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PVTTR2400-MCX INSTALLATION MANUAL

1. SYSTEM DESCRIPTION

The module PVTTR2400-MCX has been designed and manufactured by IKUSI-Angel Iglesias S.A. to be included in its radio remote control equipment.

The module PVTTR2400-MCX is a radio wireless for the frequency band 2405MHZ to 2475MHZ.

The module PVTTR2400-MCX is supplied with two smd antennas for antenna diversity.

2. SAFETY INSTRUCTION

These instructions must be read carefully in order to install and use the set properly and to keep it in perfect working condition and to reduce the risks of misuse.

Do not use this set on machines in potentially explosive atmospheres, except the models certified ATEX/RATEX designed to work in that type of environments.

Any use other than that specified in this manual is dangerous. The following instructions must be strictly adhered to.

4.1 - WHAT YOU MUST DO

- Strictly adhere to the instructions for installation contained in this manual
- Make sure that professional and competent personnel carry out the installation.
- Ensure that all site and prevailing safety regulations are fully respected.
- Make sure that this manual is permanently available to the operator and maintenance personnel.
- Keep the transmitter out of reach of unauthorised personnel.
- On starting each working day, check to make sure that the STOP button and other safety measures are working.
- When in doubt, press the STOP button.
- Whenever several sets have been installed, make sure the transmitter you are going to use is the right one. Identify the machine controlled on the label for this purpose on the transmitter.
- Service the equipment periodically.
- When carrying out repairs, only use spare parts supplied by IKUSI dealers.

4.2 - WHAT YOU MUST NOT DO

- Never make any changes to the set, which have been studied and approved by manufacturer.
- Never power the equipment other than with the specified power supply.
- Never allow unqualified personnel to operate the equipment.
- After use, never leave the equipment ON (one or several transmitters). Always set the contact key and the STOP button to switch off position of the equipment to avoid accidentally to activate manoeuvres – specially in crane maintenance purposes-
- Do not use the set when visibility is limited.
- Avoid knocking or dropping the set.
- Do not use the set if failure is detected.

Changes or modifications not expressly approved by IKUSI could void the user's authority to operate this equipment.



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3. INSTALLATION

Make sure that the crane is stopped for the entire duration of the assembly process, keep the work area free and wear protective clothing.

Park the crane and position stop-ends (if these are not available use appropriate signs) at a suitable distance so that other cranes on the same runway do not hit it.

Check the power-supply voltage and turn off the mains switch, disconnecting the wiring and connector between the receiver and the electrical cabinet of the machine.

Remember that the receiver has several voltage-powered circuits. Even when the power has been cut off, there is still a risk of electrical shocks.

4. FCC/ISED REGULATORY NOTICES

Modification statement

IKUSI ELECTRONICA, S.L. has not approved any changes or modifications to this device by the user. Any changes or modifications could void the user's authority to operate the equipment.

IKUSI ELECTRONICA, S.L. n'approuve aucune modification apportée à l'appareil par l'utilisateur, quelle qu'en soit la nature. Tout changement ou modification peuvent annuler le droit d'utilisation de l'appareil par l'utilisateur.

Interference statement

This device complies with Part 15 of the FCC Rules and 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Wireless notice

This device complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the ISED radio frequency (RF) Exposure rules. Antenna gain must be below:

Frequency band	Antenna Gain [dBi]
2.4 GHz	13.79

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device needs to be installed and used on distance greater than 20 cm from human body.



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Le présent appareil est conforme à l'exposition aux radiations FCC / ISED définies pour un environnement non contrôlé et répond aux directives d'exposition de la fréquence de la FCC radiofréquence (RF) et RSS-102 de la fréquence radio (RF) ISED règles d'exposition. Gain de l'antenne doit être ci-dessous:

Frequency band	Antenna Gain [dBi]
2.4 GHz	13.79

L'émetteur ne doit pas être colocalisé ni fonctionner conjointement avec à autre antenne ou autre émetteur.

Cet appareil doit être installé et utilisé à une distance supérieure à 20 cm du corps humain.

FCC Class B digital device notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Labelling Requirements for Host device

The host device shall be properly labelled to identify the modules within the host device. The certification label of the module shall be clearly visible at all times when installed in the host device, otherwise the host device must be labelled to display the FCC ID and IC of the module, preceded by the words "Contains transmitter module", or the word "Contains", or similar wording expressing the same meaning, as follows:

Contains FCC ID: PVTTR2400-MCX

Contains IC: 4166A- TR2400MCX

L'appareil hôte doit être étiqueté comme il faut pour permettre l'identification des modules qui s'y trouvent. L'étiquette de certification du module donné doit être posée sur l'appareil hôte à un endroit bien en vue en tout temps. En l'absence d'étiquette, l'appareil hôte doit porter une étiquette donnant le FCC ID et le IC du module, précédé des mots « Contient



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un module d'émission », du mot « Contient » ou d'une formulation similaire exprimant le même sens, comme suit:

Contains FCC ID: PVTTR2400-MCX

Contains IC: 4166A- TR2400MCX

CAN ICES-3 (B) / NMB-3 (B)

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de classe B est conforme à la norme canadienne ICES-003.