Wireless Field Programming Coil

P/N: 109-6900

User Guide **(DRAFT)**

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PROPRIETARY NOTICE

DISCLAIMER

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Revisions

Version	Description	Date	Author	Reviewed
1.0	Original version	25/11/2018	MVI	ICA
1.1	Minor changes in edition	11/12/2018	MVI	ICA
1.2	FCC & ISED information	03/01/2019	JMI	ICA
1.3	P/N added, charging state clarification	05/02/2019	JMI	ICA

Table of Contents

Warnings, Cautions and Notes

Always consult and adhere to all local and national safety codes, regulations, and standards. WARNING, CAUTION and Note statements are used throughout this manual to emphasize important and critical information to help you ensure safety and prevent product damage. These statements are defined below.

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious physical injury.

CAUTION indicates a situation, which, if not avoided, could result in damage to equipment, damage to software, loss of data or invalid results.

NOTE indicates important supplemental information.

FCC/IC Compliance

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules and Industry Canada licence-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.

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

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.

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

FCC/IC RF Exposure Guide

Aclara Technologies LLC low power RF devices and their antennas must be fixed-mounted on indoor or outdoor permanent structure(s) providing a separation distance of at least 20 cm from all persons during normal operation. In the scope of MTU Programmer, it could be used in hand except for the coil face, that must be at a distance of at least 20cm from all users. This device is not designed (and it has no external connection) to operate in conjunction with any other antennas or transmitters. No other operating instructions for satisfying RF exposure compliance are needed.

Field Calibration Procedure

Aclara Technologies LLC low power RF devices have passed through extensive testing and calibration procedures while in the factory. Therefore, no additional calibration or adjustment is required in the field.

Avertissements, Mises en garde et Remarques

Toujours consulter et respecter les codes, règlements et normes de sécurité locaux et nationaux. Des AVERTISSEMENTS, MISES EN GARDE et remarques sont utilisés tout au long de ce guide pour souligner l'information importante et critique qui vous aidera à assurer la sécurité et à prévenir les dommages au produit. Ces énoncés sont définis ci-dessous.

AVERTISSEMENT indique une situation potentiellement dangereuse qui, si elle n'était pas évitée, pourrait entraîner la mort ou des blessures graves.

MISE EN GARDE indique une situation qui, si elle n'était pas évitée, pourrait entraîner des dommages à l'équipement, des dommages au logiciel, des pertes de données ou des résultats invalides.

REMARQUE indique des informations supplémentaires importantes.

Conformité FCC/IC

Les énoncés qui suivent portent sur le guide d'exposition aux RF et la procédure de calibration sur place.

Les changements ou modifications non expressément approuvés par la partie responsable de la conformité pourraient annuler l'autorisation de l'utilisateur d'utiliser l'équipement.

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.

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

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

Guide d'exposition aux RF FCC/IC

Les appareils RF à faible puissance Aclara Technologies LLC ainsi que leurs antennes doivent être montés de manière fixe sur des structures intérieures ou extérieures permanentes qui se trouvent à au moins 20 cm des personnes pendant le fonctionnement normal. Dans le cadre de MTU Programmer, il peut être utilisé en main, sauf pour la face de la bobine, qui doit être à une distance d'au moins 20 cm de tous les utilisateurs.

Cet appareil n'est pas conçu (et il n'a aucun branchement externe) pour être utilisé en association avec toute autre antenne ou tout transmetteur. Aucune autre instruction d'utilisation n'est requise pour assurer la conformité aux règles d'exposition aux RF.

Procédure de calibration sur place

Les appareils RF à faible puissance Aclara Technologies LLC ont été soumis à des tests étendus et multi-tâches et à des procédures de calibration complexes en usine. Par conséquent, ils ne requièrent pas de calibration ni d'ajustement supplémentaire sur place. Les appareils RF à faible puissance Aclara Technologies LLC sont expédiés au client dans des boîtiers scellés. Aucun ajustement ne peut donc être effectué sur place sans briser le boîtier scellé en usine.

1 MTU Programmer Device

The following section describes the different steps for controlling and understanding the probe programmer, as well as the behavior of the leds in different situations.

1.1 Turn ON the programmer

Turn on the programmer probe by pressing the button. The blue indicator will light. Wait until blue indicator starts blinking slowly and release the button.

1.2 Turn OFF the programmer

In order to turn off the device, the user must press the button until blue indicator starts blinking fast. At this moment, button must be released.

If user keeps pressing the button more than 3 seconds, the programmer will enter into PAIRING mode and blue and red indicators will start blinking.

1.3 Pairing

In case the application shows an alert indicating to change to PAIRING mode, press the button until red and blue indicators start blinking (more than 3 seconds). Release and try to connect again to the programmer. Device remains on PAIRING state for 10 seconds until the application is connected to it.

1.4 Battery indications

LOW BATTERY

If the device is ON and detects low battery, it will turn on the red indicator while the blue one will continue blinking. In this situation, PAIRING will not be allowed.

When the device is in OFF state with low battery it will not allow to be turned ON and will be shown by blinking the red indicator five (5) times. Programmer updates will be neither allowed.

VERY LOW BATTERY

When the device is in OFF state with low battery it will not allow to be turned ON and will be shown by blinking the red indicator five (5) times. Programmer updates will be neither allowed. In addition, if the device is in ON state and detects no battery, it will change automatically to OFF state.

CHARGING

Connecting USB cable will turn the programmer automatically to CHARGING state. The red indicator will light up. If device is in ON state and the user connects USB cable, the device will turn OFF and will start charging. In this state, the devices would disconnect any Bluetooth or coil transmission and it will remain sleep until USB cable is disconnected from the device, and the puck is powered again.

CHARGED

When the charging process is finished, the programmer will turn red indicator off and blue indicator on.

1.5 Functional summary

Table 1 shows the user operations for controlling the programmer.

Initial State	Target State	Operations
OFF	ON	Pressing button until blue led starts blinking slowly[1]
ON	OFF	Pressing button until blue led starts blinking fast
ON	PAIRING	Pressing button until blue and red led start blinking alternatively
OFF	CHARGING	Connecting USB
ON	CHARGING	Connecting USB
PAIRING	CHARGING	Connecting USB
CHARGIN/CHARGED	OFF	Removing USB

Table 1. Operations for controlling probe programmer

[1] Only if programmer does not detect low battery.

2 MTU Programmer Setup

The following section outline the general procedure for placing the programmer at the time of reading or writing one MTU.

1. Turn on the device as indicated at 1.1.
2. Find the programmer point on the MTU.

3. Slide the programming probe onto the side of the MTU, so that the circular face of the programmer is flush against the programmer point on the MTU.

The programmer should be positioned as shown

WARNING Do not place hand between the round face of the programmer and the MTU. RF Exposure is not compliant in that face.