

RePLAYSM Challenge Updates

Updated 5 February 2021

RePLAYSM FIRST[®] LEGO[®] League 機器人挑戰賽

規則更新至 2021年2月5日

U01 – MISSION M08 SHARING ADJUSTMENT – If exactly one cube is sent north over the wall from your boccia share model but you are the only team in the match, you automatically get the 25 share-related points. In this case: You did send a cube away and you did get share credit, but you did not get an imaginary cube that can be used or counted anywhere.

更新01 - 共享投擲調整 - 您在當回合比賽且因為賽程安排剛好對面桌尚無隊伍時，在此任務08中您透過**共享投擲機**，向北邊圍牆投擲**一個的小方塊**到對面場地內任何位置，將直接獲得**25分**。
(在**這個情況**您確實執行了將可獲分的任務，但不會有多餘的一個假想小方塊供隊伍使用或得分)

U02 – BASKETBALL MODEL LABEL CORRECTION – In the whole-field picture on Page 7 of the Robot Game Rulebook, the basketball model is labeled “M04,” but should have been labeled “M05.”

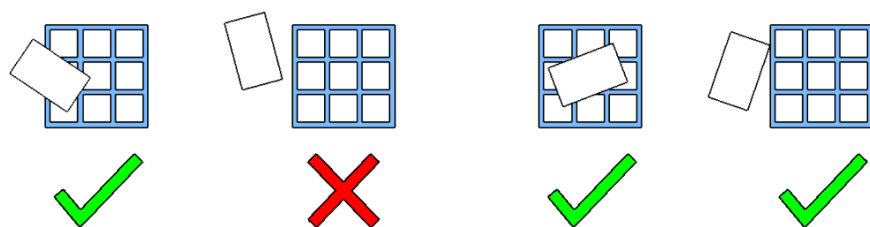
更新02 - 籃球運動任務 - 在原文第7頁機器人比賽 (Robot Game) 介紹如圖顯示各項任務，其中籃球運動任務位置標示 " M04 " 更正為 " M05 " 。 (**中文版規則已更正**) 。

U03 – PRECISION TOKEN PLACEMENT – If you compete in a match with no referee present, please set your precision tokens in their white triangle anyway. This way all teams start with identical setups, and your robot doesn't get used to open space there.

更新03 - 放置精確度籌碼 - 隊伍在比賽時若尚無裁判，仍請兩桌的隊伍將所有的精確度籌碼各自放在東南邊白色三角形區域內。(非正式比賽可能會有此情況；正式比賽不會有此情況發生。)

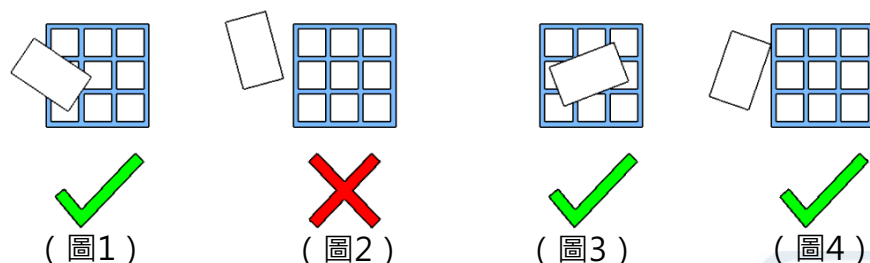


U04 – DANCE SCORING – M07 scoring for a robot dancing at the end of the match looks like this:



But actual competition scoring is quite difficult for several reasons, so above-normal benefit of the doubt shall be applied as follows: Any dancing robot scores M07 unless the referee can say: "I am convinced for sure that the robot's controller was not overlapping any bit of blue chalk line as the match ended."

更新04 - 機器人跳舞計分判定 - 任務07 隊伍的機器人在比賽回合時間結束時，機器人跳舞的位置，如下：(如原文規則「...robot's controller is at least partly over the dance floor in a "dancing" motion...」以機器人本體的控制器正投影判斷)



但是在實際的比賽中，判斷任務07可能會有許多原因導致判斷困難度高，因此以下情況都給分(20分)：

情況1：比賽時間結束之前，機器人已在舞池上呈現自動跳舞狀態，直到比賽時間結束後仍持續跳舞，裁判只要能確定機器人在比賽時間結束當下之前，控制器正投影有在規定的區域或接觸區域(如上圖1、3、4)。//且裁判會要求隊伍先將機器人關閉停止在舞池上。

情況2：機器人在比賽結束前跳舞，但跳舞位置都不接觸到舞池，直到回合時間結束「當下」控制器正投影才接觸到舞池或在舞池上，無論機器人停止或持續跳舞。//若機器人持續跳舞，裁判會要求隊伍先將機器人關閉停止在舞池上。

情況3：比賽時間結束之前，機器人已在舞池上呈現自動跳舞狀態一直到比賽時間結束當下機器人也停止不持續跳舞，但機器人停止位置可能在舞池旁邊或部分在舞池上，裁判只要能確定機器人之前跳舞過程中，控制器正投影有在規定的區域或接觸區域(如上圖1、3、4)。

備註：如果裁判在比賽過程中直到比賽時間結束當下，能非常確定機器人跳舞過程，控制器正投影都尚未接觸或不在規定區域內(如上圖2)，隊伍將無法獲得該任務分數。

U05 – HOPSCOTCH SPACES – The “spaces” mentioned in M04 – Bench refer to the areas on the mat captured by the black bench frame when the bench is down flat. This is not the artwork on the mat. There is a total of 4 spaces. You can earn a max of 10 points per space (not per cube in that space).

更新05 - 跳房子遊戲方格空間 - 在任務04提到的空間 - 是指當黑色長凳放平時，長凳框架（含底座）在底圖上產生的區域而不是底圖上的塗鴉，一共有4個空格，每個空間最多可獲得10分。（並非以空間內的小方塊數量計分。）

U06 – BOCCIA CLARIFICATION – For M08 – Boccia, you are not required to use the Boccia Aim model to deliver individual cubes into your Frame or Target that you have in your possession. You are still required to load one yellow cube on the Boccia Aim model at the start of the match per the Field Setup and solutions must still be autonomous.

更新06 - 地板滾球運動說明 - 任務08 - 地板滾球運動，不強制規定使用地板滾球投擲機將單一小方塊投擲至目標區或框架得分區。但在比賽開始時，仍須按“場地設置”放置一個黃色小方塊在地板滾球投擲機上，並以機器人自主方式完成任務。

U07 – R01– Equipment Bullet 5 Update – LEGO® MINDSTORMS® Robot Inventor is allowed in *FIRST* LEGO League Challenge. To include the use of LEGO® MINDSTORMS® Robot Inventor, the new wording for R01 – Equipment, bullet 5 is:

1. Electric LEGO equipment is allowed only as described and shown here (LEGO Education SPIKETM Prime and MINDSTORMS® EV3 shown, but MINDSTORMS® Robot Inventor and equivalent NXT and RCX are also allowed).

更新07 - 規則01 - 裝備” Bullet 5 ”一詞更新 - 允許在 *FIRST* LEGO League Challenge 使用 LEGO® MINDSTORMS® Robot Inventor。裝備新增LEGO® MINDSTORMS® Robot Inventor 後規則01產生新的一詞“**Bullet 5**”，定義如下：

1. LEGO（樂高）電子零件僅允許使用如下描述之型號及使用規範：（型號如 **LEGO Education SPIKE™ Prime**及 **MINDSTORMS® EV3**，或**MINDSTORMS® Robot Inventor**、**NXT**、**RCX** 皆允許使用）。

U08 – ROW MACHINE – If the free wheel has collected a lot of dust there is a significant reduction in the friction when it sits on the mat. This can cause the free wheel to slide back towards the row machine after it has been placed in a scoring position. Cleaning the free wheel with a damp cloth or wet wipe can help to solve this issue. Mission points due to model malfunction should be in favor of the team (R25 - Benefit of the Doubt).

更新08 - 划船機運動 - 如果飛輪積了很多灰塵，在底圖上的摩擦力會大幅降低，並可能導致飛輪移入得分區後又往划船機方向滑回，用濕巾或濕抹布清潔飛輪可以幫助解決此問題。比賽時若明顯發生此狀況則依現場裁判判決為主。(規則25 - 判罰從寬)

U09 – BOCCIA TARGET AND FRAME – For M08, the Boccia target and frame both extend all the way to the north wall. With your mat set up correctly (aligned to the south and east walls), there is a gap between the edge of the mat and the north wall. If a cube falls into that gap, then extend the sides of the target or the frame to the north wall to determine if the cube is completely in either of those spaces.

更新09 - 地板滾球運動目標區與框架得分區 - 任務08，地板滾球運動有效得分區包含目標區與框架得分區及兩者向北延伸至邊牆的區域，若底圖正確設置（與南面牆和東面牆對齊）後，底圖的邊緣與北面牆之間會有一個縫隙。如果小方塊落入該縫隙，則依目標區或框架得分區的框線延伸至北面邊牆判定得分。

U10 – END OF MATCH SCORING – R22 says that mission requirements must be visible at the end of the match to count, unless otherwise stated in the mission. This is true whether the mission requirement helps your score or hurts your score. For example, in M08 - Boccia, If there is equipment even partly in your frame, M08 scores zero for you. This requirement only applies at the end of the match; if equipment enters the frame and then completely leaves the frame before the end of the match, then it has no effect on scoring.

For missions M06 - Pull-up Bar, and M07 - Robot Dance, be careful. Do not stop your robot before all 2.5 minutes of your match are complete. The robot must be actively dancing or holding on to the pull-up bar (without being touched by you) at the end of the 2.5 minute match in order to earn points. [Referees for remote matches recorded before this update was released may apply benefit of the doubt when scoring the mission.]

更新10 - 競賽回合結束分數計算 - 規則22，除非規則有特別說明須在過程中評分（過程論），否則所有**任務分數都是等比賽結束時，依當下場地內任務狀態評分（結果論）**，不論最終結果是否影響得分都依此為依據。舉例來說，**任務08 - 地板滾球運動**，假如競賽回合結束時裝備完全或部分在框架得分區內，該任務得分為0分；如果裝備進入框架得分區，然後在比賽結束前完全離開框架得分區，則對得分沒有影響。

針對**任務06 - 單槓運動**、**任務07 - 機器人跳舞**，**注意！**在比賽時間（2.5分鐘）結束之前，**請勿停止機器人**。在比賽時間（2.5分鐘）結束後，**機器人必須持續跳舞或抓住單槓（不能被選手觸摸）**，才能獲得分數。（在發布此更新之前，裁判為遠程比賽記錄比賽得分時可能會產生疑慮。）

U11 – MISSION REQUIREMENT CLARIFICATION – In some cases, the mission description and actual mission requirements may differ. The basic description was designed to help illustrate the intent of the mission but is in no way a mission requirement. It is NOT to be used for scoring. What classifies as a “basic description” vs “mission requirement” can be seen in the Mission Example Layout (page 8 of the Robot Game Rulebook).

For example, the basic descriptions for M01 through M14 state that “the robot” does something, but only M06 and M07 mention “the robot” in the mission requirements. Your robot will be involved in completing any mission, but your team can also use another piece of equipment or any other method allowed by the rules to satisfy mission requirements to score points.

更新11 - 任務要求說明 - 某些情況，任務說明和實際任務要求可能有所不同。**基本說明旨在幫助說明任務的意圖，但並非任務要求，不適用於評分**。選手可參見範例陳列來區分**“任務基本說明”**與**“任務要求”**。（**機器人比賽規則書P.8**）

舉例來說，**任務01到任務14的任務基本說明**指出**“機器人”**做了什麼，但只有**任務06與任務07的任務要求**提及了**“機器人”**。您的機器人將參與並完成任務，但您的團隊也可以使用任何規則允許的裝備或方法來滿足任務要求並得分。

U12 – EXTRA HEALTH UNITS – During building this year’s mission models, you may have noticed the health units built in Bag 9 are not called for in the Field Setup for this year’s Robot Game. These are not to be used in competition. Only the green health units built in Bag 1 are mission models used in this year’s challenge. The extra health units built in Bag 9 are giveaways provided for you and your team to keep or share how you wish :)

更新12 - 多餘的健康標誌 - 在今年的挑戰賽中，只有裝在1號袋子中的綠色健康標誌才是任務模型。比賽場地設置用不到9號材料包內的健康標誌，這些多餘的健康標誌不得在比賽中使用。它們是提供給您和您的團隊的贈品，用於保留或分享:)

