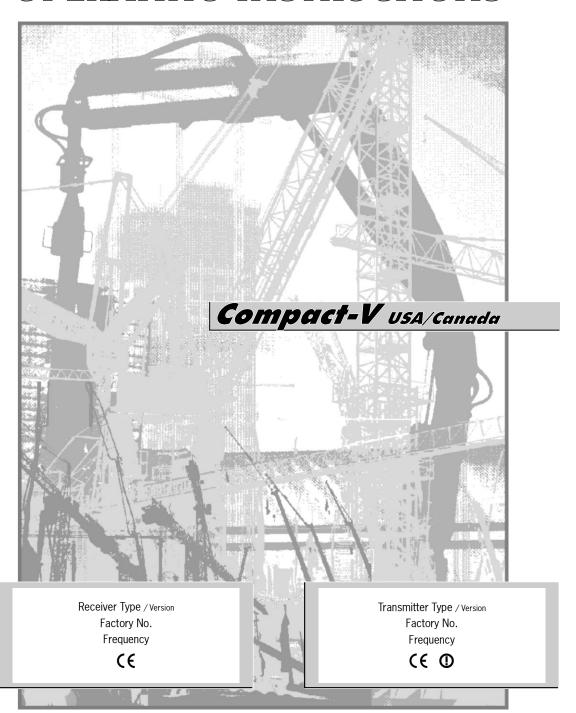


# OPERATING INSTRUCTIONS



#### 1. STANDARD SPECIFICATION

- Receiver with integrated mounting holes.
- Optional: Multi-pin connecting cable for the receiver according to your specifications.

The actual delivery specification is as detailed on the confirmation of order or the delivery note accompanying the goods!

## 2. SAFETY PRECAUTIONS

Even if you are accustomed to working with radio control systems, read these operating instructions carefully before using this equipment. Only this document contains the latest information relating to your NBB radio control system.

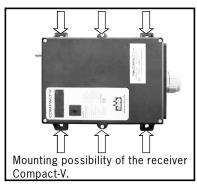
For explanatory notes on obtaining an operating permit please refer to registration documents enclosed in the appendix of this operating instruction. Observe all applicable worksafety and accident prevention regulations carefully. Only fully trained, authorized personnel may use the NBB radio control equipment. Components, etc. built into the NBB equipment for safety purposes must be regularly inspected.

If the NBB radio control unit determines a fault, it must be shut down immediately. The transmitter should be switched off with the STOP key, resp. EMERGENCY STOP switch. The connecting cable must be disconnected at the receiver from the connecting socket (terminal) of the unit to be controlled . The repair of the equipment must not be carried out other than by NBB or an NBB authorized technician.

Failure to observe these recommendations will put both you yourself and others at risk. Under these circumstances, NBB rescinds the guarantee and any other form of liability. This radio control unit is designed exclusively for the control of construction machines and industrial plants. Only under these conditions are the safety systems (STOP, resp. EMERGENCY STOP, zero setting) fully effective. No other form of use is permitted. Any non-observance of this condition will relieve NBB of all liability.

# 3. RECEIVER Compact-V

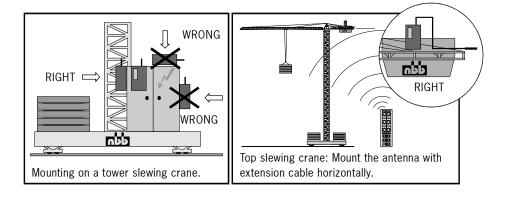




The receiver is connected to the unit to be controlled with the multi-pin connecting cable supplied. Please observe the instructions issued by the manufacturer of the unit to be controlled! We recommend urgently to realize this connection via a central, well accessible, multi-pin plug connector (for example HTS-plug connector series HE/HB/HN/HA or comparable ones of other manufacturers) to make possible a quick and clear fault diagnosis in the service case and to take off the receiver without an expenditure of assembly.

The power supply of the receiver is generally effected by the connecting cable.

- In general, an earth lead is required in case the units to be controlled have not previously been operated by radio control. Failing this, the receiver electronic circuit will not receive any power supply. Ensure that the operating voltage of the receiver complies with the electrical specifications of the unit to be controlled. The applicable operating voltage is specified in the supplement
- Never expose the receiver to a high pressure cleaning jet. This applies to the transmitter also.
- The receiver should always be fixed vertically at the outside panel of the switching cabinet. (The antenna should always reach over the top of the panel.)
- You have to make sure that the antenna is not shielded by metal parts totally or partly.
- Mounting the receiver in a cabine or in a switching cabinet the antenna should be layed with an extension cable to the outside and be attached with the fastening strapping as horizontally as possible with distance to the shielding metal parts.
- In general the antenna should always be mounted in such a way so that the antenna is still visible with each change of position of the transmitter.



# 4. FUNCTION CHECK

To maintain operational safety, a regular function check of the NBB radio remote control is necessary. In single-shift day-to-day operation, we recommend performing this check at least once a week. Checking is possible using the display lights provided on the receiver. To do so, the transmitter must be set to the ready-to-operate state.

- First connect just the receiver the transmitter remains switched off.
- Activate the transmitter by unlocking the EMERGENCY STOP switch, resp. pressing the key "START/ON/HORN".
- Now check the commands (always start with the lowest stage) and check for correct function of the unit to be controlled.
- Ensure in particular that there is nobody in the danger area. ACCIDENT RISK!
- STOP, resp. EMERGENCY STOP check. Press the EMERGENCY STOP switch at the transmitter until the switch engages, resp. press the STOP key. Then observe if the unit to be controlled is switched off (time to switch off according to the application).



Checking the LED's at the receiver Compact-V:

LED 1 green: POWER ON. If LED fails to come on, check the power supply.

If the power lead is OK, call in the after-sales service.

LED 2 yellow: HF PRESENT. Steady light when transmitter is switched on

(insignificant for scanner operation).

LED 3 green: Flashes evenly during fault-free operation.

Irregular flashing means that the HF channel is probably at

fault - please set another channel.

LED 4 red: If this LED flashes, the HF channel is at fault (not in the

scanner operation).

Steady light notifies the operator that an output function is

critical due to over current.

Service plug: For NBB service only.

## 5. IDENTIFICATION PLATES

The identification plates state the type of transmitter or receiver, the factory number, the frequency range and the approval number for non EU countries.

Always state the factory number in all your queries.

#### Example:

Transmitter Type / Version: HyPro
Factory No.: 999 899 4990
Frequency: Mhz

Receiver Type / Version: Compact-V Factory No.: 999 899 4990 Frequency: Mhz

#### 6. MAINTENANCE

Your NBB radio remote control is largely maintenance-free. Nevertheless, please notice the following points:

- Remove any leftover building materials!
- During electro-welding work on the unit to be controlled, disconnect the receiver from the current supply! Otherwise there is a risk of damage to the receiver's electronic system!
- Check wear and tear parts like dust shield tops regular!

# 7. WARRANTY

We grant a function warranty for 12 months after the sale date for all NBB radio remote controls (transmitter, receiver, charger). The warranty covers working time and material used. Shipping costs shall be charged to the customer. The warranty shall not cover: wear and tear parts, relays and batteries. The function warranty shall be invalidated in the case of damage, accident damage, negligence, incorrect use, non-compliance with operating conditions, non-compliance with operating, testing and maintenance instructions, and repairs or unit modifications not authorised by NBB.

NBB shall not be liable for indirect damage and reserves the right to decide on repair or replacement.

#### 8. IN CASE OF DEFECTS

Do not attempt to continue working with a defective NBB radio remote control. Even initially minor defects might be the start of a more extensive defect.

Do not try to repair the NBB radio remote control yourself. If there is any fault please contact your dealer or our company.

#### 9. US-FCC and CANADA IC



#### USA:

NOTE: This 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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



#### ATTENTION:

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment!

FCC part 15.203 statement:



#### Attention:

This device is delivered and installed by the original manufacturer of the machine or delivered and installed by NBB Controls Inc, Richmond VA. It is approved by FCC to operate with the antenna originally supplied by the original manufacturer of the machine or NBB Controls, Inc, Richmond VA. It is unlawful to change the antenna or change the antenna installation. Only antennas declared as original spareparts are allowed. Otherwise there is now allowance and it is illegal to operate this device!

#### IC CANADA:



The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website www.hcsc.gc.ca/rpb

This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions:

(1) this device may not cause interference, and

(2) this device must accept any interference, including interference that may cause undesired operation of the device.

## RSS-GEN 8.3 statement:



This radio transmitter (identify the device by certification number) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Please update accordingly



 $Cet \ appareil \ est \ conforme \ avec \ Industrie \ Canada \ exempt \ de \ licence \ Rss \ standard (s).$ 

Son fonctionnement est soumis aux deux conditions suivantes :

(1) cet appareil ne peut causer d'interférences, et

(2) cet appareil doit accepter toute interférence, y compris des interférences qui peuvent provoquer un fonctionnement indésirable du périphérique.



# APPROVALS AND CERTIFICATES



Approvals EU countries: **C** € **①** 

Enclosure:

**EC** Declaration of Conformity

Obtainable at demand:

M-Zert mbH Certificate DIN EN ISO 9001:2008

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Bedienungsanleitung Compact-V, Englisch, Teile-Nr. 3.150.1251, Stand 04.08