

Medeco HYBRID eCylinder

Installation Procedures – Mortise Application

1. What is required:

Hybrid cylinder kit

- Hybrid Cylinder (LCU) with proper cam

- MCU reader unit

- MCU outer cover

- MCU spacers

- Base plate

- Lock Ring

- MCU mounting screws

- Battery

User key with correct mechanical keyway and cut

- Hybrid 125KHz Prox key head

PDA programming device

- Programmed from the Hybrid Manager software

 - Including access rights for the User Key

 - The functionality to set the MCU clock

Hybrid Manager Software

2. Installation procedure when MCU is programmed at the door

2.1 Remove mechanical cylinder from lockset. (if applicable)

2.2 Verify proper cam on Hybrid cylinder for lockset.

2.3 Rotate cam on back of Hybrid cylinder to home (locked) position – This removes the cylinder from the shipping (unlocked) position and mechanically “arms” the Hybrid cylinder. A properly bitted key must now be used to operate the lock cylinder.

2.4 Install (screw) the Hybrid cylinder into the lockset. Check for operation with the lockset using the User key to operate the cylinder mechanically. Adjust the cylinder as necessary for door thickness, cam engagement, etc.

2.5 When cylinder adjustments are complete, tighten set screw in lockset to secure cylinder in place.

2.6 Install base plate and lock ring to secure lock cylinder to door. Install spacers as required for thin door applications.

2.7 Place cylinder in locked position and remove the User key. User key is no longer needed until Hybrid unit is programmed.

2.8 Ensure the battery is removed from the MCU unit.

2.9 Connect the cable from the cylinder to the back of the MCU unit.

2.10 Locate and install the MCU onto the base plate using the four mounting screws. Care must be taken to ensure the interconnect cable is routed properly behind MCU and is not damaged.

2.11 Install the battery into the MCU

MCU will power up and flash the LED red, yellow, green - one sequence.

The MCU will power up in tamper condition.

The LCU will power up and “arm” the electronic blocking mechanism (mechanical key alone will no longer operate lock)

2.12 Install the MCU outer cover

The tamper switch will be reset

The MCU will start to search (ping) for a credential

At this point:

MCU is still in tamper mode

MCU has no master credential identified and stored

MCU and LCU are not registered to each other

MCU and LCU are not authorized with each other

MCU clock is not set

MCU is not programmed with a key list, schedules, etc.

2.13 Present the Master Credential (Prox Card) to the MCU – The master credential should be the same used for all other Hybrid locks in this installation (customer site)

MCU reads and stores the Prox Card as its master credential – It remains the master credential unless reprogrammed later. The LED will flash green for 3 cycles to indicate the master credential was accepted.

MCU resets the tamper condition

MCU registers with the LCU

MCU establishes authorization with the LCU

MCU turns on the IR communications port. The MCU will flash the LED red when the IR communications session times out.

2.14 Program the MCU with the PDA – PDA should be loaded with key list (including User key used for installation)

2.15 Present the PDA to the MCU – IR port on PDA must be active

2.16 Present the master credential to the MCU

The MCU reads the master credential, flashes the LED green and turns on the IR communications port

The PDA communicates with the MCU via the IR link and uploads a key list and schedules etc. into the MCU

The PDA sets the clock in the MCU

The MCU will flash the LED green at the completion of the communications session. (The MCU will flash the LED red if the IR communications session times out prior to completing the communications session.)

The Hybrid lock is now functional and ready for use

2.17 Present the User key to test the function of Hybrid unit with the lockset

3. Procedure for programming an MCU prior to installation at door.

Note: LCU is not connected or utilized in the advance programming of the MCU. If the LCU is connected to the MCU during this process the two components will register to each other and require the installer to keep the MCU and LCU together as a matched pair until installed onto the door.

3.1 Install battery into MCU

MCU will power up and flash the LED red, yellow, green - one sequence.

The MCU will power up in tamper condition.

3.2 Install the MCU outer cover

The tamper switch will be reset

The MCU will start to search (ping) for a credential

At this point:

MCU is still in tamper mode

MCU has no master credential identified and stored

MCU and LCU are not registered to each other – No LCU connected

MCU and LCU are not authorized with each other – No LCU connected

MCU clock is not set

MCU is not programmed with a key list, schedules, etc.

3.3 Present the Master Credential (Prox Card) to the MCU – The master credential should be the same used for all other Hybrid locks in this installation (customer site)

MCU reads and stores the Prox Card as its master credential – It remains the master credential unless reprogrammed later.

The MCU flashes the LED green, red, green to indicate the master credential was accepted but no LCU was found.

MCU resets the tamper condition

MCU turns on the IR communications port - The MCU will flash the LED red when the IR communications session times out.

3.4 Program the MCU with the PDA – PDA should be loaded with key list (including User key used for installation)

3.5 Present the PDA to the MCU – IR port on PDA must be active

3.6 Present the master credential to the MCU

MCU reads the master credential and flashes LED green, red, green to indicate (Master credential valid, No LCU connected, IR port turned on)

The PDA communicates with the MCU via the IR link and uploads a key list and schedules etc. into the MCU

The PDA sets the clock in the MCU

*The MCU will flash LED green at the completion of the communications session.
(The MCU will flash the LED red if the IR communications session times out prior to
completing the communications session.)*

Note: The MCU battery should be removed until the unit is installed at the door.

4. Installation procedure when MCU is programmed in advance.

4.1 Remove mechanical cylinder from lockset. (if applicable)

4.2 Verify proper cam on Hybrid cylinder for lockset.

4.3 Rotate cam on back of Hybrid cylinder to home position – This removes the cylinder from the shipping (unlocked) position and mechanically “arms” the Hybrid cylinder. A properly bitted key must now be used to operate lock cylinder.

4.4 Install (screw) the Hybrid cylinder into the lockset. Check for operation with the lockset using the User key to operate the cylinder mechanically. Adjust the cylinder as necessary for door thickness, cam engagement, etc.

4.5 When cylinder adjustments are complete, tighten set screw in lockset to secure cylinder in place.

4.6 Install base plate and lock ring to secure lock cylinder to door. Install spacers as required for thin door applications.

4.7 Place cylinder in locked position and remove the User key. User key is no longer needed until Hybrid install is completed.

4.8 Ensure the battery is removed from the MCU unit.

4.9 Connect the cable from the cylinder to the back of the MCU unit.

4.10 Locate and install the MCU onto the base plate using four screws. Care must be taken to ensure the interconnect cable is routed properly behind MCU and is not damaged.

4.11 Install the battery into the MCU

MCU will power up and flash the LED red, yellow, green - one sequence.

The MCU will power up in tamper condition.

The LCU will power up and “arm” the electronic blocking mechanism (mechanical key alone will no longer operate lock)

4.12 Install the MCU outer cover

The tamper switch will be reset

The MCU will start to search (ping) for a credential

At this point:

MCU is still in tamper mode

MCU has a master credential previously identified and stored

MCU and LCU are not registered to each other

MCU and LCU are not authorized with each other

MCU clock is not set

MCU already programmed with a key list, schedules, etc.

4.13 Register the MCU and LCU, set clock and reset tamper with PDA

4.14 Present the PDA to the MCU – IR port on PDA must be active

4.15 Present the master credential to the MCU

MCU reads the master credential and flashes LED green to indicate master credential accepted and turns on the IR port.

MCU resets the tamper condition

MCU registers with the LCU

MCU establishes authorization with the LCU

The PDA communicates with the MCU via the IR link and sets the clock in the MCU

*The MCU will flash LED green at the completion of the communications session.
(The MCU will flash the LED red if the IR communications session times out prior to completing the communications session.)*

The Hybrid lock is now functional and ready for use

4.16 Present the User key to test the function of Hybrid unit with the lockset