely the transmitter. If the problem persists contact Hycontrol for assistance.
- If the LED on the transmitter is working correctly, check the receiver for operation.
- If the LED on the transmitter is working correctly, check the supply voltage to the receiver.
- If the range is poor check the receiver aerial and connections for signs of wear and tear, also check for sources of interference in the local area.

If the fault is not found with the above checks, contact Hycontrol for assistance. Have the following details to hand;

- Serial numbers for all transmitters and receivers (these can be found on the units)
- The name of the company who originally bought the equipment and the address of the site where it is now installed
- Details of the nature of the fault and any checks already made
- Details of what equipment / machinery the unit is installed on, in particular what the output relays of the Ultrabeam receiver are controlling.

Make the basic checks and then contact HYCONTROL before returning any equipment.